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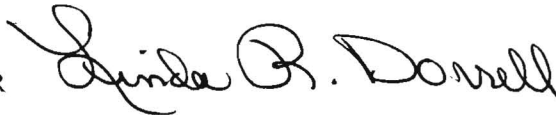
**TULSA COUNTY**  
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\_\_\_\_\_  
\_\_\_\_\_  
**PURCHASING  
DEPARTMENT**

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# MEMO

**DATE:** NOVEMBER 1, 2012

**FROM:** LINDA R. DORRELL  
PURCHASING DIRECTOR



**TO:** BOARD OF COUNTY COMMISSIONERS

**SUBJECT:** ADDENDUM #1-O'BRIEN PARK SUN SHADE STRUCTURES

ON OCTOBER 22, 2012, THE NOTICE TO BIDDERS WAS MAILED FOR O'BRIEN PARK SUN SHADE STRUCTURES. THIS BID IS SET TO OPEN ON NOVEMBER 19, 2012, WITH BIDS TO BE RECEIVED TO THE COUNTY CLERK'S OFFICE ON NOVEMBER 16, 2012.

THIS BID IS BEING AMENDED TO PROVIDE ADDITIONS/REVISIONS TO THE DRAWINGS AND SPECIFICATIONS AS PER ATTACHED DOCUMENTATION.

THIS ADDENDUM IS RESPECTFULLY SUBMITTED FOR YOUR APPROVAL.

LRD/sks

**ORIGINAL:** EARLENE WILSON, COUNTY CLERK, FOR THE NOVEMBER 5, 2012 AGENDA.

**COPIES:** COMMISSIONER JOHN M. SMALIGO  
COMMISSIONER KAREN KEITH  
COMMISSIONER FRED R. PERRY  
MARK LIOTTA, CHIEF DEPUTY



Board of County Commissioners, Tulsa County  
c/o Linda Dorrell, Director of Purchasing  
Tulsa County Administration Building  
500S. Denver, Room 322  
Tulsa, OK 74103

Date: October 31, 2012

Subject: Addendum 1

Project: O'Brien Park Sun Shade Structures  
4-To-Fix-II – SF 31

PMg respectfully submits Addendum 1 dated November 5, 2012 for consideration and approval by the Board of County Commissioners to issue to all bidders and "plan houses."

The bid dates will remain unchanged. All bids received by the County Clerk on November 16, 2012, prior to 4:00 PM, will be presented to the BOCC for opening on November 19, 2012.

Respectfully Submitted,  
PMg – Program Management Group, LLC.

A handwritten signature in blue ink, appearing to read "Vernon E. Hawkins". The signature is fluid and cursive, written over a white background.

Vernon E. Hawkins  
Senior Program Manager

BID PACKAGE AND CONTRACT MANUAL

**O'BRIEN PARK SUN SHADE  
STRUCTURES**

October 22, 2012  
November 5, 2012 - Rev. 1

Bid Due Date: Friday, November 16, 2012,  
no later than 4:00 PM.

Submit bid to: BOCC c/o Tulsa County Clerk  
Tulsa County Administration Building  
500 South Denver, Room 117  
Tulsa, OK 74103

Bid Open Date & Time Monday, November 19, 2012, 9:30 AM

Bid Location: Board of County Commissioners  
Tulsa County Administration Building  
500 South Denver, Room 119  
Tulsa, OK 74103

Owner: Board of County Commissioners,  
Tulsa County, Oklahoma  
Tulsa County Administration Building  
3<sup>rd</sup> Floor  
500 South Denver  
Tulsa, OK 74103

Owner's Representative: **PMg**--Program Management Group, LLC  
601 South Boulder Ave. Suite 1200  
Tulsa, OK 74119

November 5, 2012

## **O'BRIEN PARK SUN SHADE STRUCTURES**

### **ADDENDUM NO. ONE (1)**

This addendum must be acknowledged in the space provided on the bid form. Failure to do so will cause the bid to be rejected.

