

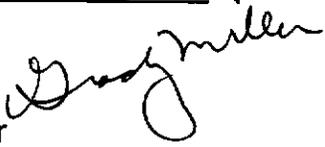
**CITY OF PEORIA, ARIZONA
COUNCIL COMMUNICATION**

CC: 10C
Amend No. _____

Date Prepared: June 19, 2007

Council Meeting Date: July 10, 2007

TO: Terry Ellis, City Manager

FROM: Grady Miller, Communications and Public Affairs Director 

SUBJECT: Award of a Contract to Grass Valley for Studio Camera Package and Production Switcher for Peoria Channel 11 Studio

RECOMMENDATION:

That the City Council award a contract to Grass Valley in the amount of \$485,840.53 for studio camera package and production switcher equipment. Funding is available and will be paid from Peoria Channel 11 studio project PS00003EQ, account number 1000-0310-542006.

SUMMARY:

In 2006 PMK Consulting was brought on board to help evaluate the City's video equipment needs for Channel 11. After fully reviewing Peoria's budget and equipment needs, PMK recommended studio camera equipment and switcher equipment which offer both high definition and standard definition output. This will allow Channel 11 to invest in digital equipment today that will adapt to high definition standards in the future. Based on the equipment specifications recommended by PMK Consulting, the Materials Management Division developed a Request for Proposal in April for three studio cameras and a production switcher. Grass Valley submitted a bid for \$485,840.53 for Grass Valley cameras and a production switcher that meets the city's specifications; Grass Valley's submittal was the lowest priced bid.

Staff is working with Materials Management on another Request for Proposal for the remaining equipment necessary to complete the Channel 11 studio. The plan is to bring a request for award of a contract to the City Council at the August 21, City Council meeting.

After completing the studio later this fall, Channel 11 staff will begin to fully utilize the studio for creating new original programming for airing on Channel 11. This includes a new television series for members of the City Council as well as a news magazine-style show.

CITY CLERK USE ONLY:

Consent Agenda
 Carry Over to Date: _____
 Approved
 Unfinished Business (Date heard previous: _____)
 New Business

ORD. # _____ RES. # _____
LCON# 06307 LIC. # _____
Action Date: _____

Grass Valley Video Equipment

July 10, 2007

Page 2

Staff recommends that the City Council award a contract to Grass Valley for the studio cameras and switcher equipment. The cost of the equipment is \$485,840.53, and will be paid from Peoria Channel 11 studio project PS00003EQ, account number 1000-0310-542006, which is in the current year's Capital Improvement Program budget.

Attachments:

None



City of Peoria, Arizona

Notice of Request for Proposal

Request for Proposal No: **P07-0036** Proposal Due Date: **May 17, 2007**
 Materials and/or Services: **Multi-Format Camera System and High Definition Switcher** Proposal Time: **5:00 P.M. AZ Time**
 Contact: **Lisa Houg, CPPB**
 Project No: Location: **City of Peoria, Materials Management** Phone: **(623) 773-7115**
 Mailing Address: **8314 West Cinnabar Avenue, Peoria, AZ 85345**

In accordance with City of Peoria Procurement Code competitive sealed proposals for the material or services specified will be received by the City of Peoria Materials Management at the specified location until the date and time cited above. Proposals shall be in the actual possession of the City of Peoria Materials Management on or prior to the exact date and time indicated above. Late proposals will not be considered, except as provided in the City of Peoria Procurement Code. **Proposals shall be submitted in a sealed envelope with the Request for Proposal number and the offeror's name and address clearly indicated on the front of the envelope.** All proposals shall be completed in ink or typewritten. Offerors are strongly encouraged to carefully read the *entire* Request for Proposal Package.

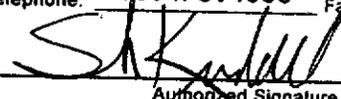
OFFER

To the City of Peoria: The undersigned on behalf of the entity, firm, company, partnership, or other legal entity listed below offers on its behalf to the City a proposal that contains all terms, conditions, specifications and amendments in the Notice of Request for Proposal issued by the City. Any exception to the terms contained in the Notice of Request for Proposal must be specifically indicated in writing and are subject to the approval of the City prior to acceptance. The signature below certifies your understanding and compliance with Paragraph 1 of the City of Peoria Standard Terms and Conditions (form COP 202) contained in the Request for Proposal package issued by the City.

For clarification of this offer contact:

Name: Steve Kendall
Grass Valley, Inc.
 Company Name
400 Providence Mine Rd.
 Address
Nevada City, CA 95959
 City State Zip Code

Telephone: 530.478.4055 Fax: 530.478.3074


 Authorized Signature for Offer
Steve Kendall
 Printed Name
Business Director
 Title

ACCEPTANCE OF OFFER AND CONTRACT AWARD (For City of Peoria Use Only)

Your offer is accepted by the City, subject to approval of each written exception that your proposal contained. The contract consists of the following documents: 1.) Request for Proposal issued by the City; 2.) Your offer in Response to the City's Request for Proposal; 3.) This written acceptance and contract award.

As the contractor, you are now legally bound to sell the materials and/or services listed by the attached award notice, based on the solicitation of proposals, including all terms, conditions, specifications, amendments and your offer as now accepted by the City. The Contractor shall not commence any billable work or provide any material, service or construction under this contract until the Contractor receives an executed Purchase Order or written Notice to Proceed.

Attested by:
Mary Jo Kief, City Clerk
 cc: LOC 071007
 Contract Number:
LC0N 06307
 City Seal
 Official File: _____

City of Peoria, Arizona. Effective Date: _____
 Approved as to form:
Stephen M. Kemp, City Attorney
 Contract Awarded Date _____
Terrence L. Ellis, City Manager

Proposal Schedule A

City of Peoria
 Stew Radawec
 8401 W Monroe St
 Peoria, AZ 85345

Proposal Number: **ESHMQ2550**
 Proposal Date: **06/03/07**
 Proposal Valid: *30 days from above date.*

NOTE: THIS SPECIFIC PROPOSAL IS SUBJECT TO THE ENCLOSED TERMS & CONDITIONS OF SALE.

Kayak HD250 Switcher, Cameras, & Lenses

| Ln# | Qty | Model/Part No. | Product Description | Unit Amount | Total Amount |
|-----|-----|-----------------|--|-------------|--------------|
| 1 | | | =====CITY OF PEORIA, AZ===== | | |
| 2 | | | | | |
| 3 | | | ===== | | |
| | | | Kayak HD250c - 48 inputs, 6 channel Ram Recorder, 4 channel internal DVE per M/E, Advanced warp and kurl effects, 2 floating chroma keyers across any ME bus. Optional:4 Sacalar options for matching 8 sources to the production format | | |
| | | | ===== | | |
| 4 | 1 | KAYAK-HD-250C | Kayak HD 2.5 M/E Multi-format Production Switcher with Control Panel, 4RU frame, 48 Inputs, 24 Mappable Outputs, and 2 Flexible Chroma Keyers per system, and 1 Internal Digital Picture Manipulator (IDPM) per full M/E with 2D plus Perspective, MakeMemo Macros, and 1 V&K Framestore on each keyer bus & YUV Color Correction on each video bus. 20 meter control/data cables standard. Specify WHITEKEYS or COLORKEYS with order. | | |
| 5 | 1 | KHD250-COLORKEY | KayakHD 2.5 M/E GV style colorkeys (Initial order only) S | | |
| 6 | 1 | KHD250-RAMREC | KayakHD-250 License for 6-Channel RAMRecorder with standard RAM capacity as follows: frames/format = 850/1080i, 1900/720p, 4800/525i, 4100/625i, or seconds/format = 28/1080i30, 34/1080i25, 31/720p60, 38/720p50, 160/525i30, and 164/625i25. | | |
| 7 | 1 | KHD250-IDPM-1 | KayakHD-250 License for 3 Additional IDPM Channels with 2D transforms with perspective & crops in M/E 1 | | |
| 8 | 1 | KHD250-IDPM-P | KayakHD-250 License for 3 Additional IDPM Channels with 2D transforms with perspective & crops in M/E 2 | | |
| 9 | 1 | KHD250-KURL-1 | KayakHD-250 License for Kurl Effects on all standard & licensed IDPMs in M/E 1 | | |
| 10 | 1 | KHD250-KURL-P | KayakHD-250 License for Kurl Effects on all standard & licensed IDPMs in Program/Preset | | |
| 11 | 4 | KHD250-MDEF | KayakHD-250 MatchDef dual video source scalar for converting 2 SD or HD sources to the production format, 4RU frame allows maximum of 4 for up to 8 sources, 8RU frame allows maximum of 8 for up to 16 sources. 1 mix/effects or IOXPAND option required per every 2 MatchDef options. | | |
| 12 | 1 | KHD-KIT | KayakHD Critical Spares Kit Includes: Kayak HD Control Proc. & Frame Fan Assembly. For customers with the Kayak HD-100 or Kayak HD-150 it is recommended that they also purchase the KHD-KIT-ME which includes the | | |

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|-----|-----|----------------|---|-------------|--------------|
| | | | mix effects board which supports the I/O. | | |
| 13. | 1 | KHD-PSU | KayakHD Internal Redundant Power Supply. Second module slides inside bottom of e-box. | | |
| 14. | 1 | KHD-SPNT | Kayak HD Onsite StartPRO - Commissioning. Includes a multi-point review check list and a brief product overview, check of control interfaces. (Actual Travel and Expenses Billed Separately) | | |
| 15. | 1 | KAY-OST | 3-Day On-Site Operations Training for Kayak DD or Kayak HD Switchers. (Actual Travel and Expenses Billed Separately) | | |
| 16. | | | SubTotal for HD250 with Scalars | | \$152,006.00 |
| 17. | | | ===== | | |
| | | | LDK 8000 HD/SD Studio Cameras - 1080i, 720p, & High Quality SD Output, 5" viewfinders, triax based system, (3) OCP (operator control panels), (1) CP (master control panel *optional*). EFP Style Lens compatibility | | |
| | | | ===== | | |
| 18. | | | -----LDK8000 Camera Heads----- | | |
| 19. | 3 | 8926 800 06001 | LDK 8000 HDTV Standard Camera head , Multifomat | | |
| 20. | 3 | 8926 586 05001 | Triax HD-adapter, TriLock/XLR. No CVBS connector, replaced by HDMI Digital monitor/viewfinder connector. Also available; a ""Ref In"" or ""Teleprompter Out"" connector, auto sensing and a 12V DC Local power coonector (4pin Canon) | | |
| 21. | 3 | 8926 503 11001 | Tripod adapter plate for all LDK Portable cameras, including the Viper FilmStream camera | | |
| 22. | 3 | 8926 530 50101 | "5"" HDTV Viewfinder, 50/60 Hz for LDK 8000/6000/4000 cameras " | | |
| 23. | | | -----Teleprompter Power Unit----- | | |
| 24. | 3 | 8995 050 00251 | Teleprompter Power Box provides 117VAC at 100 Watts | | |
| 25. | | | -----Base Stations----- | | |
| 26. | 3 | 8926 450 20101 | Standard Base unit HDTV for Ethernet use | | |
| 27. | 3 | 8926 451 01001 | Power module for Base station LDK 450x/xx. This module is mandatory for all Base station versions | | |
| 28. | 3 | 8926 452 12001 | Triax module HDTV Trilock | | |
| 29. | 3 | 8926 454 01001 | 2 ch audio & 2/4-wire intercom module. This option can be used in all Base station versions | | |

