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2016R005881

RECORDED ON
11/04/2016 03:36:00PM
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JACKSON COUNTY, IL

REC FEE: 36.00
RHSP: 9.00
PAGES: 11

Conservation Easement Agreement

CONSERVATION EASEMENT AGREEMENT
For a Save America's Treasures Grant to a Historic Subject Property

INTRODUCTION. This conservation easement agreement is made the ____ day of March, 2016, between RBF Dome NFP, as GRANTOR of a conservation easement (hereafter referred to as the "Grantor"), and the Illinois State Historic Preservation Agency, as GRANTEE of the conservation easement (hereafter referred to as the "Grantee"). This conservation easement agreement is entered under Real Property Conservation Rights Act, 720 ILCS 120/0.01 et seq. for the purpose of preserving the R. Buckminster Fuller and Anne Hewlett Dome Home, a building that is important culturally, historically, and/or architecturally.

1. **The Subject Property.** This agreement creates a conservation easement in real estate legally described in Exhibit A. The Subject Property is the site of the R. Buckminster Fuller and Anne Hewlett Dome Home, located at 407 S. Forest Ave., Carbondale, Jackson County, Illinois, Lot 8 in University Place, PIN 15-21-158-016-0040 (hereafter referred to as the "Subject Property").

2. **Grant of conservation easement.** In consideration of the sum of \$125,000.00 received in grant-in-aid financial assistance from the National Park Service of the United States Department of the Interior, the Grantor hereby grants to the Grantee a conservation easement in the Subject Property for the purpose of assuring preservation of the R. Buckminster Fuller and Anne Hewlett Dome Home.

3. **Easement required for Federal grant.** This conservation easement is granted as a condition of the eligibility of the Grantor for the financial assistance from the National Park Service of the United States Department of the Interior appropriated from the Historic Preservation Fund for the Save America's Treasures Grant Program.

4. **Conditions of easement:**

- a. **Duration.** This conservation easement is granted for a period of fifty (50) years commencing on the date when it is filed with the Jackson County Recorder, in the State of Illinois, in the United States of America.
- b. **Documentation of condition of the R. Buckminster Fuller and Anne Hewlett Dome Home at time of grant of this easement.** In order to make more certain the full extent of Grantor's obligations and the restrictions on the Subject Property, and in order to document the nature and condition of the Subject Property, including significant interior elements in spatial context, a list of character-defining materials, features, and spaces is incorporated as Exhibit "B" at the end of this agreement. The Grantor has provided to the Grantee architectural drawings of the Subject Property. To complement Exhibit "B", Grantee and/or the Grantor personnel have compiled a photographic record, including photographer's affidavit, black and white photographs and negatives, or electronic image files saved as high resolution images, photograph logs, and a keyed location map. The Grantor agrees that the nature and condition of the Subject Property on the date of execution of this easement is accurately documented by the architectural drawings and photographic record, which shall be maintained for the life of this easement in the Grantee's conservation easement file for the Subject Property.
- c. **Duty to maintain the Subject Property.** The Grantor agrees to assume the cost of continued maintenance and repair of the Subject Property so as to preserve the architectural, historical, and/or archeological integrity of the Subject Property and its materials to protect those qualities that made the Subject Property eligible for listing in the National Register of Historic Places (or a Subject Property contributing to the significance of a National Register listed Historic District) throughout the effective date of this Easement.
- d. **Restrictions on activities that would affect historically significant components of the Subject Property.** The Grantor agrees that no demolition, construction, alteration, remodeling, or any other activity shall be undertaken or permitted to be undertaken on the Subject Property which would affect historically significant exterior features or interior spaces identified as significant in Exhibit "B." Exterior construction materials, architectural details, form, fenestration, scale, and mass should not be adversely affected nor the structural soundness or setting altered without prior written permission of the Grantee affirming that such reconstruction, repair, refinishing, rehabilitation, preservation, or restoration will meet The Secretary of the Interior's *Standards for the Treatment of Historic Properties* (hereinafter referred to as the "Standards").

