



INVITATION FOR BID NUMBER AEPA IFB #008-D

**ATHLETIC FACILITIES
INDOOR & OUTDOOR TRACK AND COURT CONSTRUCTION, RENOVATION
AND MAINTENANCE PRODUCTS AND SERVICES**

PART B – SPECIFICATIONS

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1. Scope of Bid

AEPA is seeking qualified, experienced contractor(s) who possess the necessary resources and capabilities to acquire, deliver and perform the required supplies, materials equipment and labor to all 22 member states necessary to:

- 1.1 Consult and work with individual educational institutions to assess and evaluate their existing athletic and recreational indoor and/or outdoor playing fields, playgrounds, golf courses, parks, areas around buildings and related facilities to determine and develop a complete and comprehensive solution to maintenance, repair, restoration and resurfacing of existing facilities to a condition that meets or exceeds federal, state, local and/or industry standards.
- 1.2 Assist and work with individual educational institutions in planning, designing and implementing a construction program to construct new facilities that meet or exceed the institution’s requirements and industry standards for that type of facility.
- 1.3 Acquire and perform the required site work to prepare the individual project site to have the running track and/or court surface installed. Such work may include but is not limited to clearing, excavation, fill, leveling, drainage work, preparing the base course, etc., to be ready for the install of the final track or court surface.

- 1.4 Apply, seal and finish the running track or court surface required to complete the athletic facility so that it meets or exceeds the institution's requirements, manufacturer's specifications, industry standards and other governing agencies and organizations rules, regulations and requirements.
- 1.5 Provide the necessary manpower, supplies, materials and equipment to properly and professionally strip, line and provide all of the event markings required for all of the athletic/recreational events to be held on and/or within the project facility.
- 1.6 Provide the necessary athletic event hardware, equipment and accessories required to properly conduct the identified events in accordance with the national and/or state organizations that govern and oversee those athletic/sport activities identified.
- 1.7 Perform and complete any warranty work required in accordance with this solicitation's requirements, manufacturer's instructions and specifications and industry standards.
- 1.8 Offer and make available upon request the necessary products and services for the owner to make minor repairs to and to maintain the athletic/recreational facility in good condition throughout its life cycle.
- 1.9 Offer and provide the institution's staff with the training, technical support, maintenance instructions, supplies and equipment for them to properly operate, maintain and protect their investment through its life cycle.

The offeror should note that AEPA member states prefer providers/contractors that can provide and perform the scope of work as indicated in items one through nine above as a turn-key solution. However, it is also recognized that there are providers/contractors that specialize in only providing and installing the track and court surfaces or striping, lining and marking of the tracks or courts. Responses can be made for any of the major components of assessing, designing, developing, constructing and completing an athletic/recreational track or court requested and described herein. Under the terms of this solicitation, AEPA reserves the right to accept or reject offeror responses that do not offer a turn-key solution that is for the complete scope of work indicated above.

2. Anticipated AEPA Member Agency Participation

State	Participate (Yes/No/Undecided)	Estimated First year Purchase Volume	State	Participate (Yes/No/Undecided)	Estimated First year Purchase Volume
Arkansas	No		Nebraska	Yes	\$200,000
California	Yes	\$250,000	New Mexico	Yes	\$3,000,000
Colorado	Yes	Unknown	North Dakota	Yes	Unknown
Connecticut	Yes	\$1,000,000	Ohio	Yes	Unknown
Indiana	Yes	Unknown	Oregon	Yes	Unknown
Iowa	Yes	Unknown	Pennsylvania	Yes	\$2,000,000
Kansas	Yes	\$75,000	Texas	No	
Kentucky	Yes	Unknown	Virginia	Yes	\$1,000,000
Michigan	Yes	Unknown	Washington	Yes	\$1,500,000
Minnesota	Yes	Unknown	Wyoming	No	
Missouri	Yes	\$50,000			
Montana	Yes	\$150,000	Total		\$9,225,000

Please note that individual AEPA state agencies that have indicated above they would like to participate in any contract awarded under this solicitation does not guarantee or mean that the individual AEPA Agency will enter into a contract with any AEPA approved offeror. Each AEPA Member Agency will make that determination after reviewing offeror responses and AEPA's recommendation for acceptance and bid award. The AEPA Member Agency's contracting decision shall be final.

The above information relating to the estimated/projected volume for the first year for this solicitation is provided based on submittals from its members. AEPA Member Agencies anticipate that purchase volumes will increase in contract years two through four (2-4). This information is provided as an aid to offerors in preparing bids only. It is not to be considered a guarantee of volume under this IFB. The successful offeror's discount and pricing schedule shall apply regardless of the volume of business under the contract.

3. Glossary of Terms

AAMA: American Architectural Manufacturers Association (847) 303-5664 www.aamanet.org

AAU: Amateur Athletic Union

Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the organizations responsible for the standards and regulations in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

ACI: American Concrete Institute (248) 848-3700 www.aci-int.org

ADA: Americans with Disabilities Act, (800) 872-2253;

AEPA Member Agency: A state cooperative purchasing agency recognized by AEPA to represent a specified state in contracting activities associated with this solicitation.

AGCA: Associated General Contractors of America (The) (703) 548-3118 www.agc.org

AI: Asphalt Institute (859) 822-4960 www.asphaltinstitute.org

AIA: American Institute of Architects (The) (800) 242-3837 www.aia.org

Alternative Costing: If a project requires goods and services that are not covered by R.S. Means or a nationally published price list, the offeror will be required to obtain three (3) written cost proposals from local providers. Use the most advantageous cost proposal and add their normal and customary mark-up and overhead provided as part of their response to obtain the normal/retail cost. The stated AEPA discount will then be taken to arrive at the AEPA price. All products and services falling under this category must be submitted in advance and approved by the AEPA Member's Agency prior to being included in any quote or proposal from the contractor.

If a product or service is required that must be custom designed and manufactured to meet an individual project site's conditions and/or provided for a unique application or project, the contractor must utilize the alternative costing method described above.

AEPA members and/or their institutions reserve the right to accept or reject any third party cost proposals or quotes provided by the offeror.

If a product or services is required as part of the performance under this solicitation that can only be obtained and/or manufactured from a single source and falls under the sole source provision of some state's procurement codes, the contractor must provide the AEPA Member's Agency with the necessary documentation to substantiate the purchasing method.

ANSI: American National Standards Institute (202) 293-8020 www.ansi.org

API: American Petroleum Institute (202) 682-8000 www.api.org

Approved: Is defended as conveying authorization or action on the Contractor's submittals, applications, and/or Requests. The owner shall identify and establish within the contract documents who its designated representative is and the parameters of the individual's duties, responsibilities and authority.

Architectural Barriers Act (ABA) (202) 272-0080: Accessibility Guidelines for Buildings and Facilities available from Access Board www.access-board.gov

ASBA: American Sports Builders Association

ASCE: American Society of Civil Engineers (800) 548-2723 www.asce.org

ASTM: American Society for Testing and Materials International (610) 832-9585 www.astm.org

Bonding Requirements: Each of the AEPA member states have their own bonding requirements. It is the offeror's responsibility to be acquainted with each state's rules, regulations, procedures and requirements relating to payment and performance bonds, and to comply with each state's requirement and the following:

1. Upon execution of a contract between an AEPA Member's Agency and the offeror, performance and payment bonds shall be provided to the institution as required by each state's law.
2. The offeror shall execute a performance bond in an amount equal to one hundred percent (100%) of the price specified in the contract between the member institution and from a surety company authorized to do business in that individual state. Performance bonds shall be on standard forms.
3. A payment bond, in an amount equal to one hundred percent (100%) of the price specified in the contract between the member institution and the offeror, shall be executed by a surety company authorized to do business in that individual state. This bond will protect all persons supplying labor and materials to the offeror for the performance of the work provided in the contract. Payment bonds shall be on the standard form.
4. The offeror shall deliver both the performance and payment bonds to the member institution at the time the project contract is executed.
5. All suits for non-payment or non-performance shall be filed as allowed under each state's law.
6. If required by the AEPA member, the offeror will be responsible for providing the agency with copies of all contracts and bonds in accordance with their purchasing procedures.

Contract Between AEPA Member's Agency and the Offeror: In any contract between the offeror and an AEPA Member's Agency for athletic facilities covered by this solicitation, the terms and conditions listed herein will prevail. A contract between the offeror and the AEPA member institution for any construction services shall contain all elements of and be an industry standard agreement.

If applicable, the following items may need to be addressed:

1. Work to be performed by the AEPA member institution must be clearly described and the offeror's standards for acceptance stated.
2. The condition of the site prior to start of work by the offeror will be established and agreed upon prior to contract execution.
3. The party responsible for obtaining, providing and paying for temporary utility service, such as power, water and other related items, must be identified and agreed upon by all parties prior to contract execution.
4. If construction space is directly under, above, in or near AEPA member institution's used space, the offeror must agree to receive written approval from the contact person prior to interrupting any ongoing activity or program.
5. Access to the construction space will be limited to the way agreed upon by the parties.
6. When loading, unloading or operating equipment near an unprotected owner used area, the offeror will keep an employee as a guard to prevent students and adults from entering.
7. Change orders are to be avoided, if possible, since they often indicate poor planning. A mutually agreed upon system for establishing changes must be identified, including changes in scope and changes in compensation for the offeror. Because of cost, safety and scheduling considerations, the ability to make field change orders needs to be permitted, and mutually agreed upon paperwork to document these changes, must be allowed. A change order that increases the contract amount in excess of Five Thousand Dollars (\$5,000), or five percent (5%) of the contract amount, whichever is greater, must be approved, in writing, by the governing authority.

Contract Between Owner, Buyer and Contractor: An agreement between the AEPA member's agency (Owner), AEPA member (Buyer) and the AEPA contractor for the procurement of goods and services in the construction and professional services areas shall be signed for each major contract. AEPA issues this agreement in order to consummate the agreement of the parties in accordance with the terms and conditions specified in the IFB, and that the owner's purchase order to the buyer is in accordance with the same terms and conditions.

Contracting AEPA Member Agency: An AEPA Member Agency that enters into a contract as a result of this solicitation.

Contractor's License: Each of the 22 states covered by this solicitation has its own state licensing qualifications, requirements and processes. The offeror is responsible for knowing each state's requirements and codes. At the time of response, offeror must be able to comply with all licensing requirements. For those states where licenses are required a copy of the appropriate licenses authorizing the offeror to undertake or purports to undertake, supervise, subcontract others, to construct or to provide services and materials described herein, shall be included with its response. If the offeror intends to subcontract with other qualified distributors, dealers or firms, the subcontractors must be listed and copies of their licenses shall be submitted by the offeror with its response. All required licenses will be kept current and in compliance with the rules and regulations of each state's regulatory agency.

Drawings and Specifications: Term for bidding documents and contract documents.

Evaluation Factors: To qualify as a responsive offeror, the response must be responsive and materially satisfy all mandatory requirements identified throughout the solicitation. To be considered responsive, a response must reasonably and substantially conform to all of the specified requirements within each section of the solicitation in the judgment of the AEPA evaluation committee. Therefore, the offerors should take note that AEPA reserves the right to assign any penalties it considers warranted due to the offeror's failure to comply. Terms, conditions or specifications contained herein, that the offeror considers particularly unwarranted, unreasonable or unacceptable should be clearly identified, and to which the offeror would take significant exception in its response, should be clearly stated in the bid response as exceptions or deviations. Offeror's required responses for evaluation purposes are "yes" responsive or "no" non-responsive.