L 06307

Proposal Schedule A

City of Peoria
 Stew Radawec
 8401 W Monroe St
 Peoria, AZ 85345

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Kayak HD250 Switcher, Cameras, & Lenses

| Ln# | Qty | Model/Part No. | Product Description | Unit Amount | Total Amount |
|-----|-----|----------------|--|-------------|--------------|
| 30. | 3 | 8926 453 04001 | Digital/Analog External video input module. This module can be used in all Base station versions | | |
| 31. | 3 | 8926 453 13001 | High Quality SDTV output option module. Option for all HDTV Base stations. Remark: This option is standard included in the LDK 4505 Base station | | |
| 32. | 3 | 8926 457 04001 | Sliding rails for 19" Rack 600 - 800 mm depth | | |
| 33. | | | -----Camera Control Units----- | | |
| 34. | 3 | 8926 464 01001 | OCP 400 Control panel with Joystick for Ethernet use, RS 422 or RS 232. Preview button can follow Tally indication. | | |
| 35. | 1 | 8926 463 00001 | MCP 400 Master Control Panel for Ethernet use | | |
| 36. | 1 | 8926 523 50001 | Desk mounting brackets for MCP 400 | | |
| 37. | 2 | 8926 590 30001 | AC power supply, 45 Watt, 12V DC, for OCP/MCP powering. One power supply can be used for up to 3 OCP's or one MCP 400. The other OCP's can be powered by using the daisychain cable LDK 5910/05. The number of daisychain cables is (number of OCP's minus number of power supplies) | | |
| 38. | 11 | 8926 814 00001 | Ethernet cable CAT5, 3 meters | | |
| 39. | 1 | 8926 524 00001 | Ethernet switch 16 ports, 19" model | | |
| 40. | 2 | 8926 591 00501 | DC power cable for daisychain OCP's, XLR 4, 0.5 meter | | |
| 41. | 1 | 8926 521 00001 | Set of user cards (10x) | | |
| 42. | 6 | 56-025560-001 | Power Cord, 110-120V IEC Type | | |
| 43. | 3 | 8926 456 02001 | HDTV Monitoring module | | |
| 44. | | | -----Manuals and Service Extenders----- | | |
| 45. | 1 | 3922 496 49991 | First line service manual LDK 4502 HDTV Basestation with Ethernet connection | | |
| 46. | 1 | 3922 496 30581 | First line service manual LDK 8000, HDTV Camera head | | |
| 47. | 1 | 3922 496 30741 | Service Manual for LDK5860 HDTV triax adapter | | |
| 48. | 1 | 8926 582 00101 | Set service extenders camera.+ Triax adapter | | |
| 49. | 1 | 8926 457 01001 | Set extenders for LDK 4500SL | | |
| 50. | | | -----Camera Commissioning Services----- | | |

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|-----|-----|----------------|--|-------------|--------------|
| 51 | 3 | CAM-SP | StartPRO - Onsite Checkout provides onsite professional support after customer installs products. Specifically designed for each product (from 1 to 3 cameras) and includes a multi-point review checklist and a brief product overview . Initial operator training is included with this commissioning check out. (Travel and expenses billed separately) | | |
| 52 | | | -----Lenses for LDK Cameras----- | | |
| 53 | 3 | HA18X7.6ERD-S | Fujinon 18x7.6 HDTV portable zoom lens w/2x ext & servo zoom and servo focus | | |
| 54 | 3 | SS-13 | Fujinon Full Servo Rear lens controls | | |
| 55 | | | SubTotal for Cameras and Lenses | | \$295,557.20 |
| 56 | | | Total for Kayak Switcher, LDK Cameras, & Lenses | | \$447,563.20 |
| 57 | | | Sales Tax, Shipping, and Insurance | | |
| 58 | 1 | | Estimated Shipping Freight and Insurance | \$2,826.00 | \$2,826.00 |
| 59 | 1 | | 8.1% Sales tax on Equipment Purchase | \$35,451.33 | \$35,451.33 |
| 60 | | | Total Price Including Tax, Freight, & Insurance | | \$485,840.53 |

PROPOSAL GRAND TOTAL: \$485,840.53

Pricing Assumes A Simultaneous Purchase of LDK 8000's, Lenses, Kayak Switcher. The City of Peoria agrees to accept B stock inventory where available for order fulfillment. The City of Peoria agrees to work in conjunction with Grass Valley on mutually agreed upon outbound marketing campaigns in trade publications. In addition, The City of Peoria agree to work with Grass Valley to support future sales opportunities for HD production systems by hosting visits of potential Grass Valley customers frequency/duration of such visits will be agreed upon between both parties.

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 Peoria, AZ 85345

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Kayak HD250 Switcher, Cameras, & Lenses

| Ln# | Qty | Model/Part No. | Product Description | Unit Amount | Total Amount |
|-----|-----|----------------|---------------------|-------------|--------------|
|-----|-----|----------------|---------------------|-------------|--------------|

Sales tax, shipping and insurance costs are not included in this proposal total. Sales tax will be invoiced according to point of delivery, unless a valid tax exemption certificate is provided. All shipping and insurance costs will be added to the invo

Payment Terms: 25% Down, 65% before Shipment, 10% Net 30
 Delivery Terms: Shipping Point
 Ship Method: Best Way, Surface
 Valid Until: 07/03/07

Shipments are FOB Shipping Point. Customer is responsible for insurance on the equipment while in transit. Unless otherwise specified on Customer's PO, Thomson will insure each shipment and the cost of insurance will be added to each invoice.

This is a one-time offer and is given as a Customer accommodation and does not guarantee that similar pricing will be given in the future.



REQUEST FOR PROPOSAL

INSTRUCTIONS TO OFFEROR

Materials Management

Procurement

8314 West Cinnabar Avenue

Peoria, Arizona 85345-6560

Phone: (623) 773-7115

Fax: (623) 773-7118

1. PREPARATION OF PROPOSAL:

- a. All proposals shall be on the forms provided in this *Request For Proposal* package. It is permissible to copy these forms if required. Telegraphic (facsimile) or mailgram proposals will not be considered.
- b. The Offer and Contract Award document (COP Form 203) shall be submitted with an original ink signature by a person authorized to sign the offer.
- c. Erasures, interlineations, or other modifications in the proposal shall be initialed in original ink by the authorized person signing the Vendor Offer.
- d. If price is a consideration and in case of error in the extension of prices in the proposal, the unit price shall govern. No proposal shall be altered, amended, or withdrawn after the specified proposal due date and time.
- e. Periods of time, stated as a number of days, shall be calendar days.
- f. It is the responsibility of all Offerors to examine the entire *Request For Proposal* package and seek clarification of any item or requirement that may not be clear and to check all responses for accuracy before submitting a bid. Negligence in preparing a Proposal confers no right of withdrawal after proposal due date and time.

2. **INQUIRIES:** Any question related to the *Request For Proposal* shall be directed to the Buyer whose name appears on the front. The Offeror shall not contact or ask questions of the department for which the requirement is being procured. Questions should be submitted in writing when time permits. The Buyer may require any and all questions be submitted in writing at the Buyer's sole discretion. Any correspondence related to a *Request For Proposal* should refer to the appropriate *Request For Proposal* number, page, and paragraph number. However, the Offeror shall not place the *Request For Proposal* number on the outside of any envelope containing questions since such an envelope may be identified as a sealed proposal and may not be opened until after the official *Request For Proposal* due date and time.

3. **PROSPECTIVE OFFERORS CONFERENCE:** A prospective offerors conference may be held. If scheduled, the date and time of this conference will be indicated on the cover page of this document. The purpose of this conference will be to clarify the contents of this *Request For Proposal* in order to prevent any misunderstanding of the City's position. Any doubt as to the requirements of this *Request For Proposal* or any apparent omission or discrepancy should be presented to the City at this conference. The City will then determine if any action is necessary and may issue a written amendment to the *Request For Proposal*. Oral statements or instructions will not constitute an amendment to this *Request for Proposal*.

4. **LATE PROPOSALS:** Late Proposals will not be considered, except as provided by the *City of Peoria Procurement Code*. A vendor submitting a late proposal shall be so notified.

5. **WITHDRAWAL OF PROPOSAL:** At any time prior to the specified proposal due date and time, a Vendor (or designated representative) may withdraw the proposal. Telegraphic (facsimile) or mailgram proposal withdrawals will not be considered.

6. **AMENDMENT OF PROPOSAL:** Receipt of a Solicitation Amendment (COP Form 207) shall be acknowledged by signing and returning the document prior to the specified proposal due date and time.

7. **PAYMENT:** The City will make every effort to process payment for the purchase of goods or services within thirty (30) calendar days after receipt of goods or services and a correct notice of amount due, unless a good faith dispute exists as to any obligation to pay all or a portion of the account. Any proposal that requires payment in less than thirty (30) calendar days shall not be considered.

8. **NEW:** All items shall be new, unless otherwise stated in the specifications.

9. **DISCOUNTS:** Payment discount periods will be computed from the date of receipt of material/service or correct invoice, whichever is later, to the date Buyer's payment is mailed. Unless freight and other charges are itemized, any discount provided will be taken on full amount of invoice. Payment discounts of thirty (30) calendar days or more will be deducted from the proposal price in determining the low bid. However, the Buyer shall be entitled to take advantage of any payment discount offered by the Vendor provided payment is made within the discount period.

10. **TAXES:** The City of Peoria is exempt from Federal Excise Tax, including the Federal Transportation Tax. Sales tax, if any, shall be indicated as a separate item.

11. **VENDOR REGISTRATION:** After the award of a contract, the successful Vendor shall have a completed Vendor Registration Form (COP Form 200) on file with the City of Peoria Materials Management Division.

12. AWARD OF CONTRACT:

- a. Unless the Offeror states otherwise, or unless provided within this *Request For Proposal*, the City reserves the right to award by individual line item, by group of line items, or as a total, whichever is deemed most advantageous to the City.
- b. Notwithstanding any other provision of this *Request For Proposal*, The City expressly reserves the right to:
 - (1) Waive any immaterial defect or informality; or
 - (2) Reject any or all proposals, or portions thereof, or
 - (3) Reissue a *Request For Proposal*.
- c. A response to a *Request For Proposal* is an offer to contract with the City based upon the terms, conditions and specifications contained in the City's *Request For Proposal* and the written amendments thereto, if any. Proposals do not become contracts unless and until they are accepted by the City Council. A contract is formed when written notice of award(s) is provided to the successful Offeror(s). The contract has its inception in the award document, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the procurement contract are contained in the *Request For Proposal*; unless modified by a Solicitation Amendment (COP Form 207) or a Contract Amendment (COP Form 217).



STANDARD TERMS AND CONDITIONS

Materials Management Procurement

8314 West Cinnabar Avenue
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

THE FOLLOWING TERMS AND CONDITIONS ARE AN EXPLICIT PART OF THE SOLICITATION AND ANY RESULTANT CONTRACT.

1. **CERTIFICATION:** By signature in the Offer section of the Offer and Contract Award page (COP Form 203), the Vendor certifies:
 - a. The submission of the offer did not involve collusion or other anti-competitive practices.
 - b. The Vendor shall not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11456.
 - c. The Vendor has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip favor, or service to a public servant in connection with the submitted offer. Failure to sign the offer, or signing it with a false statement, shall void the submitted offer or any resulting contracts, and the vendor may be debarred.
2. **GRATUITIES:** The City may, by written notice to the Contractor, cancel this contract if it is found by the City that gratuities, in the form of entertainment, gifts or otherwise, were offered or given by the Contractor or any agent or representative of the Contractor, to any officer or employee of the City with a view toward securing an order, securing favorable treatment with respect to the awarding, amending, or the making of any determinations with respect to the performing of such order. In the event this contract is cancelled by the City pursuant to this provision, the City shall be entitled, in addition to any other rights and remedies, to recover or withhold from the Contractor the amount of the gratuity. Paying the expense of normal business meals which are generally made available to all eligible city government customers shall not be prohibited by this paragraph.
3. **APPLICABLE LAW:** In the performance of this agreement, contractors shall abide by and conform to any and all laws of the United States, State of Arizona and City of Peoria including but not limited to federal and state executive orders providing for equal employment and procurement opportunities, the Federal Occupational Safety and Health Act and any other federal or state laws applicable to this agreement.

Contractor warrants, for the term of this agreement and for six months thereafter, that it has fully complied with the requirements of the Immigration Reform and Control Act of 1986 and all related or similar legal authorities.

This contract shall be governed by the City and Contractor shall have all remedies afforded each by the Uniform Commercial Code, as adopted in the State of Arizona, except as otherwise provided in this contract or in statutes pertaining specifically to the City. This contract shall be governed by the laws of the State of Arizona and suit pertaining to this contract may be brought only in courts in the State of Arizona.

