

Attachment 2

Bid No. 10-26

BID PACKAGE NO. 10-26

CITY OF BEVERLY HILLS
PUBLIC WORKS & TRANSPORTATION - PROJECT ADMINISTRATION
345 FOOTHILL ROAD
BEVERLY HILLS, CALIFORNIA 90210

LEGAL NOTICE - BIDS WANTED

MEDIA FACILITY TELEVISION PRODUCTION SYSTEMS

The City of Beverly Hills ("City") hereby requests sealed bids for the materials, supplies, equipment or services set forth herein, subject to all conditions outlined in this Bid Package, including:

SECTION 1: NOTICE INVITING BIDS
SECTION 2: INSTRUCTIONS TO BIDDERS
SECTION 3: SPECIAL CITY REQUIREMENTS
SECTION 4: GENERAL SPECIFICATIONS
SECTION 5: BIDDER'S BID
SECTION 6: SIGNATURE PAGE AND LEGAL STATUS
SECTION 7: ADDITIONAL FORMS

SECTION 1: NOTICE INVITING BIDS

1. **Notice Inviting Bids**

a. **Date of Request:** **March 5, 2010**

b. **Bid Number:** **10-26**

c. **Item Description:** Project scope of work shall include all installation, integration, wiring, materials, and commissioning necessary to provide complete and fully operational television production systems located at the City's Media Facility, 331 N. Foothill Road, Beverly Hills, California 90210.

d. **Obtaining or Viewing Bid Documents:** A copy of the Bid Package may be obtained by mail or in person from the Department of Public Works & Transportation - Project Administration, 345 Foothill Road, Beverly Hills, CA 90210, telephone number 310-288-2823. The bid package including plans and specifications, may also be viewed on, and downloaded from the City's web site: www.beverlyhills.org; shortcuts: bid information: bid number 10-26.

e. **Bid Opening:** **Friday – April 9, 2010 at 2:00 p.m.**

f. **Due Date and Location for Submittals:** Sealed bids will be received at all times during normal business hours prior to the Bid Opening, at the City Clerk's Office, 455 North Rexford Drive, Room 290, Beverly Hills, CA 90210. All bids must be in writing and must contain an original signature by an authorized officer of the firm. Electronic bids (i.e., telephonic, FAX, etc.) are **NOT** acceptable. All bids shall clearly contain on the outside of the sealed envelope in which they are submitted: **BID PACKAGE 10-26: MEDIA FACILITY TELEVISION PRODUCTION SYSTEMS**

g. **Contractor's License:** In accordance with provisions of Section 3300 of the California Public Contract Code, the City has determined that the Contractor performing installation and configuration work shall possess a valid California Contractor's License Class C-7 or other appropriate license classification under the State

Contracting Code at the time the contract is bid. Failure to possess such license may render the bid non responsive and bar the award of the contract to that non responsive Bidder.

h. **Liquidated Damages:** There shall be a \$500.00 assessment for each and every calendar day work remains undone after date fixed for completion.

i. **Prevailing Wages:** In accordance with the provisions of Sections 1770 et seq., of the Labor Code, the Director of the Industrial Relations of the State of California has determined the general prevailing rate of wages applicable to the work to be done. The Contractor will be required to pay to all persons employed on the project by the Contractor sums not less than the sums set forth in the documents entitled "General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code, Part 7, Chapter 1, Article 2, Sections 1770, 1773, 1773.1." These documents can be reviewed in the office of the City Clerk or may be obtained from the State.

j. **Prebid Conference Date and Location:** A pre-bid conference will be held on Thursday, March 11, 2010 at 10:30 a.m. at the Public Works Facility, 345 Foothill Road, Beverly Hills 90210.

k. **Bid Security:** Each bid shall be accompanied by bid security in the form of a cashier's check, certified check or bid bond in the amount of 10% of the total bid amount. All cashier's checks or certified checks must be drawn on a responsible bank doing business in the United States and shall be made payable to THE CITY OF BEVERLY HILLS. Bid bonds must be issued by a bonding company licensed to do business in the State of California. Bids not accompanied by the required bid security shall be rejected. Cash and personal or company checks are **NOT** acceptable. The City shall return the bid security checks of unsuccessful bidders to them when the successful bidder ("Contractor") enters into the Contract with the City.

l. **Payment Bond and Performance Bond:** A Payment Bond and a Performance Bond, each in the amount of 100% of the contract amount, will be required of the Contractor.

m. **Insurance:** Upon award of contract, contractor will be obligated to file certificates of insurance evidencing coverage as specified in the bid documents and in a form acceptable to the City. The certificates shall be on the City's standard proof of insurance form.

n. **Time of Completion:** The contractual completion time shall be 180 calendar days from the date of Notice To Proceed.

o. **Retention:** In accordance with the contract, ten percent (10%) of any progress payment will be withheld as retention. Pursuant to Section 22300 of the Public Contract Code, at the request and expense of the Contractor, securities equivalent to the amount withheld may be deposited with the City or with a state or federally chartered bank as the escrow agent, and City shall then pay such moneys to the Contractor. Refer to the contract for further clarification.

p. **Contact Person:** A bidder or potential bidder who has a procedural question may call Julio Guerrero at telephone number 310-285-2823. A substantive question must be submitted in writing and a copy of that question plus a written response to it will be emailed, faxed or mailed to all parties who have obtained a bid package.

THE CITY OF BEVERLY HILLS RESERVES THE RIGHT TO REJECT ANY BID OR ALL BIDS AND TO WAIVE ANY INFORMALITY OR IRREGULARITY IN ANY BID. ANY CONTRACT AWARDED WILL BE LET TO THE LOWEST RESPONSIVE AND RESPONSIBLE BIDDER.

SECTION 2: INSTRUCTIONS TO BIDDERS**2. Instructions to Bidders**

a. **General Bid Requirements.** To be considered, a bidder must follow the format for bids presented in this document. Bids must be binding and firm. Any bid may be withdrawn before Bid Opening but no proposal may be withdrawn after Bid Opening.

b. **Bid Security.** Each bid shall be accompanied by bid security in the form of a cashier's check, certified check or bid bond in the amount of 10% of the total bid amount. All cashier's checks or certified checks must be drawn on a responsible bank doing business in the United States and shall be made payable to THE CITY OF BEVERLY HILLS. Bid bonds must be issued by a bonding company licensed to do business in the State of California. Bids not accompanied by the required bid security shall be rejected. Cash and personal or company checks are **NOT** acceptable. If the bidder to whom the Contract is awarded shall for fifteen (15) calendar days after such award fail or neglect to enter into the Contract or fail or neglect to file with the City all required bonds and other documents, if any, the City shall consider that bidder to be in default, and the City shall deposit in its treasury this bidder's security and under no circumstances shall it be returned to the defaulting bidder. The City shall return the bid security checks of unsuccessful bidders to them upon a successful bidder's entering into the Contract with the City.

c. **Bidder Must Make Thorough Investigation.** It is the bidder's responsibility to examine the location of the proposed work, to fully acquaint itself with any plans and/or specifications and the nature of the work to be done. Bidders shall have no claim against the City based upon ignorance of the nature or requirements of the project, misapprehension of site conditions or misunderstanding of the specifications or other Contract provisions. Once the award has been made, failure to have read all of the conditions, instructions and Contract Documents shall not be cause to alter any term of the Contract or provide valid grounds for the Contractor to seek additional compensation.

d. **Acceptance of Conditions.** By submitting a bid, each bidder expressly agrees to and accepts the following conditions:

(1) All parts of the Instructions to Bidders and Specifications will be part of the Contract between the selected bidder and the City;

(2) Either before or after Bid Opening, the City may require whatever evidence it deems necessary relative to the bidder's financial stability and ability to complete this project;

(3) The City reserves the right to request further information from a bidder, either in writing or orally, to establish any stated qualifications.

(4) The City reserves the right, in its sole discretion, to judge a bidder's representations and to determine whether the bidder is qualified to undertake the project pursuant to the criteria set forth herein. A bidder, by submitting a bid, expressly acknowledges and agrees that the judgment of the City as to whether or not the bidder is qualified to perform the project shall be final, binding and conclusive.

(5) The City reserves the right to reject all bids, waive any irregularity in any of the bids, cancel or delay the bid opening at any time.

(6) This bidding process does not commit the City to award any contract, and the City is not liable for any costs incurred by the bidder in the preparation and submission of a bid.

e. **Registration and Qualifications of Contractors.** Before submitting bids, contractors shall be licensed in accordance with Business and Professions Code Section 7000 et. seq., and each contractor shall insert its license number on its bid.