- e. *Restrictions on activities that would affect archeological resources.* The Grantor agrees that no ground disturbing activity shall be undertaken or permitted to be undertaken on the Subject Property which would affect historically significant archeological resources identified in Exhibit "A" without prior written permission of the Grantee affirming that such work will meet The Secretary of the Interior's applicable "Standards for Archeology and Historic Preservation".
- f. *Maintenance of recovered materials.* The Grantor agrees to ensure that any data and material recovered will be placed in a repository that will care for the data in the manner prescribed in the applicable *Standards for Archeology and Historic Preservation* or will comply with the requirements of the Native American Graves Protection and Repatriation Act, and with 36 CFR 79 and 43 CFR 10.
- g. *Public access.* The Grantor agrees to provide public access to view the grant-assisted work or features no less than 12 days a year on an equitably spaced basis. The dates and times when the Subject Property will be open to the public must be annually published and provided to the Grantee. At the option of the Grantor, the relevant portions of the Subject Property may also be open at other times in addition to the scheduled 12 days a year. Nothing in this agreement will prohibit a reasonably nondiscriminatory admission fee, comparable to fees charged at similar facilities in the area.
- h. *Right to inspect.* The Grantor agrees that the Grantee, its employees, agents and designees shall have the right to inspect the Subject Property at all reasonable times, with twenty-four hours written notice, in order to ascertain whether the conditions of this conservation easement agreement are being observed. However, in the case of any natural or man-made disaster or imminent endangerment to the Subject Property the easement holder shall be granted access to the Subject Property with no prior notice.
- i. *Anti-discrimination.* The Grantor agrees to comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, the Americans with Disabilities Act (42 U.S.C. 12204), and with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794). These laws prohibit discrimination on the basis of race, religion, national origin, or disability. In implementing public access, reasonable accommodation to qualified disabled persons shall be made in consultation with the Grantee (or State Historic Preservation Office if another organization is holding the easement).
- j. *Easement shall run with the land; conditions on conveyance.* This conservation easement shall run with the land and be binding on the Grantor, its successors, and assigns. The Grantor agrees to insert an appropriate reference to this easement agreement in any deed or other legal instrument by which it divests itself in part or in whole of either the fee simple title or other lesser estate in the Subject Property, the Subject Property, or any part thereof.
- k. *Casualty Damage or Destruction.* In the event that the Subject Property or any part of it shall be damaged or destroyed by fire, flood, windstorm, earth movement, or other casualty, the Grantor shall notify the Grantee in writing within 14 calendar days of the damage or destruction, such notification including what, if any, emergency work has already been completed. No repairs or reconstruction of any type, other than temporary emergency work to prevent further damage to the Subject Property and to protect public safety, shall be undertaken by the Grantor without the Grantee's prior written approval indicating that the proposed work will meet the Standards. The Grantee shall give its written approval, if any, of any proposed work within 60 days of receiving the request from the Grantor. If after reviewing the condition of the Subject Property, the Grantee determines that the features, materials, appearance, workmanship, and environment (or setting) which made the Subject Property eligible for listing in the National Register of Historic Places have been lost or so damaged that its continued National Register listing is in question, the Grantee will notify the Keeper of the National Register (or the SHPO if the Grantee is not the State) in writing of the loss. The Keeper of the National Register will evaluate the findings and notify the Grantee in writing of any decision to remove the Subject Property from the National Register. If the Subject Property is removed, the Grantee will then notify the Grantor that the agreement is null and void. If the damage or destruction that warrants the properties removal from the National Register is deliberately caused by the gross negligence or other actions of the Grantor or successor owner, then the Grantee will initiate requisite legal action to recover, at a minimum, the Federal grant funds applied to the Subject Property which will then be returned to the U.S. Government.

- l. *Enforcement.* The Grantee shall have the right to prevent and correct violations of the terms of this conservation easement. If the Grantee, upon inspection of the Subject Property, finds what appears to be a violation, it may exercise its discretion to seek injunctive relief in a court having jurisdiction. Except when an ongoing or imminent violation will irreversibly diminish or impair the cultural, historical and/or architectural importance of the Subject Property, the Grantee shall give the Grantor written notice of the violation and allow thirty (30) calendar days to correct the violation before taking any formal action, including, but not limited to, legal action. If a court, having jurisdiction, determines that a violation exists or has occurred, the Grantee may seek to obtain an injunction to stop the violation, temporarily or permanently. A court may also issue a mandatory injunction requiring the Grantor to restore the Subject Property to a condition that would be consistent with preservation purposes of the grant from the National Park Service. In any case where a court finds that a violation has occurred, the court may require the Subject Property to reimburse the Grantee and the State Attorney General for all the State's expenses incurred in stopping, preventing, and/or correcting the violation, including, but not limited, to reasonable attorney's fees. The failure of the Grantee to discover a violation or to take immediate action to correct a violation shall not bar it from doing so at a later time.