This contract is subject to the provisions of ARS §38-511; the City may cancel this contract without penalty or further obligations by the City or any of its departments or agencies if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the City or any of its departments or agencies, is at any time while the contract or any extension of the contract is in effect, an employee of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.

4. **LEGAL REMEDIES:** All claims and controversies shall be subject to resolution according to the terms of the City of Peoria Procurement Code.
5. **CONTRACT:** The contract between the City and the Contractor shall consist of (1) the Solicitation, including instructions, all terms and conditions, specifications, scopes of work, attachments, and any amendments thereto, and (2) the offer submitted by the Vendor in response to the solicitation. In the event of a conflict in language between the Solicitation and the Offer, the provisions and requirements in the Solicitation shall govern. However, the City reserves the right to clarify, in writing, any



STANDARD TERMS AND CONDITIONS

Materials Management Procurement

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contractual terms with the concurrence of the Contractor, and such written contract shall govern in case of conflict with the applicable requirements stated in the Solicitation or the Vendor's offer. The Solicitation shall govern in all other matters not affected by the written contract.

6. **CONTRACT AMENDMENTS:** This contract may be modified only by a written Contract Amendment (COP Form 217) signed by persons duly authorized to enter into contracts on behalf of the City and the Contractor.
7. **CONTRACT APPLICABILITY:** The Offeror shall substantially conform to the terms, conditions, specifications and other requirements found within the text of this specific Solicitation. All previous agreements, contracts, or other documents, which have been executed between the Offeror and the City are not applicable to this Solicitation or any resultant contract.
8. **PROVISIONS REQUIRED BY LAW:** Each and every provision of law and any clause required by law to be in the contract will be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the contract will forthwith be physically amended to make such insertion or correction.
9. **SEVERABILITY:** The provisions of this contract are severable to the extent that any provision or application held to be invalid shall not affect any other provision or application of the contract which may remain in effect without the invalid provision or application.
10. **RELATIONSHIP TO PARTIES:** It is clearly understood that each party will act in its individual capacity and not as an agent, employee, partner, joint venturer, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other for any purpose whatsoever. The Contractor is advised that taxes or Social Security payments will not be withheld from any City payments issued hereunder and that the Contractor should make arrangements to directly pay such expenses, if any.
11. **INTERPRETATION-PAROL EVIDENCE:** This contract represents the entire agreement of the Parties with respect to its subject matter, and all previous agreements, whether oral or written, entered into prior to this contract are hereby revoked and superseded by this contract. No representations, warranties, inducements or oral agreements have been made by any of the Parties except as expressly set forth herein, or in any other contemporaneous written agreement executed for the purposes of carrying out the provisions of this contract. This contract may not be changed, modified or rescinded except as provided for herein, absent a written agreement signed by both Parties. Any attempt at oral modification of this contract shall be void and of no effect.
12. **ASSIGNMENT-DELEGATION:** No right or interest in this contract shall be assigned by Contractor without prior written permission of the City and no delegation of any duty of Contractor shall be made without prior written permission of the City.
13. **SUBCONTRACTS:** No subcontract shall be entered into by the contractor with any other party to furnish any of the material, service or construction specified herein without the advance written approval of the City. The prime contractor shall itemize all sub-contractors which shall be utilized on the project. Any substitution of sub-contractors by the prime contractor shall be approved by the City and any cost savings will be reduced from the prime contractor's bid amount. All subcontracts shall comply with Federal and State laws and regulations which are applicable to the services covered by the subcontract and shall include all the terms and conditions set forth herein which shall apply with equal force to the subcontract and if the Subcontractor were the Contractor referred to herein. The Contractor is responsible for contract performance whether or not Subcontractors are used.
14. **RIGHTS AND REMEDIES:** No provision in this document or in the vendor's offer shall be construed, expressly or by implication, as waiver by the City of any existing or future right and/or remedy available by law in the event of any claim of default or breach of contract. The failure of the City to insist upon the strict performance of any term or condition of the contract or to exercise or delay the exercise of any right or remedy provided in the contract, or by law, or the City's acceptance of and payment for materials



STANDARD TERMS AND CONDITIONS

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or services, shall not release the Contractor from any responsibilities or obligations imposed by this contract or by law, and shall not be deemed a waiver of any right of the City to insist upon the strict performance of the Contract.

15. **INDEMNIFICATION:** To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the City, its agents, representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, work or services of the Contractor, its employees, agents, or any tier of subcontractors in the performance of this Contract. Contractor's duty to defend, hold harmless and indemnify the City, its agents, representatives, officers, directors, officials and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use resulting therefrom, caused by any acts, errors, mistakes, omissions, work or services in the performance of this Contract including any employee of the Contractor or any tier of subcontractor or any other person for whose acts, errors, mistakes, omissions, work or services the Contractor may be legally liable.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

16. **OVERCHARGES BY ANTITRUST VIOLATIONS:** The City maintains that, in practice, overcharges resulting from antitrust violations are borne by the purchaser. Therefore, to the extent permitted by law, the Contractor hereby assigns to the City any and all claims for such overcharges as to the goods and services used to fulfill the Contract.
17. **FORCE MAJEURE:** Except for payment for sums due, neither party shall be liable to the other nor deemed in default under this Contract if and to the extent that such party's performance of this Contract is prevented by reason of force Majeure. The term "force majeure" means an occurrence that is beyond the control of the party affected and occurs without its fault or negligence. Without limiting the foregoing, force majeure includes acts of God; acts of the public enemy; war; riots; strikes; mobilization; labor disputes; civil disorders; fire; floods; lockouts, injunctions-intervention-acts, or failures or refusals to act by government authority; and other similar occurrences beyond the control of the party declaring force majeure which such party is unable to prevent by exercising reasonable diligence. The force majeure shall be deemed to commence when the party declaring force majeure notifies the other party of the existence of the force majeure and shall be deemed to continue as long as the results or effects of the force majeure prevent the party from resuming performance in accordance with this Contract.

Force majeure shall not include the following occurrences:

- a. Late delivery of equipment or materials caused by congestion at a manufacturer's plant or elsewhere, an oversold condition of the market, inefficiencies, or similar occurrences.
- b. Late performance by a subcontractor unless the delay arises out of a force majeure occurrence in accordance with this Force Majeure term and Condition.

Any delay or failure in performance by either party hereto shall not constitute default hereunder or give rise to any claim for damages or loss of anticipated profits if, and to the extent that such delay or failure is caused by force majeure. If either party is delayed at any time in the progress of the work by force majeure, then the delayed party shall notify the other party in writing of such delay within forty-eight (48) hours commencement thereof and shall specify the causes of such delay in such notice. Such notice shall be hand delivered or mailed *Certified-Return Receipt* and shall make a specific reference to this article, thereby invoking its provisions. The delayed party shall cause such delay to cease as soon as practicable and shall notify the other party in writing. The time of completion shall be extended by contract modification for a period of time equal to the time that the results or effects of such delay prevent the delayed party from performing in accordance with this contract.



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18. **RIGHT TO ASSURANCE:** Whenever one party to this contract in good faith has reason to question the other party's intent to perform he may demand that the other party give a written assurance of this intent to perform. In the event that a demand is made and no written assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the Contract.
19. **RIGHT TO AUDIT RECORDS:** The City may, at reasonable times and places, audit the books and records of any Contractor as related to any contract held with the City.
20. **RIGHT TO INSPECT PLANT:** The City may, at reasonable times, inspect the part of the plant or place of business of a Contractor or Subcontractor which is related to the performance of any contract as awarded or to be awarded.
21. **WARRANTIES:** Contractor warrants that all material, service or construction delivered under this contract shall conform to the specifications of this contract. Unless otherwise stated in Contractor's response, the City is responsible for selecting items, their use, and the results obtained from any other items used with the items furnished under this contract. Mere receipt of shipment of the material/service specified and any inspection incidental thereto by the City shall not alter or affect the obligations of the Contractor or the rights of the City under the foregoing warranties. Additional warranty requirements may be set forth in the solicitation.
22. **INSPECTION:** All material and/or services are subject to final inspection and acceptance by the City. Materials and/or services failing to conform to the specifications of this Contract will be held at Contractor's risk and may be returned to the Contractor. If so returned, all costs are the responsibility of the Contractor. The City may elect to do any or all:
 - a. Waive the non-conformance.
 - b. Stop the work immediately.
 - c. Bring material into compliance.

This shall be accomplished by a written determination for the City.
23. **TITLE AND RISK OF LOSS:** The title and risk of loss of material and/or service shall not pass to the City until the City actually receives the material or service at the point of delivery, unless otherwise provided within this Contract.
24. **NO REPLACEMENT OF DEFECTIVE TENDER:** Every tender of materials shall fully comply with all provisions of the Contract. If a tender is made which does not fully conform, this shall constitute a breach of the Contract as a whole.
25. **DEFAULT IN ONE INSTALLMENT TO CONSTITUTE TOTAL BREACH:** Contractor shall deliver conforming materials in each installment of lot of this Contract and may not substitute nonconforming materials. Delivery of nonconforming materials or a default of any nature, at the option of the City, shall constitute a breach of the Contract as a whole.
26. **SHIPMENT UNDER RESERVATION PROHIBITED:** Contractor is not authorized to ship materials under reservation and no tender of a bill of lading will operate as a tender of the materials.
27. **LIENS:** All materials, service or construction shall be free of all liens, and if the City requests, a formal release of all liens shall be delivered to the City.
28. **LICENSES:** Contractor shall maintain in current status all Federal, State and Local licenses and permits required for the operation of the business conducted by the Contractor as applicable to this Contract.



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29. **PATENTS AND COPYRIGHTS:** All services, information, computer program elements, reports and other deliverables, which may be patented or copyrighted and created under this contract are the property of the City and shall not be used or released by the Contractor or any other person except with the prior written permission of the City.
30. **PREPARATION OF SPECIFICATIONS BY PERSONS OTHER THAN CITY PERSONNEL:** All specifications shall seek to promote overall economy for the purposes intended and encourage competition and not be unduly restrictive in satisfying the City's needs. No person preparing specifications shall receive any direct or indirect benefit from the utilization of specifications, other than fees paid for the preparation of specifications.
31. **COST OF BID/PROPOSAL PREPARATION:** The City shall not reimburse the cost of developing presenting or providing any response to this solicitation. Offers submitted for consideration should be prepared simply and economically, providing adequate information in a straightforward and concise manner.
32. **PUBLIC RECORD:** All offers submitted in response to this solicitation shall become the property of the City and shall become a matter of public record available for review, subsequent to the award notification, in accordance with the City's Procurement Code.
33. **ADVERTISING:** Contractor shall not advertise or publish information concerning this Contract, without prior written consent of the City.
34. **DELIVERY ORDERS:** The City shall issue a Purchase Order for the material and/or services covered by this contract. All such documents shall reference the contract number as indicated on the Offer and Contract Award (COP Form 203).
35. **FUNDING:** Any contract entered into by the City of Peoria is subject to funding availability. Fiscal years for the City of Peoria are July 1 to June 30. The City Council approves all budget requests. If a specific funding request is not approved, the contract shall be terminated.
36. **PAYMENT:** A separate invoice shall be issued for each shipment of material or service performed, and no payment will be issued prior to receipt of material and/or services and correct invoice.