In submitting its bid, contractor warrants that it has work experience comparable to that which is to be performed. Prior to award of a Contract, City may request of any bidder, a statement setting forth its work experience of a nature comparable to that which is to be performed. That statement shall describe the work performed during the period three (3) years immediately preceding the date of the statement, and shall give the owner, location, and contract price of all such work, together with the dates of beginning and completing that work. This statement of experience shall be submitted within seven (7) calendar days after the City's notification to so submit. Failure to submit an adequate statement may result in rejection of the bid as non responsive.

Any bidder not licensed at the time of award of the contract shall be subject to all legal penalties imposed by law, including, but not limited to, any appropriate disciplinary action by the Contractor's State License Board. Failure of the bidder to obtain proper and adequate licensing for an award of a contract shall constitute a failure to execute the contract and shall result in the forfeiture of the security of the bidder.

f. **Truth and Accuracy of Representation.** False, incomplete or unresponsive statements in connection with a bid may be sufficient cause for rejection of a bid or a bidder.

g. **Withdrawal of Proposals.** A bidder may withdraw a proposal at any time prior to bid opening; no bid may be withdrawn after bid opening.

h. **City Changes to the Bid Documents.** The City reserves the right to change any part of the Bid Package any time prior to the bid opening. Any changes shall be in the form of addenda which shall become a part of the bid documents and the Contract. Addenda shall be made available to each bidder. A bidder's failure to address the requirements of any addendum may result in that bid being rejected as non-responsive. If the City determines that a time extension is required for the submission of the bid, an addendum will give the new bid opening date.

i. **Notice Regarding Disclosure of Contents of Bids.** All bids accepted by the City shall become the exclusive property of the City. Upon opening, all bids submitted to the City shall become a matter of public record and shall be regarded as public, with the exception of those elements of each bid which are identified by the bidder as business or trade secrets and plainly marked as "trade secret," "confidential," or "proprietary." Each element of a bid which a bidder desires not to be considered a public record must be clearly marked as set forth above, and any blanket statement (i.e, regarding entire pages, documents, or other non-specific designations) shall not be sufficient and shall not bind the City in any way whatsoever. If disclosure is nonetheless required under the California Public Records Act or otherwise by law (despite the bidder's request for confidentiality), the City shall not in any way be liable or responsible for disclosure of any such records or part thereof.

j. **Warranties, Guarantees and Manufacturer's Specifications.** If applicable, bidder shall state the nature and period of any warranty or guarantee. If applicable, manufacturer's specifications shall be submitted with the bid and shall be considered a part of the Contract for the bidder who is awarded the Contract and where the specifications meet the minimum requirements of the Contract.

k. **Award of Bid and Determination of Responsiveness.** The City shall determine the bidder to whom the Contract shall be awarded. In making this determination, the City shall consider (in no particular order):

- (1) The cost to the City;
- (2) The quality of the material offered;
- (3) The ability, capacity and skill of the bidder to perform the Contract or provide the material or services;
- (4) Whether the bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference;
- (5) The sufficiency of the bidder's financial resources and the effect thereof on its ability to perform the Contract or provide the material or services;

- (6) The character, integrity, reputation, judgment, experience and efficiency of the bidder;
- (7) The quality and timeliness of the bidder's performance on previous purchase orders or contracts with the City;
- (8) Litigation by the bidder on previous purchase orders or contracts with the City;
- (9) The ability of the bidder to provide future maintenance and service where such maintenance and service are essential;

The City reserves the right to be the sole and exclusive judge of quality, compliance with bid requirements, and all other matters pertaining to this bid.

l. **Prompt Payment Discounts.** Prompt payment discounts shall be considered in evaluating bids, except that payment periods shorter than thirty (30) days will not be considered. Where discounts are offered, the period for calculation of the discount shall begin with the invoice date or its date of delivery to the City, whichever is later.

m. **Bids Other than "Lump Sum" Bids.** Bids calling for other than a "lump sum" total bid may be awarded by single item, by groups of items, or as a whole, as the City deems to be in its best interests.

n. **Prices in Bid.** Prices quoted in the bid must be firm for a period of not less than ninety (90) days after the Bid Opening.

o. **Assignment and Subcontracting.** The Contractor shall not assign the Contract in whole or in part without express prior written consent of the City. Any such consent given by the City shall neither relieve the Contractor from its obligations nor change any term of the Contract.

p. **Errors and Omissions.** Bidders shall not be allowed to take advantage of any errors or omissions in these Bid Documents. Full instructions will be given if any error or omission is discovered and timely called to the attention of the City.

q. **Patent Fees; Patent, Copyright, Trade Secret and Trademark Fees.** Each bidder shall include in the price bid any patent fees, royalties and charges on any patented article or process to be furnished or used in the prosecution of the Work.

r. **Taxes.** The price bid shall include all federal, state, local and other taxes.

SECTION 3: SPECIAL CITY REQUIREMENTS

3. **Special City Requirements.** All forms (and their instructions) which a bidder must complete to establish compliance with City requirements should be considered an integral part of the Specifications, and failure to complete any of them shall be grounds, in the sole discretion of the City, for rejection of that bid or that bidder.

a. **Fair Employment Practices/Equal Opportunity Acts.** In the performance of any services described in this Bid Package, Contractor and every supplier of materials and services shall comply with all applicable provisions of the California Fair Employment Practices Act (California Government Code Sections 12940-48) and the applicable equal employment provisions of the Civil Rights Act of 1964 (42 U.S.C. §§ 200e-217), whichever is more restrictive.

b. **Affidavit of Non-Collusion by Contractor.** The City requires that each bidder complete, execute and submit to the City with its bid the Affidavit of Non-Collusion included in the Bid Package.

c. **Requirement for Acceptance of Sureties.**

(1) The surety on any bond or undertaking must be a corporation authorized by the Insurance Commissioner of the Department of Insurance of the state to transact surety business in the state; and

(2) There must be on file with the City Clerk of the City of Beverly Hills or submitted with the bond, a copy, duly certified by the proper authority and attested by the seal of the corporation, of the transcript or record of appointment entitling or authorizing the person or persons purporting to execute an undertaking or bond for and on behalf of such corporation to act in the premises.

SECTION 4: GENERAL SPECIFICATIONS**4. General Specifications**

a. **Sample Contract.** A sample of the Form of Contract the successful bidder will be required to enter into with the City is attached hereto as Appendix A and by this reference incorporated herein and made a part of these General Specifications.

b. **Scope of Work.** The Scope of Work shall be as described and in accordance with the specifications set forth in Appendix B hereto, and by reference, incorporated herein.

c. **Bid Proposal Quantities.** The quantities contained in the Bid Package are approximate only, and are for the sole purpose of comparing bids. The City may order more or less Work or material, as necessary, in the City's sole discretion. Payment will be made for the amount of Work or material actually provided, as determined by the City and accepted at the unit or lump sum prices noted in the bid, where applicable, and those prices shall govern.

d. **Standard Specifications.** In connection with contracts to which it may apply, and except as otherwise provided below, all public works construction Work shall be done in accordance with the provisions of the most current edition of "**STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION**" (commonly known as "the GREEN BOOK") including Supplements, prepared and promulgated by the Southern California Chapter of the American Public Works Association and the Associated General Contractors of California, which specifications are hereinafter referred to as the "Standard Specifications." The provisions of these General Specifications shall apply and/or shall supersede, as the case may be, provisions of the above referenced Standard Specifications.

e. **Subcontracts.** In addition to the information to be listed by the bidder with its bid pursuant to Section 2-3 of the Standard Specifications, entitled "Subcontracts," the bidder shall provide for each subcontractor listed a brief description of the Work and the dollar value of the Work to be subcontracted. After bids have been received, the written consent of the City is required to make any change in subcontractors.

f. **Meaning of Amount of Bid.** Except where otherwise provided, all costs to perform the entirety of the Work, including all costs required for repair or replacement of existing improvements damaged, injured or removed as a result of the Work, shall be reflected in the unit or lump sum prices stated in the bidder's bid. If no specific unit or lump sum line item is required to be bid for a specific item of Work, then all costs related to that item shall be incorporated into the unit or lump sum prices provided for all other items. The total price of the bid is to be interpreted as the total price of all Work required under the Contract, whether or not there is a specific line item identifying a particular item of Work.