- m. *Effective date; severability.* This conservation easement shall become effective when filed by the Grantor in the Office of the Recorder of Jackson County, Illinois, with a copy of the recorded instrument provided to the Grantee for its conservation easement file. If any part of this conservation easement agreement is held to be illegal by a court, the validity of the remaining parts shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the conservation agreement does not contain the particular part held to be invalid.

- n. *Amendments.* The parties may by mutual written agreement jointly amend this conservation easement, provided the amendment shall be consistent with preservation purpose of this conservation easement and shall not reduce the regulatory controls listed in the conditions of this conservation easement. Any such amendment shall not be effective unless it is executed in the same manner as this easement, refers expressly to this easement, and is filed with the Jackson County Recorder.

This instrument reflects the entire agreement of Grantor and Grantee regarding the subject easement. Any prior or simultaneous correspondence, understandings, agreements, and representations are null and void upon execution of this agreement, unless set out in this instrument.

In witness whereof, Grantor and Grantee have set their hands under seal on the days and year set forth below.

GRANTOR: RBF Dome NFP

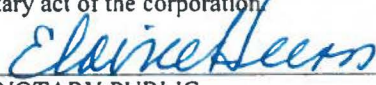
By: 

 Jon Davey, President

STATE OF Illinois
 Jackson COUNTY, ss:

On this 18th day of October, 2016, before me the undersigned, a Notary Public for said State, personally appeared Jon Davey, to me personally known, who stated that he is President of RBF Dome NFP, that no seal has been procured by said corporation, and that the foregoing instrument was signed on behalf of said corporation by authority of its Board of Directors, and that as such officer, he acknowledged that he executed the foregoing instrument as his voluntary act and the voluntary act of the corporation.





 NOTARY PUBLIC

GRANTEE: Illinois State Historic Preservation Agency

By: Heidi Brown-McCreery Director, IHPA

Name and Title
Heidi Brown-McCreery

STATE OF ILLINOIS SANGAMON COUNTY, ss: On the 14TH day of SEPTEMBER, 2016, before me, a Notary Public for said State, personally appeared HEIDI BROWN-MCCREERY, who stated that he is the duly appointed and actively serving the Director - Illinois Historic Preservation Agency, and that he executed the foregoing conservation easement agreement as ^{his} voluntary act and as the voluntary act of the State Department of Cultural Affairs.

Thomas Jon Carlisle
NOTARY PUBLIC



Commission #198009

EXHIBIT A TO THE CONSERVATION AGREEMENT

Legal Description of the Subject Property

Lot 78 in University Place Addition to Carbondale, Illinois, being a subdivision of Outlot 110 and Lots 539 and 540 in Brewster's Second Addition to Carbondale, Illinois, as shown by the recorded Plat thereof in Book 4 of Plats on Page 38 in the Recorder's Office of Jackson County, Illinois.

Permanent Index Number: 15-21-158-016-0040

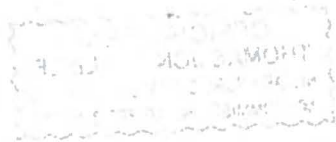


EXHIBIT B TO CONSERVATION EASEMENT AGREEMENT

Baseline Documentation Subject Property Name, City, State

To remain eligible for listing on the National Register of Historic Places, a Subject Property must be able to convey its significance. The following character-defining materials, spaces, and features have been identified as those that help convey the significance of **R. Buckminster Fuller's Geodesic Dome Home** (Subject Property name). Also current photo documentation and the narrative of the National Register nomination must be attached to the baseline documentation.

Significant Character Defining Interior Spaces and Features

- Original Interior still largely intact (NOT included in the Phase I: Exterior Preservation Grant)
- Vaulted interior geodesic space with Study Loft overlooking the Living area.
- Floors: 12" x 12" x 5/16" (Main Level) or 6" x 12" x 3/16" (Loft) cork tiles.
- Walls/Ceiling Finish: Smooth face nominal 1/4" plywood panels with 1/2" half-round bead trim at interior edge joints - painted.
- Interior ventilation incorporated a stack effect and central fan to circulate air from the lower level to the upper level via ceiling grills and a perforated "peg-board" base at the Loft built-in bookcase.
- Radiant hot water circulating heat was incorporated into the floor slab and is still active.

Significant Character Defining Exterior Spaces and Features

- (3) Frequency, 3/8th Sphere Geodesic Dome.
- (60) triangular facets enclose the interior space with (5) trapezoid fenestration openings.
- Dark blue base color with white upper Dome with lighter blue at trapezoid canopy trim.
- (10) Flush Skylights arrayed symmetrically around the "Polar Pentagon".