SPECIAL TERMS AND CONDITIONS

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1. **Purpose:** Pursuant to provisions of the City Procurement Code, the City of Peoria, Materials Management Division intends to establish a contract for **Multi-Format Camera System and High Definition Switcher**.
2. **Authority:** This Solicitation as well as any resultant contract is issued under the authority of the City. No alteration of any resultant contract may be made without the express written approval of the City Materials Manager in the form of an official contract amendment. Any attempt to alter any contract without such approval is a violation of the contract and the City Procurement Code. Any such action is subject to the legal and contractual remedies available to the City inclusive of, but not limited to, contract cancellation, suspension and/or debarment of the contractor.
3. **Offer Acceptance Period:** In order to allow for an adequate evaluation, the City requires an offer in response to this Solicitation to be valid and irrevocable for ninety (90) days after the opening time and date.
4. **Eligible Agencies:** Any contract resulting from this Solicitation shall be for the exclusive use of the City of Peoria.
5. **Contract Type:** Fixed Price
6. **Term of Contract:** The term of any resultant contract shall commence upon award and shall remain in effect until all work required by the contractor is completed and accepted by the City. Work shall not commence until authorization to proceed is received from the City.
7. **Affirmative Action Report:** It is the policy of the City of Peoria that suppliers of goods or services to the City adhere to a policy of equal employment opportunity and demonstrate an affirmative effort to recruit, hire, and promote regardless of race, color, religion, gender, national origin, age or disability.
8. **Proposal Format:** Proposals shall be submitted in one (1) original and three (3) copies on the forms and in the format as contained in the Request for Proposal. Proposals shall be on 8 1/2" & 11" paper with the text on one side only.
9. **Interview Guidelines:** During any requested interview, which would be scheduled in the future, be prepared to discuss your firm's proposal, staff assignments, project approach and other pertinent information. The presentation shall be approximately 30 minutes, allowing 15 minutes for a question and answer session. The Consultant's Project/Team Manager shall lead the presentation team and answer questions on behalf of the Consultant. If work involves a major sub-consultant, the firms Project/Team Manager's presence may also be requested (by the City) at the interview.
10. **Evaluation:** In accordance with the City of Peoria Procurement Code, awards shall be made to the responsible offeror whose proposal is determined in writing to be the most advantageous to the City, based upon the evaluation criteria listed below. The evaluation factors are listed in their relative order of importance.
 - a. Proposed Camera and Switcher System and Compliance with Specifications
 - b. Functionality of Camera and Switcher System
 - c. Cost Considerations.
 - d. Conformance to Request for Proposal.
11. **Discussions:** In accordance with the City of Peoria Procurement Code, after the initial receipt of proposals, discussions may be conducted with offerors who submit proposals determined to be reasonably susceptible of being selected for award.
12. **Proposal Opening:** Proposals shall be submitted at the time and place designated in the request for proposals. All information contained in the proposals shall be deemed as exempt from public disclosure based on the City's need to avoid disclosure of contents prejudicial to competing offerors during the process of negotiation. The proposals shall not be open for public



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inspection until after contract award. After contract award, the successful proposal and the evaluation documentation shall be open for public inspection.

- 13. **Performance Warranty:** Contractor warrants that the services rendered in performance will conform to the requirements and to the highest professional standards in the engineering field.
- 14. **Permits and Approvals:** Contractor agrees and undertakes to obtain necessary permits and approvals from all local, state and federal authorities for the project.
- 15. **Shipping Terms:** Prices shall be F.O.B. Destination to the delivery location designated herein. Contractor shall retain title and control of all goods until they are delivered and the contract of coverage has been completed. All risk of transportation and all related charges shall be the responsibility of the contractor. All claims for visible or concealed damage shall be filed by the contractor. The City will notify the contractor promptly of any damaged goods and shall assist the contractor in arranging for inspection.
- 16. **Insurance Requirements:** The Contractor, at Contractor's own expense, shall purchase and maintain the herein stipulated minimum insurance with companies duly licensed, possessing a current A.M. Best, Inc. Rating of A-, or approved unlicensed in the State of Arizona with policies and forms satisfactory to the City.

All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted; failure to do so may, at the sole discretion of the City, constitute a material breach of this Contract.

The Contractor's insurance shall be primary insurance as respects the City, and any insurance or self-insurance maintained by the City shall not contribute to it.

Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect coverage afforded under the insurance policies to protect the City.

The insurance policies, except Workers' Compensation, shall contain a waiver of transfer rights of recovery (subrogation) against the City, its agents, representatives, directors, officers, and employees for any claims arising out of the Contractor's acts, errors, mistakes, omissions, work or service.

The insurance policies may provide coverage which contain deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to the City under such policies. The Contractor shall be solely responsible for the deductible and/or self-insured retention and the City, at its option, may require the Contractor to secure payment of such deductibles or self-insured retentions by a Surety Bond or an irrevocable and unconditional letter of credit.

The City reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance policies and/or endorsements. The City shall not be obligated, however, to review same or to advise Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Contractor from, or be deemed a waiver of the City's right to insist on, strict fulfillment of Contractor's obligations under this Contract.

The insurance policies, except Workers' Compensation and Professional Liability, required by this Contract, shall name the City, its agents, representatives, officers, directors, officials and employees as Additional Insureds.

- 17. **Required Insurance Coverage:**



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a. Commercial General Liability

Contractor shall maintain Commercial General Liability insurance with a limit of not less than \$1,000,000 for each occurrence with a \$2,000,000 Products/Completed Operations Aggregate and a \$2,000,000 General Aggregate Limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage including, but not limited to, the liability assumed under the indemnification provisions of this Contract which coverage will be at least as broad as Insurance Service Office, Inc. Policy Form CG 00011093 or any replacements thereof. The coverage shall not exclude X, C, U.

Such policy shall contain a severability of interest provision, and shall not contain a sunset provision or commutation clause, nor any provision which would serve to limit third party action over claims.

The Commercial General Liability additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form B, CG 20101185, and shall include coverage for Contractor's operations and products and completed operations.

Any Contractor subcontracting any part of the work, services or operations awarded to the Contractor shall purchase and maintain, at all times during prosecution of the work, services or operations under this Contract, an Owner's and Contractor's Protective Liability insurance policy for bodily injury and property damage, including death, which may arise in the prosecution of the Contractor's work, service or operations under this Contract. Coverage shall be on an occurrence basis with a limit not less than \$1,000,000 per occurrence, and the policy shall be issued by the same insurance company that issues the Contractor's Commercial General Liability insurance.

b. Automobile Liability

Contractor shall maintain Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to the Contractor's any owned, hired, and non-owned vehicles assigned to or used in performance of the Contractor's work. Coverage will be at least as broad as coverage code 1, "any auto", (Insurance Service Office, Inc. Policy Form CA 00011293, or any replacements thereof). Such insurance shall include coverage for loading and off loading hazards. If hazardous substances, materials or wastes are to be transported, MCS 90 endorsement shall be included and \$5,000,000 per accident limits for bodily injury and property damage shall apply.

c. Workers' Compensation

The Contractor shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor's employees engaged in the performance of the work or services; and, Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case any work is subcontracted, the Contractor will require the Subcontractor to provide Workers' Compensation and Employer's Liability to at least the same extent as required of the Contractor.

d. Professional Liability

The Contractor retained by the City to provide the work or service required by this Contract will maintain Professional Liability insurance covering acts, errors, mistakes and omissions arising out of the work or services performed by the Contractor, or any person employed by the Contractor, with a limit of not less than \$1,000,000 each claim.



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18. **Certificates of Insurance:** Prior to commencing work or services under this Contract, Contractor shall furnish the City with Certificates of Insurance, or formal endorsements as required by the Contract, issued by Contractor's insurer(s), as evidence that policies providing the required coverages, conditions and limits required by this Contract are in full force and effect.

In the event any insurance policy(ies) required by this contract is(are) written on a "Claims made" basis, coverage shall extend for two years past completion and acceptance of the Contractor's work or services and as evidenced by annual Certificates of Insurance.

If a policy does expire during the life of the Contract, a renewal certificate must be sent to the City fifteen (15) days prior to the expiration date.

All Certificates of Insurance shall be identified with bid serial number and title. A \$25.00 administrative fee will be assessed for all certificates received without the appropriate bid serial number and title.

19. **Cancellation and Expiration Notice:** Insurance required herein shall not expire, be canceled, or materially changed without thirty (30) days prior written notice to the City.

20. **Independent Contractor:**

a. General

- i. The Contractor acknowledges that all services provided under this Agreement are being provided by him as an independent contractor, not as an employee or agent of the City Manager or the City of Peoria.
- ii. Both parties agree that this Agreement is nonexclusive and that Contractor is not prohibited from entering into other contracts nor prohibited from practicing his profession elsewhere.

b. Liability

- i. The City of Peoria shall not be liable for any acts of Contractor outside the scope of authority granted under this Agreement or as the result of Contractor's acts, errors, misconduct, negligence, omissions and intentional acts.
- ii. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the City, its agents, representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, work or services of the Contractor, its employees, agents, or any tier of subcontractors in the performance of this Contract. Contractor's duty to defend, hold harmless and indemnify the City, its agents, representatives, officers, directors, officials and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use resulting therefrom, caused by any acts, errors, mistakes, omissions, work or services in the performance of this Contract including any employee of the Contractor or any tier of subcontractor or any other person for whose acts, errors, mistakes, omissions, work or services the Contractor may be legally liable.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

c. Other Benefits



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The Contractor is an independent contractor, therefore, the City Manager will not provide the Contractor with health insurance, life insurance, workmen's compensation, sick leave, vacation leave, or any other fringe benefits. Further, Contractor acknowledges that he is exempt from coverage of the Comprehensive Benefit and Retirement Act (COBRA). Any such fringe benefits shall be the sole responsibility of Contractor.

21. **Confidential Information:**

- a. If a person believes that a bid, proposal, offer, specification, or protest contains information that should be withheld, a statement advising the Materials Supervisor of this fact shall accompany the submission and the information shall be identified.
- b. The information identified by the person as confidential shall not be disclosed until the Materials Supervisor makes a written determination.
- c. The Materials Supervisor shall review the statement and information and shall determine in writing whether the information shall be withheld.
- d. If the Materials Supervisor determines to disclose the information, the Materials Supervisor shall inform the bidder in writing of such determination.

22. **Ordering Process:** Upon award of a contract by the City of Peoria, Materials Management Division may procure the specific material and/or service awarded by the issuance of a purchase order to the appropriate contractor. The award of a contract shall be in accordance with the City of Peoria Procurement Code and all transactions and procedures required by the Code for public bidding have been complied with. A purchase order for the awarded material and/or service that cites the correct contract number is the only document required for the department to order and the contractor to deliver the material and/or service.

Any attempt to represent any material and/or service not specifically awarded as being under contract with the City of Peoria is a violation of the contract and the City of Peoria Procurement Code. Any such action is subject to the legal and contractual remedies available to the City inclusive of, but not limited to, contract cancellation, suspension and/or debarment of the contractor.

23. **Billing:** All billing notices to the City shall identify the specific item(s) being billed and the purchase order number. Items are to be identified by the name, model number, and/or serial number most applicable. Any purchase/delivery order issued by the requesting agency shall refer to the contract number resulting from this solicitation.
24. **Licenses:** Contractor shall maintain in current status all Federal, State and Local licenses and permits required for the operation of the business conducted by the Contractor.
25. **Cancellation:** The City reserves the right to cancel the whole or any part of this contract due to failure by the contractor to carry out any obligation, term or condition of the contract. The City will issue written notice to the contractor for acting or failing to act as in any of the following:
- a. The contractor provides material that does not meet the specifications of the contract;
 - b. The contractor fails to adequately perform the services set forth in the specifications of the contract;
 - c. The contractor fails to complete the work required or to furnish the materials required within the time stipulated in the contract;



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- d. The contractor fails to make progress in the performance of the contract and/or gives the City reason to believe that the contractor will not or cannot perform to the requirements of the contract.

Upon receipt of the written notice of concern, the contractor shall have ten (10) days to provide a satisfactory response to the City. Failure on the part of the contractor to adequately address all issues of concern may result in the City resorting to any single or combination of the following remedies:

- a. Cancel any contract;
- b. Reserve all rights or claims to damage for breach of any covenants of the contract;
- c. Perform any test or analysis on materials for compliance with the specifications of the contract. If the results of any test or analysis find a material non-compliant with the specifications, the actual expense of testing shall be borne by the contractor;
- d. In case of default, the City reserves the right to purchase materials, or to complete the required work in accordance with the City Procurement Code. The City may recover any actual excess costs from the contractor by:
 - i. Deduction from an unpaid balance;
 - ii. Any combination of the above or any other remedies as provided by law.