g. **Compliance with Labor Laws.** Contractor shall comply with and adhere to all applicable labor laws, such as, but not limited to, alien labor, prevailing wages, etc. Contractor shall comply with the provisions of Sections 1770-1777.5 of the California Labor Code, and Section 7-2 of the Standard Specifications, entitled "Labor." The California Department of Industrial Relations has ascertained the general prevailing rate of wages in the county in which the Work is to be done. A copy of the general prevailing rate of wages is on file with the City Clerk of the City of Beverly Hills and is available for inspection and reference during regular business hours. Contractor shall submit with bid, on a form provided in Section 7, a statement acknowledging obligation to comply with California Labor Law requirements.

h. **Contract Bonds.** The bidder to whom a Contract is awarded shall file with the City a Payment (Labor and Materials) Bond in a form acceptable to the City in the amount of 100% of the Contract Price before execution of the Contract. The bidder to whom a Contract is awarded shall file with the City a Performance (Completion) Bond in a form acceptable to the City in the amount of 100% of the Contract Price before execution of the Contract. The term "Contract Price" shall be deemed to mean the total Contract "not to exceed" amount consisting of the base bid stated in the Bidder's Bid plus all additional amounts provided for adjustments to the estimated quantities contained in the Bidder's Bid and for extra Work covered by approved Change Orders, if any.

i. **Liability Insurance.** Contractor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by the Contractor, his agents, representatives, employees or subcontractors, pursuant to contractor's bid or any subsequent contract. Insurance shall be of the type, in the amounts and subject to the provisions described below.

(1) **Commercial general liability** coverage at least as broad as Insurance Services Office Commercial General Liability occurrence coverage ("occurrence" form CG0001, Ed. 11/88) with a limit of not less than \$2,000,000 per occurrence. If the insurance includes a general aggregate limit, that limit shall apply separately to this contract or it shall be at least twice the required per occurrence limit.

(2) **Business automobile liability** insurance at least as broad as Insurance Services office form CA 0001 (Ed. 12/90) covering Automobile Liability, code 1 "any auto" and endorsement CA 0029 (Ed. 12/88) with a limit not less than \$1,000,000 per accident.

(3) **Workers Compensation** Insurance as required by the State of California and employers liability insurance with a limit not less than \$1,000,000 per accident.

(4) **Evidence of Coverage:**

(a) Prior to commencement of work under this contract, or within 14 days of notification of award of contract, whichever is shorter, Contractor shall file certificates of insurance with original endorsements evidencing coverage in compliance with this contract and in a form acceptable to City. The certificate shall be on the City's standard proof of insurance form.

(b) Contractor shall provide to City, on request, a complete copy, including all endorsements and riders, of any insurance policy.

(c) During the term of this agreement, Contractor shall maintain current valid proof of insurance coverage, with City at all times. Proof of renewals shall be filed prior to expiration of any required coverage and shall be provided on the City's standard proof of insurance form.

(d) Failure to submit any required evidences of insurance within the required time period shall be cause for termination for default, and shall be cause for forfeiture of this bidder's bid security, if applicable.

(e) In the event Contractor does not maintain current, valid evidence of insurance on file with City, City may, at its option, withhold payment of any moneys owed to Contractor, or which it subsequently owes to Contractor, until proper proof is filed.

(5) All insurance coverages shall be provided by insurers with a rating of B+;VII, or better in the most recent edition of Best's Key Rating Guide, Property-Casualty Edition.

(6) Each insurance policy shall be endorsed to state that coverage shall not be suspended, voided or canceled and shall not be reduced in coverage or limits except after 30 days prior written notice provided to the City. Upon prior request of the carrier, the notice period may be reduced to 10 days in the event of non-payment of premium.

(7) All liability coverages shall name the City, its City Council and every officer, agent and employee of City as additional insureds with respect to work under this bid or any subsequent contract.

(8) Contractor's insurance and any insurance provided in compliance with these specifications, shall be primary with respect to any insurance or self-insurance programs covering the City, its City Council and any officer, agent or employee of City.

(9) Where available, the insurer shall agree to waive all rights of subrogation against the City, its City Council and every officer, agent and employee of City.

(10) Any deductibles or self-insured retention's shall be declared to and must be approved by City. At the option of the City, either the insurer shall reduce or eliminate the deductibles or self-insured retention's as respects the City, or the Contractor shall procure a bond guaranteeing payment of losses and expenses.

(11) In the event that Contractor does not provide continuous insurance coverage, the City shall have the right, but not the obligation, to obtain the required insurance coverage at Contractor's cost, and the City may deduct all such costs from moneys the City owes to the Contractor or from moneys which it subsequently owes to the Contractor.

j. **Indemnification.** The Contractor shall indemnify, defend, and hold harmless the City, including its officers, agents, servants and employees, from any and all costs, claims, liabilities, damages, or expenses, including, without limitation, costs of suit and reasonable attorney fees, arising out of the operations, acts or omissions of the Contractor, its agents, servants, subcontractors or employees.

k. **Materials and Workmanship.** The City shall have the right to inspect any material used. Material furnished shall be new, complete, ready-for-use and of the latest model, shall not have been used in demonstration or other services and shall have all the usual equipment as shown by its manufacturer's current specifications and catalogs, unless otherwise specified. Equipment, supplies or services that fail to comply with the Contract requirements regarding design, material or workmanship may be rejected at the option of the City. Any materials rejected shall be removed from City premises at the Contractor's sole expense.

All Work must be approved by the City. For unsatisfactory Work not corrected, the City may, at its option, withhold payment for the unsatisfactory Work, deduct the amount from the invoiced amount, have the Work corrected by another contractor at Contractor's cost and expense or perform the corrective Work with City personnel and deduct all costs so incurred by the City from moneys owed to the Contractor.

l. **License and Permits.** Except as provided herein below, the Contractor shall obtain and pay for all permits and licenses required by federal, state or local law, rule or regulation. Costs for obtaining City permits required under this Contract will be waived. [NOTE: All requirements for obtaining permits (including City permits) remain in effect and are not waived; only the costs of City permits are waived.] For information concerning business licenses required under the Beverly Hills Municipal Code, contact the Beverly Hills Finance Department at (310) 285-2427.

m. **Payment.** The Payment Provisions are provided in Appendix C hereto, and by this reference they are incorporated herein.

n. **Changes to the Work.** City may by written notice initiate any change within the scope of the Contract. If Contractor desires to make any change, Contractor must submit a written request for that change to the City, but Contractor may make that change only upon written order of the City. A corresponding equitable change in the Contract Price of this Contract will be made for each change ordered.

o. **Termination of Work.**

(1) **For Cause.** Upon notice to Contractor, City may terminate the Work or any part thereof immediately for cause, without any prior notification to Contractor.

(2) **Without Cause.** City may terminate the Work or any part thereof upon five (5) days prior notice to Contractor.

(3) **Payment.** Upon termination of the Contract in whole or in part, City shall pay Contractor, subject to all provisions of the Contract for retention of funds, for all Work completed prior to the date of termination.

p. **Resolution of Claims and Disputes.** Public Contract Code Sections 20104 et seq. apply to this contract. Those Public Contract Code Sections are attached hereto as Exhibit I. In any arbitration to resolve a dispute relating to or arising out of this contract, the arbitrator's award shall be supported by law and substantial evidence. The arbitrator shall file a written decision with the court and serve a copy of it on each of the parties. The written decision shall contain a summary of the evidence, reasons underlying the decision, and unless the parties otherwise agree, findings of fact and conclusions of law.

q. **Assignment of Unfair Business Practices.** In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or a subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arises from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

r. **Safety and Protection of Workers.** Pursuant to Public Contract Code Section 7104, if any work under this Contract involves digging trenches or other excavations that extend deeper than four feet below the surface:

(1) The Contractor shall promptly, and before the following conditions are disturbed, notify City, in writing, of any:

(a) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

(b) Subsurface or latent physical conditions at the site differing from those indicated.

(c) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in the Contract.

(2) The City shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the Contract.

(3) In the event that a dispute arises between the City and the Contractor, whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

SECTION 5: BIDDER'S BID

5. **Bidder's Bid.** The Bidder's Bid Form is provided in Appendix D hereto, and by this reference it is incorporated herein. This form must be completed by the bidder and submitted to the City as described in Section 1 above.

SECTION 6: SIGNATURE PAGE AND LEGAL STATUS

6. **Signature Page and Legal Status.** The undersigned certifies that he is an official legally authorized to bind his firm and to enter into a contract should the City accept this proposal.