Cost evaluation will be based on a point system with points being awarded for being low to high bidder for each cost evaluation item, that is, contractor's labor rates, discount off R.S. Means, overhead and profit percentage markup, mileage charge, per diem rate, travel time, etc. If an offeror leaves out an item that is required, AEPA will allot zero (0) points to that item, and if awarded a contract, cannot be used in providing products or services. The low bidder will receive the full point value and all other bidders will receive points calculated as follows:

$(\text{Lowest Bid} / \text{Other Bid}) \times \text{point value}$

CSI: Construction Specifications Institute (The) (800) 689-2900 www.csinet.org

Federal Requirements: Contractor agrees, when working on any federally assisted projects with more than Twenty Thousand Dollars (\$20,000) in labor costs, to comply with the Contract Work Hours and Safety Standards Act, the Davis-Bacon Act (Section 29, CFR Part 5), the Copeland "Anti-Kickback" Act, and the Equal Opportunity Employment requirements of Executive Order 11375. In such projects, the contractor agrees to post wage rates at the work site, and comply with all reporting requirements. The contractor shall provide AEPA with a copy of any required report filed. In addition, to comply with the Copeland Act, the contractor must keep records for three (3) years, and allow the federal grantor agency access to these records, upon demand. All federally assisted contracts to AEPA members that exceed Ten Thousand Dollars (\$10,000) may be terminated by the federal grantee for non-compliance by the contractor. In projects that are not federally funded, offeror must agree to meet any federal, state or local requirements, as necessary. In addition, if compliance with the federal regulations increases the contract costs beyond the agreed upon costs in this solicitation, the additional costs may only apply to the portion of the work paid by the federal grantee. On all other projects, the prices must agree with this contract.

FIBA: The International Basketball Federation www.fiba.com

FIVB: The International Volleyball Federation www.fivb.ch

Furnish: Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

GSI: Geosynthetic Institute (formally GSI) (610) 522-8440 www.geosynthetic-institute.org

IBF: International Badminton Federation (6-03) 9283-7155 www.intbadfed.org

ICRI: International Concrete Repair Institute, Inc. (847) 827-0830 www.icri.org

Individual Project Contract Documents: Should consist of the construction contract, conditions of the contract, drawings (if required) and specifications defining the scope of work, product specification, delivery timelines etc. These should be issued prior to signing the construction contract

Install: Operations at project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

ISO: International Organization for Standardization www.iso.ch Available from ANSI (202) 293-8020 www.ansi.org

Manufacturer's Representative: Dealers, distributors or installers submitting a response to this solicitation for products requested herein or as a manufacturer's representative must include with their response documented evidence from or between them and the manufacturer certifying that the offeror is a bona fide manufacturer's agent for the specific products or services proposed. The offeror is qualified and experienced to assess existing conditions, develop and submit manufacturer acceptable solutions for the product lines offered. The manufacturer will support, review and issue their guarantee on the work performed and products provided. The offeror has a good track record with their product. Should the offeror fail to satisfactorily fulfill any obligations established as a result of completing a project using their products/system under contract as a result of this solicitation, the manufacturer will either assume and discharge such obligations or provide for their competent assumption by one or more bona fide representatives for the balance of the obligations.

Material Costs: Costs for materials, including taxes, delivery, handling, storage, and waste.

Member: A public school district or other qualifying agency authorized to use the contracts of an AEPA Member Agency.

MHIA: Material Handling Industry of America (800) 345-1815 www.mhia.org

NAGWS: National Association for Girls and Women in Sport (800) 213-7193, ext. 453 www.aahperd.org/nagws/

NAIMA: North American Insulation Manufacturers Association (703) 684-0084, www.naima.org

NCAA: National Collegiate Athletic Association (The) (317) 917-6222 www.ncaa.org

NFHS: National Federation of State High School Associations (317) 972-6900 www.nfhs.org

NSSGA: National Stone, Sand & Gravel Association (800) 342-1415 www.nsf.org

PDI: Plumbing & Drainage Institute (800) 589-8956 www.pdionline.org

Offeror's Price List: For the purpose of this solicitation the offeror's price lists shall consist of the cost evaluation submittal form; manufacturer's/distributor's published price lists that clearly state and identify all products and services offered with the offeror's discount to be applied to each to determine the AEPA price and because the scope of work covered by this solicitation may require site preparation or other construction related products and services be provided as part of completing the proposed project. The AEPA members have selected "R.S. Means", a nationally accepted costing method, to be used to determine the cost of those items not covered by a published price list and/or the alternative method of costing.

Owner's Representative: An individual identified by the member as contact person for individual project. Member's representative has authority to make decisions and to authorize any actions as defined for the project.

Performance Specification: Specifies the subsequent performance of completed construction work rather than prescribing how the work shall be constructed and installed.

Prime Contractor: Any firm, business and/or individual(s) who submits a response to this IFB and is awarded a contract. The contractor will be considered a prime contractor to AEPA and AEPA will not enter into any agreements with a subcontractor. Any contractor paid directly by AEPA is a prime contractor. Any subcontractor performing under this IFB is contracted and paid by the prime contractor. Prime contractors using subcontractors must be willing, able and capable of obtaining, supervising and being responsible for any subcontractors required to perform and/or provide products and services offered herein.

Project Site: Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

Provide: Furnish and install, complete and ready for the intended use.

Qualifications: Includes any and all skills, knowledge, capacities, capabilities, experience, financial stability, available human and physical resources, historical background, past and present performance, properly licensed to perform and provide products within the 20 AEPA member states. The proposed products/services meet or exceed specifications specified herein and proposed pricing complies with state and local requirements. The evaluation of a respondent's qualifications shall be done in accordance with the criteria set forth herein, and the most recent edition of any relevant regulation, standard, document or code that shall be in effect. Where conflict among the requirements or with these specifications exists, the most stringent requirement shall be utilized.

R.S. Means Quotations/Proposals: When providing R.S. Means costs as part of a project's proposal, the following items apply:

1. R.S. Means proposals must use the current year, standard costs based on the following CD titles will be accepted:
 - a. Repair and Remodeling Cost Data
 - b. Building Construction Cost Data
 - c. Facility Construction Cost Data
2. All work proposed under the R.S. Means method must use the R.S. Means format, even if subcontractors are used to do the work.. Subcontractor's invoices must tie to the R.S. Means spreadsheet.
3. An R.S. Means spreadsheet must be submitted to substantiate the quote given to the AEPA member institution. Make sure that spreadsheet columns are expanded to show the full R.S. Means number and a sufficient amount of the description.
4. Pricing must be done by Location Codes. National Average will not be allowed. In order to choose the "closest" location code, the first three (3) numbers of the zip code will be used to determine the city location index in each state. The same criteria are used by R.S.

Means. As an example, if the project is in Hobbs, New Mexico, which has a zip code of 88240, the city index to be used is Roswell, New Mexico, which has a zip code of 88201.

5. AEPA discount, bonding cost and sales taxes if applicable, must be shown as separate line items at the bottom of the R.S. Means spreadsheet. This information can be handwritten or typed on the spreadsheet or can be shown on a separate summary sheet. The summary sheet must start with the R.S. Means spreadsheet total and show the detail for each of the items stated above.
6. All change orders which list items covered by R.S. Means must be supported by an R.S. Means spreadsheet.

Regulations: Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

Shop Drawings: Drawings made for production purposes by persons other than a designer.

Specifications: Written descriptions of work, materials, or equipment that complements the construction drawings.

State Wage Rates: Some of the AEPA member's states have and require the contractors pay state wage rates. It is the offeror's responsibility to be acquainted with those state's Department of Labor's rules, regulations, procedures and requirements relating to state wage rates, and to comply with state and federal regulations regarding payment of wages on public projects. The offeror and any subcontractors shall pay all tradesmen and laborers employed on the site of the project, unconditionally and not less often than once a week, and without subsequent unlawful deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications.

SWRI: Sealant, Waterproofing, & Restoration Institute (816) 472-7974 www.swrionline.org

TPI: Turf grass Producers International (847) 649-5555 www.turfgrassod.org

UFAS: Uniform Federal Accessibility Standards (800) 872-2253; Available from Access Board (202) 272-0080 www.accessboard.gov

UL: Underwriters Laboratories Inc. (877) 854-3577 www.ul.com

Unit cost: An average cost per unit calculated by dividing total costs of the item by the measured quantity of units. Unit costs may include material costs, labor costs, plant and equipment costs, overhead costs, job and operating and profit. The content of the unit costs must be made clear. An item may have separate unit costs for materials and labor.

Unit Price: Similar to a unit cost but usually consisting of all direct costs and some or all indirect costs.

USAV: USA Volleyball (888) 786-5539 www.usavolleyball.org

Value Engineering: Comparison and economic evaluation of alternate construction methods for a given project.

Offeror/Contractor: Individual or entity providing goods and services to AEPA members based on the specifications of this solicitation.

Waste Construction Material: That is extra to the actual net quantity required by the work, but that is nevertheless required by or used in performing the work, or is somehow lost as a result of doing the work, and therefore contributes to the material cost.

4. Special Terms and Conditions

- 4.1 By responding to this solicitation, the offeror agrees to and will be solely responsible for doing the research to ascertain that its solutions offered meet or exceed all federal, state, local and industry regulations, rules, standards and/or requirements.
- 4.2 The successful offeror must abide by and ensure that any subcontractor abides by all applicable federal, state, and local laws, codes, and ordinances governing any area(s) in which any products and/or service covered by this solicitation are rendered and must have all required permits, licenses, agreements, tariffs, bonding and insurance required by same. No claims for additional payment will be approved for changes required to comply with any such requirements.
- 4.3 The successful offeror must provide AEPA members the benefit of all general price reductions extended to its other customers at any time during the period of this contract or any extension thereof. Likewise, the offeror may during the annual contract renewal process, submit to AEPA any additional products or services covered by their award and may request for prices adjustments on published price lists. The R.S. Means price shall be adjusted when the new updates (usually January 1st of each year) become available. Any request must be in writing and submitted to the oversight committee chairman who has been designated by AEPA for that solicitation/category. The chairman will process the request and submit it to the AEPA board of directors for their approval/disapproval. If approved, each AEPA state agency will be responsible for notifying its participating members. In the event of a decrease in the prevailing contract price, the oversight committee may approve the change and it will become effective immediately upon notification.
- 4.4 If the offeror intends to utilize independent agents/distributors, subcontractors and/or third-party agents to perform and/or provide any part of the products and services offered herein, the offeror must ensure that prices from these parties are in accordance with the terms, conditions and pricing submitted and approved by AEPA.
- 4.5 Responses must clearly identify all charges and components necessary for performance of the contract, even if such are not specifically addressed in any paragraph or subparagraph or form that is a part of this solicitation.
- 4.6 Additional and optional products and services must be identified separately, and must include clear descriptions and specifications of proposed items.
- 4.7 Offerors are asked to make new products and services available after they have been tested and proven to be reliable, suitable and appropriate for use within educational athletic facilities. There shall be detailed information provided to the owner indicating that the product and/or service is new technology. Also, test results or past performance history necessary to allow the owner to make an informed decision on accepting the product/service for the proposed project must be provided.
- 4.8 The offeror must have the resources necessary to provide a comprehensive training, maintenance support program to any individual owner within the 22 AEPA states, which will allow the owner to properly and successfully utilize and maintain the installed facility through its stated life cycle. The programs offered must be appropriate for the owner's staff that will be responsible for and using the facility. The offeror must provide documentation that proves these resources and programs do exist and can

be successfully delivered on a national basis. If there are associated costs, terms, conditions and stipulations relating to the programs offered, they must be clearly identified and stated within the offeror's response.