ADD TO SPECIAL TERMS AND CONDITIONS:

Project Travel Reimbursable Expenses: If travel expenses are allowed as part of the contract the reimbursable expenses will be as follows. All expenses will be billed to the City at cost without markup. Copies of bills for expenses are to be submitted with the invoice. Travel time to and from job site is excluded from this contract. There will be no allowances for parking or personal car mileage. No incidentals for travel of any kind are allowed under this contract.

The following is a list of allowable travel expenses under this contract agreement:

- a. Transportation:
 - i. Air Transportation – coach class fares, minimum 14 days advanced purchase, unless otherwise agreed upon.
 - ii. Car Rental – mid size car, gas for rental car (City assumes no liability regarding additional insurance costs).
- b. Lodging and Meals:
 - i. Meals – three meals per day, at the current federal per diem rate for Maricopa County.
 - ii. Lodging – not to exceed the current federal rate for Maricopa County. Vendors are encouraged to stay in hotels located within the City of Peoria when practical. A listing of accommodations within Peoria can be found on the following website: <http://visitpeoriaaz.com/accommodations.php>



SCOPE OF WORK

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TELEVISION PRODUCTION SYSTEM COMPONENTS TECHNICAL SPECIFICATIONS

GENERAL REQUIREMENTS:

All components shall be new, latest generation and in current production and sourced from a single manufacturer. For these purposes components shall mean cameras, video production switchers and routing switchers. Lenses and minor accessories may be allowed from third party manufacturers.

On staff factory commissioning and training is required for all components.

Part 1 - MULTI-FORMAT CAMERA SYSTEMS

1. General Specifications

- 1.1. The camera shall be designed for studio and field applications producing a color picture of the highest broadcast HDTV quality
- 1.2. The camera shall provide simultaneous HDTV and SDTV color videos of the highest broadcast quality.
- 1.3. The camera head will utilize 2/3 inch format, CCD image sensors, capable of native 1080i/59.94 and 720P/59.94 directly from the sensor.
- 1.4. The digital processing in the camera head shall utilize dedicated Digital Signal Processors (DSP) to digitally process the RGB video signals.
- 1.5. The camera shall be provided with a choice of high-resolution HDTV 2-inch, and 5-inch or 7-inch viewfinders for camera operation.
- 1.6. The camera shall accept a range of studio and field lenses with a rugged quick release lens interface.
- 1.7. The camera Base Station (BS) shall be designed for rack mounting in a standard 19" rack. Utilizing no more than two (2) rack units. The BS design shall allow them to be stacked in a rack with no ventilation space in between them.
- 1.8. Transmission between the camera head and the BS shall be via standard triaxial cable (triax).



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- 1.9. An Optical Fiber transmission version of the camera shall be available for longer cable runs of up to 4000 meters including power using standard SMPTE cable.
- 1.10. The camera system shall incorporate an assignable Master Control Panel (MCP) for centralized maintenance, setup and advanced control purposes.
- 1.11. Each camera system shall incorporate a dedicated Operational Control Panel (OCP) for individual control of each camera.
- 1.12. The control system (OCP/MCP) shall be based on a standard Ethernet network for maximum flexibility.
 - 1.12.1. OCPs shall provide an LCD screen for the display of alpha numeric characters.
 - 1.12.2. OCPs shall provide back lighting on all function switches for easy operation in dark environments.
 - 1.12.3. MCP shall be based on a PC platform providing a color touch screen and standard USB interfaces.
- 1.13. Control settings will be stored in a digital form with memory at the camera head. This use of localized memory shall permit interchange of units without the need to re-establish proper alignment settings.
- 1.14. A same removable media (smart card) shall allow storage and recall of scene files and operational files at the camera head as well as at the OCP.
- 1.15. A permanent factory file shall be provided to allow the restoring at any time of the camera to factory settings.
- 1.16. A User File shall be provided in addition to the scene and factory files to allow users to have a file that can be setup and recalled that reflects the tastes and needs of the user. This file is separate from the scene files.



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1.17. The camera shall be built in such a way that it can be converted from a studio configuration (large "box type" lens and 7 inch. viewfinder) to a portable configuration (portable lens / 2 inch. viewfinder) in minutes.

1.18. The camera must be dockable to be able to accommodate triax or fiber transmission.

2. Mechanical Specifications

2.1. The camera head shall be constructed entirely of a rugged magnesium-alloy body. The camera shall be constructed using techniques, which will preserve high levels of durability, immunity to radio frequency interference (RFI) and weather protection.

2.2. The camera shall utilize a quick-release type lens mount.

2.3. The camera head, when used with the large lens adapter, shall incorporate a mechanism for the 7-inch viewfinder, which provides +30/- 55 degrees of tilt and 90 degrees of rotation.

2.4. The camera head shall consist of two distinct units. The camera head and a docked adapter. This configuration shall be provided to allow flexibility to adapt to other applications such as an optical fiber adapter.

2.5. The Triax Connector on the portable camera shall utilize a rotary mount to prevent damage to the camera cable

3. Optical Specifications

3.1. The camera shall incorporate two (2) remote controlled 4-position motor driven filter wheels. One filter wheel shall provide 3 ND filters plus a clear filter and the second shall provide a 4-point star filter, 6-point star filter, a soft focus filter and a clear position.

3.1.1. The special effect filter wheel shall utilize clip-in (non-adhesive) type fixing to allow filters to be replaced with other special purpose optical filters if needed.

3.2. The camera optics will utilize a 3-piece f1.4 beam splitting prism to minimize the corrections needed and to prevent light attenuation from additional surfaces. The prism shall incorporate electronically



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corrected overlapping skirts to optimize spectral response, colorimetry and to maximize camera sensitivity.

4. HDTV CCD Specifications

- 4.1. The camera shall use 2/3 inch high density CCD's. The CCD shall have a density of a minimum of 9.2 million pixels.
- 4.2. The CCD shall provide switching between native 1080i/59.94 line interlaced scan and native 720P/59.94 progressive scan.
- 4.3. The CCDs shall provide continuous automatic black balance and black shading.
- 4.4. The CCD sensors shall provide no vertical measurable smear
- 4.5. The CCD shall include a black mask to minimize ring flare phenomena.
- 4.6. The CCD shall have a high sensitivity. The camera sensitivity shall be f8.0 at 2000 lux.

5. HDTV Digital processing

- 5.1. For maximum stability and operational flexibility, the camera head shall utilize digital processing of the RGB video signals.
 - 5.1.1. Digital processing shall be provided for each of the RGB video signals. Digital processing shall be of precision higher than 22bits
 - 5.1.2. The Digital Signal Processors (DSP) shall perform the following main functions:
 - 5.1.2.1. Continuous automatic black balance and black shading
 - 5.1.2.2. Masking processing
 - 5.1.2.3. Advanced detail processing



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- 5.1.2.4. Gamma correction
- 5.1.2.5. Advanced knee processing
- 5.1.2.6. Continuous automatic Leaking Pixel Correction (LPC)
- 5.1.3. A 14-bit analog to digital (A/D) converter shall be used for each of the RGB video signals.
- 5.2. Detail shall be generated in the digital domain for optimum stability, repeatability and maximum operational flexibility.
 - 5.2.1. The HD detail center frequency shall be adjustable from 18 to 37MHz with both coarse and fine adjustment
 - 5.2.2. Skin tone detail circuits shall be provided to soften facial blemishes and wrinkles without affecting the detail level applied to other portions of the scene.
 - 5.2.2.1. The hue selection shall have a full 360 degree selection capability to allow this feature to be used for colors other than flesh tones such as the green grass for outdoor events.
 - 5.2.2.2. An automatic detection of the skin color shall be available
 - 5.2.2.3. A skin view function shall display the area covered by the skin correction for the viewfinder as well as the video output.
 - 5.2.2.4. Two (2) separately adjustable flesh tone detail circuits shall be provided. Control shall be provided to turn on each independently or to turn both on the same time.
 - 5.2.3. Soft detail shall be provided to prevent over enhancement with large video transitions. A control shall be provided for the adjustment of this function as well as an on/off switch.
 - 5.2.4. Remote selection of detail generated from green only, and green & red shall be provided. Changing selection shall not require realignment of the detail setup.
- 5.3. Adjustment of initial gamma gain 3-8 times shall be provided. This function affects the blackest portion of the video waveform to provide the most natural video appearance.
- 5.4. Both a linear matrix and 6-vector color corrector shall be provided.



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- 5.5. The order of the matrix and gamma processing shall be selectable to provide matrix before gamma or matrix after gamma.
 - 5.6. Saw tooth test signals shall be provided for testing the linearity of digital processing, triaxial system and base station.
 - 5.7. Real time Automatic Pixel Correction (every frame) shall be provided by the DSP (No operator or maintenance action shall be needed to correct a leaking pixel).
6. SDTV Digital Processing
- 6.1. High Quality SDTV video shall be provided at the base station.
 - 6.2. The SDTV signal shall be scaled down from the HDTV signal at the base station
 - 6.3. Letterbox (16:9, 14:9 aspect ratios) processing shall be available on the SDTV output
 - 6.4. The SDTV output shall be switchable between 16:9 and 4:3 aspect ratios.
 - 6.5. Independent detail controls shall be available for HDTV and SDTV outputs.
7. Transmission Specifications
- 7.1. The standard triax transmission system between the camera head and the base station shall be wide-band High Definition component (Y, R-Y, B-Y) to assure the highest quality video possible with long distance transmission.
 - 7.1.1. This long distance triax system shall utilize component transmission with a bandwidth of 30 MHz for the "Y" signal and a bandwidth of 15MHz for each of the "R-Y" and "B-Y" signals.
 - 7.1.2. No compression shall be used on the video signals.
 - 7.1.3. Frequency modulation (FM) shall be utilized for audio, intercom and data signals to maximize rejection of spurious emission pickup by the triax system.
 - 7.1.4. Maximum triax cable length shall be 1200 meters using 14.mm / 0.55" diameter triax cable.



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- 7.1.5. The viewfinder return video signal shall be transmitted from the base station to the camera head on an individual carrier. Bandwidth shall be sufficient for a SD color video signal.
 - 7.1.6. The viewfinder return video inputs shall be able to accommodate either SDTV composite video or SDI inputs.
 - 7.1.7. A separate video signal shall be transmitted from the base station to the camera head for use by the teleprompter (with limited triax cable length).
 - 7.1.8. The triax system shall provide protection from cable shorts and by power supply design to insure against both operator injury and equipment damage.
 - 7.1.9. The triax system must connect directly from camera head to base station without additional converter boxes at either end.
8. Automatics and file system specifications
- 8.1. The following automatic setup modes shall be provided: Auto White, Auto Black.
 - 8.2. To conserve setup time, the Master Control Panel shall provide for the transfer of setup data from a selected camera to one or multiple cameras. This allows the operator to setup one camera then transfer this setup to one or all cameras in a system.
 - 8.3. 4 scene files shall be provided for camera operators to store specific scene information including on/off switch settings, filter selection, master gain position, detail level, etc.
 - 8.4. USB ports shall be provided on the Master Control Panel (MCP) in order to store and recall setup files on removable media (USB Stick) and to connect a mouse and keyboard.
9. Monitoring specifications



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- 9.1. Two monitoring signals will be generated, one selected at the camera head and displayed on the 2-inch, 5-inch or 7-inch camera viewfinder, the second selected at the MCP or OCP for use with external waveform and picture monitors.
- 9.1.1. Viewfinder monitoring signals shall include separate and non-additive mix of R,G,B videos; luminance (Y), -G, Return 1 and Return 2.
- 9.1.2. External monitoring signals shall provide 2 channels each for waveform and picture monitors, Monitoring signal shall include separate, sequential, and overlay of R,G,B.
- 9.2. The camera head shall incorporate a 2-inch, 5-inch or a 7-inch high-resolution viewfinder.
- 9.2.1. The viewfinder shall include a separate dedicated detail generator providing horizontal and vertical detail for the viewfinder.
- 9.2.2. The viewfinder shall provide a 16:9 picture with the possibility to indicate the 4:3 picture area with either line markers or shaded video marker.
- 9.2.3. Controls on the viewfinder shall include contrast, brightness and detail level control. LED indicators shall be provided for "On Air" (red) and "ISO Tally" (yellow). The red tally LED shall be used for call signaling.
- 9.2.4. Electronic graphics in the 7-inch viewfinder shall include an electronic lens zoom and focus position alpha-numeric read-out, operating status, "safe" picture area, center indicator and user adjustable box cursor markers.
- 9.2.5. A "Crawler" circuit shall be provided as a focusing aid. This circuit shall take the highest HD frequencies and adding it back to the viewfinder video producing a edge crawl when these high frequencies are present (sharp focus).
- 9.2.6. The viewfinder shall be provided with a "zoom" function to enlarge the image in the viewfinder making focus easy to see. A switch shall be provided to assign the on/off control of this function to the Ext 2 control on the lens zoom controller. A choice shall be provided to make this function either momentary or latched.