Bid proposal by _____
(Name of Firm)

Legal status of bidder: Please check the appropriate box

A. Corporation ___; State of Incorporation _____;

B. Partnership ___; List Names _____

C. DBA ___; State full name _____ DBA

D. Other ___; Explain _____

Signature of Bidder _____ Title _____
(Authorized Signature)

Signature of Bidder _____ Title _____
(Authorized Signature)

Address _____ City _____ Zip _____

Telephone () _____

Signed this _____ day of _____ 200_

Bidder acknowledges receipt of the following Addenda:

<u>ADDENDUM NO.</u>	<u>BIDDER'S INITIALS</u>
_____	_____
_____	_____
_____	_____

SECTION 7: ADDITIONAL FORMS

7. Additional Forms

- a. Experience Form
- b. Affidavit of Non-Collusion
- c. Statement Acknowledging Obligation To Comply With California Labor Laws
- d. Bid Bond
- e. Faithful Performance Bond
- f. Payment Bond
- g. Certificate of Insurance
- h. Bidder's Check List

EXPERIENCE FORM

Bidders must complete the following Experience Form and submit all required information. **Bidder's failure to fully complete the form or to adequately respond to the questions will render the bid non-responsive and are grounds for rejection by the City Council.**

Bidders shall have project experience in Television Production Systems installed in public facilities, such as governmental, municipal or university facilities that are comparable to the work specified by this bid package. City shall determine, in its sole discretion, what constitutes comparable projects. **Bidder's failure to meet the minimum specific qualifications required herein and accurately represent bidder's past project experience will render the bid non-responsive and are grounds for rejection by the City Council.**

LICENSING

- 1) List jurisdictions and trade categories in which your organization is legally qualified to do business and indicate registration or license numbers if applicable.

State: _____
 Category: _____
 License: _____
 Class: _____

GENERAL EXPERIENCE

- 2) List the categories of work that your organization normally performs with its own forces.

i) Trades: _____

- 3) Claims and Suits: (if the answer to any of the questions below is yes, attach details)

- i) Has your organization ever failed to complete any work awarded to it? _____
- ii) Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers? _____
- iii) Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years? _____
- iv) Has your organization ever been cited for violation in complying with the Prevailing Wage requirements? _____

- 4) Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? _____
(If the answer is yes, attach details)
- 5) On a separate sheet, list the major general remodeling projects your organization has in progress, giving the name of project, owner, contract amount, percent complete and scheduled completion date.
 - i) State total worth of work in progress and under contract: _____
- 6) On a separate sheet, list the cumulative experience and present commitments of the key individuals of your organization.

SPECIFIC QUALIFICATIONS

- 7) Within the last five years, list at least three (3) Television Production Systems projects each exceeding \$500,000 (original bid amount) your organization has completed involving public facilities, which include similar trade categories. On a separate sheet, provide the following project information for the projects listed:
 - (a) Project owner (municipal or governmental agency)
 - (b) Owner's representative (current contact information including phone number)
 - (c) Original contract amount
 - (d) Final contract amount (including all change orders)
 - (e) Contract start date (Notice to Proceed)
 - (f) Final date of completion
 - (g) List of similar trade categories

Project i) _____

Project ii) _____

Project iii) _____

REFERENCES

- 8) Trade references: (provide on a separate sheet)
- 9) Bank references: (provide on a separate sheet)

**NON-COLLUSION AFFIDAVIT
(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)**

State of California)

) ss.

County of Los Angeles)

_____, being first duly sworn, deposes and says that he or she is _____ of _____ the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

NAME

TITLE

DATE

STATEMENT ACKNOWLEDGING OBLIGATION TO COMPLY WITH CALIFORNIA LABOR LAW

[Labor Code § 1720, 1773.8, 1775, 1776, 1777.5, 1813, 1860, 1861, 3700]

I, the undersigned Contractor, certify that I am aware of and will fully comply with the following provisions of California law:

Contractor acknowledges that this contract is subject to the provisions of Division 2, Part 7, Chapter 1 (commencing with Section 1720) of the California Labor Code relating to public works and the awarding public agency ("Agency") and agrees to be bound by all provisions thereof as though set forth in full herein.

Contractor agrees to comply with the provisions of California Labor Code Section 1773.8 which require the payment of travel and subsistence payments to each worker needed to execute the work, to the extent required by law.

Contractor agrees to comply with the provisions of California Labor Code Section 1774 and 1775 concerning the payment of prevailing wages to workers and the penalties for failure to do so. Contractor shall, as a penalty to the Agency, forfeit not more than fifty dollars (\$50) for each calendar day or portion thereof, for each worker paid less than the prevailing rates, as determined by the Director of Industrial Relations, for the work or craft in which the worker is employed for any public work done under the contract by Contractor or any subcontractor.

Contractor agrees to comply with the provisions of California Labor Code Section 1776 which require Contractor and each subcontractor to (1) keep accurate payroll records, (2) certify and make those payroll records available for inspection as provided by Section 1776, and (3) inform the Agency of the location of the records. Contractor is responsible for compliance with Section 1776, by itself and all of its subcontractors.

Contractor agrees to comply with the provisions of California Labor Code Section 1777.5 concerning the employment of apprentices on public works projects, and Contractor further agrees that Contractor is responsible for compliance with Section 1777.5 and for the compliance of all of its subcontractors.

Contractor agrees to comply with the provisions of California Labor Code Section 1813 concerning penalties for workers who work excess hours. Contractor shall, as a penalty to the Agency, forfeit twenty-five dollars (\$25) for each worker employed in the execution of the contract by Contractor or by any subcontractor for each calendar day during which such worker was required or permitted to work more than 8 hours in any one calendar day or 40 hours in any one calendar week in violation of the provisions of Division 2, Part 7, Chapter 1, Article 3 of the California Labor Code.

California Labor Code Sections 1860 and 3700, provide that every Contractor will be required to secure the payment of compensation to its employees. In accordance with the provisions of California Labor Code Section 1861, Contractor hereby certifies as follows:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."

Date: _____

Signature: _____

BID BOND

WHEREAS, _____, hereinafter "Principal," has submitted a bid to the City of Beverly Hills (hereinafter, "City") for the **MEDIA FACILITY TELEVISION PRODUCTION SYSTEMS**.

AND WHEREAS, said Principal is required to furnish a bond in connection with said bid, to ensure that the Principal will enter into a contract with the City;

NOW, THEREFORE, we, the Principal and _____, as Surety, are held firmly bound unto the City in the sum of _____ Dollars (\$ _____), this amount being not less than ten percent (10%) of the Bid Sum, for which payment well and truly to be made we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if said Principal is awarded a Contract by said City and, within the time and in the manner required in the Contract Documents for said project, enters into the written form of Agreement bound with said Contract Documents and furnishes the required bonds and insurance, and performs all other obligations prerequisite to signing the Agreement, then this obligation shall be null and void, otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by said City and judgment is recovered, said Surety shall pay all costs incurred by said City in such suit, including a reasonable attorney's fee to be fixed by the Court.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety named herein, on the _____ day of _____ 2010, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

Principal _____

By _____

Surety _____

By _____

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS, the City of Beverly Hills, hereinafter "City", has awarded to

_____ hereinafter designated as "Principal", a Contract for the **MEDIA FACILITY TELEVISION PRODUCTION SYSTEMS:**

_____ WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract;

NOW, THEREFORE, the undersigned Principal, and _____, as Surety, are held and firmly bound unto the City in the sum of:

_____ Dollars (\$ _____), this amount being not less than one hundred percent (100%) of the total Contract Sum, for which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if said Principal, its heirs, executors, administrators, successors, assigns, shall in all things stand to and abide by, well and truly keep and perform all the undertakings, terms, covenants, conditions and agreements in the said Contract and any alteration thereof, made as therein provided, all within the time and in the manner therein designated and in all respects according to their true intent and meaning, then this obligation shall become null and void, otherwise, it shall be and remain in full force and effect. In case suit is brought upon this bond, the Surety shall pay all court costs and reasonable attorneys' fees to the City in an amount fixed by the court.

FURTHER, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents, or of the work to be performed thereunder, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or modification of the Contract Documents or of the work to be performed thereunder. Surety hereby waives the provisions of California Civil Code § 2845 and 2849. The City is the principal beneficiary of this bond and has all rights of a party hereto.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by the Principal and Surety named herein, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

DATED: _____

"PRINCIPAL"

"SURETY"

BY: _____
Its

BY: _____
Its

BY: _____
Its

BY: _____
Its

{ SEAL }

{ SEAL }

NOTE: THIS BOND MUST BE EXECUTED IN TRIPPLICATE AND DATED. ALL SIGNATURES MUST BE NOTARIZED, AND EVIDENCE OF THE AUTHORITY OF ANY PERSON SIGNING AS ATTORNEY-IN-FACT MUST BE ATTACHED.