R. Buckminster Fuller Geodesic Dome Home Phase I: Exterior Preservation Narrative

BRIEF DESCRIPTION OF CONSTRUCTION

The original Dome Home was assembled in approximately seven hours on Tuesday, April 19th, 1960, for Anne and "Bucky" Fuller as their private residence, the geodesic dome shell is a panelized wood frame assembly prefabricated by the Pease Woodworking Company of Hamilton, Ohio. The entire ~39.5' diameter Dome Home with concrete perimeter frost-wall foundation encloses a 4" concrete slab. The slab floor contains a hot water circulating heating system that is still operational. The related mechanical and building electrical systems are also in place. The entire Dome was constructed by Carbondale, Illinois Contractor Ira Parrish for an overall cost of \$7,000 to \$8,000.

The geometry of the home is a 3 frequency, 3/8th sphere geodesic dome consisting of six pentagons (pent's) and five hexagons (hex's) comprised of three differing length modular struts forming a total of 60 triangular panels. Each isosceles triangular panel consists of 1 1/2" x 3" (actual size) wood framing "chords" with nominal 1/2" plywood roof/wall sheathing.

The only exterior vertical surfaces are five trapezoidal 2" x 4" (nominal size) stud walls with textured finish exterior plywood having 3/8" cut grooves at 6" centers. The five vertical wall assemblies are symmetrically arrayed around the ten sided perimeter and provide for fenestration.

Restoration efforts for the Phase I Preservation was principally concerned with correcting the failing Dome geometry. The original exterior geodesic wood frame was dimpled at the Living Room hexagon, requiring internal shoring, while other frames were rotted from years of water leakage and infiltration. As a result, the geodesic shell had become distorted to the point that collapse would be an eventual concern.

The entire geodesic shell was measured using laser instruments (additional narrative provided below) and compared to an "ideal" computer model. The resulting corrected measurements were used as a guide to return the failing geometry and geodesic frame to its original sphericity. This work is reported in the Construction Documents. An additional layer of plywood roof sheathing was installed over the repaired original plywood sheathing for greater strength, a 1/2" roof 'recovery' board was installed over that and immediately below a new thermoplastic polyolefin (TPO) membrane roof. TPO was selected for the ability to cover convex geometry reliably that closely emulates the original roof coating and joints while also being identical in color. Although documentation for the original "white" roof material or membrane has thus far not been found, Celastic tape joints with methylethyl-ketone "hard shell" is documented at the edges followed soon after by asphalt shingle applications that existed prior to the preservation work.

Natural lighting was accomplished with skylights originally set flush to the roof, but were eventually abandoned. The skylights were revived in this preservation work.

BRIEF DESCRIPTION OF FIELD NOTE-TAKING PROCESS

Given the geometry of a geodesic dome, the field note-taking process was somewhat unique. This is combined with the fact that Construction Documents demanded an accomplished level of accuracy for a "non-orthogonal" structure. Conventionally framed structures are relatively easy to verify if they are "square, level, and plumb" by simple diagonal, right angle, and leveling measurements. Not true with a geodesic dome. The procedures below were developed in response to evaluating Buckminster Fuller's Dome - verifying it's "closeness to sphere"; the ideal for which geodesics, in this case, icosahedral, derive its geometry and ultimately to determine preservation strategies for the Dome structural repairs.

Laser alignment and range-finding instruments were used to determine accuracy of sphere for the Dome, critical in accessing obviously damaged pentagons and hexagons and the corresponding triangulation as well as possibly shifted pent's and hex's. The purpose for this procedure was to record field measurements and to determine if the Dome, or portions of it are reasonably close to an acceptable tolerance for construction preservation or needed complete reconstruction - the final result was a combination of both as recorded in the Construction Documents.

A Hilti PM 24 multi-axis laser plumb device was used to establish vertex locations. A vertical plumb laser beam was positioned at each ceiling vertex and projected to corresponding locations on the floor. The solid beam of laser was carefully aligned below the center medallion at each vertex and "witness marks" placed on the floor in preparation for vertical and horizontal measurements (witness marks appear on the plans of the NPS drawing in "ideal" locations). Immediately after vertical alignments were made,

a Hilti PM 4 laser range-finder was used to take an accurate vertical measurement. The instrument was set at a +/- 1/16" tolerance and located on the witness marks. Ease of measurement became especially critical for many of the Dome's high vertex's - cumbersome to reach even with tall ladders. The range-finder readings were taken minimally two times and often three times in an attempt to average the readings since high precision "aiming" of the laser for the high vertexes and precisely "hitting" the same exact location proved difficult. However, with practice, readings became reliably consistent. Multiple readings were given in the field notes.

