Spanish Fork City

Request for Proposals: Spanish Fork City Center 4-Plex Lighting System – 2006

Date: **Revised February 13, 2006**

Reply to: Chris Thompson, P.E.
Design Engineer
40 South Main Street
Spanish Fork, UT 84660

Information Meeting: Wednesday, February 8, 2006 at 3:00 PM, MST
Sports Park Office, 200 West Volunteer Drive
(Approx. 900 South), Spanish Fork

Proposal Deadline: Tuesday, February 28, 2006 at 3:00 PM, MST
Due to the Engineering Office
40 South Main St, Spanish Fork 84660

Spanish Fork City is requesting proposals to provide the lighting materials including light bases for the Sports Park Center 4-Plex project. A layout of the 4-Plex is included. Proposals shall include all specifications, layouts and detail drawings of materials to be provided.

Proposals shall also be subject to the following special provisions:

1. 25 Year Life Cycle Cost. Proposals shall include a detail of the 25 year life cycle cost including:

- Cost to replace lamps based on 500 hours of use per year.
- Cost of electricity based on 500 hours of use per year and $0.08 per kilowatt hour.

2. Contactor Cabinet and Contactors (Switch Gears). Contactor cabinet shall be installed into the scorekeepers building shown on the plans. Contactor cabinet shall have switches to turn on and off individual banks of lights.

3. Poles. Galvanized steel poles and cross arm assemblies shall be provided.

4. Ballasts. Remote all ballasts and supporting electrical equipment in aluminum or stainless steel enclosures mounted 20 feet above grade. The enclosures shall include ballast, capacitor and fusing for each luminaire. Safety disconnect per circuit for each pole structure will be located in the enclosures.

5. Light Level on the Fields. Lights shall provide a maintained minimum light level of 50 foot-candles infield and 30 foot-candles 3 feet off the ground outfield for the life of the system. The ratio for uniformity level shall be no more than 2 to 1 infield and 2.5 to 1 outfield. Manufacturer must provide lumen criteria used for design.

6. Spill Light and Glare. Proposals shall include all specifications for the spill light and glare that the lighting system will provide. Include the horizontal spill light readings at 100 feet and 200 feet from the field area at 3, 15 and 30 feet off the ground.

7. Manufacturing Requirements. All components shall be designed and manufactured as a system. All luminaries, wire harnesses, ballast and other enclosures shall be factory assembled, aimed, wired and tested.

8. Durability. All exposed components shall be constructed of corrosion resistant material and/or coated to help prevent corrosion. All exposed steel shall be hot dip galvanized per ASTM A123. All exposed hardware and fasteners shall be stainless steel of at least 18-8 grade, passivated and polymer coated to prevent possible galvanic corrosion to adjoining metals. All exposed aluminum shall be powder coated with high performance polyester. All exterior reflective inserts shall be anodized, coated with a clear, high gloss, durable fluorocarbon, and protected from direct environmental exposure to prevent reflective degradation or corrosion. All wiring shall be enclosed within the cross arms, pole, or electrical components enclosure.

9. Lightning Protection. All structures shall be equipped with lightning protection meeting NFPA 780 standards. Contractor shall supply a ground rod of not less than 5/8” in diameter and 8’ in length, with a minimum of 10’ embedment. Ground rod shall be connected to the structure by a copper main down conductor with a minimum size of #2 for poles with less than 75’ mounting height and 2/0 for poles with more than 75’ mounting height.

10. Safety. All system components shall be UL Listed for the appropriate application.

11. Electric Power Requirements for the Sports Lighting Equipment. Enter electric power requirements of system. The maximum total voltage drop to the disconnect switch located on the poles shall not exceed 3 percent of the rated voltage.

Electric power: 480 Volt, 3 Phase

12. Support Structure Wind Load Strength. Poles and other support structures, brackets, arms, bases, anchorages and foundations shall be determined based on the 2003 edition of the International Building Code, wind speed of 90mph,

exposure category C and an importance factor of 1.0. Luminaire, visor, and cross arm shall withstand 150 mph winds and maintain luminaire aiming alignment.

13. Structural Design. The stress analysis and safety factor of the poles shall conform to AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals.

14. Soil Conditions. The design criteria for these specifications are based on soil design parameters as outlined in the geotechnical report. Report shall be available at the City Office on Thursday, February 23, 2006.

15. Foundation Drawings. Project specific foundation drawings stamped by a registered engineer in the state where the project is located are required. The foundation drawings must list the moment, shear (horizontal) force, and axial (vertical) force at ground level for each pole.

16. Submittal Checklist Information Sheet. Bids shall include a signed copy of submittal information checklist attached. All requirements of the checklist shall be included with the bids.

17. Warranty. Proposals shall include all details of warranties of the lighting system.

18. Bonds. Bonds will not be required with this project.

19. Project References. Proposals shall include project references of lighting supplied for other baseball or softball fields.