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS, the City of Beverly Hills, hereinafter "City", has awarded to

_____ ,
hereinafter designated as "Principal," a Contract for the **MEDIA FACILITY TELEVISION PRODUCTION SYSTEMS:**

WHEREAS, said Principal is required under the terms of the Contract and the California Civil Code, to secure the payment of claims of laborers, mechanics, materialmen and other persons, as provided by law;

NOW, THEREFORE, we, the undersigned Principal, and _____,
("Surety") a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the City in the penal sum of:

_____ Dollars (\$ _____),
this amount being not less than one hundred percent (100%) of the total Contract Price, in lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal, its heirs, executors, administrators, successors, assigns, or subcontractors shall fail to pay any of the persons named in Section 3181, of the California Civil Code, or any amounts due under the Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Contractor and its subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to work or labor performed under the Contract, the Surety will pay for the same in an amount not exceeding the penal sum specified in this bond; otherwise, the above obligation shall be null and void.

This bond shall inure to the benefit of any of the persons named in Section 3181 of the California Civil Code so as to give a right of action to such persons or other assigns in any suit brought upon the bond.

In case suit is brought upon this bond, the said Surety will pay all court costs and reasonable attorneys' fees in an amount to be fixed by the court.

FURTHER the Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents, or of the work to be performed thereunder, shall in any way affect the obligations of this bond, and it does hereby waive notice of any such change, extension of time, alteration, addition or modification of the Contract Documents or to the work or specifications thereunder. Surety hereby waives the provisions of California Civil Code § 2845 and 2849.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by the Principal and Surety named herein, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

DATE: _____

"PRINCIPAL"

"SURETY"

BY: _____
Its

BY: _____
Its

BY: _____
Its

BY: _____
Its

{ SEAL }

{ SEAL }

NOTE: THIS BOND MUST BE EXECUTED IN TRIPPLICATE AND DATED. ALL SIGNATURES MUST BE NOTARIZED, AND EVIDENCE OF THE AUTHORITY OF ANY PERSON SIGNING AS ATTORNEY-IN-FACT MUST BE ATTACHED.

CERTIFICATE OF INSURANCE

This is to certify that the following endorsement is part of the policy(ies) described below:

NAMED INSURED (CONTRACTOR)

COMPANIES AFFORDING COVERAGE

ADDRESS

A.
B.
C.

POLICY NUMBER	COMPANY (A. B. C.)	COVERAGE	EXPIR. DATE	LIMITS		AGGREGATE
				B.I.	P.D.	
		AUTOMOBILE LIABILITY []				
		GENERAL LIABILITY []				
		PRODUCTS /COMPLETED OPERATIONS []				
		BLANKET CONTRACTUAL []				
		CONTRACTOR'S PROTECTIVE []				
		PERSONAL INJURY []				
		OTHER []				
		EXCESS LIABILITY []				
		WORKERS' COMPENSATION []				

It is hereby understood and agreed that the City of Beverly Hills, its City Council and each member thereof and every officer and employee of the City shall be named as joint and several assureds with respect to claims arising out of the following project:

CITY OF BEVERLY HILLS MEDIA FACILITY TELEVISION PRODUCTION SYSTEMS

It is further agreed that the following indemnity agreement between the City of Beverly Hills and the named insured is covered under the policy: Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right on contribution with insurance which may be available to the City of Beverly Hills.

In the event of cancellation or material change in the above coverage, the company will give 30 days written notice of cancellation or material change to the certificate holder.

Except to certify that the policy(ies) described above have the above endorsement attached, this certificate or verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

DATE _____

BY _____
Authorized Insurance Representative

AGENCY _____

TITLE _____

ADDRESS _____

BIDDER'S CHECK LIST

TO THE BIDDER:

The following checklist is provided for the convenience of both you and the City to help eliminate errors or omissions which may render your bid non-responsive. Please check all appropriate boxes and submit this page with your bid.

- 1. **BID**
 Signed by Bidder

- 2. **BID BOND**
 Enclosed _____

- 3. **AFFIDAVIT OF NONCOLLUSION**
 Enclosed _____
 Signed by Bidder

- 4. **STATEMENT ACKNOWLEDGING OBLIGATION TO COMPLY
 WITH CALIFORNIA LABOR LAW REQUIREMENTS**
 Enclosed _____
 Signed by Bidder

- 5. **SECTION 6: SIGNATURE AND LEGAL STATUS**
 Enclosed _____
 Signed by Bidder

- 6. **SECTION 7: EXPERIENCE FORM**
 Enclosed _____

Make sure DELIVERY of your completed documents is made to the City Clerk, 455 North Rexford Drive, Room 290, Beverly Hills, CA 90210, prior to Bid Opening time. It is YOUR responsibility to mail your bid sufficiently early or deliver it in person.

EXHIBIT I

Public Contract Code

ARTICLE 1.5. RESOLUTION OF CONSTRUCTION CLAIMS

§20104:

(a)(1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arises between a contractor and a local agency.

(2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.

(b)(1) "Public work" has the same meaning as in Sections 3100 and 3106 of the Civil Code, except that "public work" does not include any work or improvement contracted for by the state or the Regents of the University of California.

(2) "Claim" means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by or on behalf of the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

(c) The provisions of this article or a summary thereof shall be set forth in the plans and specifications for any work which may give rise to a claim under this article.

(d) This article applies only to contracts entered into on or after January 1, 1991.

§20104.2:

For any claim subject to this article, the following requirements apply:

(a) The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

(b)(1) For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.

(c)(1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.

(d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time a claimant submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

(f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.

§20104.4:

The following procedures are established for all civil actions filed to resolve claims subject to this article:

(a) Within 60 days, but no earlier than 30 days, following the filing of responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b)(1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of trial de novo.

(c) The court may, upon request by any party, order any witness to participate in the mediation or arbitration process.

§20104.6:

(a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

§20104.8:

(a) This article shall remain in effect only until January 1, 1994, and as of that date is repealed, unless a later enacted statute, which is enacted before January 1, 1994, deletes or extends that date.

(b) As stated in subdivision (c) of Section 20104, any contract entered into between January 1, 1991, and January 1, 1994, which is subject to this article shall incorporate this article. To that end, these contracts shall be subject to this article even if this article is repealed pursuant to subdivision (a).

APPENDIX A

FORM OF CONTRACT

This contract ("Contract") is entered into by and between the City of Beverly Hills ("City"), a California municipal corporation, and _____, a _____, whose address is _____.

In consideration of the agreements herein contained, the parties agree as follows:

1. **WORK TO BE PERFORMED.** Contractor shall furnish at Contractor's own expense all labor, materials, supplies, equipment, tools, transportation and other items of expense necessary to complete in a workmanlike manner all Work in accordance with the terms and conditions of the Contract, except for the labor, materials, supplies, equipment, tools, transportation and other items of expense as may be required to be furnished by the City. The Work is defined in detail in the Contract Documents, which govern the interpretation and performance of this Contract, but may be generally described as follows:

MEDIA FACILITY TELEVISION PRODUCTION SYSTEMS

Item Description: Installation, integration, wiring, and commissioning of fully operational television production systems at City of Beverly Hills Media Facility, located at 331 N. Foothill Road, Beverly Hills, California 90210.

2. **CONTRACT DOCUMENTS.** This contract consists of this Form of Contract and the following Contract Documents, including all exhibits, appendices, addenda, drawings, specifications and documents therein and attachments thereto, all of which are by this reference incorporated herein and made a part of this Contract:

- SECTION 1: NOTICE INVITING BIDS**
- SECTION 2: INSTRUCTIONS TO BIDDERS**
- SECTION 3: SPECIAL CITY REQUIREMENTS**
- SECTION 4: GENERAL SPECIFICATIONS**
- SECTION 7: ADDITIONAL FORMS**
- APPENDIX B: SCOPE OF WORK**
- APPENDIX C: PAYMENT PROCEDURES**
- APPENDIX D: BID FORM**
- APPENDIX E: TECHNICAL SPECIFICATIONS**

as contained in City's Bid Document for Bid No. 10-26, dated March 5, 2010 and

- SECTION 5: BIDDER'S BID**
- SECTION 6: SIGNATURE PAGE AND LEGAL STATUS**

of Contractor's Bid in response thereto, all of which are incorporated herein by reference, and all of which shall comprise the Contract Documents for this Contract. If any item of the Scope of Work, Payment Schedule, or any other item of the Bid Package is modified by either of the parties or arrived at by negotiation between the parties, that item as finally agreed upon by the parties shall also become a Contract Document, it shall supersede the corresponding item of the Bid Package, if any, and it shall be subject to all terms and conditions of the Contract.