Measurements to each witness mark were taken both horizontally and vertically at each vertex. Vertex locations above the loft area are added to the loft floor elevation to produce a consistent data set from the same horizontal reference plane; the top of slab elevation at an assumed 100'-0" datum reference.

A three dimensional software model of the Bucky Dome was next created using the computer software program "Sketch-Up". This software has geodesic dome geometry resident within its menus. An accurate three dimensional model based on precise field measurements for the diameter of the Dome at the reference plane was created with the software. Careful measurements were taken for the outer ten-sided polygon foundation line and subsequently, the Dome's frequency and sphericity was accurately modeled from this criteria without regard to the actual vertical field measurements at the vertexes. Once the model was created and recognizing that the radial symmetry of a geodesic has the advantage of redundancy, the computer was next queried for the vertical dimensions on the model at each vertex location noting that only a handful of vertex measurements were actually needed. The computer measurements were then compared to the actual field measurements to determine correction criteria. The three dimensional model was then printed out in various views and sections for comparison studies as well as for drafting and rendering guidance. It is important to note that the prefabricated triangular panel thickness was taken into consideration in developing the interior computer dimensions at the vertexes. Simply put, the thickness of the Dome's panels and their position in space was accounted for in comparing the interior vertical vertex dimension with the actual field measurements.

CONCLUSION

The actual versus ideal measurements were used to determine spherical acuity for preservation decisions and ultimately the scope of work to restore the Dome. Some discrepancy is unavoidable. The purpose was to conclude within a measured proximity if a vertex is reasonably close to its ideal spherical position in 3-Space. This lends valuable insight into whether the pent's or hex's had settled in or have been pushed out - also indicating whether they can remain, required shoring and adjusting, or if they should be removed and rebuilt. Some pent's and hex's were obviously in need of attention - some seriously in need, however, numerous other vertexes and the corresponding triangles were found to be fairly close to their ideal model locations. This is most evident over the Loft. This is sensible as the loft appears to be "holding" the Dome in position while the open expanse areas of the east side of the Dome exhibited serious deformation from a history of poorly rendered repairs.

Although documentation thus far has not been found for the original Pease Woodworking Company's 'shop drawings' of Bucky's Dome, it has been reported that the exterior top or polar vertex is approximately 16'-6" above the floor. The computer model that is derived from the perimeter and diagonal field measurements yields this dimension at 16'-6 1/8". Surprising close to what has been reported and lending confidence that the computer model is representing the Dome within acceptable decision making tolerances.

The R. Buckminster Fuller Geodesic Dome Home Phase I: Exterior Preservation was accomplished with a surprisingly high degree of spherical and historical accuracy for a difficult, non-orthographic structure. In addition to restoring the wood frame geometry, heavy steel straps were 'let-in' (completely

concealed from view) at the Dome's lower vertex perimeter – tying the entire frame together structurally (thus avoiding the trapezoid steel frames) and yielding a geodesic shell even more substantial than the already considerable strength of a geodesic frame; insuring the Dome will remain in its proper geometry for many years to come.

EXHIBIT C TO CONSERVATION EASEMENT AGREEMENT

Written Documentation of the Signatories Authority to Sign for and Legally Bind their Organization

**RESOLUTION OF THE BOARD OF DIRECTORS OF
RBF Dome NFP**

RESOLVED, that RBF Dome NFP, an Illinois non-profit corporation (the "Grantor") shall execute a conservation easement with Illinois State Historic Preservation Agency, (the "Grantee"). This conservation easement will be entered under Real Property Conservation Rights Act, 720 ILCS 120/0.01 et seq. for the purpose of preserving the R. Buckminster Fuller and Anne Hewlett Dome Home, a building that is important culturally, historically, and architecturally.

RESOLVED, that Jon Davey as President of RBD Dome NFP, is authorized, directed, and empowered to take such action and execute and deliver such document in such form as he or she deems to be in the best interests of RBF Dome NFP, including without limitation the execution and delivery of a conservation easement.

I, Judy Ashby, Secretary of RBF Dome NFP, do hereby certify that the foregoing is a full, true and correct copy of the resolution of the Board of Directors of said Corporation, duly and regularly passed by the Board of Directors of said Corporation in all respects as required by law, and by the By-Laws of said Corporation, on the 1st day of March, 2016, at which time a majority of the Board of Directors of said Corporation was present and voted in favor of said resolution.

Date: March 22, 2016

By: RBF Dome NFP

By: 

Judy Ashby, Secretary