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10. Pulse system specifications

- 10.1. The camera head shall incorporate an internal Sync Pulse Generator with genlock capability for stand alone operation.
- 10.2. The camera system shall incorporate automatic phase correction to automatically retime the camera regardless of cable length.
- 10.3. The camera shall incorporate an electronic shutter with the following capabilities:
 - 10.3.1. A minimum of seven (7) preset electronic shutter speeds (1/60, 1/100, 1/125, 1/250, 1/500 and 1/1,000) shall be provided with remote control selection. The purpose of this shutter is to increase the dynamic resolution for sports and other applications with fast motion.
 - 10.3.2. Clean scan with remote selection and on/off switching shall be provided to allow the imaging of computer monitors and other applications with non-synchronous or with non-NTSC rate displays with a vertical frequency above the NTSC rate.

11. Intercom and audio specifications

- 11.1. The camera head shall include intercom headset connectors for communication between the camera operator and engineering and/or production.
 - 11.1.1. Headsets with dynamic or carbon type microphones can be used. The camera intercom shall be RTS/ 4 wire compatible.
 - 11.1.2. Headset connectors shall be 5-pin XLR type.
 - 11.1.3. An 11p Fisher connector shall be provided at the camera head for the tracker.
- 11.2. The camera shall include two (2) bi-directional intercom channels designated Engineering and Production. A third channel, Program, shall be included with listen only for cameraman. Individual volume controls shall be included.



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11.3. The camera shall include two (2) high quality program audio microphone channels with 3-pin XLR connectors provided on the camera head.

11.3.1. An amplifier shall be provided in the camera head for two (2) microphone audio channels. This amplifier shall be a high quality design and shall provide "Phantom" microphone power.

12. Power supply specifications

12.1. The power supply unit at the base station shall operate with an AC input and provide power supply voltages to the base station electronics as well as provide AC voltage to power the camera head (in Large Lens Adapter configuration).

12.2. A utility power output shall be provided with 12V DC, 8VA power at the Large Lens Adapter for use with a teleprompter or other application. This utility power shall utilize a fuse to prevent overloads from disrupting camera head power.

12.3. In studio configuration (7"VF / Large Lens Adapter) a connector shall be provided to allow the direct connection of the large lens adapter to 117VAC power.

12.4. In portable configuration, a connector shall be provided to allow the direct connection of the camera head to 12V DC power.

13. Camera control specifications

13.1. The Control System shall be based on a standard Ethernet network where Master Control Panels, Operational Control Panels and Camera Base Stations will be connected.

13.2. Interconnection between units will utilize standard CAT5 Ethernet cables and off-the-shelf data switcher.

13.3. The Master Control Panel (MCP) shall access to control of up to 99 cameras in the system without additional units



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- 13.3.1. The MCP shall be based on a PC platform with color touch screen for fast access to adjustments.
- 13.3.2. The MCP shall employ the use of digital rotary-encoder technology for all primary and secondary controls including iris and master black.
- 13.3.3. The MCP shall provide single camera control menus, as well as an overall camera menus with direct access to adjustments.
- 13.3.4. Red and orange Tally shall be visible on the MCP menu screens when an On Air or ISO camera is selected
- 13.3.5. The MCP shall have the capability of being mounted in a desk top or 19-inch rack mounted in a maintenance area.
- 13.3.6. LED alpha-numeric displays on the MCP shall provide Iris and Master Black read outs of the camera selected.
- 13.3.7. The MCP shall provide access to all setup and operational controls including iris and master black level and shall therefore have capacity to provide a second full-control position (e.g. Engineering).
- 13.3.8. The MCP shall provide selection of the video to be display on picture and waveform monitoring.
- 13.3.9. The MCP shall provide for the saving of computer compatible files of the camera configurations and adjustments. This makes it possible to email camera files and to read and write to USB memory sticks from a computer
- 13.3.10. Complete facilities for control of manual and automatic setup shall be available at the MCP. Control functions will be provided with rotary encoders for actual adjustments. Switch functions shall be controlled by up/down or on/off selection keys.
- 13.3.11. Simultaneous camera control of a camera by the Operational Control Panel (OCP) and the MCP shall be provided. This allows the operator to continue operating the camera from the remote



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control unit and at the same time use the master setup control unit to adjust an engineering function for example.

- 13.3.12. The MCP shall provide access to: four (4) scene files, user file and factory files of each camera connected to the system. Store and recall functions shall be provided for all files (except the factory file which is read-only).
- 13.3.13. The MCP shall have USB ports for communication with external devices such as USB memory sticks or to connect a mouse and/or keyboard.
- 13.3.14. The MCP shall use a touch screen or a USB mouse for control.
- 13.3.15. A standard 15-pin sub D-connector shall be provided to connect to an external display SVGA computer monitor to provide a larger display.
- 13.4. Each Camera shall utilize an Operational Control Panel (OCP) for control of operating functions by the camera operator.
 - 13.4.1. The OCP shall give access to all camera parameters including advanced functions like Skin tone, Soft detail, etc.
 - 13.4.2. The OCP shall provide direct access to main functions such as Iris, Master Black, RGB Black and White Painting, and detail level.
 - 13.4.3. More advanced functions shall be accessible via menu on a LCD display and assignable button.
 - 13.4.4. All controls shall be digital rotary-encoder technology (digi-pots), with the exception of the Iris control. The Iris and master black control shall be provided through a joystick.
 - 13.4.5. A lock panel function shall be available on the OCP with individual lock of menu area and Iris/Painting area.
 - 13.4.6. A Smart Card memory card slot shall be provided to load and store camera files. This same card shall be useable at the camera head.



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13.5. Stand-alone operation of the camera head shall be provided for special applications and ease of maintenance.

13.5.1. Automatic setup and operational controls shall be provided directly at the camera head without the need of external devices.

13.5.2. Provision shall be provided to allow the connection of a local control unit directly to the camera head for operational control.

14. Technical specifications

14.1. HD Video Standard: Switched between 1080i (59.94 Hz) & 720P (59.94)

14.2. SDTV Color type: NTSC / PAL

14.3. Imaging system: R,G, B; 3-CCD

14.4. Imaging device: 2/3 inch format, minimum 9.2 million pixel, CCD

14.5. Optical System: f1.4 beam splitting prism

14.6. Optical filters: ND -Clear, 1/4, 1/16, 1/64. Effect Clear, Star 6p, Star 4p, soft focus

14.7. Electronic color temperature: 3200K, 5600K, 7500K, AW1 and AW2 (White balance)

14.8. Shutter speeds: Lighting control 50/60 Hz and exposure control speeds of 1/200, 1/500, 1/1000.

14.9. Sensitivity: f8.0 at 2000 lux, video level set to 100 IRE with a 89.9% reflectance gray scale chart illuminated with a color temperature of 3200°K and a 2000 lux illumination level.

14.10. Signal-to-Noise ratio (HD): 55dB typical, Camera conditions: Gamma Off, DTL Off, Masking Off, Chroma Off, white balanced with 3200K lighting; measured with Rohde & Schwarz meter set for LPF: 30MHz, HPF: 100KHz.



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14.11. Depth of Modulation shall be: 40% (16:9)

14.12. Registration accuracy: All areas 0.05%, excluding lens errors

14.13. RF Interference: usable in an electric field of 130 dB μ (MF to UHF)

14.14. Power consumption: 470VA max (camera head, base station, triax system, 7-inch viewfinder)

14.15. Power supply: 115/230V AC \pm 15% 47-63Hz

14.16. Camera head with Triax adapter dimensions: 241 x164 x373 (H x W x L in mm)

14.17. Operating temperature: basestation 0 to +45° C camera head; -20 to +45° C

14.18. Base station input and output signals:

14.18.1. One (1) Reference input. This input shall accept either tri-level HD sync or standard definition black burst.

14.18.2. One (1) teleprompter input

14.18.3. Three (3) HDTV SDI outputs

14.18.4. One (1) Text video output

14.18.5. One (1) composite video output w/ or w/o text (viewing quality)

14.18.6. Signaling in/out Preview, Green tally(Call), Yellow tally(ISO), Red tally(on-air)

14.18.7. Auxiliary in/out (private bi-directional data channel between base station and camera head 2.4KB TTL)



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- 14.18.8. One (1) RS232 port
- 14.18.9. One (1) RJ45 Ethernet control link
- 14.18.10. Two (2) External video inputs (these can be either SD composite video or SDI)
- 14.18.11. Three SDTV SDI outputs
- 14.18.12. Analog RGB/YCrCb or three (3) NTSC composite video outputs
- 14.18.13. Two (2) Audio channels (analog) outputs
- 14.18.14. Five (5) Intercom channels (bi-directional PROD and ENG plus PROG)
- 14.18.15. One (1) headset connector (ENG intercom)
- 14.18.16. One (1) PXM video output
- 14.18.17. One (1) SYNC.sync.WFM video output
- 14.18.18. One (1) Analog HDTV output on VGA-type D-connector. This connector allows the direction connection to SVGA computer monitor to display HDTV video signals. This provides a low-cost monitor for each camera.
- 14.19. Camera head input and output signals:
 - 14.19.1. One (1) front microphone input
 - 14.19.2. One (1) Viewfinder output
 - 14.19.3. One (1) lens connector
 - 14.19.4. One (1) 9 pin control input (RS232 compatible)



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- 14.19.5. One (1) HDMI output
- 14.19.6. Two (2) HD-SDI Video output
- 14.19.7. One (1) Teleprompter output
- 14.19.8. Two (2) Rear microphone Inputs
- 14.19.9. DC 12Volt Input
- 14.19.10. One (1) DC 12 Volts output
- 14.19.11. One (1) DC 12V script light output
- 14.19.12. One (1) Tracker Intercom
- 14.19.13. One (1) Auxiliary/Data
- 14.19.14. One (1) XLR5 Intercom Headset (ENG/PROD/PROG)
- 14.19.15. Intercom: 0dB, 600 ohms, 2 channels, 4-wire/RTS compatible
- 14.19.16. One (1) Genlock tri-level HD sync

15. Camera systems types and quantities

- 15.1.1. General description. Three Triax Camera Systems - 1080i, 720p, & SD Outputs, including 3 Standard Camera heads , Multi-format, with 3 Triax HD-adapters, TriLock / XLR and 3 Tripod adapter plates, three 5" HDTV Viewfinders, 50/60 Hz., 3 Teleprompter Power Boxes.



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15.1.2. Camera base stations. Three standard Base unit HDTV for Ethernet use, with Power module for Base station, and 3 Triax modules with HDTV Trilock., and 2 ch audio & 2/4-wire intercom module and digital/Analog External video input module and High Quality SDTV output option module and rack rails.

15.1.3. Camera Control units and Panels. three Control panels with Joystick for Ethernet use, RS 422 or RS 232., and one Master Control Panel for Ethernet use with desk mounting brackets, power supplies as needed, 45 Watt, 12V DC, and all required Ethernet cables and Ethernet switches, DC power daisy chaining cables, 10 user cards and all primary power cords.

15.1.4. Manuals and Service Extenders, one per camera system. Include for all individual components.

15.1.5. On Site Services. Provide onsite services for commissioning and user training including estimated travel and living expenses as part of proposal. Assume three days on site.