- 4.9 Applicability of industry standards, unless the individual project contract documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the project's contract documents to the extent referenced. Such standards are made a part of this solicitation by reference provided under Item 3 Glossary of Terms above.
 - 4.9.1 Publication Dates: Comply with standards in effect as of date of the individual project's contract documents, unless otherwise indicated.
 - 4.9.2 The contractor and any subcontractors engaged in a construction project covered by this solicitation should be familiar with industry standards applicable to its construction activity being performed. Copies of applicable standards are not provided as part of this solicitation and when copies of standards are needed to perform a required construction activity, they may be directly obtained from publication source as identified herein.
 - 4.9.3 Where abbreviations and acronyms for standards and regulations are used within this solicitation, individual project's specifications or other contract documents, they shall indicate the recognized name of the organizations/ agency responsible for the standards and regulations utilized.
- 4.10 In its' response, the offeror must demonstrate and present paperwork to communicate its ability to adhere to, utilize and ensure the following:
 - 4.10.1 The contractor must hold and maintain a current and valid contractor's license for any of the AEPA states that allows it to supervise others, to construct, alter, repair, add to, subtract from, improve, move, wreck, or demolish any athletic facility covered by this solicitation and found within those states that have such requirements.
 - 4.10.2 The contractor will ensure that all individuals, firms or subcontractors being used to perform or supervise work performed, materials and equipment installed under this contract hold a current contractor's license, as required by those individual AEPA states. All subcontractors to be used for each individual project performed under this contract must be clearly identified and a list submitted with the name, address, trade or type of work, contractor's license number, if applicable, and their federal ID number.
 - 4.10.3 Upon request by an AEPA member agency's local member, the contractor shall schedule a meeting with the member/owner to ascertain and develop a comprehensive and complete understanding of the scope of work being requested by the member. The contractor shall conduct and perform a site investigation to learn existing site conditions in order to provide additional products and/or services necessary to properly complete the project in accordance with the project's contract documents.
 - 4.10.4 Any contract between the individual owner and the contractor under this solicitation shall consist of a detailed scope of work (a description of the work to be performed and the products to be provided by the contractor) and will

include all specifications, drawings, contractor's cost proposal and other project related documents. All applicable industry standards, manufacturer's instructions and requirements, technical specifications and general conditions, federal, state and local codes around which the contract is made shall be included, as if they were physically part of the contract documents.

- 4.10.5 A schedule for performance of work that can be met without planned overtime is the responsibility of the contractor, unless otherwise requested by the owner.
 - 4.10.6 Terms for what constitutes project completion and acceptance by the owner and taking title to work finished must be clearly identified, described and agreed upon and made a part of any contract. If any part of the construction requires the owner to assume control before the completion, this needs to be defined with all of the agreed to terms, conditions and stipulations. Both parties must agree on the definition of what constitutes total acceptance of the project and it must be accomplished before final payment is made to the contractor. Upon completion of the project, the worksite will be left in a condition equal to or better than before the project.
 - 4.10.7 Upon completion of the work, the contractor will present the owner with all documents necessary to close out the project, including but not limited to certificate of occupancy, maintenance manuals, up to four (4) complete sets of "as built" project drawings, and two (2) copies each of procedures of using and maintaining the facility and executed warranties on installed products and equipment.
 - 4.10.8 As part of the close-out process or upon request, no-cost training must be offered by the prime contractor for the maintenance staff of the owner and must be included as part of the purchase contract.
 - 4.10.9 The prime contractor must warrant the work performed, materials, equipment installed for a period of not less than six (6) years against defects and poor workmanship. Even if final payment is made, if the owner discovers an unfinished and/or improperly installed component, defect or poor workmanship that should have been identified and noted during the final inspection, the contractor will complete the work in a timely fashion at no additional cost to the owner.
 - 4.10.10 The contractor may offer extended warranties or maintenance agreements if available at an additional cost to owners. The maintenance contract must be offered as a separate line item.
- 4.11 If the offeror submitting a response to this solicitation to provide construction products and services relating to athletic/recreational tracks and courts is not a manufacturer, then the offeror must provide written documentation between it and the manufacturer indicating that the product manufacturer(s), for the purpose of this solicitation, is aware of the offeror's intent to offer the manufacturer's product line(s) and both parties are jointly committed and are aware of the terms, conditions and stipulations in this IFB, and that the manufacturer acknowledges and agrees to and will stand behind the contractor's performance under this IFB. Failure of non-manufacturers to submit sufficient documentation to meet this requirement can result in a non-responsive bid.

4.12 In its response, the offeror must provide a complete listing/catalog of all products offered with their associated cost that are not to be covered by R.S. Means. This will enable an owner's staff, architect or general contractor to verify the offeror's individual project quotes for new construction, renovation, retrofit or general maintenance and repair. This listing/catalog must provide complete specifications on each product/service. (This information is required in electronic format.)

4.13 Inspection

4.13.1 The contractor's project manager shall conduct a pre-inspection prior to any construction meeting or final inspection where the owner is expected to accept and/or sign-off on work that has been completed. This is to ensure that all work meets or exceeds the projects specifications and requirements. Any discrepancies shall be corrected and/or communicated to the owner.

4.13.2 Date of final inspection shall be scheduled in advance, with appropriate notice and agreed upon by all parties. The contractor shall provide the owner or its designee, with copies of the printed check-off list, proposed pay application, state and local inspector's sign-off/reports acquired since the last meeting. Any discrepancies will be noted as a punch list item and corrected prior to the next meeting or within the time specified by contract documents.

4.13.3 Prior to final payment being made and during the project close-out process the contractor shall submit and have the owner or designee acknowledge receipt of as-built drawings, maintenance and operational guides and all activated product warranties and approve any submittals needed..

4.14 The offeror must be in compliance with all federal, state and industry standards, and guidelines that apply to and within any of the 22 states.

4.15 Quality Control Issues

4.15.1 During the course of the contract, the owner or designee may request and/or secure samples, according to construction industry standards, guidelines or ASBA standards, of materials being applied, used from containers at the job site. The owner may then submit the samples to an independent industry qualified/certified consultant to test and evaluate the samples to determine that the materials being installed meet or exceed project's specifications. The cost for these tests and services will be paid for by the owner.

4.15.2 Should test results prove that a material used and/or applied is not equal to or better than specified, or the end product does not meet minimum requirements, the offeror will reimburse the owner for the cost of the tests and/or services acquired. The offeror will also pay for all costs incurred and associated to replace, remove and dispose of non-compliant materials and bring the end product up to project specifications and requirements.

4.15.3 Should test results and services prove that the materials tested were equal to specified materials and the work performed meets the project's specifications and requirements, the offeror will be notified of the results and the owner will pay all associated costs.

5. Specifications

5.1 General

- 5.1.1 The offeror must demonstrate its' knowledge, understanding and experience with dealing and working with drawings, specifications and general provisions of athletic track/court design, construction and related trades and utilities work, which may be part of any athletic facility project requested under this solicitation.
- 5.1.2 The offeror must provide all labor, materials, equipment and if required design services, site inspection and preparation services of track and court construction. These services may be provided by the offeror's own crews and staff or by subcontractors contracted and supervised by the offeror. It should be noted that the level of the offeror's involvement will depend on the owner's requirements.
- 5.1.3 The offeror is responsible for ensuring that the proposed project's design and construction drawings and manual clearly indicate, identify and communicate the products, services and testing that must be provided to deal with existing site conditions, public utilities, track/court sub-base-works, drainage systems and asphalt base-works, track/court surfaces are in accordance and comply with applicable ASBA, AAU, NCAA, NFHS and individual state requirements.
- 5.1.4 The offeror is responsible for being aware of, knowing and understanding all of federal, state and local government codes, regulations and requirements dealing with public athletic/recreational facilities.
- 5.1.5 If the offeror is only providing the track and/or court surface, the offeror must provide the owner with construction guidelines, requirements and recommendations for the site preparation, sub-base and asphalt pavement. However, it should be noted that AEPA and its members are seeking and prefer providers who can provide a turn-key salutation.
- 5.1.6 If any part of the design or construction work is to be performed by the owner's own crews or owner's architect and/or a third party contractor not associated with the offeror, the offeror, prior to taking possession of the project site or proceeding with its work, must provide the owner with a signed affidavit stating that it has inspected and has accepted the current site conditions and work completed as meeting and/or exceeding its and the manufacturer, industry and governmental standards and requirements. If work is not acceptable, the offeror must notify the owner immediately in writing stating what is not acceptable and on what this determination was made.
- 5.1.7 By accepting the owner's notice/order to proceed and executing the construction process, the offeror/contractor acknowledges that he has visited the site, has familiarized himself with the current conditions under which the work is to be performed, and understands the scope of work as defined in the contract documents and the product specifications requested.
- 5.1.8 Documentation signed by an authorized representative of the manufacturer will be provided to the member stating that the track and/or court surfacing has no measurable traces of heavy metals, leachable mercury or any other hazardous materials identified by the EPA. For comparison testing prior to installation and

randomly during installation, an 8" x 10" sample of the material must be furnished to the owner's independent laboratory upon request. This sample must be provided prior to installation.

- 5.1.9 An additional 8" x 10" product sample, the same color, texture, thickness, etc. as the type of surfacing to be installed for this project shall be provided to the owner. This must be a representative sample of the product for comparison of color and texture during installation. This sample must be submitted and approved by the owner prior to installation.
- 5.1.10 Upon completion of any striping, line markings, the offeror shall obtain written acceptance and approval of the markings by the owner's designated representative as being complete and meeting their requirements. This document shall state that the track and/or court markings and layout meets and complies with the governing bodies' (AAU/NCAA/NFHSA/etc.) requirements for any athletic event stated in the owner's scope of work for the individual project.

5.2 Quality Assurance

- 5.2.1 Offeror must demonstrate through documentation that it has completed at least 10 athletic/recreational track and court facilities that were completed and accepted by the owner as meeting and complying with the governing bodies' (AAU/NCAA/NFSHS/etc.) requirements and rules governing their level of athletic competition. The products offered shall meet or exceed the ASBA's guidelines, requirements and performance specification for the various types and levels of synthetic track or court surfaces recognized and approved by ASBA.
- 5.2.2 The offeror will only utilize qualified, trained, experienced, manufacturer approved and if applicable licensed tradesman to perform all work done under this IFB.
- 5.2.3 The offeror shall make its' own site visit to fully acquaint themselves with the construction site, existing facilities and utilities and shall fully understand the difficulties and restrictions attending the execution of the work under this IFB. All offerors shall advise the member in writing and receive its' acceptance of any restrictions, project alterations and/or anticipated difficulties prior to accepting a contract to do the individual project.
- 5.2.4 The offeror/AEPA prime contractor shall employ and maintain for the term of the AEPA contract an ASBA Certified Track Builder on staff to ensure quality control in all aspects of a project conducted under this solicitation. Failure of the offeror/AEPA contractor to meet this requirement their response will be deemed non-responsive and AEPA contract terminated.
- 5.2.5 Due to the individual AEPA member agency's individual requirements. Any offeror responding to this solicitation, who files to provide the information required on the Contractor's Qualifications Form (F) or has failed to perform/complete past project or is in default of warranty work or has been found guilty of violating state and/or local construction/labor codes, as judged by previous clients or AEPA. AEPA reserves the right to consider or not consider the offeror's response as being a responsive based on its on investigation and findings.

- 5.2.6 All track and court materials shall be warranted/guaranteed to the extent that the surfacing/product manufacturer's has indicated and stated. :
- 5.2.6.1 Has been manufactured, shipped, stored and applied in accordance with industry standards, manufacturer's specifications and instructions.
 - 5.2.6.2 Will hold fast and/or adhere to the asphalt, concrete, edging, filler and patches or overlay materials as intended.
 - 5.2.6.3 Will perform as specified in these specifications, the specifications of the product manufacturer and as identified and indicated in the current product information, literature and specification sheets available to the end user.
 - 5.2.6.4 Is ultra-violet resistant and will not de-laminate, bubble, blister, fade, crack or wear excessively during the required guarantee period as indicted herein and under normal use and intended purpose as communicated by the owner during the development of the project's scope of work.
 - 5.2.6.5 All machinery and materials used must be only those approved by the track and court manufacturer.