A. Drawing revisions.

- 1) Refer to "Exhibit A" dated 11.05.2012 for revisions marked  11.05.2012

B. Refer to "Scope of Work," paragraph B.c. Preapproved Manufacturers:

Add: USA Shade/Sunports Dallas, TX [www.usa-shade.com](http://www.usa-shade.com)  
Shade Industries Phoenix, AZ [www.shadeindustries.com](http://www.shadeindustries.com)

C. Refer to "Scope of Work," paragraph B.6.

Add: Contractor shall insure that all column supports for the proposed shade structures remain outside of the existing playground containment areas.

D. All material to be in accordance with the attached specification entitled "SUN SHADE STRUCTURE MATERIAL SPECIFICATIONS"

E. Cover Sheet: Refer to the revised bid package cover sheet for corrected information.

End.

## SUN SHADE STRUCTURE MATERIAL SPECIFICATIONS

### FABRIC SPECIFICATIONS

- A. UV shade fabric to be made of UV stabilized cloth manufactured by ALNET, or approved equal.
- B. The high density polyethylene material shall be manufactured with tensioned fabric structures in mind.
- C. The fabric knit is to be made using monofilament and tape filler which has a weight of 9.38 to 10.32 oz. sq. yd. Material to be Rachel-knitted to ensure material will not unravel if cut.
- D. Burst strength of 828 lbf (ASTM 3786).
- E. Cloth meets fire resistance tests as follows:
  - Alnet Extra Block: California State Fire Marshall Reg. #F-66601
  - Others: NFPA 701-99 (Test Method 2)
  - ASTM E-84

### THREAD

- A. Shall be 100% expanded PTFE fiber which carries a 10 year warranty that is high strength and low shrinkage.
- B. Shall have a wide temperature and humidity range.
- C. Abrasion resistant and UV radiation immunity.
- D. Shall be unaffected by non-hydrocarbon based cleaning agents, acid rain, mildew, rot, chlorine, saltwater, and pollution.
- E. Lockstitch thread – 1200 Denier or equal.
- F. Chain stitch thread – 2400 Denier or equal.

### STEEL TUBING

- A. All fabricated steel must be in accordance with approved shop drawings and calculations.
- B. All steel is cleaned, degreased or etched to ensure proper adhesion of powder-coat in accordance with manufacturer's specifications.
- C. All steel used on this project needs to be new and accompanied by the mill certificates if requested. Structural steel tubing up to 5"-7gauge shall be galvanized per Allied Steel FLO-COAT specifications. Schedule 40 black pipe fabrications shall be sandblasted and primed as described below.
- D. All non-hollow structural shapes comply with ASTM A-36, unless otherwise noted.
- E. All hollow structural steel shapes shall be cold formed HSS ASTM A-53 grade C, unless otherwise noted.

F. Plate products shall comply with ASTM A-36.

### **POWDER COATING & PRIMING**

A. All non-galvanized steel shall be sandblasted and primed prior to powder coating using brown fused aluminum oxide grit and the following primer.

B. All non-galvanized steel must be coated with rust inhibiting primer prior to applying the powder coat. Primer shall be Cardinal Industrial Finishes Corp. E396 –GR1372 epoxy powder coating semi gloss smooth zinc rich primer.

C. Welds shall be primed with rust inhibiting primer prior to applying the powder coat. Primer shall be Cardinal Industrial Finishes Corp E396-GR1372 epoxy powder coating semi gloss smooth zinc rich primer.

D. All steel parts shall be primed for rust protection and finished with a minimum 3.5 mil thick UV-inhibited weather resistant powder coating.