15.1.6. Lenses for the camera systems. Provide:

15.1.6.1. Three HA18X7.6ERD-S Fujinon 18x7.6 HDTV portable zoom lens w/2x ext & servo zoom and servo focus.

15.1.6.2. three SS-13 Fujinon Full Servo Rear lens controls

PART 2 - VIDEO PRODUCTION SWITCHER SYSTEM WITH ROUTER INTEGRATION

16. General specifications

16.1. The equipment shall be designed in accordance with good engineering practice and shall provide a level of performance consistent with all current standards.

16.2. The system shall be certified to meet the following safety standards:

USA Professional Video/Audio to UL 60950 (3rd edition) certified with the ETL mark

Canada CAN/CSA C22.2 NO. 60950

Europe IEC 60950 by self-certification using the CB checklist

CE Marking EMC Directive (Requires Declaration of Conformity)

89/336/EEC EMC Directive

73/23/EEC Low Voltage Directive

EN 60950 (Safety of Information Technology Equipment)



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16.3. The system shall be certified to meet the following Electromagnetic Compatibility standards:

USA FCC Part 15 subpart B (ITE equipment) Class A (non-residential)

Canada FCC Industry Canada (IC) USA FCC tests apply

EMC statement must be marked in English and French

Europe

BS EN55103-1/2 consisting of:

| | |
|------------------------------|-----------------------------------|
| Radiated emissions | EN55022 Class A (non residential) |
| Conducted emissions | EN55022 Class A (non residential) |
| Harmonics | EN61000-3-2 |
| Voltage Fluctuations/Flicker | EN61000-3-2 |
| Immunity | EN50082-1:1997 |
| ESD | IEC 61000-4-2 |
| RF Radiated | EN 61000-4-3 |
| RF Radiated | ENV 50204:1995 |
| EFT/Burst | EN 61000-4-4 |
| Surges | EN 61000-4-5 |
| RF Conducted | EN 61000-4-6 |
| Mains Dips and Interruptions | EN 61000-4-11 |
| Magnetic Radiation | EN 61000-4-8 |

Australia & New Zealand AS/NZS 3548

Radiated and conducted per EN 55022 (ITE)

C-Tick labeling (Requires Declaration of Conformity)

16.4. Each system shall be completely assembled and tested (including factory installed options) prior to shipment.

16.5. The equipment shall be covered by a one year limited warranty.

16.6. The manufacturer shall maintain an inventory of service spares at multiple strategically located worldwide service centers and shall provide 24 hour emergency service in those areas served either by a direct sales and support office or by an authorized service provider (ASP).

16.7. Where practical, all active circuitry shall be mounted on plug-in printed circuit boards (PCBs).

16.8. All PCB's shall be fully solder masked and shall bear silk-screened component legends where possible.



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- 16.9. All PCB's which perform video processing functions in the video processor frame shall be equipped with mating connectors with gold plating on both contact surfaces. Printed edge board contacts are not acceptable.
- 16.10. Emergency spares kits shall be made available.
- 16.11. The video processor frame equipment shall be designed in a manner which permits the removal or insertion of pluggable PCBs with power applied to the system and with no ill effects resulting from such removal or insertion.
- 16.12. System control panels larger than 1 M/E shall include source name displays on the program/preset (PGM/PST) bank, and on the upstream M/E banks.
- 16.13. The main video processor frame power supplies shall be designed to automatically sense and accept input power in the range of 100-120 VAC or 200-240 VAC, +/- 10%, 50 to 60 Hz without manual intervention.
- 16.14. Each power supply shall be individually protected by power limiting on the output of each supply.
- 16.15. The power supply equipment for the video processing frame shall be designed in a manner which permits the removal or insertion of each power supply with power applied to the system and with no ill effects resulting from such removal or insertion.
- 16.16. The system power supplies shall include input line filtering and shall be power factor corrected.
- 16.17. Operational temperature range shall be 0° to 40° C (32° to 104°F) for operation and 20° to 30° C (68° to 86°F) for specifications at 0% - 95% relative humidity, non-condensing.
- 16.18. Video processor electronics frames shall be designed for mounting in standard 19-inch (483 mm) equipment racks.
- 16.19. There shall be two electronics frames available for various mix effects configurations and expansion capability.



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- 16.20. The production switcher shall be available in models that are either fully HD/SD switchable, multi-format systems, or as SD-only systems that can be upgraded via software licensing only, requiring no hardware exchange for conversion to multi-format operation.
- 16.21. A compact video processor frame shall be available that accommodates 1 to 2.5 mix/effects and consumes no more than 4 rack units (177.8 mm or 7 in.). This includes space for up to 48 digital video inputs, up to 24 digital video outputs, redundant power supply, 16 GPI inputs and 64 tally/GPI output relay closures, optional internal video clip and still storage and playback, and optional internal digital effects processors.
- 16.22. A video processor frame shall be available that accommodates up to 4.5 mix/effects and consumes no more than 8 rack units (355.6 mm or 14 in.). This system shall include up to 96 digital video inputs, up to 48 digital video outputs, redundant power supply, up to 32 GPI inputs and 128 tally/GPI output relay closures, optional internal video clip and still storage and playback, and optional internal digital effects processors.
- 16.23. An additional power supply chassis shall be available, if required for remote control panel installation, of no more than 1 rack unit (44.45 mm or 1.75 in.).
- 16.24. The system shall include built-in test signals.
- 16.25. Non-volatile storage shall be provided for system configuration and effects memory data.
- 16.26. System software updates shall be provided via removable media such as a USB flash drive.
- 16.27. The source selection area of the control panel shall consist of source select buttons and shall include a shift mechanism for accessing additional sources with the same button row.
- 16.28. Source select buttons shall have three levels of illumination to indicate source tallies:
- OFF indicates not selected
 - WHITE or "low tally" indicates selected, but not on the air
 - RED or "high tally" indicates selected and on the air
- 16.29. The system shall provide a means of identifying input signals that do not meet the input auto-timing requirements.



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- 16.30. All sources, including internal still/clip store channels, M/E or Program/Preset outputs, black, white, test signals, and color backgrounds shall be able to be user mapped to any crosspoint button desired.
- 16.31. Each of the serial digital BNC outputs shall be able to be user mapped to any of the internal M/E outputs, to any internal still/clip store output, or as an auxiliary bus for access to any primary source, still store output or M/E re-entry.
- 16.32. Unlimited re-entry shall be supported for outputs of the Mix/Effects system. The program output on any M/E may be re-entered as an input on another M/E, or in the Program-Preset/DSK system.
- 16.33. The system shall incorporate lockout logic to prevent one M/E from entering a second M/E at the same time the second M/E is entering the first M/E. If a reentry is in use while another reentry is attempted, the request for the second reentry shall be ignored.
- 16.34. The system shall provide for a means of reporting maintenance and status information at a maintenance terminal.
- 16.35. The system shall provide for up to four editor interface serial ports.
- 16.36. The system shall provide for at least eight communication ports for external DVE control, serial remote auxiliary bus panel control, serial tally information, Peripheral Bus II control, ESAM2 audio mixer control, and basic device control (including at least Sony 422, Odetics, VDCP and Advanced Media Protocol (AMP)).
- 16.37. The production switcher shall be user selectable for the following standards:
- | | |
|------------------------------|---------------------------|
| 1080i 60/59.94 | SMPTE 274M Table 1-4,5 |
| 1080i 50 | SMPTE 274M Table 1-6 |
| 1080sf 23.976/24/25/29.97/30 | SMPTE RP211 Table 1-15,16 |
| 720p 60/59.94 | SMPTE 296M Table 1-1,2 |
| 720p 50 | SMPTE 296M Table 1-3 |
| 525i 30 or 625 25 | ITU-R656 |
- 16.38. The system shall provide for full 10-bit digital input and outputs.
- 16.39. Serial digital video input and output signals shall conform to SMPTE 259M & SMPTE 292M-1998.



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16.40. Key Standard Operational Features

16.41. The switcher control panels shall include 1, 2, or 3 mix/effects control banks. These panels shall be used to control 1, 1.5, 2, 2.5, 3, 3.5, 4 or 4.5 mix effects in a single electronics chassis.

16.42. Each control panel shall provide dedicated buttons on the panel for delegation of control of any of the M/E modules in a 1, 1.5, 2, 2.5, 3, 3.5, 4 or 4.5 mix/effects electronics frame.

16.43. The video switching system shall provide 2 video utility buses in each Mix/Effect (M/E) for inserting video in wipe border, video masking of keys, or as a wipe pattern source.

16.44. Each M/E shall include a total of 8 video and 4 key input buses.

16.45. The system shall provide for frame-based internal digital effects for processing one channel of video and key per mix/effects bank, standard. Effects shall include 2D planar resizing, relocation and rotation in 3D space and cropping.

16.46. The system shall provide the ability to couple mix/effects in parallel so that one mix/effects automatically follows source selections and transitions of another mix/effects, including the ability to substitute different sources on the controlled bus than are selected on the controlling bus.

16.47. Two 4:2:2 chroma keyers shall be available, standard in the switcher, which can be assigned by the user to any keyer in any full mix/effects. The system shall be able to chroma key from any digital component source feeding the switcher.

16.48. The video switching system shall be capable of providing up to 48 terminating, non-looping inputs for use as video or key in any combination in a 4 RU electronics chassis.

16.49. The video switching system shall be capable of providing up to 96 terminating, non-looping inputs for use as video or key in any combination in an 8 RU electronics chassis.

16.50. The system shall provide for Video and Key input assignment to control panel crosspoint buttons.

16.51. The video switching system shall provide for key masking in each M/E keyer. Keys may be masked by either of two main wipe generators in the same M/E, by a separate simple pattern generator



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dedicated to each keyer, by a box mask generator dedicated to each keyer, or by an internal or external video source selected on a utility bus.

- 16.52. The system shall support both an inhibit mask and a forced mask in each M/E, with ability to apply both simultaneously.
- 16.53. A mode for exchanging the priority of the M/E keyers as a mix or wipe shall be included in each M/E.
- 16.54. Borders shall be available for all preset wipes.
- 16.55. The border key edge opacity shall be adjustable and separate color mattes with two colors or with video and color wash shall be provided for every edge and fill.
- 16.56. The system shall be capable of YUV or RGB color correction on every M/E background and keyer bus without requiring the use of digital effects processing channels, internal or external.
- 16.57. Each M/E shall have a minimum of 10 dual matte generators with wash capability (4 for matte fill, 4 for preset pattern border, and 2 for transition borders).
- 16.58. The video switching system shall provide for at least three background generators with independent wash. Wash sources for these background generators may be a rotating line with softness control, or a mix of these two sources.
- 16.59. All M/E matte generators shall include wash capability, including the ability to wash from matte to external video and from video to video.
- 16.60. The video switching system shall provide wipe pattern mix and non-additive-mix between any two available wipe patterns on the two main wipe generators.
- 16.61. The video switching system shall provide preset black mix in every M/E.
- 16.62. The video switching system shall provide fade to black mix in every M/E.
- 16.63. The video switching system shall include a program bus and a preset bus linked via a flip-flop mixer.



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- 16.64. Alternatively, the video switching system shall include a program bus and a preset bus linked via an A/B background bus mix that follows the fader arm position.
- 16.65. Transition controls shall include both manual control and automatic transition control. The automatic transition rate shall be programmable in increments of one frame.
- 16.66. The automatic transition maximum duration shall be no less than 999 frames, in any format.
- 16.67. The video switching system shall provide up to 100 effects memory registers which can hold one or more keyframes, multiple mix/effects, RAM Recorder, machine control and other peripheral switcher functions.
- 16.68. The system shall support keyframe based effects within each effects memory register. The system shall provide for an extensive keyframing/timeline model.
- 16.69. Effects memory registers shall have the ability to be locked thus preventing the contents of that register from being altered.
- 16.70. The effects memory system shall have the ability to recall the last state of the switcher, including source selections on at least one manufacturer's routing system, when a routing system is used for input expansion (i.e. effects memory recall undo).
- 16.71. The effects memory system shall have the ability to create automated register recall sequences.
- 16.72. The effects memory system shall support effects dissolve, a function that causes an S-linear transition from the current state to the next recalled register.
- 16.73. The effects memory system shall support the ability to transfer the contents of one register into another.
- 16.74. The system shall be capable of jogging effects memory registers with menu controls.
- 16.75. System configuration data and effects memory shall be able to be stored on some form of high-density, removable media.