5.3 Outdoor Running and Jogging Tracks

- 5.3.1 Depending on the individual AEPA member agency's organizational purpose and scope they may or may not work with and serve educational institutions (pre-school through colleges and universities), government agencies (federal, state, county and city), non-public/not-for-profit organizations (education, recreational and community based). Therefore, AEPA is requesting a range of outdoor running and jogging track solutions that can meet the individual, sports and recreational need of the above noted groups. AEPA has presented the following information to communicate, provide and establish for the offeror minimum and general specifications, requirements, product quality and performance standards for the offer to base their proposed solutions on. It is understood that various manufacturer's materials, products and/or installation process may differ however, the end result for the same level and type of outdoor track should meet or exceed the minimum materials, product, performance and life cycle as their competitors' solution.
- 5.3.2 For each outdoor running and jogging track solutions offered the offer must provide the information necessary for AEPA and its owners to determine the quality of, level of, construction components of and the performance of the solution proposed.
- 5.3.3 Site Inspection and Investigation – The ultimate performance and life cycle of any running/jogging track depends to a significant degree on the subsoil and drainage conditions of the site. The stability of the subsoil also has a direct influence on the ability to properly prepare the site, construct the track and to maintain design grades under the deformations generated by the construction equipment itself. Such site condition as: expansive soils or plastic soils and use of base course materials consisting of these types of soils can create problems and frost action is exaggerated where frost susceptible materials exist with moisture available to generate frost heave. It is, therefore, necessary for offeror in cooperation with the owner in ensure that a complete and accrete site inspection/investigation has been

performed to identify soil conditions existing at the site and to take these conditions into account in designing the project. Site preparation, including stripping, placement of backfill and base construction must be properly performed to minimize the risk of problems due to subsoil and sub grade conditions.

5.3.3.1 The scope of and level of any site inspection/investigation must be flexible and dependent on the nature of the conditions that exist at a particular site, and the degree of risk that the owner is willing to acknowledge, accept and take regarding adverse effects of subsoil conditions. During the design and development of the project the offeror will advise and consult with the owner to determine the scope and level of site inspection required. Obviously, the more serious site conditions that require an adequate study includes but is not limited to:

5.3.3.1.1 The existence of peat or other organic soils at the site

5.3.3.1.2 Uncontrolled fill materials or waste materials at the site;

5.3.3.1.3 Expansive soils at the site;

5.3.3.1.4 High ground water conditions or surface water retention areas (low area flooding);

5.3.3.1.5 Special usage of the facility for a variety of activities.

5.3.3.2 Soils should be classified, in general, in accordance with the visual manual method of identification of soils, utilizing the Unified Soil Classification System (ASTM Methods D 2488 “Description of Soil Visual Manual Procedure”, and D 2487 “Classification of Soils for Engineering Purposes”). It is not intended, however, that a rigorous use of these methods be required, but only use of terminology that will describe the soil conditions in terms of soil types using the Unified Soil Classification symbols, such as CL, CH, etc.

5.3.3.3 Data obtained from this investigation should be prepared and submitted as part of the project record documents for later reference, if necessary, or for review by a qualified engineer if an evaluation is decided upon by the owner and/or the contractor

5.3.3.4 Once a site study has been completed, identified risks require the owner and the offeror to make a joint decision as to the level site preparation is required before the project is started. This is done so that an adequate site can be available for the tract construction, and in the event of any problems developing because of sub grade conditions, the responsibility can be clearly allocated between the CES member and the contractor.

5.3.3.5 Where any site and/or soil conditions are suspect for problem, such as existence of fill material, organic material or expansive soils, are known or believed to exist at a site, then it is required that the owner and contractor shall review, accesses and discuss the pros and cons of the condition and the owner may chose to retain a geotechnical consultant to obtain samples in accordance with ASTM Method D 1587 in cohesive soils, and D 1586 in granular soils, with borings to a depth of at least 10 ft. or into firm materials. This should be followed by appropriate unconfined

compressions tests, water content and density determinations on cohesive soils, and penetration resistances and blows per foot for granular soils, plus water level determinations, again with borings at each corner of the tennis court or at each quadrant of the track and intermediate borings not greater than 200 ft. apart outside the pavement area.

5.3.3.6 All information and communications relating to the site inspection and investigation shall become part of the project's documentation.

5.3.4 Site Preparation. Earthwork, Drainage and Sub base Construction

5.3.4.1 For new track construction the site must be properly prepared in accordance with project design documents that were prepared based on the site inspection and investigation which addressed:

5.3.4.2 Site grade and elevations;

5.3.4.3 The sub soil, topsoil and drainage conditions;

5.3.4.4 The existence of peat or other organic soils at the site;

5.3.4.5 Uncontrolled fill materials or waste materials at the site;

5.3.4.6 Expansive soils at the site;

5.3.4.7 High ground water conditions or surface water retention areas (low area flooding);

5.3.4.8 If an existing athletic facility, type of facility, how is it being utilized and by whom;

5.3.5 Stripping and excavation - Unless otherwise specified, topsoil and other unsuitable materials at the site, and to a minimum distance of 5' beyond the surfaced area, should be removed in such a manner as to minimize disturbance of the remaining sub grade soils, and to facilitate placement of embankment materials and/or base course materials. Topsoil should be stored at the site and reused for landscaping at the completion of construction.

5.3.6 Subsurface Drainage

5.3.6.1 Where surface inlets are provided on or near the courts or track, drain lines to carry the water to appropriate discharge channels should be in accordance with local building codes and regulations.

5.3.6.2 Where it is necessary or otherwise decided to lower the water table at the site, French drains (permeable, properly graded gravel-filled trenches), geocomposites or perforated drain lines surrounded with a stone material, should be utilized, discharging to appropriate channels. Non-woven geotextile fabric may be used, depending on the stone materials available.

5.3.6.3 Backfill of all trenches should be granular material, placed in layers not to exceed 6" in thickness, compacted with appropriate compaction equipment to 95% of the maximum density determined by ASTM Method D 698 (Modified Proctor). This compaction is necessary to minimize the risk of subsequent settlement of the surface over the trench.

5.3.6.4 When trenching or drain tile is used under existing permanent pavement, it is recommended that this area be compacted to 100% of the maximum density determined by ASTM Method D 698 (Modified Proctor). This method will reduce the amount of settlement that may occur in these trenches which will reflect on the final surface.

5.3.7 Sub base Embankment

5.3.7.1 Embankment is fill material necessary to raise the grade at the site, after removal of unsuitable materials identified during the site investigation, to provide the surface on which to place the base course for the running track.

5.3.7.2 While well-graded granular soil is preferred for embankment fill, normally locally available soil is used for economic reasons. The material should be free of organic or expansive material, and of particles greater than 1 1/2" in dimension. It should be placed in lifts not to exceed 6" in thickness and compacted to 95% of the maximum density determined by ASTM Method D 698 (Modified Proctor). The water content of the fill should be reduced by aeration or increased by adding water, as necessary to achieve the required compaction.

5.3.7.3 Where the natural soil at the bottom of the sub base course is stable, as evidenced by stability under construction equipment, hand auger or other exploration, base course materials can be placed on this soil. Soft clay and plastic soils should be appropriately stabilized.

5.3.8 Vegetation control or vegetation regrowth prevention - Soil conditions vary from area to area. Where problems exist, it may be necessary to sterilize the soil. The offeror should during project development or construction, recognize and determine when soil sterilization is necessary and offer methods and options to the member for rectifying problems caused by vegetation.,

5.4 Concrete curbs and drains

5.4.1 Furnish all required labor, materials, equipment implements, parts and supplies necessary to prepare the site and install curbs and drainage systems.

5.4.2 Cement shall conform to one of the standard specifications for Portland Cements, ASTM C-150, or specification for blending hydraulic cements, ASTM C-595, excluding slag cements types S and SA.

5.4.3 Air entrainment by total volume of concrete shall be: 4 – 6% for 1 1/2" maximum size coarse aggregate; 5 – 7% for 3/4" or 1" maximum size coarse aggregate; 6 1/2" – 8 1/2" for 3/8" or 1/2" maximum size coarse; 1/2 – 8 1/2% for 3/8" or 1/2" maximum size coarse aggregate.

5.4.4 Aggregate shall conform to standard specifications for concrete aggregates ASTM C-33. For concrete work that is 5" thick, the normal size of the coarse aggregate shall not exceed 1 1/2". For concrete work that is 4" thick, the normal size of the coarse aggregate shall not be greater than 1".

- 5.4.5 Concrete work shall be 5" thick if the location of the structure is such that it will be subject to more than three freeze-thaw cycles annually. If the location is such that not more than three freeze-thaw cycles occur annually, concrete work may be 4" thick.
- 5.4.6 Steel reinforcement bars shall conform to standard specifications for deformed and plain billet-steel bar for concrete reinforcement ASTM A-615, grade 60 or 40.
- 5.4.7 For concrete work that is 5" thick, the recommended bars shall be No. 5 size in both directions at 12" on center. For concrete work that is 4" thick, the recommended bars shall be No. 5 size in both directions at 15" on center. Bars shall be accurately positioned at mid-depth, terminating 2" away from edges and joints, and shall be adequately supported by chairs with sand plates provided to prevent bar supports from sinking into the sub base.
- 5.4.8 Bars shall be lapped 18" and also be securely tied or otherwise secured so that there is no possibility of displacement when concrete is placed. Reinforcement at time of concrete placement shall be free of loose, flaky rust and other coatings or films that could interfere with bonding to the concrete.
- 5.4.9 The concrete shall have a compressive strength of not less than 3,000 psi at the 29th day after casting. The minimum cement content for finish ability shall not be less than 470 lb. per cubic yard for 1 1/2" maximum size coarse aggregate or 520 lb. for 1". In freeze-thaw environments, the minimum cement content shall not be less than 560 lb. per cubic yard. The slump shall not be more than 4". Ready-mixed concrete shall be mixed and delivered in accordance with ASTM C-94, specification for ready-mixed concrete.
- 5.4.10 Concrete shall be spread, consolidated, screened, bull-floated and finished in accordance with Section 7.2 of ACT Standard 302, recommended practice for concrete floor and slab construction.
- 5.4.11 When concrete is sufficiently set to withstand foot pressure with only about 1/4" indentation and the water sheen has left the surface, the slab shall be uniformly finished by power floating and trawling. The final finish texture shall have at least a medium broom finish to improve the mechanical bond to the surface.
- 5.4.12 Immediately after brooming, the concrete shall be kept continuously moist for seven (7) days by covering with polyethylene film or waterproof curing paper. Curing compounds will not be used. Curing time shall be in accordance with surfacing systems manufacturer's recommendations, but in not less than 28 days.
- 5.4.13 The concrete surface shall be finished so that the tolerance shall not vary more than 1/4" in 10' when measured with a 10' straightedge in all directions.
- 5.4.14 Perimeter edging shall be constructed using one of the following methods; pavement extension, flush curb, permanent raised curb or removable raised curb.
- 5.4.15 A pavement extension shall have an aggregate base course constructed so that the inside perimeter is parallel to and 28" inside of the track measure line, and 16" from the outer side of the outside lane line.

- 5.4.16 A pavement extension shall have an asphalt concrete course(s) constructed so that the inside perimeter is parallel to and 22" inside of the track measure line, and its outside perimeter parallel to and 10" from the outer side of the outside lane line.
- 5.4.17 A pavement extension shall have a synthetic surfacing course constructed so that the inside perimeter is parallel to and 16" inside of the track measure line, and its outside perimeter parallel to and 4" from the outer side of the outside lane line.
- 5.4.18 A flush curb shall be solid, installed for both the inside and outside (or inside only) perimeter of the trade. The curb shall be flush with either the asphalt or the top elevation of the synthetic surface for an impermeable installation. For a permeable installation, the curb is to be flush with the final elevation of the asphalt. The distance between the track side of the inside curb and the measure line shall be less than the distance between the track side of the outside curb and the line shall not be less than 4".
- 5.4.19 Removable raised curbs shall be available in various materials, including but not limited to; aluminum, polyurethane or aluminum with a firm rubber top. These removable curbs shall sit on pads that allow movement of water from the track surface to the drain channel or infield.
- 5.4.20 Drainage systems shall utilize a perimeter drain tile system, catch basin, curb and gutter drainage system, permeable system or continuous trench drains.
- 5.5 Hot mix asphalt concrete base course and leveling course for running tracks and/or field events areas.
 - 5.5.1 The components and methods utilized to install and complete the base and leveling course must be in accordance with the individual project's design documents. The success of any installation of base or leveling course is dependent upon a properly constructed sub base and a good drainage system.
 - 5.5.1.1 Minimum recommended of the base course thickness shall be based on the specifications established by the geotechnical engineer.
 - 5.5.1.2 Minimum recommended of the leveling course thickness shall be based on the specifications established by the geotechnical engineer.
 - 5.5.2 Quality Assurance - For installation of running track and field event hot mix asphalt, utilize only thorough highly trained personnel experienced and familiar with running track and field event paving and with the tolerances required by the appropriate federal, state and local governing bodies.
 - 5.5.3 Asphalt - The proper type of asphalt used will vary from state to state if using the standard norm of the Department of Transportation (DOT) or State Highway Department standards. The following is a typical mix design for example only:
 - 5.5.3.1 Thickness: No less than 1".
 - 5.5.3.2 Liquid Asphalt or Bitumen: 5.5% by weight (+/- 0.5%).
 - 5.5.3.3 Asphalt Penetration or Type: 85 - 100 penetration.
 - 5.5.3.4 Aggregate Type: Crushed stone, gravel, shale, limestone, etc. Slag is unacceptable unless other materials cannot be obtained, and then only blast furnace slag is acceptable.

