# **SPECIFICATIONS**

**FOR** 

Basketball Backboards Lake Land College District Number 517 Mattoon, Illinois 61938

PROJECT NO. 2017-014

Bid Date: November 20, 2017

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### **ADVERTISEMENT FOR BIDS**

Bids: November 20, 2017 LAKE LAND COLLEGE DISTRICT #517 MATTOON, ILLINOIS Project No. 2017-014

The Lake Land College District Number 517 Board of Trustees will receive sealed bids for the purchase of Basketball Backboards.

Bids will be received until 2:00 PM Central Standard Time on Monday, November 20, 2017 in the Office of the Vice President for Business Services on the campus of Lake Land College, 5001 Lake Land Blvd., Mattoon, IL. Bids will be on a stipulated sum basis. Bids received after this time will not be accepted. Bids will be opened and publicly read immediately after the specified closing time. Obtain bidding documents/requirements at the office of the Vice President for Business Services on the campus of Lake Land College, phone (217) 234-5224.

The Board of Trustees reserves the right to waive irregularities and reject all bids or parts of bids.

Successful Bidders shall have the sole responsibility of complying with all aspects of existing Prevailing Wage Policies.

Dave Storm Chairperson - Lake Land College Board of Trustees

### **INSTRUCTIONS TO BIDDERS**

### PART 1 GENERAL

### 1.01 DEFINITIONS

- A. Lake Land College Board of Trustees will be hereafter referred to in this Specification as "Owners" and all correspondence shall be addressed to: Bryan Gleckler, Vice President for Business Services, Lake Land College, 5001 Lake Land Blvd., Mattoon, IL 61938.
- B. A Bidder is a person or entity who submits a Bid to the Owner.
- C. Bidding Documents include the Advertisement for Bid, Instructions to Bidders, Bid Forms and supplements, specifications and Addenda.
- D. Contract Documents include any Contract forms, Specifications, Drawings, Addenda, and modifications.
- E. The Agreement is the written agreement between the Owner and Contractor setting forth the obligations of the parties thereunder, including but not limited to the performance of the Work, the basis of payment and the contract time.
- F. The Work is the entire delivery, installation or construction or separately identifiable parts thereof required to be furnished under the contract documents.
- G. A Bid is a complete and properly signed proposal to provide the materials and labor for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- H. The Base Bid is the sum stated in the Bid for which the Bidder offers to provide the equipment described in the Bidding Documents as the base, to which Work may be added or from which Work maybe deleted for sums stated in Alternate Bids.
- I. An Alternate Bid is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding changes in the items, as described in the Bidding Documents are executed.
- J. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials or service as described in the Bidding Documents or in the proposed Contract Documents.

### 1.02 DOCUMENTS

A. Copies of the Bidding Documents may be obtained at the office of the Vice President for Business Services, 5001 Lake Land Boulevard, Mattoon, Illinois 61938; (217) 234-5224.

### 1.03 EXAMINATION OF DOCUMENTS

- A. Bidders shall examine all documents and shall inform themselves of the Work to be performed. Failure to do so will not relieve a successful bidder of his obligation to provide all materials necessary to execute the Work for the sum stated thereon.
- B. Each Bidder, by submitting his bid represents that he has read and understands the bidding documents and has informed himself of the conditions of the Work.

### 1.04 INTERPRETATIONS DURING BIDDING

- A. If any Bidder is in doubt as to the meaning of any part of the Bidding Documents, they may submit a written request to: Bryan Gleckler, Vice President for Business Services, 5001 Lake Land Boulevard, Mattoon, Illinois 61938; for an interpretation of that part.
- B. Written requests for interpretations or clarifications must be made no later than ten (10) working days prior to the Bid Date specified in the Advertisement for Bids.
- C. Any interpretation or change will be made only by Addenda numbered, dated, and issued by the Owner to each Bidder on record as having received a set of Bidding Documents and will be available for inspection wherever the Bidding Documents are kept available for that purpose. Lake Land College will not be responsible for any other explanations or interpretations of the Bidding Documents.

### 1.05 SUBSTITUTION OF PRODUCTS

- A. MANUFACTURER'S TRADE NAMES ARE USED IN SPECIFICATIONS FOR THE EXPRESS PURPOSE OF ESTABLISHING A STANDARD OF QUALITY AND COORDINATION OF DESIGN, NOT FOR THE PURPOSE OF LIMITING COMPETITION.
- B. All sizes of equipment must be as specified, and all pieces of equipment must include or have those features which are set forth in the specifications.