20. Bidder's List. To submit proposals you must be on the bidder's list for "Sports Park Lighting Suppliers". To review list go to:

http://www.spanishfork.org/dept/pubworks/engineering/

If you are not on the list contact the engineering secretary at (801) 798-5000 extension 22 or at:

msmith@spanishfork.org

Note which bidder's lists you would like to be added to.

Materials shall be supplied by June 15, 2006. Payment for 95% of the cost of the materials shall be made July 10, 2006. The remaining 5% shall be held until installation is completed in September 2006.

A pre-bid meeting shall be held at the Sports Park Office at 200 West Volunteer Drive (Approximately 900 South) on Wednesday, February 8, 2006 at 3:00 pm MST. Sealed proposals are due by Tuesday, February 28, 2006 at 3:00 pm MST at the Spanish Fork

Engineering Office, 40 South Main Street, Spanish Fork, UT 84660. If you have any questions please contact:

Chris Thompson, P.E.
(801) 798-5000 extension 41
(801) 798-5085 facsimile
cthompson@spanishfork.org

Proposals shall be submitted with the most current RFP form with the following bid schedule completed:

Total Cost of Light Pole Bases: _____

Total Project Cost without Light Pole Bases: _____

Total Project Cost with Light Pole Bases: _____

Total Project Cost Written Out:

_____

Respectfully Submitted:

_____
Signature / Title Date Phone

_____
Company Facsimile Mobile

_____ _____
License # Street Address
Seal (if by a Corporation)

_____ _____
Attest City / State / Zip Code

SUBMITTAL INFORMATION

Design Submittal Data Checklist and Certification

All items listed below are mandatory, shall comply with the specification and be submitted according to pre-bid submittal requirements