5.5.3.5 Aggregate Sieve Analysis	% Passing
1/2"	100%
3/8"	70 – 80%
1/4"	60 – 80%
No. 4	60 – 70%
No. 8	40 – 60%
No. 12	30 – 50%
No. 16	20 – 40%
No. 30	20 – 30%
No. 50	10 – 20%
No. 100	2 – 6%
No. 200	60 – 70%
Washed	0 - 2%

5.5.3.6 Plant, equipment, machines and tools - The bituminous plant should be capable of producing the quantities of bituminous mixtures required. Hauling, placing and compaction equipment should be provided in sufficient numbers that the placement capacity at the site is equal to, or greater than, the planned plant output to the site.

5.5.3.7 Paver - All pavement, where applicable, should be placed with a self propelled asphalt paver. The screed width should be adjustable to no less than eight feet (8'). Only hydraulic screed and auger extensions to achieve widths greater than that of the main screed are acceptable

5.5.3.8 Compaction Equipment - Compaction equipment should consist of steel drum asphalt rollers of sufficient size and width to properly compact the hot mix asphalt to the required compaction, while providing a smooth surface free from bumps, marks and creases.

5.5.3.9 Transportation Equipment - Transportation of the hot mix asphalt to the site from the asphalt plant should be in trucks having tight, clean, smooth beds lightly coated with an approved releasing agent. Each load should be covered with a canvas or other approved material of ample size to protect the mixture from cooling

5.5.3.10 Straightedge – The contractor should furnish and maintain at the site, good working condition, and one 10' straightedge for each paver

5.5.4 Placement and Compaction

5.5.4.1 Hot mix asphalt courses should only be placed on the specified base, free from contamination and with no free water on the surface.

5.5.4.2 Paving operations should not be scheduled unless there is ample time to place; compact and finish roll the hot mix asphalt

- 5.5.4.3 The range of temperatures for mixtures to be dumped into the paver should be determined by State Department of Transportation guidelines, and in no case should they be cooler than 225 degrees F
- 5.5.4.4 Paving operations should provide a mat that is smooth, dense and of the proper thickness, slope and plane
- 5.5.4.5 The leveling course should be placed such that the longitudinal joints of the leveling course are offset from that of the base course. Transverse joints should be offset a minimum of 24
- 5.5.4.6 In placing each succeeding pass after the initial one, the screed of the paver should be set so that it overlaps the preceding pass by 2" and be sufficiently high so that when compacted, a smooth joint is produced. Prior to pinching the joint, the excess material should be pushed onto the edge of the new pass with a lute. Excess material should be removed and wasted
- 5.5.4.7 Breakdown rolling should begin as soon after the placement as the mixture will allow without undue displacement. No delays in rolling should be permitted. After breakdown rolling has been completed, preliminary testing of grade, slope and planarity should be done. Any deficiencies should be immediately corrected in accordance with "Acceptability of Work." When the paving contractor is assured that all tolerances are being met, finish rolling should begin
- 5.5.4.8 Deficient areas within the base course should be corrected by saw cutting or milling high spots and/or by truing and leveling low spots
- 5.5.4.9 Deficient areas in the leveling course should be corrected by saw cutting or milling to a depth equal to the thickness of the mat. Tack coat should be applied to all edges and the pavement should be replaced. Skin patching of the leveling course should only be done with materials acceptable to the track surfacing contractor
- 5.5.5 Acceptance of work – Upon completion of the work and/or prior to installing the track surface system the base and leveling course should be inspected for:
 - 5.5.5.1 Grade conformance tests should be conducted on both the base course and the leveling course. The entire surface should have positive drainage.
 - 5.5.5.2 Planarity - After completion of the finish rolling operations on each course, the compacted surface should be tested with a 10' straightedge. Measurements should be made perpendicular to and across all mats at a distance not to exceed 25' feet. The track surfacing contractor and/or member's representative should be present when these measurements are made. The maximum allowable planarity deviation within a pass should be 1/4" in 10' when measured in any direction.

5.6 Running Track Surfacing Systems

- 5.6.1 Furnish all required labor, materials, equipment implements, parts and supplies necessary to inspect/investigate site conditions, obtain, deliver, install required track surface, line and mark track for appropriate track configuration for the events identified by the AEPA member.
- 5.6.2 Due to the wide range of needs and requirements of AEPA members. AEPA is seeking track surfaces of various types and the following descriptions are given as a general guide and standard of the surfaces being requested. The offeror is encouraged to propose a complete line of track surfaces that meet or exceed the listed surfaces and the standards and specifications established by the National Federation of State High Association, American Sports Builders Association, state and local Uniform Building Codes. Guide track surfaces manufactured by Atlas Tracks Inc., 19495 SW Teton Avenue, Tualatin, Oregon 97062, Phone 800-423-5875, Fax 503-692-0491, <http://www.atlastrack-tennis.com>
 - 5.6.2.1 Atlas Classic - Product classification rubber/asphalt system using a unique blend of fibrous SBR stands incorporated with petrol-chemical binders.
 - 5.6.2.2 Atlas L-2000 - Product classification: layered system polymer resin bound, SBR granule, all-weather running track surface.
 - 5.6.2.3 Atlas L-3000 - Product classification: layered system polymer resin bound, SBR granule, all-weather running track surface, with a polyurethane structural spray coating.
 - 5.6.2.4 Atlas Poly 4000 - Product classification: layered system polymer resin bound, SBR base mat and colored EPDM rubber top coat bound by highly pigmented, polymer resin-binder spray coatings, all-weather running track surface.
 - 5.6.2.5 Atlas Poly 5000 - Product classification: layered system polymer resin bound, SBR base mat and colored EPDM rubber top coat, bound by colored polyurethane structural spray coatings, all-weather running track surface.
 - 5.6.2.6 Atlas RESISPORT BMSS Product classification: a cast-in-place, durable, resilient, all-weather track surface consisting of polyurethane bound rubber base mat, and a structural spray coating of polyurethane and EPDM rubber.
 - 5.6.2.7 Atlas Poly Mat - Product classification: Polyurethane system cast-in-place, durable, permeable, resilient, all-weather track surface consisting of a polyurethane bound rubber base mat.
 - 5.6.2.8 Atlas Top-Coat Product Classification: Layered system used to rejuvenate an existing track surface, rubber granules applied "dry" to the surface and adhered by spraying an application of a resin-binder.
 - 5.6.2.9 Atlas RESISPORT FP - product classification poured-in-place full-depth polyurethane installed in several layers of polyurethane mixed with SBR granules.

- 5.6.2.10 Atlas RESISPORT SE - Product classification: multi-layered coatings used to rejuvenate an existing polyurethane track surface, durable, resilient, all-weather track surface consisting of an impervious, polyurethane bound rubber base mat, and a structural spray coating of polyurethane and EPDM rubber.
- 5.6.2.11 Atlas RESISPORT FP Top - Product classification: cast-in-place, durable, spike-resistant, impervious, all-weather track surface used to rejuvenate an existing track surface, consisting of a resilient, colored, solid pour coating with encapsulated rubber, and an embedded, colored EPDM rubber granule top.
- 5.6.2.12 Atlas RESISPORT SW - Product classification: cast-in-place, durable, spike-resistant, all-weather track surface consisting of a resilient 10 mm polyurethane bound rubber base mat, and a 3 mm, impervious, colored, solid pour coating with a colored EPDM rubber granule top.
- 5.6.2.13 Atlas RESISPORT SS - Product classification: multi-layers of colored EPDM granules encapsulated in a colored polyurethane coating utilized to rejuvenate repair an existing track surface.

5.7 Asphalt, latex, polyurethane tracks

- 5.7.1 Track systems offered shall be asphalt, latex, polyurethane systems or pre manufactured rubber. Installed depth of all systems, depending on the individual project's specifications and requirements, will be 3/8" to 1/2". Only track surface systems that have a demonstrated and a proven record of performance within the area of the country in which the project is being proposed.
 - 5.7.1.1 Asphalt track surfacing systems shall be either a SAR or asphalt emulsion and rubber system constructed in accordance with ASBA standards.
 - 5.7.1.2 Latex track surfacing systems shall be available in black or use a colored binder, color sandwich or full-depth color system. It shall be mixed and installed on-site and the end product must meet or exceed ASBA standards.
 - 5.7.1.3 Polyurethane track surfacing systems shall be available in either permeable or impermeable forms. They will utilize a base mat, structural spray, sandwich or full-pour application process. The polyurethane system shall be mixed and installed onsite or per manufacturer's specifications and instructions and must meet ASBA standards.
- 5.7.2 The asphalt or concrete base must be properly cured in accordance with all general specifications referenced above prior to the application of the synthetic surface.
- 5.7.3 The asphalt or concrete base shall be inspected for conformity to allow tolerances for inclination. Also, the surface shall not deviate more than 1/4" in 10' from the specified grade when checked with a 10' straightedge in all directions. The surface should also be flooded with water to detect low areas.
- 5.7.4 The area to be surfaced shall be clean and free of any loose or foreign particles prior to the synthetic surface installation.

- 5.7.5 A primer or K coat may need to be applied to the asphalt or concrete base in accordance with the system specifications. Some systems will not require this primer coat.
- 5.7.6 The track surface shall be installed in strict compliance with the manufacturer's specifications. All equipment is to be kept clean. All daily work shall be finished in a uniform manner. All cured joints are to be properly prepared prior to commencement of new work. All layers are to be properly cured prior to subsequent applications.
- 5.7.7 Delaminating surfaces – Any surfaces not adhered to the concrete or asphalt substrate need to be removed. If only a few small areas are involved, they can be patched with an appropriate compatible material. If large sections are loose and adjacent areas can be easily pulled loose, the entire surface should be removed.
- 5.7.8 Leveling Course(s) – Contractor shall flood track, mark and fill all water-holding depressions with the leveling course mixture.
- 5.7.9 Striping – The owner's personnel will be consulted to determine the levels of competition and the governing organization's (AAU/NCAA/NHSAA) standards must be utilized for the placement of the finish line(s), events to be run, location of lane numbers and any other painted markings. A computerized set of calculations will be created to enable accurate layout of the selected markings. Layout of kings will be done with a steel tape calibrated to .01". The markings on the curve will be sighted-in with a theodolite capable of direct reading to 20 seconds of arc. Markings shall conform to NFSHSA, NCAA or AAU regulations. The paint shall be semi-gloss urethane compatible with the surface. The offeror will supply a scaled drawing of all markings. All calculations, measurements and markings will be done by qualified and experienced specialists with a minimum of three (3) years of experience in this field. All markings shall be painted, using an application process applied at approximately 200 to 250 square feet per gallon of paint.
- 5.7.10 The offeror/contractor must provide a written warranty on the all-weather running/jogging track construction, materials and surfaces for a period not less than six (6) years from the date of acceptance by the owner. This warranty shall include a three (3) year warranty from any subcontractor/installer/supplier and is to be provided directly to the owner/AEPA contractor. All project warranties must be backed by a warranty bond from an A-rated insurance company licensed to do business in the state in which the project was completed. The three year subcontractor/installer/supplier warranty from the bonding company is to be payable to the AEPA contractor and the six year warranty from the AEPA contractor is to be payable to the project owner.
- 5.7.11 The warranty shall cover defects in materials, excessive color change, excessive wear, and any other feature; material and/or condition which are not deemed ordinary wear on a running track.