- C. Bidders proposing substitutions in writing must submit detailed specifications with catalog cuts or manufacturer's literature, pictorially portraying that on which they are bidding for comparison to specified items by the Owner.
- D. Any additional explanation or statement which the Bidder wishes to make must be placed in the same envelope and attached to the proposal. Unless the Bidder so indicates, it is understood that the Bidder has bid in strict accordance with the specifications and drawings and has made no substitutions, modifications or additional stipulations.

### 1.06 QUALIFICATION OF BIDDERS

- A. Bidders may be disqualified and their Bids not considered for any of the following specific reasons:
  - 1. Reason to believe collusion exists among Bidders.
  - 2. The Bidder being interested in any litigation against the Owner.
  - 3. The Bidder being in arrears on any existing contract or having defaulted on a previous contract.
  - 4. Lack of competency as revealed by the financial statement, experience, and equipment, questionnaires, or qualification statement.
- B. If requested, a Bidder shall submit to the Owner a confidential Financial Statement in a sealed envelope.

### 1.07 PREPARATION OF BID:

- A. No modification to the terms of these bid documents will be permitted. Any deviation shall be considered cause for disqualification.
- B. All bids must be submitted on the bid form contained herein.
- C. The Bidder shall base the bid on materials complying with the Bidding Documents, and shall list all information where the bid form requires.
- D. Bids shall not be based on discounts, rebates or other refunds unless all requirements of these Bid documents are met within the terms of the discounts, rebates or refunds. Bidder shall notify Owner of intention to base Bid on any discounts, rebates or refunds in writing. This notification shall be attached to bid form when submitted to owner.
- E. The blank spaces in the bid form shall be filled in correctly with ink or typewritten. A bid form containing an alteration or erasure of any price

contained in the bid which is used in determining the lowest responsible bid shall be rejected unless the alteration or erasure is corrected as herein provided:

- 1. An alteration or erasure must be crossed out and the correction printed in ink or typewritten adjacent to the alteration or erasure.
- 2. The person signing the bid must initial the correction in ink.
- 3. In the event that any price used in determining the lowest responsible bid is expressed by the Bidder in both written and numerical form, the written representation shall govern in all cases.
- F. If the bid form includes alternates, each Bidder may bid on any alternate he/she chooses provided they have the required level of proficiency with item in question.
- G. If an individual submits Bid, he or his duly authorized agent must sign his name. If a firm, association or partnership submits the Bid, the name, address and title of each member must be given, and an official or duly authorized agent must sign the Bid. Powers of attorney authorizing agents or others to sign Bids must be properly certified and must be in writing and submitted with the Bid.
- H. Bids from individuals or partnerships, if signed by an attorney-in-fact, shall have attached to the bid the power of attorney, evidencing the authority to sign the bid. If the bid is signed by any other legal entity, the authority of the person signing shall be attached to the bid.

### 1.08 EXEMPTION FROM SALES TAX ON MATERIALS

A. The Owner is exempted by Section Three of the Illinois Use Tax Act (Sec 3, House Bill 1610 approved July 31, 1961. IL. Rev. Stat. 1961, Chap. 120 Sec 439.3) from paying any of the taxes imposed by that act and sales to the Owner are exempt by Section Two of the Illinois Retailer's Occupation Tax Act (Section 2, House Bill 1609, Approved July 31, 1961 IL. Rev. Stat. 1961, Chap. 120 Sec. 441) from any of the taxes imposed by that Act.

### 1.09 IDENTIFICATION AND SUBMITTAL OF BID

- A. Each bid and all papers bound and attached to it shall be placed in an envelope and securely sealed therein. The envelope shall be plainly marked with the following:
  - 1. The word "BID"
  - 2. Name and address of the Bidder.

B. The envelope of the bid shall be addressed to:

Lake Land College Basketball Backboards Bid C/O Bryan Gleckler 5001 Lake Land Boulevard Mattoon, Illinois, 61938

- C. Bids shall be delivered before the time set for the opening of the bids. Bids arriving by mail or otherwise after the time designated for the opening of bids will be returned unopened.
- D. No oral, telephone, facsimile or email proposals or modifications will be considered.