E. Characteristics: Powder used in the powder-coat process shall have the following characteristics:

N.3.1	Specific gravity	1.68+/-0.05
N.3.2	Theoretical coverage	114+/- 4 ft 2/lb/mil
N.3.3	Mass loss during cure	< 1%
N.3.4	Maximum storage temperature	75 degrees F

F. Powder-coating shall meet the following tests:

ASTM	Gloss at 60 degree	85-95
HOI TM 10.219	PCI Powder smoothness	7
ASTM D2454-91	Over-bake resistance time	200%
ASTM D3363-92A	Pencil hardness	H-2H
ASTM D2794-93	Dir/Rev Impact, Gardner	140/140 in/lbs
ASTM D3359-95B	Adhesion, cross hatch	5B Pass
ASTM D522-93A	Flexibility Mandrel	¼" dia. No fracture
ASTM B117-95	Salt Spray	1,000 hours
UL D1OV2	Organic coating steel enclosures, elect eq.	Recognized

G. Application Criteria

N.5.1 Electrostatic spray cold	Substrate:0.032 in. CRS
N.5.2 Cure Schedule	10 minutes at 400 degrees F
N.5.3 Pretreatment	Bonderite 1000
N.5.4 Film Thickness	3.5 MILS

### **WELDING**

A. All shop welds shall be executed in accordance with the latest edition of the American Welding Society Specifications.

- B. Welding procedures shall comply in accordance with the AWS D1.1-AWS Structural Welding Code-Steel.
- D. All welds to be performed by a certified welder. All welds shall be continuous where length is not given, unless otherwise shown or noted on drawings.
- E. All welds shall develop the full strength of the weaker member. All welds shall be made using E70xx.035 wire.
- F. Shop connections shall be welded unless noted otherwise. Field connections shall be indicated on the drawings. Field –welded connections are not acceptable.
- G. All fillet welds shall be a minimum of ¼” unless otherwise noted.
- H. All steel shall be welded shut at terminations to prevent internal leakage.
- I. Internal weld sleeving is not acceptable.
- J. On-site welding of any component is not acceptable.

#### **SEWING**

- A. On-site sewing of a fabric will not be accepted.
- B. All corners shall be reinforced with extra non-tear cloth and strap to distribute the load.
- C. The perimeters that contain the cables shall be double lock stitched.

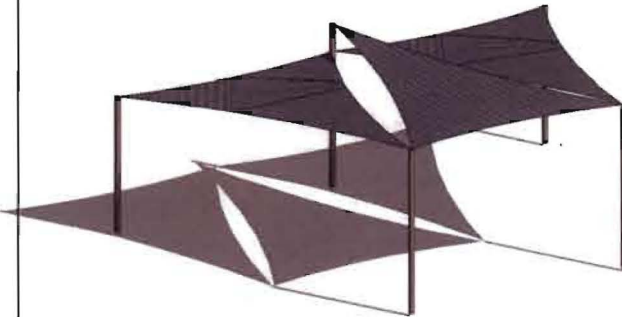
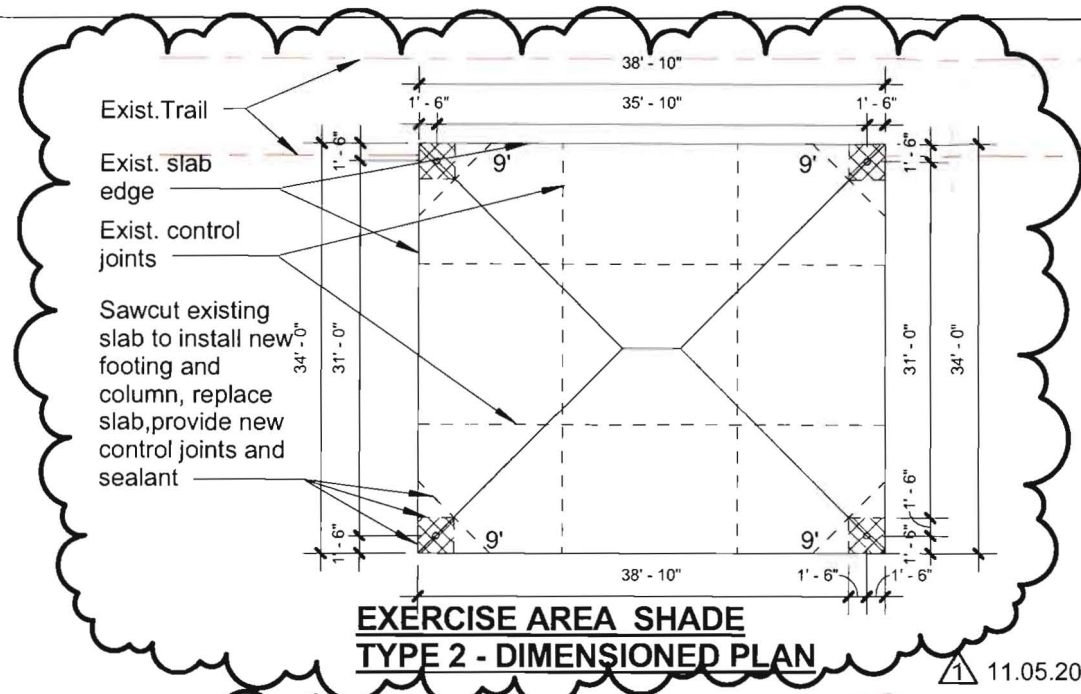
#### **INSTALLATION HARDWARE**