3. **PERFORMANCE PERIOD.** Contractor shall commence Work after execution of the Contract, and shall complete all Work in 180 calendar days from the date of Notice To Proceed as set forth in the Contract Documents.

4. PAYMENT. City shall pay Contractor as full consideration for the satisfactory performance by Contractor of all Work required under this Contract the sum of _____, payable as provided in the Contract Documents.

5. The City Manager or his designee shall administer the terms of the Agreement on behalf of the City.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed as of the date stated below.

DATED: _____

DATED: _____

CITY OF BEVERLY HILLS
"City"

"Contractor"

JIMMY DELSHAD
Mayor

By: _____

ATTEST:

By: _____

BYRON POPE
City Clerk

APPROVED TO FORM:

APPROVED AS TO CONTENT:

LAURENCE S. WIENER
City Attorney

JEFF KOLIN
City Manager

DAVID SCHIRMER
Chief Information Officer

ALAN SCHNEIDER
Director of Project Administration

KARL KIRKMAN
Risk Manager

APPENDIX B

SCOPE OF WORK

1.0 SCOPE OF WORK

- 1.1 Scope of Work shall be as described and in accordance with plans, dated December 15, 2009 and technical specifications prepared by BFA, LLC. Communications Technology Consultants, 114 South First Street, Suite 200, Burbank, CA 91502 (tel. 818-559-2205).
- 1.2 The scope of work includes:

General Description:
 - 1.2.1 **Base Bid:** Media Facility Television Production Systems – Project scope of work shall include all installation, integration, wiring, and commissioning necessary to provide complete and fully operational television production systems per the Plans, Technical Specifications, and Equipment List For Bidding Purposes.
 - 1.2.2 Portable Production Flypack Bid:
 - 1.2.2.1 **Portable Production Flypack Bid:** Project scope of work shall include all installation, integration, wiring, and commissioning necessary to provide complete and fully functional portable production flypack as described in Part 1 2.2 of of Technical Specifications.
 - 1.2.3 Bid Allowances: none

2.0 SCHEDULE OF WORK – CONSTRUCTION PHASES

- 2.1 Work shall be completed within the contract completion period specified herein from the date of Notice to Proceed:

Base Bid Work: 180 Calendar Days

3.0 SPECIAL PROVISIONS

- 3.1 The operations of the Media Facility will remain throughout the construction period. Unless otherwise authorized by the City, the facilities will be available to the contractor Monday - Friday, 8:00 AM - 5:00 PM. The Facilities shall be ready for normal operations by the end of each work shift. Access and egress for staff and public through main lobby is required at all times.
- 3.2 Activities which create noise, vibration, fumes or similar disruptions which are, in the opinion of the Owner's Representative, detrimental to the normal operations of the facility shall only be performed as approved in advance by the Owner's Representative.
- 3.3 Contractor shall control the conduct of its employees so as to prevent unwanted interaction with the owner's staff, public or other individuals except those associated with the project
- 3.4 Storage will be limited to the project area or approved in advance by the City's representatives.
- 3.5 Contractor shall provide all temporary structures, measures, apparatus and services required to prosecute the Work of this bid package.

- 3.6 All utility service and building system connections or required interruptions shall be coordinated in advance with the Owner's Representative.
- 3.7 Upon award of Contract, Contractor shall submit an itemized schedule of values in a format acceptable to the Owner's Representative.
- 3.8 The City will provide parking on an as needed basis at designated locations adjacent to the Media Facility.
- 3.9 **Contractor shall have a competent representative on the Project site at all times Work is in progress.** Communication given to the representative shall be binding as if given to the contractor. Contractor shall immediately replace any individual who ceases to perform his duties satisfactorily, in the opinion of the Owner's
- 3.10 Rubbish, debris, waste, dust or surplus materials shall not be allowed to accumulate and shall be removed continuously and disposed of by the Contractor as the work progresses. The owner may elect if required, upon written notice to the Contractor, to perform cleanup, the cost for which will be deducted from the Contract amount. Only one rubbish removal company is allowed to operate within the City. Their contact information may be obtained from the City's Commercial Solid Waste Division at 310-288-2806.
- 3.11 Contractor shall submit schedule information to the Owner's Representative for the project with updates as work progresses on the project.
- 3.12 Contractor shall submit as-built drawings, warranties, operations and service manuals upon completion of the work.

4.0 PLANS AND SPECIFICATIONS

The Media Facility Television Production Systems plans are dated December 15, 2009 and consist of the followings drawings.

DRAWINGS

TV000	Title Sheet
TV001	Notes and Schedules
TV002	Miscellaneous Details
TV101	Production Center Technical System Equipment Floor Plan
TV102	Production Center Technical Conduit Plan and Riser Diagram
TV103	Production Center Technical Power Room Details
TV104	Production Center Satellite Roof Area Plans and Details
TV201	Production Center Lighting System Details
TV301	Rack Room 409 Elevations and Details
TV302	Production Control Area Elevations and Details 1
TV303	Production Control Area Elevations and Details 2
TV304	Master Control Elevations and Details
TV305	Library and Legacy System Elevations and Details
TV306	Edit Rooms Elevations and Details
TV311	Studio Interconnect Panels Elevation, Riser and Details
TV401	Overall Signal Flow
TV402	Reference System Single Line Diagram
TV403	Intercom System Single Line Diagram

TV404	Server System Single Line Diagram
TV405	HD/SDI Routing Switcher Video Single Line Diagram
TV406	HD/SDI Routing Switcher Control Single Line Diagram
TV407	Monitor Distribution Single Line Diagram
TV408	Facility Control LAN Single Line Diagram
TV411	Transmission - Air/DBS/CATV Single Line Diagram
TV412	Transmission - Satellites Single Line Diagram
TV421	Production Control Video Single Line Diagram
TV422	Production Control Monitor Single Line Diagram
TV423	Production Control Audio Single Line Diagram
TV424	Production Camera System Single Line and Detail
TV425	Production Graphics and Teleprompter Single Line Diagrams
TV431	Master Control Single Line Diagram 1
TV432	Master Control Single Line Diagram 2
TV433	Master Control Emergency Bypass and Control Single Line Diagram
TV434	<i>Master Control Digital Signage Single Line Diagram</i>
TV441	Edit System 1 Single Line Diagram
TV442	Edit Systems 2 and 3 Single Line Diagrams
TV443	Edit System 4 Single Line Diagram
TV444	Edit System 5 Single Line Diagram
TV451	Legacy System Single Line Diagram 1
TV452	Legacy System Single Line Diagram 2
TV461	Work Room Single Line Diagram

SPECIFICATIONS

The Specifications consist of the following sections.

PART 1- SCOPE

- Section 1 General Provisions
- Section 2 Project Information
- Section 3 Description of Work
- Section 4 Related Work Specified and Found Elsewhere in the Project
- Section 5 Project Schedule
- Section 6 Quality Assurance
- Section 7 Work Completion
- Section 8 Warranty Service
- Section 9 Bidder Qualification
- Section 10 Submittals

PART 2 - PRODUCTS

- Section 1 General Provisions
- Section 2 Miscellaneous Products
- Section 3 Equipment

PART 3 - EXECUTION

- Section 1 General Provisions
- Section 2 Equipment and Rack Installation
- Section 3 Conduit, Wire and Cable Installation
- Section 4 Signal Handling Procedures
- Section 5 Cleanup
- Section 6 System Commissioning