### 1.10 MODIFICATION OR WITHDRAWL OF BID

- A. A bid may not be modified after submittal. Bidders may withdraw a bid at any time before opening. A Withdrawal of a Bid must be made in writing or in person by a bidder or his duly authorized agent. If a firm, association or partnership wishes to withdraw a bid, an official or duly authorized agent must sign the written request or appear in person.
- B. Once withdrawn, the bidder must submit a new bid prior to the opening in order to be considered.
- C. No Bid may be withdrawn or modified after the Bid opening except where the award of the Contract has been delayed beyond 60 days after date of Bid.

### 1.11 OPENING OF BIDS

- A. The Bids submitted will be opened at the time and place stated in the Advertisement for Bids and publicly read aloud and thereafter shall remain on file with the Owner.
- B. After Bids are opened, the Bids will be tabulated for comparison on the basis of the Bid prices and quantities shown on the Bids.
- C. The Owner reserves the right to withhold the award of the Work for a period of 60 days from the date of the opening of Bids and no award will be made until the Owner is satisfied as to the responsibilities of the low Bidders.
- D. Until final award of the Work, the Owner reserves the right to reject any or all Bids or proceed to do the Work otherwise in the best interest of the Owner.

### 1.12 EVALUATION AND CONSIDERATION OF BIDS

- A. The Owner reserves the right to reject all bids or parts of bids, and to waive informalities therein.
- B. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates in the numerical order in which they appear on the bid form.

### 1.13 DISQUALIFICATION OF BIDDERS

- A. Bids will not be considered if they show any omissions, additions, alterations of form, conditions not requested, unauthorized alternate Bids or irregularities of any kind. However, the Owner reserves the right to waive any irregularities and to make the award in the best interest of the Owner.
- B. The Bidder acknowledges the right of the Owner to reject any or all Bids and to waive any informality or irregularity in any Bid received. In addition, the Bidder recognizes the right of the Owner to reject a Bid if the Bidder fails to submit the data required by the Bidding Documents.
- C. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates.

### 1.14 APPLICABLE LAWS

- A. All applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the Work shall apply throughout, and they will be deemed to be included the same as though herein written out in full.
- B. Bidder's signatures shall be construed as acceptance of and willingness to comply with all provisions of the acts of the General Assembly of the State of Illinois relating to the Department of Human Rights Act, previously the Illinois Fair Employment Practices Act, Prevailing Wage Act for workers in our area, preference to citizens of the United States and residents of the State of Illinois, and discrimination and intimidation of employees. Provisions of said acts are hereby incorporated by reference and become a part of this proposal and specification.

### 1.15 RECORDS:

A. The Contractor shall maintain, for a minimum of 5 years after the completion of the Work, adequate books, records and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with the Work; all books, records and supporting documents related to the Work shall be available for review and audit, and the Contractor agrees to cooperate fully with any audit conducted and to provide full access to all relevant materials.

### **BID FORM**

PROJECTIDI BID TO:	Board of Trustees	Баскроаго	is, Project 2017-014				
DID TO.	Lake Land College District Number #517						
	C/O Bryan Gleckler						
	Vice President for Busin	ess Service	S				
	5001 Lake Land Boulev		3				
	Mattoon, Illinois, 61938						
BID FROM:							
DID FROM.							
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Documents, to p		fied or indicate	d, to enter into an Agreement with the ed in the Bidding Documents for the e Contract Documents.				
In sub	mitting this Bid, Bidder represent	s that:					
A.	This Bid will remain subject to	acceptance f	or 60 days after the day of the bid o	pening.			
В.	The Owner has the right to reject this bid.						
C.							
D.	days after the Owner's Notice Bidder has copies of all the B		onts				
E.			ents. iliar with the general, local and site c	conditions			
F.	Bidder is familiar with federal						
G.	Bidder has correlated the information known to Bidder, information and observations obtained from visits to the site, reports and						
	drawings identified in the bidding documents and additional examinations, investigations, explorations, tests, studies and data						
11	with the Bidding Documents.						
H.	This Bid is genuine and not made in the interest of or on the behalf of an undisclosed person, firm or corporation and is not						
	submitted in conformity with an agreement or rules of a group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited another Bidder to submit a false or sham Bid; Bidder has not solicited or induced a person, firm or						
			dder has not sought by collusion to c				
	over the Owner.	Ü	g ,	· ·			
I.			receipt of which is hereby acknowled	dged.			
	Date	Nu	ımber				
BID PF	RICE (Complete)			Dollars (\$	) (use words)		
Bidde	agrees to provide all materials, l	abor and equi	pment, as specified, on or before the	e number of calendar days indic	cated below.		
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		SUBMITTE	ED on		_, 2017		
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		, (44, 666			-		
		Signed					
		Signed			_		
			(D. L. INI. )		_		
			(Printed Name)				
		Phone			_		
		Fax			<u>_</u>		