- A. Bolt and fastening hardware shall be determined based on calculated engineering loads.
- B. All hardware shall be marine grade stainless steel and shall comply with SAE-J429 (Grade 8) or ASTM A325 (Grade BD). All nuts shall comply with ASTM F-594, alloy Group 1 or 2.
- C. Wire rope cable shall be 7x19 strand stainless steel wire rope with a breaking strength of 7,000 lbs. (1/4” diameter) for shades generally under 300 sq. ft. unless requested larger by the customer. For shades >300 sq. ft. cable shall be 5/16” @9800# breaking strength. For special windy conditions, cable system may be up-sized by engineering.
- D. All fittings required for proper securing of the cable are hot dipped galvanized.

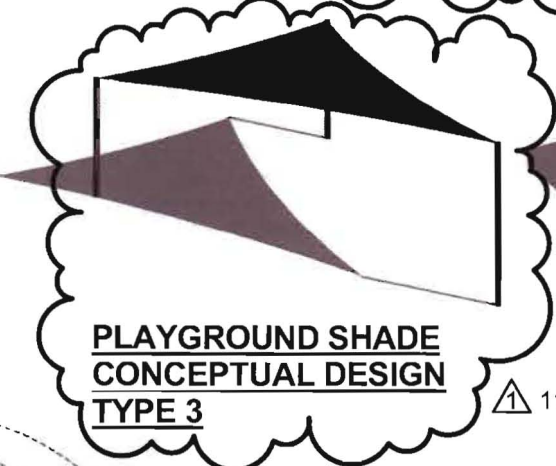
# "EXHIBIT A"