Section 7
Section 8

Final Procedures
Acceptance of Work

TELEVISION PRODUCTION SYSTEMS EQUIPMENT LIST FOR BIDDING PURPOSES

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Rack Room	1	House Reference System, consisting of:			
Rack Room	1	Generator, Sync, HD/SD	Ensemble	7400	Base
Rack Room	1	Generator, Test	Ensemble	7400EX	Base
Rack Room	1	Generator, GPS/TimeCode	Ensemble	7400GPS	Base
Rack Room	1	Display, Timecode	ESE	ES-126U	Base
Rack Room	10	DA, Analog Video/AES	Ensemble	5150	Base
Rack Room	1	DA, HD/SDI	Ensemble	7110	Base
Rack Room	1	DA Control Module	Ensemble	5030	Base
Rack Room	2	DA Tray, 3 RU	Ensemble	Avenue	Base
Rack Room	2	DA Tray, 3 RU, Power SUnitply	Ensemble	Avenue	Base
Rack Room	1	DA, Quad Analog Audio 1x6	ESE	ES-245	Base
Rack Room	1	Intercom System, consisting of:	Clearcom	MicroMatrix	Base
Rack Room	1	Intercom Matrix, 36 Port Frame	Clearcom	Eclipse-Pico	Base
Rack Room	1	Intercom Software	Clearcom	Eclipse	Base
Rack Room	1	Intercom System Commissioning/Training	Clearcom	Eclipse	Base
Rack Room	1	Intercom Interface Frame	Clearcom	IMF-3	Base
Rack Room	1	Intercom Interface Frame Power SUnitply	Clearcom	PSU-101	Base
Rack Room	2	Intercom Dual 2W:4W Interface Cards	Clearcom	CCI-22	Base
Rack Room	1	Intercom Dual Telco Interface Cards	Clearcom	TEL-14	Base
Rack Room	1	Intercom Quad IFB Interface	Clearcom	IFB-104	Base
Rack Room	1	Intercom 8 Ch ISO Interface	Clearcom	BAL-8	Base
Rack Room	1	Intercom Power SUnitply	Clearcom	PS-704	Base
Rack Room	4	Intercom Master Control Stations	Clearcom	V24PDX	Base
Rack Room	6	Intercom Remote Stations	Clearcom	V12PDX	Base
Rack Room	10	Intercom Gooseneck Mics, 18"	Clearcom	110/490	Base
Rack Room	1	Intercom Wireless Transmitter, Two channel	Clearcom	CM-222	Base
Rack Room	2	Intercom Wireless Belt Pack	Clearcom	CP-222	Base
Rack Room	4	Intercom IFB Talent Receivers	Clearcom	TR-50	Base
Rack Room	6	Intercom Headset, Single Ear Lightweight	Clearcom	CC-26	Base
Rack Room	2	Intercom Headset, Split Ear Double	Clearcom	CC-260	Base
Rack Room	1	Intercom Power SUnitply, 2-wire	RTS	PS-31	Base
Rack Room	4	Intercom PL Cables, 25'	RTS	EX25	Base
Rack Room	2	Intercom PL Extensions, 50'	RTS	EX50	Base
Rack Room	6	Intercom Belt Packs	RTS	BP-325	Base
Rack Room	1	Server, Audio-Video, Playback consisting of:			Base
Rack Room	3	Server Chassis, HD; 1 in, 2 out (3 Ch)	Video Technics	Apella AHDS-12	Base
Rack Room	1	Server Chassis, SD, 1 in, 2 out (3 Ch)	Video Technics	Apella LCS-3	OFE

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Rack Room	1	Server, NewsFlow DataBase	Video Technics	VT DB 6000-05	Base
Rack Room	1	Sever, HD VT Media Exchange	Video Technics	VTMX 6200-HD-02	Base
Rack Room	1	Server VT Media Archive Library - LTO4 - 1-drive/20-slot (incl. archive inteface SW & 20 tapes)	Video Technics	6360-20-1.c	Base
Rack Room	3	Server NAS Port Kit	Video Technics	NAS-PK	Base
Rack Room	2	Server NAS-vStorage 4U-10GE	Video Technics	6544U-24-c	Base
Rack Room	1	Server, Network Time Protocol	Video Technics	6412-01	Base
Rack Room	3	Server Keyboard	Logitech	Access 600	Base
Rack Room	3	Server Mouse, three button optical, USB/PS2	Logitech	LX3	Base
Rack Room	3	Server Monitor, LCD, 24" Digital/Analog	LG	W2420	Base
Rack Room	3	Server Monitor Speaker, Pair	Logitech	X140	Base
Rack Room	2	Server KVM Transmit/Receive Set, with Audio	Black Box	CATx KVM	Base
Rack Room	2	Server Switch: Gigabit - 24-port Layer 3	Video Technics	6507-72	Base
Rack Room	1	Server Software, Scheduler - Single Seat	Video Technics	VT Scheduler aps-014-01	Base
Rack Room	2	Server Software, Proxy EDITOR Plus; Single Seat	Video Technics	Editor PLUS aps-022-01	Base
Rack Room	1	Server Software, Proxy EDITOR Plus Floating License	Video Technics	Editor PLUS	
				aps-022-F	Base
Rack Room	4	Server Software Plug In, VT News Edit for Final Cut Pro	Video Technics	aps-026-01	Base
Rack Room	5	Server Commissioning	Video Technics	CM-NF-01	Base
Rack Room	4	Server On-site Training	Video Technics	TR-NF-01	Base
Rack Room	3	DA, Dual HD/SDI	Ensemble	7125	Base
Rack Room	1	DA Tray, 3 RU	Ensemble	Avenue	Base
Rack Room	1	DA Tray, 3 RU, Power SUnitply	Ensemble	Avenue	Base
Rack Room	2	Monitor, Color, LCD, 4", Quad HD/SDI	Marshall	V-R44P-HDSDI	Unit
Rack Room					
Rack Room	1	Switcher, Routing, HD/SDI. 64x64 capacity populated 32x32, with control system (shared with Master Control), consisting of;	Grass Valley	Concerto	Unit
Rack Room	1	Switcher, Routing, HD/SDI Chassis 64x64, Power SUnitply, Matrix Controller and Fan Module.	Grass Valley	CRS-FRM64-CPL	Unit
Rack Room	1	Switcher, Routing, Redundant Power SUnitply	Grass Valley	CRS-PS	Unit
Rack Room	1	Switcher, Routing, HD/SDI Matrix Board 32x32	Grass Valley	CRS-HD64	Unit

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Rack Room	1	Switcher, Routing, Chassis Rear Panel, BNC	Grass Valley	CRS-HD-CP	Unit
Rack Room	1	Switcher, Routing, Control Panel, Master, X-Y	Grass Valley	PRE-XY	Unit
Rack Room	8	Switcher, Routing, Control Panel, 32 button w/display	Grass Valley	PRE-BPS	Unit
Rack Room	4	Switcher, Routing, Control Panel, Eight Buss	Grass Valley	PRE-PMB	Unit
Rack Room	1	Switcher, Routing, Configuration CPU, Rack Mount	Grass Valley	PRE-PC-4000	Unit
Rack Room	1	Switcher, Routing, Configuration Software	Grass Valley	PRE-SW	Unit
Rack Room	1	Switcher, Routing, Commissioning	Grass Valley		Unit
Rack Room	8	Switcher, Routing, OnSite Checkout	Grass Valley	CRS-MD-SPNT	Unit
Rack Room	1	Switch, Ethernet, Gig-E, 24 Port	Cisco		Base
Rack Room	4	Patch Panel, SDI/NTSC/AES	Bitree	B64T-2WTHD	Base
Rack Room					
Rack Room	1	Frame Sync/Conversion, consisting of:			
Rack Room	2	Converter, Universal Unit/Down/Cross Module	Ensemble	7900	Base
Rack Room	1	DA Control Module	Ensemble	5030	Base
Rack Room	1	DA Touch Screen Control Panel	Ensemble	Avenue	Base
Rack Room	1	DA Control Application Software	Ensemble	Avenue	Base
Rack Room	1	DA Tray, 3 RU	Ensemble	Avenue	Base
Rack Room	1	DA Tray, 3 RU, Power SUnitply	Ensemble	Avenue	Base
Rack Room					
Rack Room	1	Switcher, Routing, Monitor System, consisting of:	Crestron		Base
Rack Room	1	Switcher, Routing, Monitor, Matrix 16x16	Crestron	DM-MD16X16	Base
Rack Room	4	Switcher, Routing, Monitor, Input Card, DVI	Crestron	DMC-DVI	Base
Rack Room	5	Switcher, Routing, Monitor, Input Card, HD/SDI	Crestron	DMC-HDSDI	Base
Rack Room	2	Switcher, Routing, Monitor, Input Card, SD Analog	Crestron	DMC-VID	Base
Rack Room	3	Switcher, Routing, Monitor, Output Card, DM	Crestron	DMCO-2222	Base
Rack Room	2	QC Stations			
Rack Room	2	Monitor, Color, 17" HD/SDI Multiformat	Panasonic	BTLH1760W	Unit
Rack Room	2	Monitor Rack Mount	Panasonic	BTLH-RK	Unit
Rack Room	1	Waveform Monitor/Vectorscope	Videotek	TVM-9100PKG	Unit
Rack Room	1	Waveform Monitor Dual Tray	Videotek		Unit
Rack Room	1	Waveform/Vectorscope Raster Display	Videotek	VTM-2400	Unit
Rack Room	2	Monitor Panel, Audio Analog	Wohler	AMP1-VTR	Unit
Rack Room	2	Clock, Slave, Digital, .55" Display, 1RU	ESE	ES-161Unit/UL	Unit
Rack Room	2	Pull Out Workshelf	Middle Atlantic	SS	Base
Rack Room	1	Facility Control and Programming System, consisting of:			
Rack Room	1	PC, Facility LAN			OFE
Rack Room	1	Shelf, Fixed, for PC	Middle Atlantic		Base
Rack Room	1	Pull out Keyboard/LCD Panel	Ergo 2000		Base