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16.76. The system shall provide for adjustable luminance and chrominance offset and gain on each M/E video input bus.

16.77. Luminance keys shall have variable clip and gain controls with S-shaping of the key signal.

16.78. Linear keys shall have the gain fixed at unity, clip fixed at 50% and no S-shaping.

16.79. User adjustment shall be provided on linear keys in the form of variable clip and gain controls (which may optionally be used as clip high and clip low controls).

16.80. The system shall provide for adjustable key timing in the keyers on each M/E.

16.81. A method shall be provided to allow the user to view the keyers on the preview monitor.

16.82. The system shall provide for Look-Ahead Preview, and Show Key Signal Modes.

16.83. The system shall provide the user the ability to define the default state of the switcher.

16.84. The system shall support field dominance (when interlaced formats are in use). This allows the user to force effects memory recalls, crosspoint changes, GPI triggers, etc. to always occur on the same field (field 1 or field 2 depending on the user preference). Alternatively, field dominance may be disabled allowing effects memory recalls, crosspoint changes, GPI triggers, etc. to occur on the next field regardless of the field alignment.

16.85. The system shall include a safe title generator.

16.86. The system shall provide a user interface for machine control including a touch screen. Functions shall include scroll clip list, load clip, play, stop, fast-forward, rewind, and cue with the ability to mark an in-point.

16.87. Optional Features

16.87.1. The system shall include optional half M/E video processing, where half M/E functionality includes background and keyer source cuts and mix capability, and 4 linear/luminance keyers with



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- cuts and mix transitions, with an alternate mode using the 4 linear/luminance keyers as downstream keys that can be assigned downstream of any full mix/effects in the switcher.
- 16.87.2. At least four inputs per mix/effects shall be optionally configured for resolution scaling of video sources allowing integration of SD sources into an HD production format, HD sources into an SD production format, or cross-scaling of differing HD resolutions into an HD production format.
- 16.87.3. The system shall be expandable to include up to 20 keyers, 16 of which are capable of chroma keys, wipes, and incorporate transform effects including nonlinear transforms, defocus, glow, and lighting effects, and include a freeze frame buffer.
- 16.87.4. The system shall provide for stills and clip storage with at least 100 frames of on-line storage for video or key shared among multiple outputs. This option shall have a minimum of six inputs and six outputs, each of which may be used for video, key or mask.
- 16.87.5. The online capacity of clip playback shall provide up to 30 seconds of high definition video or 3 minutes of standard definition video.
- 16.87.6. A 4:2:2 chroma keyer shall be available for every keyer in the switcher, optional. The system shall be able to chroma key from any digital component source feeding the switcher.
- 16.88. The system shall provide for automatic set-up of the chroma key by selecting a small region of the foreground video and the chroma keyers shall include primary and secondary background color suppression, adjustments for key width and position, and color selectivity.
- 16.89. The system shall provide for redundant power for the video processor frame and control panel.
- 16.90. The system shall provide for up to 128 tally relay outputs for on-air tally, preview tally, M/E and bus ISO tally.
- 16.91. The system shall provide for frame-based internal digital effects for processing up to four channels of video and key per mix/effects bank. Effects shall include 2D planar resizing, relocation and rotation in 3D space, cropping, page turns, page rolls, sphere, ripple, and size/position modulation.
- 16.92. The system shall provide for one program and one clean feed output from each M/E and PGM/PST bank. Program and clean feeds shall be programmable by selecting from four layers in sequential combinations.



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16.93. The system shall provide for two independent preview outputs from each M/E which may be separately programmed to preview the main program output and one of the programmable clean feed outputs.

16.94. On-site operational training shall be provided.

16.95. The system shall provide a "half M/E" which can be placed anywhere in the production switcher timing chain upstream or downstream of any M/E. "half M/E" must operate independently or must be able to be coupled to any full M/E to add four extra keyers – in the latter mode, the coupled M/E will contain four full-function effects keyers plus four linear / luminance keyers for a total of 8.

16.96. Signals converted within the switcher must be able to be used as a source for any or all internal and external crosspoint destinations without using any keyer of M/E resources and using only one scaler channel regardless of how many places the signal is routed to.

16.97. Internal still/animation store must be able to contain any combination of full raster and partial raster images for efficient usage of RAM storage.

17.0 General Specifications

17.1 Environmental

- 17.1.1 Storage temperature -20 to 70 deg C (-4 to 158 deg F)
- 17.1.2 Operating temperature 0 to 40 deg C (32 to 104 deg F)
- 17.1.3 Relative humidity 0-95% (non-condensing)
- 17.1.4 Electromagnetic environment E2 (according to EN55103-1, -2)
- 17.1.5 Electrical specifications temperature range 20 to 30 deg C (68 to 86 deg F)

17.2 Control Panel Connection

- 17.2.1 Type of connection 10/100 Base T
- 17.2.2 Protocol TCP(UDP)/IP
- 17.2.3 Cable and connectors CAT5 UTP, RJ45 connectors;
- 17.2.4 Max. Cable Length 100m / 300ft
- 17.2.5 1 Frame and up to 4 Panels connect without use of external hub/switch.

17.3 Power

- 17.3.1 4 RU Frame



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- 17.3.1.1 Line voltage 100V-240V AC +/-10% autorange, power factor corrected.
Automatic
- 17.3.1.2 line-voltage sensing for 120V and 240V sources.
- 17.3.1.3 Line frequency 50/60Hz +/- 5%
- 17.3.1.4 Power consumption max. 400W
- 17.3.1.5 Leakage current < 2.5 mA
- 17.3.1.6 DC-OUT for control panel 48V DC, max 3A
- 17.3.1.7 1.5 & 2 M/E Control Panel
- 17.3.1.8 DC-IN 48V DC In, max 1.3A
- 17.3.1.9 Power consumption max. 60W
- 17.3.1.10 Remote Control Panel Power Supply
- 17.3.1.11 Line voltage 100V-240V AC +/-10%, power factor corrected
- 17.3.1.12 Line frequency 50/60Hz +/- 5%
- 17.3.1.13 Power consumption max. 375W
- 17.3.1.14 Leakage current < 2 mA at 250V AC

17.4 Serial Digital Video Inputs

- 17.4.1 Format ITU-R656, SMPTE 259M, 270Mbit/s., SMPTE 292M, 1.5Gbit/s
- 17.4.2 Number of Inputs: 2.5 M/E in 4RU chassis: minimum 48 inputs
- 17.4.3 Return loss > 15 db, 5 MHz to 1.5 GHz
- 17.4.4 Type of Connector 75 ohm BNC (SMPTE 259M)
- 17.4.5 Interface HD Video Formats SMPTE 292M-1998, SD Video Formats SMPTE 259M-1997
- 17.4.6 Nominal Amplitude 800mV peak-to-peak terminated
- 17.4.7 Autophasing inputs
- 17.4.8 Channel Coding conforms to SMPTE 259M, SMPTE 292M and Ancillary Data Blanked or passed (user selectable) and Embedded audio Blanked or passed (user selectable) and EDH Blanked
- 17.4.9 Input Impedance 75 ohm, Max cable length HD Video 100 meters using Belden 1694A type cable and SD Video 300 meters using Belden 1694A type cable

17.5 Serial Digital Video Outputs

- 17.5.1 Format ITU-R656, SMPTE 259M, 270Mbit/s.
- 17.5.2 SMPTE 292M, 1.5Gbit/s
- 17.5.3 Number of Outputs: 2.5 M/E in 4RU chassis, minimum 24
- 17.5.4 Return loss > 15 db, 5 MHz to 1.5 GHz
- 17.5.5 Type of Connector 75 ohm BNC (SMPTE 259M)
- 17.5.6 Interface HD Video Formats SMPTE 292M-1998, SD Video Formats SMPTE 259M-1997



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- 17.5.7 Nominal Amplitude 800 mv peak-to-peak across 75 ohm
- 17.5.8 Rise & Fall Times 400 to 1400 picoseconds 75 ohm termination between 20% and 80% amplitude and Jitter per ITU R 601/656
- 17.5.9 Output Impedance 75 ohm, DC Offset < 50mV with 75 ohm termination

17.6 Analog Reference Input

- 17.6.1 Video Standard For HD Video: Tri-level Sync, Analog equivalent to the standard being used, For SD Video: Color Black, Analog equivalent to the standard being used
- 17.6.2 Return loss > 40dB, up to 5 MHz
- 17.6.3 Connectors 2 each BNC loop through for both HD and SD inputs
- 17.6.4 Impedance 75 ohm external

17.7 HD Video Standards

- 17.7.1 HD Mode SD Mode
- 17.7.2 1080i 29.97/30 SMPTE 274M Table 1-4, 5 525i 59.94 SMPTE 259M
- 17.7.3 1080i 25 SMPTE 274M Table 1-6 625i 50 SMPTE 259M
- 17.7.4 1080sF 24/23.976 SMPTE 211 Table 1-15, 16 RP211
- 17.7.5 720p 60/59.94/50 SMPTE 296M Table 1-1, 2, 3 RP211

17.8 Video Production Switcher system types and quantities

- 17.8.1 One system, 2.5 ME, 48 inputs, 4CH DVE on all ME's, 6CH Ram Recorder, 3D effects, & 2 Floating Chroma Keyers including:
 - 17.8.1.1 One 2.5 M/E HD/SD switcher frame including 48 Inputs, 24 mappable Outputs, and Flexible Chroma Keyers per system, and 1 Internal Digital Picture Manipulator (iDPM) per full M/E with 2D plus Perspective, Make Memo Macros, and 1 Video & Key Framestore on each key bus & YUV Color Correction on every bus.
 - 17.8.1.2 One Control Panel: 2 ME, 32 Source buttons. TFT menu display w/ touchscreen, source name displays, 20 meter control/data cables and 2 M/E colorkeys.
 - 17.8.1.3 One license for 3 Additional iDPM Channels with 2D transforms with perspective & crops in M/E 1, license for 3 Additional iDPM Channels with 2D transforms with perspective & crops in M/E 2,
 - 17.8.1.4 One license for Kurl Effects on all standard & licensed iDPMs in M/E 1.
 - 17.8.1.5 One license for Kurl Effects on all standard & licensed iDPMs on program / preset.
 - 17.8.1.6 Two video scalers for up conversion of four SD signals to HD.



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SUBMITTAL REQUIREMENTS

A. Proposal Format

Proposals shall be submitted in one (1) original and three (3) copies on the forms and in the format as contained in the Request for Proposal. Proposals shall be on 8 1/2" & 11" paper with the text on one side only. The proposals should be submitted in the maximum length of 25 pages. **DO NOT BIND THE ORIGINAL COPY.**

B. Proposal Content

The following items shall be addressed in the proposal submission:

- i. Proposed Camera and Switcher System and Compliance with Specifications.
- ii. On Site Services.
 - Provide onsite services for commissioning and user training including estimated travel and living expenses as part of proposal. Assume three days on site.
- iii. Functionality of Camera and Switcher System.
- iv. Cost Considerations.
 - Provide cost sheet listing all components with total price for system.
- v. Conformance to Request from Proposal.

C. Evaluation Criteria

The proposals will be evaluated on the criteria as outlined in the Special Terms and Conditions, Section 10, Evaluation.

D. Proposal Submittal and Contact Information

Proposals will be submitted in one (1) original and three (3) copies and shall be delivered to:

City of Peoria
Materials Management
8314 W. Cinnabar
Peoria, AZ 85345

The proposal shall be due no later than **5:00 p.m.** on May 17, 2007.

All questions regarding the proposal should be directed to Lisa Houg at Lisa.Houg@peoriaaz.gov



QUESTIONNAIRE

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Materials Management Procurement

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Peoria, Arizona 85345-6560

Phone: (623) 773-7115

Fax: (623) 773-7118

Has your firm been certified by any jurisdiction in Arizona as a minority or woman owned business enterprise?

Yes _____, No _____.

If yes, please provide details and documentation of the certification.