## O'BRIEN PARK SUN SHADE STRUCTURES

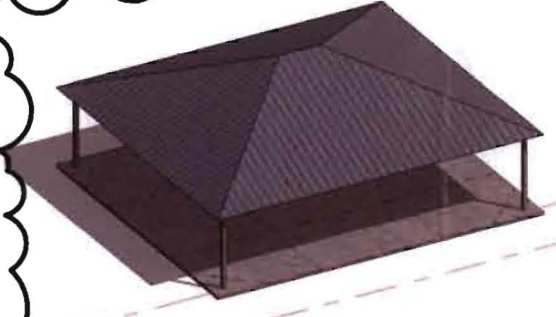
10.15.2012  
REV. #1 11.05.2012



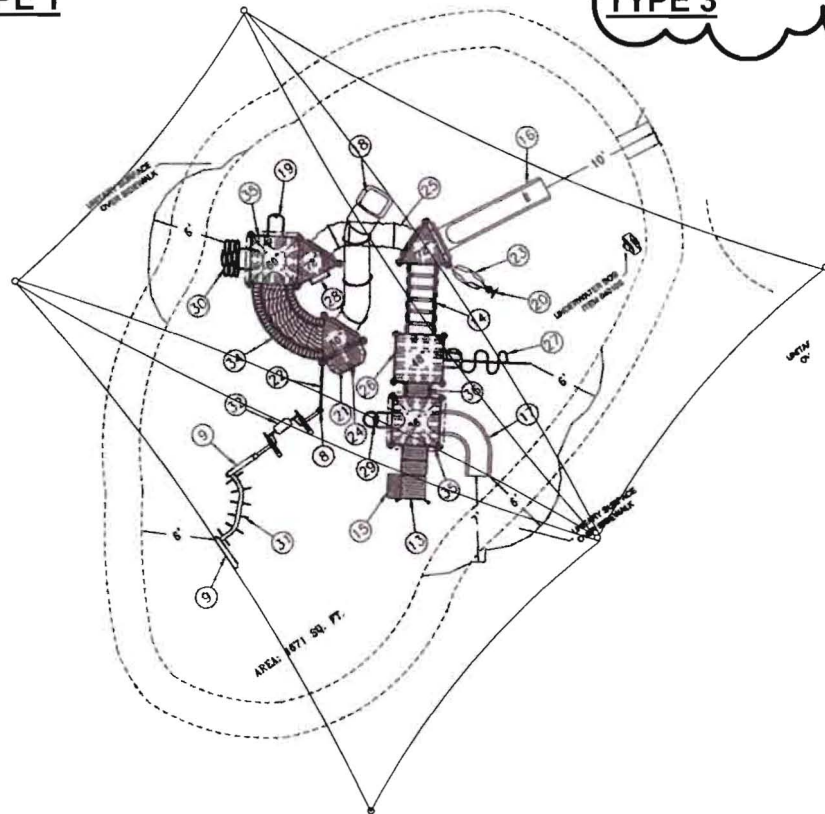
**PLAYGROUND SHADE  
CONCEPTUAL DESIGN  
TYPE 1**



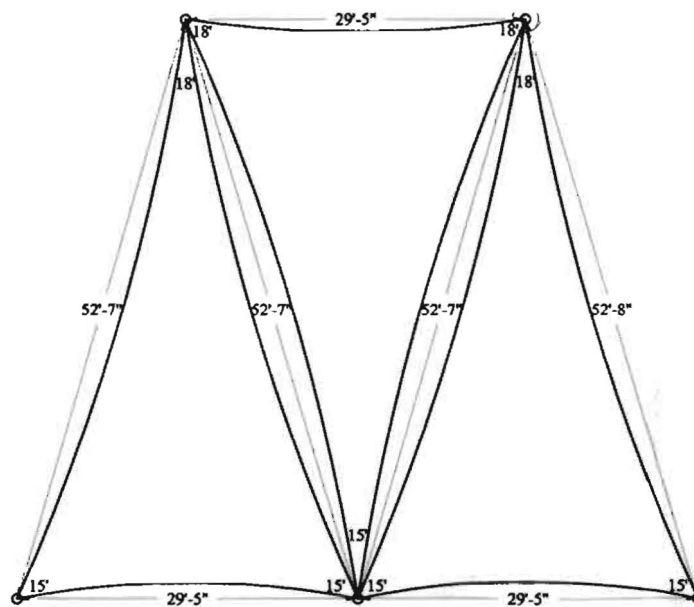
**PLAYGROUND SHADE  
CONCEPTUAL DESIGN  
TYPE 3**