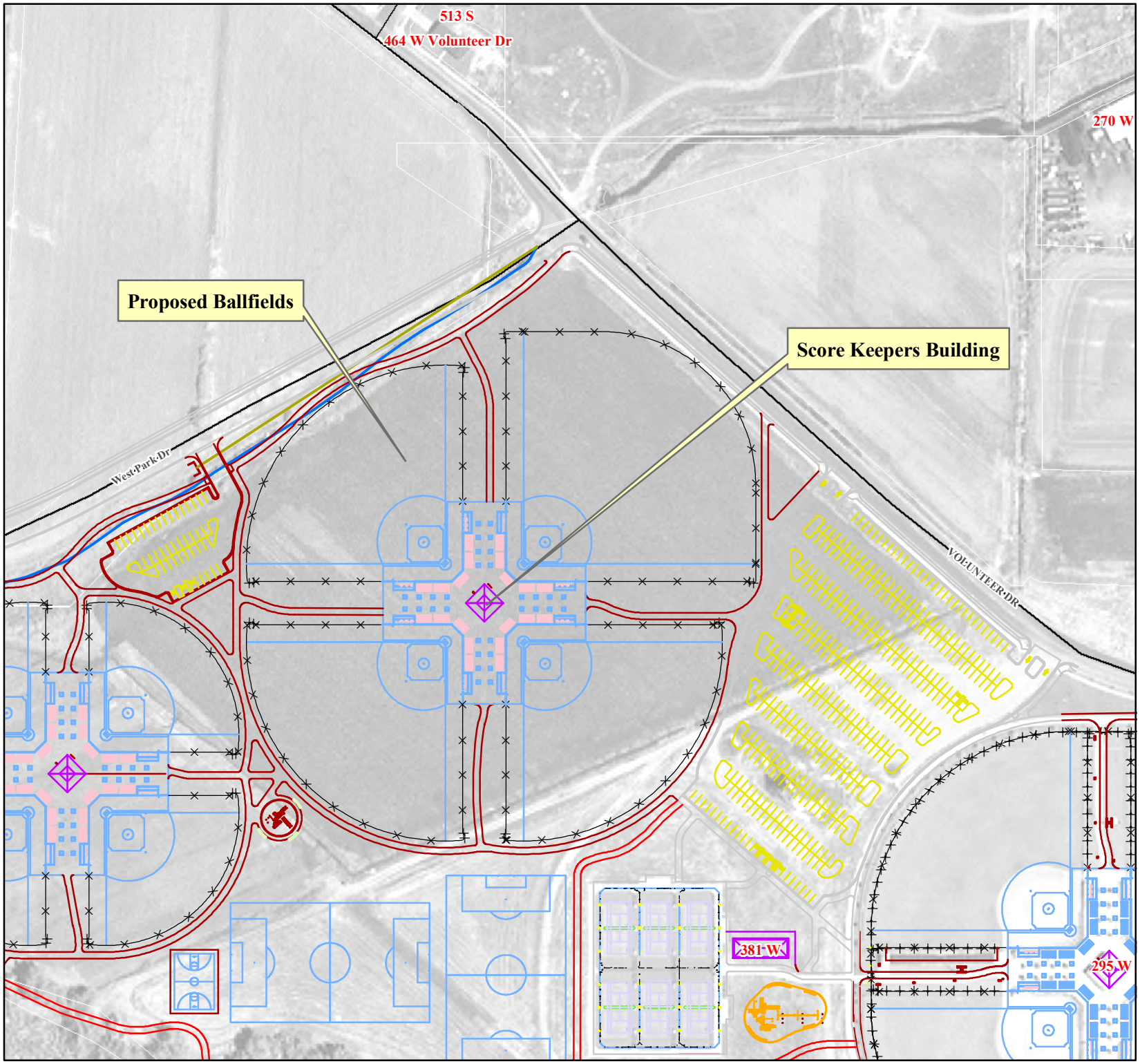
Included	Tab	Item	Description
	A	Letter/ Checklist	Listing of all information being submitted must be included in a cover letter. List the name of the supplier's local representative and his/her phone number. Signed submittal checklist to be included.
	B	On Field Lighting Design	Lighting design drawing(s) showing: a. Field Name, date, file number, prepared by, and other pertinent data b. Outline of field(s) being lighted, as well as pole locations referenced to homeplate for baseball/softball fields. Illuminance levels at grid spacing specified c. Pole height, number of fixtures per pole, as well as luminaire information including wattage, lumens and optics d. Height of meter above field surface e. Summary table showing the number and spacing of grid points; average, minimum and maximum illuminance levels in foot candles (fc); uniformity including maximum to minimum ratio, coefficient of variance and uniformity gradient; number of luminaries, total kilowatts, average tilt factor; light loss factor. f. Manufacturers shall provide both initial and maintained light scans using a maximum 0.70 Light Loss Factor to calculate maintained values.
	C	Off Field Lighting Design	Lighting design drawings showing spill light levels in footcandles as specified in section 1.3 A.
	D	Photometric Report (glare concerns only)	Provide photometric report for a typical luminaire used showing candela tabulations as defined by IESNA Publication LM-35-02. Photometric data shall be certified by laboratory with current National Voluntary Laboratory Accreditation Program or an independent testing facility with over 5 years experience.
	E	Life Cycle Cost calculation	Document life cycle cost calculations as defined in the specification. Identify energy costs for operating the luminaires, maintenance cost for the system including spot lamp replacement, and group relamping costs. All costs should be based on 25 Years.
	F	Luminaire Aiming Summary	Document showing each luminaire's aiming angle and the poles on which the luminaries are mounted. Each aiming point shall identify the type of luminaire.
	G	Structural Calculations (if required)	Pole structural calculations and foundation design showing foundation shape, depth backfill requirements, rebar and anchor bolts (if required). Pole base reaction forces shall be shown on the foundation drawing along with soil bearing pressures. Design must be stamped by a structural engineer in the state of Utah.
	H	Electrical distribution plans	Manufacturer must include an electrical distribution plan including plans and specifications for the service entrance, panels and wire sizing, signed by a licensed Electrical Engineer in the state of Utah.
	I	Performance Guarantee	Provide performance guarantee including a written commitment to undertake all corrections required to meet the performance requirements noted in these specifications at no expense to the owner. Light levels must be guaranteed per specification for 25 years.
	J	Warranty	Provide written warranty information including all terms and conditions.
	K	Project References	Manufacturer to provide a list of project references of similar products completed within the past three years.
	L	Product Information	Complete set of product brochures for all components, including a complete parts list and UL Listings.
	M	Non-Compliance	Manufacturer shall list all items that do not comply with the specifications.
	N	Compliance	Manufacturer shall sign off that all requirements of the specifications have been met at that the manufacturer will be responsible for any future costs incurred to bring their equipment into compliance for all items not meeting specifications and not listed in item N – Non-Compliance

Manufacturer: _____ **Signature:** _____

Contact Name: _____ **Date:** _____/_____/_____

Sports Complex

1 Inch equals 200 Feet



Legend

Roads
- Other Roads
- Not Paved
- Paved

Rivers
County_SF_Parcels
Spanish Fork Boundary
CBPL_Building
CBPL_Conc Exist
CBPL_Conc Prop
CBPL_playground
CBPL_striping
Hatch
LAWN
Path
Proposed Fence
Proposed Road
S-AMENITY
S-BENCH
S-BLDG
S-BLEACHERS
S-G
S-GUTTER
S-LIGHTS
S-PARKING
S-TENNISFENCE
Sewer Existing
Sidewalks
Storm Proposed
WHITELINE
millrace length
striping

1/31/2006

Geographic Information Systems

Spanish Fork City GIS
40 South Main Street
Spanish Fork, UT 84660
(801) 798-5000

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