5.8 Submittals to AEPA and prospective buyers.

- 5.8.1 The offeror must provide written documentation for each track surface offered, the installers authorization and certification by the surface manufacturer to install, maintenance and/or repair the proposed track system.

- 5.8.2 For the track surface offered provide written documentation of its proven track record for performance and durability by listing 3 installations that are a minimum of four years old or older, that contain the same track surface materials, and use the same method of installation showing locations, installation dates, and owner representatives contact information. Tracks listed are to have been provided by the offeror making the response to this solicitation.
- 5.8.3 The contractor will provide written documentation indicating the proper utilization and operation of the track as well as the ongoing maintenance required to maintain and have the track meet its projected live cycle. The information may includes but is not limited to the day to day operating instructions, maintenance and repair materials to be used, equipment needed and the methods and where the materials, equipment and if need maintenance can be obtained, including associated cost at the time of the project..
- 5.8.4 Provide required manufacturer's Product Data and Material Safety Data Sheet for products provided.
- 5.8.5 For the all-weather track system proposed/or provided under this solicitation the offeror must provide written documentation describing and lay out all of the terms, conditions, stipulations and requirements of the warrantee for each and any associated cost if applicable.
- 5.8.6 The offeror must provide a written proposal to the CES member that includes all of the necessary information required for the owner to:
 - 5.8.6.1 Have a complete understanding of the scope of work to be performed and timelines.
 - 5.8.6.2 Understand the physical layout of the proposed project in relationship to existing site conditions.
 - 5.8.6.3 Be aware of the type, level, quality and performance standards of products to be utilized and/or provided in completing the project.
 - 5.8.6.4 Understand the roles, responsibilities and commitments of all parties during the track construction process.
 - 5.8.6.5 Be aware of and understand all of the cost associated to site inspection/investigation, site preparation, track construction, lining and marking the track for events and other related materials and/or construction costs.
- 5.9 Indoor/outdoor tennis and basketball courts:
 - 5.9.1 Furnish all required labor, materials, equipment implements, parts and supplies necessary to inspect/investigate site conditions, obtain, deliver, construct, install required tennis/basketball court surface, line and mark court for appropriate court configuration for the events identified by the AEPA owner.
 - 5.9.2 Due to the wide range of needs and requirements of AEPA members. AEPA is seeking tennis/basketball surfaces of various types and the following descriptions are given as a general guide, minimum standards and type of court construction being requested. The offeror is encouraged to propose a complete line of indoor/outdoor tennis/basketball court systems and surfaces that meet or exceed

the systems listed and comply with the standards and specifications established by the American Sports Builders Association, state and local Uniform Building Codes. The systems and surfaces give as a guide are those manufactured and/or provided by Atlas Tracks Inc., 19495 SW Teton Avenue, Tualatin, Oregon 97062, Phone 800-423-5875, Fax 503-692-0491, <http://www.atlastrack-tennis.com>.

5.9.2.1 Atlas Cushion BX basketball/tennis court system - Product classification: multi-layer system containing resilient, cushion base mat using SBR and EPDM rubber granules and Nike grind bound together with latex and/or polyurethane resin, a second layer of reinforcing barrier resins to transition to four layers of textured acrylic court surfacing system.

5.9.2.2 Atlas Cushion CX basketball/tennis court system - Product classification: multi-layer system containing resilient, cushion base mat using SBR and EPDM rubber granules and Nike grind bound together with latex and/or polyurethane resin, a second layer of reinforcing barrier resins to transition to world class four layered textured acrylic tennis court surfacing system.

5.9.2.3 Plexipave Sports Surfacing System a division of California Products provides a multi-layer court surfacing system that can be applied over properly prepared asphalt and concrete courts. The system can be formulated to meet the requirements of players at any level based on the ITF's specifications. The three system being used for this solicitation are plexipave standard, HU and IW.

5.9.3 Concrete court construction - This method is preferred and allows for a much larger single monolithic pour, eliminates the need for expansion joints and minimizes reflective and surface cracking.

5.9.3.1 References

5.9.3.1.1 STM specifications are available from ASTM.

5.9.3.1.2 A. General conditions for construction; I.B. Site Investigation; I.C. Site preparation, Earthwork, Drainage and Sub base; I.D. Vegetation Control or Vegetation Regrowth Prevention; I.E. Subsurface and Surface Drainage for Recreational Areas; II.A. Tennis Court Orientation; IIB. Tennis Court Dimensions and Related Measurements; EH Post Tensioned Concrete Court Pavement: IIB Tennis Court Playing Line Layout Plan; and IIIH Post Tensioned Concrete Slab Tennis Courts found within ASBA adapted guidelines.

5.9.3.2 Slope and Elevation Requirements - All excavating, filling and grading requirements and compacting work of the sub base should be performed so that the finished sub grade is 4"-6" above the surrounding ground and slopes not less than 0.83% (1:120) and not more than 0.1% (1:100). Each court must slope in a true plane, preferably from side to side (but from end to end or from corner to corner also are acceptable), or in the shortest direction for good drainage and water runoff. The court should never be sloped from the net line to the baseline, from the baseline to the netline, from the sides to the centerline or from the centerline to the sides.

5.9.3.3 Base Preparation – Refer to ASBA’s guidelines for site preparation, earthwork, drainage and sub base construction.

5.9.3.4 Concrete construction

- 5.9.3.4.1 Apron - The overall dimension of an individual court should be 61' x 121' to provide a 6" apron around the court or 62' x 122' to provide a 1' apron around the court. This additional footage helps prevent vegetation intrusion, facilitates landscape maintenance and adds to the overall cosmetics. Fencing should remain at 60' x 120'. Fence posts, net posts, sleeves and center anchor should be installed prior to or during concrete placement. Fencing should be completed prior to surfacing.
- 5.9.3.4.2 Moisture/Vapor Barrier – A double moisture/vapor barrier, consisting of polyethylene (two-6 mil. thicknesses laid in opposite directions) should be installed prior to installation of any steel and/or cables. Overlap polyethylene sheets at least 6" and tape joints. Once in place no vehicular traffic should be allowed on the moisture/vapor barrier or any other object which could puncture the barrier or otherwise compromise the integrity of the surface. All concrete should be pumped, not driven onto the court. Excessive loads at any time are unacceptable.
- 5.9.3.4.3 Cement - Cement (Type 1 or IA) should conform to one of the Standard Specifications for Portland Cement, ASTM C 150 or Specifications for Blending Hydraulic Cements, ASTM C 595, excluding slag cements Types S and SA. Do not use curing compounds.
- 5.9.3.4.4 Air entrainment by total volume of concrete should be 4 to 6% for 1 1/2" maximum size coarse aggregate, 5 to 7% for 3/4" or 1" maximum size coarse aggregate, 6 1/2 to 8 1/2% for 3/8" or 1/2" maximum size coarse aggregate.
- 5.9.3.4.5 Aggregate should conform to standard specifications for concrete aggregates ASTM C 33. For concrete work that is 5" thick, the nominal size of the coarse aggregate should not exceed 1 1/2" and for concrete work that is 4" thick, the nominal size of the coarse aggregate should not be greater than 1". Fly ash or other additives are not acceptable.
- 5.9.3.4.6 Thickness of concrete work should be 5" thick if the location of the tennis court is such that it will be subject to more than three freeze/thaw cycles annually. If the location is such that not more than three freeze/thaw cycles occur annually, concrete may be 4" thick.

5.9.3.5 Post 6 Tensioning materials should consist of seven wire stress-relieved strands, conforming to ASTM A 416, with an ultimate strength of 270 KSI. Strands should be coated with a permanent rust preventative lubricant and wrapped with plastic sheathing. If strand sheathing is damaged or removed, it is to be repaired by taping. A maximum of 6" exposed strand is permitted at the anchor. End anchorage devices will conform to Post-Tensioning Institute (PTI) specifications. All dead end anchorages must be power seated. All strands are to be supported on chairs and tied at all intersections or securely supported in beams to prevent vertical and horizontal movement during concrete placement. Cables should be laid out in grids no greater than 4' on center. Concrete must be well consolidated, especially in the vicinity of strand anchorages. Strands should be anchored at 28.9 KIPS, but may be initially stressed at 33 KIPS. A 9" diameter centered on the strand axis by a 36" length should be allowed for stressing equipment clearance. The stressing process generates tremendous pressures and extreme care should be taken to prevent injury from operator error or failure of equipment or materials. Slabs should be designed using acceptable engineering practices in accordance with the American Concrete Institute Building Code Requirements for reinforced concrete and the Post-Tensioning Institute's tentative specifications for post-tensioning materials. The soil condition and plasticity index of the court site should be considered in determining strand spacing and beam requirements.

5.9.3.6 Forms should be set accurately to the lines and grades indicated on drawings and secured to prevent settlement or movement during placing of concrete. Forms should remain in place until concrete has taken its final set.

5.9.3.7 Joints.

5.9.3.7.1 Single courts may be poured as a monolithic slab, or a metal key way joint or tooled control joint may be placed at the net line to minimize cracking of the slab due to shrinkage, prior to stressing the cables.

5.9.3.7.2 Double courts may have an electrometric metal construction joint between courts. This joint may also be placed on the net line if needed. Joints should never be installed in the play areas.

5.9.3.7.3 Multiple court banks may have an expansion joint between every two courts. Where this occurs, the cables will be "dead ended" on both sides.

5.9.3.7.4 For multi-court banks, an accepted alternative expansion joint method would be to construct a common expansion joint between every two courts with a T-joint method. The cabling system can be continued through the system to allow for tension to be applied at the end of the total slab distance.

5.9.3.8 Concrete proportioning and mixing - The concrete should have a compressive strength of not less than 3,000 psi at 28th day after casting. Ready-mixed concrete should be mixed and delivered in accordance with ASTM C 94, Specification for Ready-Mixed Concrete with a 4" maximum slump.

5.9.3.9 Placing and finishing - Concrete should be placed by pumping method. At least a full court should be placed in one continuous operation without intervening joints of any kind. Concrete should be spread, consolidated, screened, bull-floated and finished in accordance with Section 7.2 of ACI Standard 302, Recommended Practice for Concrete Floor and Slab Construction. When concrete is sufficiently set to withstand foot pressure with only about 1/4" indentation and the water sheen has left the surface, the slab should be uniformly finished by power floating and toweling. The final finish texture should be a medium broom finish unless otherwise specified by the surface manufacturer. No curing compounds should be used at any time.

5.9.3.10 The finished surface of the court should not vary more than 1/8" in 10' when measured in any direction.

5.9.3.11 Curing - Immediately after finishing, the concrete should be kept continuously moist for 7 days by covering with polyethylene film or waterproof curing paper, or by sprinkling or ponding or other acceptable coverings. No curing compounds should be used at any time. Curing time should be in accordance with surfacing system manufacturer's recommendations. Timing is critical on all of the above due to the possibility of disturbing the finished surface.

5.9.4 Hot Mix Asphalts Courts

5.9.4.1 References

5.9.4.1.1 STM specifications are available from ASTM.

5.9.4.1.2 A. General conditions for construction; I.B. Site Investigation; I.C. Site preparation, Earthwork, Drainage and Sub base; I.D. Vegetation Control or Vegetation Regrowth Prevention; I.E. Subsurface and Surface Drainage for Recreational Areas; II.A. Tennis Court Orientation; II.B. Tennis Court Dimensions and Related Measurements; II.I. Typical Asphalt Court edge; and II.B. Tennis Court Playing Line Layout Plan found within ASBA adapted guidelines.