**END OF SECTION** 

Basketball Backboards / 2017-014

### **PAYMENT PROCEDURES**

### PART 1 GENERAL

### 1.01 PAYMENTS

- A. The Owner will make payment on account of the Contract as follows:
  - 1. Upon completion of all work as directed in these specifications the Contractor shall request payment in full.
  - 2. Payment will be made provided Owner certifies that the work meets all requirements of these specifications.
  - 3. The Contractor shall provide an invoice for the work which will satisfy the following:
    - 1) Itemize separate line item cost for each unit type of equipment as indicated on the Bid Form.
    - 2) All forms must be typed and all sections of the forms completed.
  - 4. Payment will be made within 60 days of certification of work by Owner.

### 1.02 PAYMENTS WITHHELD

- A. The Owner may withhold, or on account of subsequently discovered evidence, nullify the whole or part of any payment to such an extent as may be necessary to protect the Owner from loss on account of:
  - 1. Defective work not remedied.
  - 2. Claims filed or reasonable evidence indicating probable filing of claims.
  - 3. Failure of the Contractor to make payment properly to Subcontractors for materials and/or labor.
  - 4. A reasonable doubt that the Contract can be completed for the balance then unpaid.
  - 5. Damage to another Contractor.
- B. When the above conditions are remedied payment will be made for the amounts withheld.

C. Should the Contractor fail to perform any work according to the drawings and specifications, or should he refuse to correct any work not done according to the drawings and specifications, the Owner may, after having given the Contractor ten days written notice, construct such work or make repairs necessary to meet the requirements of the Contract. The cost of such work shall be deducted from the final payment due the Contractor.

## BASKETBALL SCOREBOARDS

#### PART 1 GENERAL

### 1.01 SCOPE

- A. The work under this section includes the furnishing of all labor, material, equipment, supervision and services necessary for the execution and completion of all items necessary to provide complete and functioning Basketball Backboards, delivery and installation as herein specified.
- B. If a Bidder is unable to comply with any of the following specifications, the Bidder shall submit in writing the reason for noncompliance. Noncompliance with any specification is grounds for rejection of the entire bid. The buyer reserves the right to reject any bid which does not meet these specifications.
- C. Bids shall include all shipping, handling, delivery and installation fees and will have no hidden costs.
- D. Bids shall include explicit technical information regarding electrical requirements or special structural considerations or other accommodations required for the proper installation and operation of specified equipment.
- E. All equipment shall bear full manufacturers on-site warranty for a minimum of one year from the date of delivery to the Owner and shall include parts and labor.
- F. All Owner's materials, software, manuals, guides or other supplied information shall be presented in a neat, orderly, and professional manner using binders, folders or other devices as necessary.

### 1.02 RELATED DOCUMENTS:

A. All provisions of the Specifications apply to the work of this section.

### 1.03 SUBMITTALS:

- A. Submit for approval; shop drawings and product data, including but not limited to:
  - 1. Provide diagrams, example photos, engineering drawings, and details as are available to properly illustrate the appearance and function of the proposed Basketball Backboards.

B. Upon completion Basketball Backboards vendor shall provide three (3) sets of equipment manuals and warranty documents for all equipment.

### 1.04 QUALITY ASSURANCE:

A. Deliver, handle, store and install the Basketball Backboards in accordance with manufacturer's approved printed instructions.

### PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Provide Four (4) Model 208 center strut rectangular glass backboards. Each furnished with power-flex goals, pro pad bolt on padding and manual height adjusters, with four (4) safety strap backstop safety locks, as manufactured by PORTER, 601 Mercury Drive, Champaign IL 61822-9648, or equal, which shall include the following:
  - 1. Provide Four (4) Model 208 center strut rectangular glass backboards. Backboard shall be 3'-6" x 6'-0" to meet all NCAA, NFHS and professional requirements. Backboard frame shall be of a welded, unitized construction fabricated from heavy wall rectangular steel tubing, aluminum-faced for professional appearance. Unitized frame shall be designed for use only on direct goal mounting (Center-Strut R) type support structures. Unitized frame shall be designed to allow the bottom two goal mount holes to pass beneath the glass section to further alleviate stress on the glass. Backside of goal mount structure is provided with two mounting holes and hardware to independently secure backboard to a direct mount goal feature which relieves all stress and shock on the backboard frame conforming to the latest NCAA Rules. Backboard frame shall be furnished with heavy steel gusset plates in the top two corners incorporating keyhole slots for mounting the backboard to direct-mount type support structures. Rear backboard frame shall be finished in a durable neutral gray powder coated finish. Glass shall be provided in 1/2" thick, fully tempered (heat-treated) glass section with uniform load and impact strength. Official white border and target area is "fired in" permanently on front side of glass section so that it cannot wear away. Glass section shall be secured to unitized rear frame by means of an attractive, Lshaped brushed aluminum extrusion for optimum durability. Front perimeter frame shall be secured to unitized rear frame with structural truss head rivets. Glass section shall be fitted with