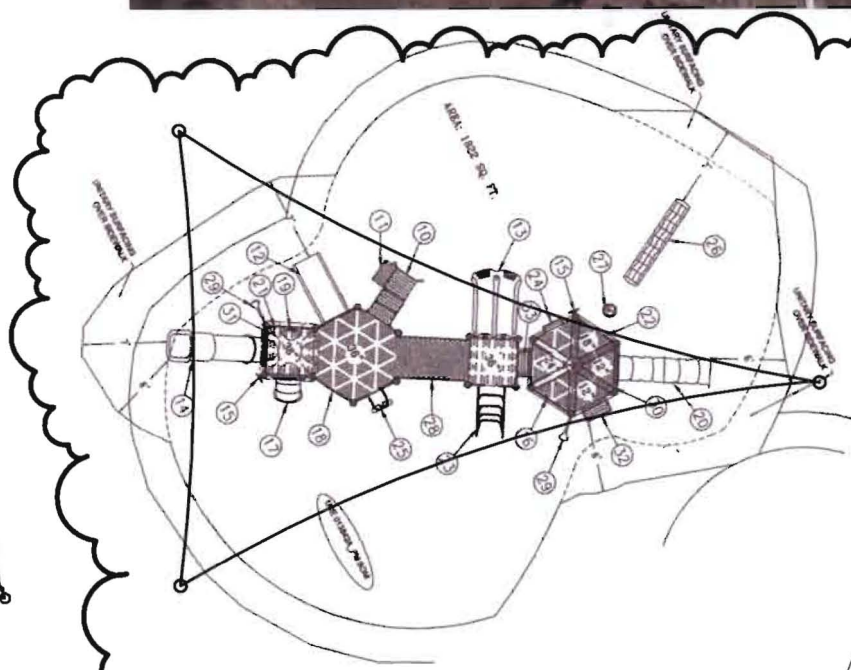
**EXERCISE AREA SHADE  
CONCEPTUAL DESIGN  
TYPE 2**



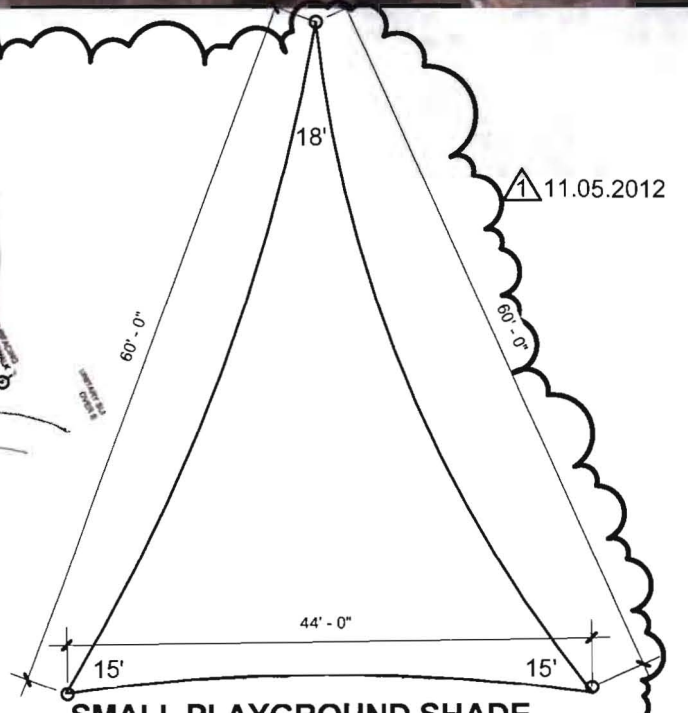
**LARGE PLAYGROUND SHADE  
TYPE 1 - ORIENTATION PLAN**



**LARGE PLAYGROUND SHADE  
TYPE 1 - DIMENSIONED PLAN**



**SMALL PLAYGROUND SHADE  
TYPE 3 - ORIENTATION PLAN**



**SMALL PLAYGROUND SHADE  
TYPE 3 - DIMENSIONED PLAN**