5.9.4.2 Slope Requirements - All excavating, filling and grading requirements and compacting work of the sub base should be performed so that the finished sub grade is 4"-6" above the surrounding ground and slopes not less than 0.83% (1:120) and not more than 1% (1:100). Each court must slope on a true plane, preferably from side to side (but from end to end or from corner to corner are also acceptable), or in the shortest direction for good drainage and water runoff. The court should never be sloped from the net line to the baseline, from the baseline to the netline, from the sides to the centerline or from the centerline to the sides.

5.9.4.3 Perimeter Edging

5.9.4.3.1 Curbing (for decorative purposes) – An optional edging of brick, concrete, steel or treated wood may be installed around the entire perimeter of the court area. In freeze-thaw climates, cracks will develop between the curbing and pavement. Sections may be left open to allow trucks and other equipment to enter and leave the court area, until other work specified herein has been completed. Top elevation of the edging should be approximately 1/2" below the finished grade level and the court's surface should be tapered out to meet it.

5.9.4.3.2 Apron - A 6" - 12" apron may be added around the perimeter of the court (5) to help prevent the intrusion of vegetation, facilitate landscape maintenance, and improve the overall cosmetics of the court. Fencing should remain 60' by 120' and should be installed after paving and prior to surfacing.

5.9.4.4 Aggregate Base Course.

5.9.4.4.1 Material – A base course of bituminous concrete mixture; crushed aggregate; processed/recycled asphalt or processed/recycled concrete should be installed over the sub grade. The specified material should meet applicable ASTM specifications. Compacted thickness will depend on local soil and climatic conditions, but in no case should the thickness be less than the equivalent of 4" of thoroughly compacted crushed stone.

5.9.4.4.2 Spreading and Compacting - The material should be spread by methods and in a manner that produces a uniform density and thickness. The material as spread should be compacted to 95% minimum Proctor Test with equipment that provides uniform density.

5.9.4.4.3 Tolerances - Surface of the base course as compacted should not vary more than 1/2" from the true plane of the court.

5.9.4.5 Modified Base Course - A modified base course is sometimes used, particularly in areas not subject to freeze/thaw action. The modified base may consist of one course of suitable material as described above and may be installed to a uniform thickness oft 1/2" to 4". The modified base should be compacted to provide a smooth, true plane surface, and should not vary more than 1/4" in 10', when measured in any direction.

5.9.4.6 Intermediate Pavement Course. A leveling course of a hot plant mix having a maximum aggregate size of 3/8" to 3/4" in accordance with specifications of the state's Department of Transportation and/or the Asphalt Institute should be constructed over the base course to a compacted thickness of not less than 1 1/2". This hot plant mix should be spread and compacted by methods and in a manner that produces a uniform density and thickness. The finished intermediate course should not vary more than 1/4" in 10', when measured in any direction.

5.9.4.7 Asphalt Surface Course

5.9.4.7.1 General Description – A surface course of a hot plant mix having a maximum aggregate size of 3/8" and a minimum aggregate size of 1/4" should be constructed over the hot mix intermediate course to a compacted thickness of not less than 1"

5.9.4.7.2 Suggested Mix Design:

<u>Screen</u>	<u>% Passing</u>
1/2	100
3/8	90-100
#4	55-85
#8	32-67
#50	7-23
#200	2-10

*The proper type asphalt used for the surface course will vary from state to state if using the standard norm of the Department of Transportation (DOT) or State Highway Department standards. Local soil and climatic conditions also may impact the type of asphalt used.

5.9.4.7.3 Thickness: Not less than 1"

5.9.4.7.4 Liquid Asphalt Bitumen: Minimum 5.5% by weight.

- 5.9.4.7.5 Aggregate Type: Crushed stone, gravel, shale, limestone, etc. Foreign materials, i.e., pyrite, clay, ferrous compounds, dirt and organic material are not acceptable.
- 5.9.4.7.6 Cure Time: Follow coating manufacturer's recommendations (typically 14-30 days, depending on the time of years, and rainfall. Asphalt will cure more slowly in cooler temperatures, i.e. the Spring and Fall.
- 5.9.4.7.7 Voids Content: Minimum as specified by the Department of Transportation or State Highways Department, but in no case should void content exceed 7%.
- 5.9.4.8 Spreading and Compacting - This hot plant mix should be spread and compacted by methods and in a manner that produces a uniform density and thickness.
- 5.9.4.9 Surface Tolerance - The finished surface of the court should not vary more than 1/8" in 10' when measured in any direction.
- 5.9.5 The installation of final all weather court surfaces.
 - 5.9.5.1 The asphalt or concrete base course is to be properly cured in accordance with the surface manufacturer's specifications and instructions.
 - 5.9.5.2 The asphalt or concrete base shall be inspected for conformity to allow tolerances for inclination. Also, the surface shall not deviate more than 1/4" in 10' from the specified grade when checked with a 10' straightedge in all directions. The surface should also be flooded with water to detect low areas.
 - 5.9.5.3 The area to be surfaced shall be clean and free of any loose or foreign particles prior to the synthetic surface installation.
 - 5.9.5.4 A primer or K coat may need to be applied to the asphalt or concrete base in accordance with the system specifications. Some systems will not require this primer coat.
 - 5.9.5.5 The court surface shall be installed in strict compliance with the manufacturer's specifications. All equipment is to be kept clean. All daily work shall be finished in a uniform manner. All cured joints are to be properly prepared prior to commencement of new work. All layers are to be properly cured prior to subsequent applications.
 - 5.9.5.6 Delaminating surfaces – Any surfaces not adhered to the concrete or asphalt substrate need to be removed. If only a few small areas are involved, they can be patched with an appropriate compatible material. If large sections are loose and adjacent areas can be easily pulled loose, the entire surface should be removed.
 - 5.9.5.7 Leveling Course(s) – Contractor shall flood court, mark and fill all water-holding depressions with the leveling course mixture.

- 5.9.5.8 Striping – The owner’s personnel will be consulted to determine the levels of competition and the governing organization’s (AAU/NCAA/NHSAA) standards must be utilized for the placement of court lines and related markings. A computerized set of calculations will be created to enable accurate layout of the selected markings. Layout of lines will be done with a steel tape calibrated to .01”. Markings shall conform to NFSHSA, NCAA or AAU regulations. The paint shall be semi-gloss urethane compatible with the surface. The offeror will supply a scaled drawing of all markings. All calculations, measurements and markings will be done by qualified and experienced specialists with a minimum of three (3) years of experience in this field. All markings shall be painted, using an application process approved by the surface manufacturer.
- 5.9.5.9 The offeror/contractor must provide a written warranty on the tennis/basketball court construction, materials and surfaces for a period not less than six (6) years from the date of acceptance by the owner. This warranty shall include a three (3) year warranty form any subcontractor/installer/supplier and is to be provided directly to the owner/AEPA contractor. All project warranties must be backed by a warranty bond from an A-rated insurance company licensed to do business in the state in which the project was completed. The three year subcontractor/installer/supplier warranty from the bonding company is to be payable to the AEPA contractor and the six year warranty from the AEPA contractor is to be payable to the project owner.
- 5.9.5.10 The warranty shall cover defects in materials, excessive color change, excessive wear, and any other feature; material and/or condition which are not deemed ordinary wear on a running track.
- 5.9.6 Submittals to prospective buyers.
- 5.9.6.1 The offeror must provide written documentation for each tennis/basketball surface offered, the installers must be qualified, experienced and authorized by the surface manufacturer to install, maintain and/or repair each of the proposed court systems.
- 5.9.6.2 For the court surfaces offered provide written documentation of its proven track record for performance and durability by listing 3 installations that are a minimum of five (5) years old, that contain the same court surface materials, and use the same method of installation showing locations, installation dates, and owner representatives contact information. Tennis/basketball courts listed are to have been provided by the offeror making a response to this solicitation.

- 5.9.6.3 For each system offered, the offeror will provide a written document stating the ongoing maintenance that is required to keep the court system in good condition for the duration of its life cycle. This document must be provided with the offeror's response and to each owner on completion of the project. The information shall include end user instructions on the day to day operations, the maintenance and repair methods to be utilized if required and the availability of repair materials and services with their associated costs.
- 5.9.6.4 Provide required manufacturer's Product Data and Material Safety Data Sheet for products provided.
- 5.9.6.5 For the court systems proposed and/or provided under this solicitation the offeror must provide written documentation describing and lay out all of the terms, conditions, stipulations and requirements of the warrantee for each and any associated cost if applicable. All court systems offered must have a minimum six (6) year warrantee.
- 5.9.6.6 The offeror must provide a written proposal to the AEPA member that includes all of the necessary information required for the member to:
- 5.9.6.6.1 Have a complete understanding of the scope of work to be performed and timelines.
 - 5.9.6.6.2 Understand the physical layout of the proposed project in relationship to existing site conditions.
 - 5.9.6.6.3 Be aware of the type, level, quality and performance standards of products to be utilized and/or provided in completing the project.
 - 5.9.6.6.4 Understand the roles, responsibilities and commitments of all parties during the tennis/basketball court construction process.
 - 5.9.6.6.5 Be aware of and understand all of the cost associated to site inspection/investigation, site preparation, court construction, lining and marking the court and other related materials and/or construction costs.
- 5.9.6.7 Quality Assurance
- 5.9.6.7.1 The work shall conform to the ITF's and ASBA's standards for court construction. The court surface will be applied by a licensed firm, which has been installing the material for the past five (5) years.
 - 5.9.6.7.2 Installing foreman must have at least five years experience installing this type of system.
 - 5.9.6.7.3 Site preparation may include removing trees, bushes and a minimum of 4" of topsoil if existing conditions require such action. The area will be graded to the required depth to accommodate the base and concrete thickness and provide a uniform 1% slope at $\pm .1'$ in one plane. All fills will be placed in 6" layers and will be compacted to 90% standard density at optimum moisture. The contractor will alert the member of any

“soft spots” or structures that could affect the stability of the slab. The site preparation will be done so as to provide positive drainage away from the play courts and, if needed, to provide intercepting swales to prevent drainage on to the court. The final grade base material shall be placed with automatic laser-regulated equipment capable of providing a true accurate plane to a 1/4”. The depth of the fine grade base material shall be sufficient to develop a 1/4” accuracy.

5.9.6.7.4 Site preparation materials may consist of the existing sub-grade material unless a soils engineer specifies import fill. The fine grade base materials shall be an approved compactable, free-draining base material (sand, fine gravel, etc.).

5.9.6.7.5 Guarantee – The contractor is to provide a written guarantee against defective materials or faulty workmanship, excessive color change, excessive wear, and any other feature which is not deemed ordinary wear of an all-weather tennis/basketball court for a period of not less than six (6) years.

5.9.7 Cleaning

5.9.7.1 Protect installed court surface from subsequent construction operation.

5.9.7.2 Do not permit traffic over unprotected surface.

5.9.7.3 Contractor shall provide the labor, supplies, and equipment as necessary for final cleaning of surfaces and installed items.

5.9.7.4 All usable remnants of new material shall become the property of the Owner.

5.9.7.5 The Contractor shall keep the area clean throughout the project and clear of debris.

5.9.7.6 Surfaces, recesses, enclosures, etc., shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

5.9.8 Project Close-out

5.9.8.1 The contractor and the owner’s representative shall conduct a complete and extensive site inspection of all work performed and products provided.

5.9.8.2 Up to three (3) copies of Maintenance Manuals, which will include all necessary instructions for the proper care and preventative maintenance of the synthetic court system, including painting and markings.

5.9.8.3 The contractor shall owner’s personnel with the necessary training in order for them to develop a complete knowledge and understanding of the supplies, materials and equipment to maintain and keep the install system in good working condition.

5.9.8.4 Project Record Documents: Record actual locations of seams, drains or other pertinent information, as built drawings and field notes.

5.9.8.5 Warranty: Submit completed and executed contractor's and manufacturer's warranty documents and ensure that forms have been completed in AEPA members' name and registered with Manufacturer.

6. Substantiating Documentation

6.1 Required Categorical Responses - Please Note: AEPA reserves the right to deem an offer's response non-responsive if offeror fails to provide the necessary information and/or documentation requested below.