- shock absorbing neoprene material to cushion and protect the glass section. Goal mounting holes (4) to be on standard 5" (horizontal)  $\times$  4- 1/2" (vertical) mounting centers (see B-200 for goal options).
- Provide POWR-FLEX GOAL. Shock absorption feature shall be 2. provided by means of a special, offset hinge arrangement rim and backplate mounting housing and a concealed molded rubber shock absorber. Hinge shall be positioned to place goal return impact forces in shear (parallel) to minimize oscillation induced into the face of the backboard. Shock absorber shall be molded from a special rubber formulation (spec. D-2000 ASTM 2 BC 725 B14C12FI7G21) to dampen and minimize vibrations and fatigue in backboard. Front of rim shall deflect downward up to 2-1/16" when a static load of 250 pounds is applied and instantly return to playing position when load is released. Function of goal shall meet the NCAA specifications on moveable rims, which states "A moveable basket ring shall have rebound characteristics identical to those of a non-moveable ring." Goal shall be set at factory for proper flex and rebound requirements. Rim shall be fabricated from 5/8" diameter cold drawn alloy steel, round formed to an 18" inside diameter ring. Inside diameter of ring shall be positioned 6" from face of backboard by a heavy formed steel, hinged type housing with a removable cover to conceal mounting bolts and entire shock absorption mechanism of goal, and also protect against finger entrapment. Goal mounting plate shall be provided with hardware and a 5" x 4" mounting hole pattern for front mounting on standard glass, wood and fiberglass type backboards and is also compatible for use with all Center-Strut direct mount type support frames. Rim shall be rigidly braced by means of a 3/16" (4.7mm) thick formed and die cut steel brace welded in position on the underside of the rim for maximum support. Rim shall be provided with a unique "tube-tie" net attachment system to eliminate the conventional wire-formed type net locks for additional player safety. Goal shall be furnished in a durable, official orange powder-coat finish. Goal shall be furnished complete with plated mounting hardware and an anti-whip net. Mounting bolts shall be SAE Grade 5.
- 3. Provide PRO-PAD BACKBOARD PADDING KIT FOR OFFICIAL RECTANGULAR BACKBOARDS (EACH). Pad shall fit any official size (72" wide) glass backboard. Pad shall consist of two pieces with molded type square corners for maximum safety, appearance and durability. Pads shall be molded from Polyurethane Foam (9 lb. density) with integral skin (self-skinning). Extremely durable skin minimizes the possibility of cracks and tears as on traditional extruded type pads. Pad is provided in colors as listed on chart below. A positive, bolt-on type attachment system shall be provided to eliminate glue or peel and stick

tape type attachment methods. Pad sections are provided with internal, molded in steel attachment channel sections, which are secured to the backboard with special self-drilling, self-tapping attachment hardware provided in kit. Pad sections shall include molded-in clearance for goal mounting plate and Center-Strut feature, eliminating cutting in-field.

4. Provide CENTER-STRUT® HEIGHT ADJUSTMENT SYSTEM FOR RECTANGULAR BACKBOARD - MANUAL OPERATION. Height adjustment unit shall be designed for use with No. 600 series ceiling suspended basketball backstop support systems to provide an adjustable, direct-mount (Center-Strut®) goal attachment system to eliminate any strain on the backboard should a player hang on the front mounted goal (conforms to the latest NCAA recommendation). Height adjustment units without the prescribed direct-mount goal feature will not be approved as equal. Height adjustment feature will allow goal height settings from 8'-0" to the official 10'-0" for use by all age groups. Unit shall be designed for use with any official size (4' x 6' or 3'-6" x 6') Porter rectangular backboard and companion front mount type goal. Center unitized support frame shall be fabricated by dual, 2-3/16" square heavy-wall zinc plated guide tubes located on 11-3/16" centers. Ends of guide tubes shall be welded to heavy, formed mounting brackets. Height adjustment assembly mechanism shall be supported to No. 600 line drop frame assembly on 5'-9" centers by heavy structural support tubes. Outer dual slide tubes shall support heavy structural steel angle sections which extend downward to accept a direct-mount (Center-Strut®) goal mounting system. Slide tube assembly shall be provided with a heavy formed steel section to attach a special upper backboard support assembly to secure the unit to the upper two comers of the rectangular backboard on standard 5'-6" mounting centers. Height adjustment unit shall incorporate a centrally located 3/4" diameter acme threaded rod equipped with precision, hardened steel roller thrust bearings for ease of operation from the playing floor by means of an awning crank type mechanism. Height adjustment system shall incorporate an internal, spring-loaded height locking mechanism to automatically lock and hold unit at any desired goal height during play. Lock mechanism automatically releases when height setting changes are made with adjustment crank assembly. Adjustment crank assembly shall be provided with each pair of height adjustment units. A height setting scale shall be located on the side of the unit to visually determine height settings from 8'-0" to 10'-0" in 3" increments. Height adjustment frame shall be finished with one coat of flat black enamel. Hardware shall be furnished for mounting unit to a 2-3/8" O.D. vertical support structure on 5'-6" or 5'-9" centers.

Provide "SAF-STRAP" BASKETBALL BACKSTOP SAFETY LOCK. The 5. "Saf-Strap" shall be directly speed sensitive to automatically lock a basketball backstop or divider curtain in position at any time. The device will lock, whether in storage or during the raising/lowering cycle, in the event of an over-speed occurrence due to a malfunction of the hoisting apparatus, such as winch, cable, pulleys, support fittings, etc., any increase in cycle speed or tension, whether sudden or gradual, immediately activates the locking device. The "Saf-Strap" shall incorporate a 2-wide belt rated at 7,300 lbs., maximum breaking strength. The entire unit must be capable of withstanding a test using a 1750 lb. falling weight, without strap failure or structural damage. The locking mechanism must be fail-safe, meaning that any sticking, jamming or breakage of any of the components of the arresting mechanism results in immediate, positive locking of the reel. The locking mechanism must react to the actual speed of the reel and prevent it from exceeding a strap speed of 1.5 feet per second regardless of whether the load suddenly drops by breakage of a component in the hoisting apparatus or whether it accelerates more slowly, as caused by a back-driving winch or the yielding of a structural component. The locking mechanism must be self-checking, meaning that during normal use the mechanism is in constant motion to prevent long-term binding or seizing caused by dirt or corrosion. The mechanism shall actively and positively confirm, six times per revolution, that the reel is traveling at a safe speed, below 1.5 feet per second. The action of the locking mechanism must be audible to facilitate preinstallation checking and to prove positive operation of the unit. The locking action of the mechanism shall be by means of high strength metal components and shall apply on both sides of the reel for balanced loading and greater security. The strap shall extend a maximum of 36 feet and shall have a safety alert patch stitched to the strap to indicate the maximum safe extension. The strap shall incorporate a breakaway loop stitched into its lower end to indicate if the unit has been subjected to a heavy load. A bright colored warning label must be exposed if the loop stitching has been broken. The strap shall be automatically retracted and stored on a reel equipped with a special negator type constant force spring. The strap anchoring system must bear on the full width of the strap and be capable of taking the full breaking strength of the strap. The reel must be supported in bearings on both sides to assure that there is no deflection under heavy load, which would cause the strap to be misaligned and suffer damage. The unit shall incorporate a fully automatic reset requiring no poles, ropes,

levers or buttons to be used. The unit shall incorporate a universal mounting system to allow mounting either parallel or at right angles to the strap and to allow mounting on either a 4" O.D. or a 3·O.D. pipe. The unit shall have an interlocking all-steel frame for strength and be powder coated for corrosion resistance and a modem, aesthetically-pleasing appearance.

### PART 3 EXECUTION

### 3.01 DELIVERY, STORAGE AND HANDLING

### A. Contractor shall:

- 1. Install Basketball Backboards per manufacturer's instructions in a professional, neat and timely manner.
- 2. Provide all accessories, controls and appurtenances to provide a fully functioning system.
- 3. All equipment shall be provided in the manufacturer's original sealed packaging and shall be clearly marked with the project name and number;

Basketball Backboards Project 2017-014