6.1.1 Offeror must respond to and provide all of the necessary documentation requested within Form F Contractor's Qualifications.

6.1.2 Offeror must, through written narrative, clearly identify the type, kind, level of products and services it is proposing to provide AEPA members under the this IFB. The narrative shall include:

6.1.2.1 The manufacturer's name(s).

6.1.2.2 The various levels of products offered from each.

6.1.2.3 Submit one sample of each product offered, 6x6 inch in size, illustrating details of finished product.

6.1.2.4 Submit the major component manufacturers/supplier's name, component and composition of the component.

6.1.2.5 Certified copies of independent (third-party) laboratory reports on ASTM tests on the products offered.

6.1.2.6 For each manufacturer provide the required documentation to demonstrate their awareness, willingness, ability and capacity to perform as a party to this solicitation.

6.1.2.7 Completed information on any subcontractor that will be utilized to provide any major components/products and/or perform services under this solicitation.

6.1.2.8 Samples of the Track/Court surface Manufacturer Warranty to be provided to the owner covering defects in materials, workmanship, excessive color change, excessive wear, and any other feature which is not deemed ordinary wear on a running tracks/courts of the type provided for a period of six (6) years from the date of Substantial Completion. The method utilized by the surface manufacturer to verify that their onsite representative has inspected the installation and that the work conforms to the manufacturer's specifications and requirements for the warranty to be issued.

6.1.2.9 Provide documentation demonstrating the surface Manufacturer's /contractor's Warranties is supported by an insurance policy and/or performance bond for the full six (6) year period.

- 6.1.2.10 Provide a sample of the subcontractor's warranty to be provided to the AEPA contractor covering defects in the work performed, installation workmanship, and further warrant that the installation was done in accordance with both the Manufacturer's recommendations and any written directives of the Manufacturer's onsite representative.
- 6.1.3 Offeror must, through written documentation, demonstrate its ability to provide and perform those products and services offered herein to all twenty-two (22) AEPA states by providing prior experience with educational institutions. The documentation shall include:
 - 6.1.3.1 For each product offered list one (1) previous project performed in ten (10) of the (22) twenty-two states which has been use by the owner for one or more three (3) years.
 - 6.1.3.2 The general scope of work for each project and the size and type of Track/Court installed.
 - 6.1.3.3 The manufacturer's product used for each project listed.
 - 6.1.3.4 The total cost of each project.
 - 6.1.3.5 The institution's name, address, phone number, contact person's name and title for each project.
 - 6.1.3.6 Provide the time line for each project listed and provide a brief narrative of the pre-sale and follow-up consulting services offered to ensure institution's satisfaction.
- 6.1.4 Provide a brief narrative of three (3) projects that you have done for educational institutions, that since the project was completed and signed off on, that you had to go back and perform warranty work. Please include the following:
 - 6.1.4.1 Through your evaluation of the problem what was did you find as the cause of the problem?
 - 6.1.4.2 What products and/or services did you have to provide to resolve the problem?
 - 6.1.4.3 Was the customer satisfied with your solution and would they be willing to give you a letter of reference if requested to?
 - 6.1.4.4 Name of name of institutions, contact person and phone number. Provide a narrative of your company's policies, procedures and strategies to ensure quality control, response to concerns before, during and after the project. Indicate what follow-up, review and oversight process your management team has in place to ensure member satisfaction.

6.2 Cost Considerations

- 6.2.1 The offeror must provide a complete listing of all products and services that it is proposing to offer under this solicitation. All products and services pricing must be determined by one of pricing methods defined herein.

- 6.2.2 Price sheets and/or catalogs – For those products and services that are to be priced using a manufacturer’s published price list or product catalog. Provide complete price list and/or catalogs that include product number, product description, unit of measure the product is available, the item’s price and what that price includes (delivery, installation, etc.). The offeror will indicate within their response the amount of discount to be applied to each item to arrive at the individual AEPA state agency price. Within the terms of this IFB, different manufacturers/products can have different discounts as long as the discounts are clearly stated within the offeror’s response. If a price list or MSRP is not available, than the offeror must utilize one of the other established pricing methodologies.
- 6.2.2.1 AEPA understands the basic cost of the product/services listed on a published price list indicates the cost of obtaining, manufacturing, and preparing the product/services to ship to the project site. It is also understood that the cost incurred by the AEPA offeror to deliver, store, and install the product/service to an individual project site will differ depending on the AEPA state that the project site is located and the distance form the offeror’s home location. Therefore, for each of the AEPA states list herein, provide your multiplier/factor to be applied the base AEPA price shown on the published price list to arrive at the individual AEPA state price.
- 6.2.2.2 Example: if the published price on the price is \$1,000 and the AEPA discount is twenty (20%). The AEPA price would be ($\$1,000 \times .20 = \200 amount of AEPA discount and $\$1,000 - \$200 =$ an AEPA price of \$800). If the offeror bid a state multiplier/factor of 1.02%, to arrive at the AEPA state price \$816 ($\$800 \times 1.02 = \816).
- 6.2.3 The R.S. Means Company publishes a CD Rom and books covering the areas specified in the General Terms and Conditions of this IFB. The current CD/books will be the basis for all quotes and proposals.
- 6.2.3.1 For individual construction cost items within the R.S. Means cost-book (including labor, overhead and profit) will be charged to the member for construction items. Please note that costs relating to non-construction items/assemblies (General Condition items) such as season of the year; home office costs; insurance; project management and supervision; office and storage trailers; pickup trucks, mileage, per diem, transportation/delivery; safety equipment, weather conditions, etc., must be included as part of the contractor’s multiplier/factor to be applied to the R.S. Means cost proposal to achieve the CES cost for the project. A bid multiplier/factor of 92% indicates that the contractor will charge the Means **total cost** times .92 as the billable amount. A bid multiplier/factor of 102% indicates that the contractor will charge the Means Total Cost times 1.02 as the billable amount. Note the following:
- 6.2.3.2 When using the R.S. Means assembly cost items, the contractor must for each individual cost item/assembly indicate and document any of the R.S. Means special factors that are applicable, including factors affecting cost, quality of materials, productivity of labor force, size of project and location.

- 6.2.3.3 No R.S. Means (General Conditions Items) such as contract management/supervision, home office costs, travel, per diem, pickup trucks, office trailers, storage facilities etc, are to be included in a project's cost proposal unless it has been requested and approved by the owner.
 - 6.2.3.4 Any costs associated with permits, state gross receipts and tribal taxes, performance and payment bond costs and other applicable reimbursable cost approved in advance by the member will appear as separate line items on the contractor's quote/proposal.
 - 6.2.3.5 As noted above the most recent edition of the R.S. Means will be utilized and this will adjust for inflation, material cost and labor rates effective January 1 of each year.
 - 6.2.3.6 The contractor's R.S. Means bid factor/multiplier will be adjusted on the offeror's contract anniversary date by applying the escalation/de-escalation as measured by the Construction Cost Index (CCI) published in the ENR (formerly known as Engineering News and Record).
 - 6.2.3.7 If there are goods and services provided under this contract that are not covered by R.S. Means, then the cost of these items will be calculated by utilizing one of the other costing methodologies defined herein.
- 6.2.4 Alternative costing methodology: Any items not covered by R.S. Means and/or published price list/catalog. The price will be obtained by issuing, receiving and evaluating three (3) written quotes which shall be submitted in advance and approved by the owner prior to being included into any final contract documents. AEPA and its members reserve the right to accept or reject any quote or proposal including such items and may obtain these items through other procurement means (other existing contracts). The AEPA price will be determined by utilizing two percentages.
- 6.2.4.1 Based on the most advantages and cost effective quote received by the contractor. The contractor will apply its normal and customary overhead and profit percentages to the total cost submitted by the subcontractor and add that amount to obtain the normal and customary retail price. (item cost multiplied by percent for overhead/profit equals amount of profit and overhead to be add to item cost equal retail price).
 - 6.2.4.2 Taking the normal and customary retail price as established in item 1 above the contractor will apply the AEPA discount percentage and subtract this amount from the normal and customary retail price to obtain the AEPA price (item retail price multiplied by percent of AEPA discount equals amount of discount to be subtracted to obtain AEPA price).
- 6.2.5 If products or services are required as part of the performance under this contract that can only be obtained and/or manufactured from a single source and fall under the sole source provision that is found within must states procurement codes. The contractor must provide the owner with the necessary documentation to substantiate the purchasing method as sole source.

6.2.6 Cost evaluation will be based on a point system with points being awarded for being low to high bidder for each cost evaluation item, that is, contractor, discount off R.S. Means, overhead and profit percentage markup, mileage charge, per diem rate, travel time, etc. If an offeror leaves out an item that is required, CES will allot zero (0) points to that item, and if awarded a contract, cannot be used in providing products or services. The low bidder will receive the full point value and all other bidders will receive points calculated as follows:

$$(\text{Lowest Bid} / \text{Other Bid}) \times \text{point value}$$

6.3 Cost Evaluation Information (Form G) - The following factors will be used to evaluate and award this solicitation. Please note that these are only a few items selected to do the cost evaluation. The must provide all of the necessary pricing information required herein.

6.3.1 General Cost Items.

6.3.1.1 Performance and Payment Bond Costs – This represents the cost the offeror incurs to provide a performance and payment bond to the member for an individual project when it is required. The offeror is to indicate the percentage rate charged on the total cost of an individual project to obtain a bond, and the documentation to substantiate the rate, that is, two percent (2%).

6.3.1.2 Bonding Capacity – This represents the offeror’s maximum level of bonds that it can obtain at any one time. Offeror is to indicate its bonding capacity and provide documentation from a security company to substantiate the amount indicated.

6.3.1.3 Offeror’s Bid factor/multiplier off R.S. Means costing of products and services relating to construction projects during **Normal Hours** (Monday through Friday 7:30 am to 4:30 pm) and not covered by other costing methods.

6.3.1.4 Offeror’s Bid factor/multiplier off R.S. Means costing of products and services relating to construction projects during **Outside Normal Hours** (Monday through Friday 4:30 pm to 7:30 am, Saturday and Sunday) and not covered by other costing methods.

6.3.1.5 Alternative Method of Costing – percentage of overhead and profit. This method includes custom manufactured items, items not covered by other R.S. Means or sole source items. Offeror is to indicate the percent of overhead and/or markup to be applied to these costs to obtain the retail cost. Example: Item cost \$1,000 multiplied by percent of profit/overhead 20% equal \$200 for overhead and profit. Item cost \$1,000 plus overhead and profit of \$200 equal a retail price of \$1,000. Note this percentage has no relationship to the R. S. Means costing method indicated above.

6.3.1.6 Alternative Method of Costing - percentage of AEPA Discount to obtain AEPA Price (item retail price multiplied by percent of AEPA discount equals amount of discount to be subtracted from retail price to obtain AEPA price). Example: Item retail cost \$1,200 multiplied by percent of 10% AEPA discount equal discount of \$120. Retail cost \$1,200 less the

AE {A discount \$120 equal the AE {A price of \$1,080. Note this percentage has no relationship to the percentage of discount of manufacturer's/suppliers price sheets or catalogs indicated below.

- 6.3.1.7 Discounts Provided on Price List and Catalogs – This represents the average discount provided by the offeror on stated prices. Note different product lines and/or category of products on published price sheets may be offered at different discount percentages. If different discount percentages are offered, AEPA will calculate an average percentage for evaluation purposes.
- 6.3.1.8 Provide for each of the AEPA states list, your multiplier/factor to be applied to the AEPA price calculated from the published price list to arrive at the individual AEPA state price.
- 6.3.1.9 Offeror's Support for AEPA Pricing – This is the percent of difference between what the offeror's price to AEPA and the price that the offeror would offer the same products directly to any public educational institution in New Mexico. The offeror's AEPA price is \$100, the offeror's direct price to AEPA members is \$103. The difference is 3% percent.
- 6.3.1.10 A number of individual items have been selected for evaluation purposes. Offeror must indicate for each of the items what their cost would be to provide and install each of the items listed in each of the twenty-two states.