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Rack Room	2	Switch, Ethernet, Gig-E, 24 Port	Cisco		Base
Rack Room	1	Transmission and Reception System			
Rack Room	1	Tuner, CATV/MATV, NTSC/DTV, w/rack mount	CRR	232-ATSC	Base
Rack Room	1	DBS DVR/Receiver, HD	Dish	VIP622	OFE
Rack Room	1	CATV DVR/Receiver, HD	Time Warner	8300HDC	OFE
Rack Room	3	Converter, HDMI to HD/SDI	Ensemble	BE83	Base
Rack Room	1	DA Rack Mount	Ensemble	BERKMT	Base
Rack Room	1	Converter, AV/PCM to HDMI	Star Tech		Base
Rack Room	1	Antenna, VHF/FM Broadband	Blonder Tongue	BTY-LP-BB	Base
Rack Room	1	Antenna, UHF Broadband	Blonder Tongue	BTY-UHF-BB	Base
Rack Room	1	Antenna Combiner, VHF/UHF	Blonder Tongue		Base
Rack Room	2	Amplifier, RF Broadband, 1000MHz	Blonder Tongue	RMDA-1000-30	Base
Rack Room	1	MATV/CATV Passives	Blonder Tongue		Base
Rack Room	1	Monitor, Color, LCD, 4", Quad NTSC	Marshall	V-R44P	Unit
Rack Room	1	Satellite Control System	EASI		OFE
Rack Room	3	Receiver, Satellite HD/SDI	Tandberg	RX1290	Unit
Rack Room	2	Receiver, Satellite (4) RF Input for above	Tandberg		Unit
Rack Room	2	Receiver, Satellite Adapter, D9 Pin to XLR	Tandberg		Unit
Rack Room	1	Receiver, Satellite DVB-S, DVB-S2 sat Demod Card	Tandberg		Unit
Rack Room	1	Receiver, Satellite DVB S2 QPSK License Key	Tandberg		Unit
Rack Room	1	Receiver, Satellite Common Interface	Tandberg		Unit
Rack Room	1	Receiver, Satellite Password Protect for Browser	Tandberg		Unit
Rack Room	1	Receiver, Satellite Dolby AC3 License Kit	Tandberg		Unit
Rack Room	1	Receiver, Satellite Provider Lock License Key	Tandberg		Unit
Rack Room	1	Receiver, Satellite Main Cord	Tandberg		Unit
Rack Room	1	Receiver, Satellite SD Analog	Motorola	DSR-440X	OFE
Rack Room	1	Receiver, Satellite SD Analog	Echostar	500	OFE
Rack Room	1	Converter, Quad Analog Composite to SD/SDI	Ensemble	5360	Base
Rack Room	2	Converter, SD/SDI to HD/SDI	Ensemble	7910	Base
Rack Room	1	Receiver, Satellite, HD	Kaon	KACF-S660HD	OFE
Rack Room	1	Converter, HDMI to HD/SDI	Ensemble	BE83	Base
Rack Room	1	Switch, Ethernet, Gig-E, 24 Port	Cisco		Base
Rack Room	2	Monitor, Color, LCD, 4", Quad HD/SDI	Marshall	V-R44P-HDSDI	Unit
Rack Room	2	DA, Dual HD/SDI	Ensemble	7125	Base
Rack Room	1	DA Control Module	Ensemble	5030	Base
Rack Room	1	DA Tray, 3 RU	Ensemble	Avenue	Base
Rack Room	1	DA Tray, 3 RU, Power SUnitply	Ensemble	Avenue	Base
Rack Room	4	Rack Shelves for Receivers	Middle Atlantic		Base

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Rack Room	4	Equipment Rack, 45RU, 36" Deep	Stantron	Pioneer series	Base
Rack Room	8	Equipment Rack, 45RU, 30" Deep	Stantron	Pioneer series	Base
Rack Room	12	Equipment Rack Rear Doors, 45RU	Stantron	Pioneer series	Base
Rack Room	4	Equipment Rack Perforated Top Panel, 36" Deep	Stantron	Pioneer series	Base
Rack Room	8	Equipment Rack Perforated Top Panel, 30" Deep	Stantron	Pioneer series	Base
Rack Room	24	20A IG Full Height Plugstrips	Stantron		Base
Rack Room	12	Full Height Copper Ground Strips	Stantron		Base
Rack Room	3	Lateral Ground Buss Strips	Stantron		Base
Rack Room	12	Wire Management System	Stantron		Base
Rack Room	1	Vent and Blank Panels, as required	Stantron		Base
Production Control	1	Switcher, HD Production, 2 M/E Multi-format, consisting of:	Grass Valley	Kayak	Unit
Production Control	1	Switcher Chassis, HD Production, 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.	Grass Valley	Kayak HD-200C	Unit
Production Control	1	Switcher 2 M/E Control Panel, with control cable from from to chassis	Grass Valley	Kayak HD-200C	Unit
Production Control	1	Switcher, HD Production, RAM Recorder	Grass Valley	KHD-RAMREC	Unit
Production Control	2	Switcher, HD Production, Kurle Effects License	Grass Valley	KHD200-KURL-P, -1	Unit
Production Control	1	Switcher, HD Production, Second Power SUnitply	Grass Valley	KHD-PSU	Unit
Production Control	1	Switcher, HD Production, On Site Commissioning	Grass Valley	KHD-SPNT	Unit
Production Control	1	Chroma Key Generator System, consisting of:	Ultimatte		Unit
Production Control	1	Chroma Key Generator Chassis, HD	Ultimatte	11 HD/SD	Unit
Production Control	1	Chroma Key Generator Remote	Ultimatte	Smart Remote 2	Unit
Production Control	1	Switcher I/O Distribution and Processing, consisting of:	Ensemble		
Production Control	12	DA, Dual HD/SDI	Ensemble	7125	Base
Production Control	4	DA/Converter, HD/SDI to SD Analog	Ensemble	7130	Base
Production Control	6	Embedder/De-Embedder. AES	Ensemble	7600	Base
Production Control	1	DA Control Module	Ensemble	5030	Base

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Production Control	3	DA Tray, 3 RU	Ensemble	Avenue	Base
Production Control	3	DA Tray, 3 RU, Power SUnitply	Ensemble	Avenue	Base
Production Control	3	Patch Panel, SDI/NTSC/AES	Bitree	B64T-2WTHD	Base
Production Control	2	Monitor, Plasma Display, 42"	Panasonic	TH-42PF11UK	Unit
Production Control	2	Monitor, Plasma Input Card, HD/SDI	Panasonic	TY-FB10HD	Unit
Production Control	4	Monitor, Color, 17" HD/SD/NTSC	Panasonic	BTLH1710W	Unit
Production Control	2	Monitor Interface, DM to HDMI	Crestron	DM-RMC-100	Base
Production Control	1	Video Wall Processor System, consisting of:	Evertz		
Production Control	1	Video Wall Processor, 24 Input	Evertz	7787VIPA24-DUO-3G-DIN	Unit
Production Control	1	Video Wall Proc Tray, 3 RU	Evertz	7800FR	Unit
Production Control	1	Video Wall Proc Tray Power SUnitply	Evertz	7800PS	Unit
Production Control	1	Interface, Production Switcher Tally	Custom		Base
Production Control	1	Interface, Production Switcher GPI Breakout	Custom		Base
Production Control	2	Speaker, Monitor, Large	JBL	LR4312	Unit
Production Control	1	Clock, Slave, Digital, 1" Display, 2 RU	ESE	ES-166Unit/UL	Unit
Production Control	1	Clock, Countdown Display w/Remote	ESE	ES-362Unit/UL	Unit
Production Control	1	Character Generator System, consisting of:	Chyron		Unit
Production Control	1	Character Generator Chassis, HD/SD SDI	Chyron	HyperX3	Unit
Production Control	1	Character Generator Keyboard	Chyron		Unit
Production Control	1	Character Generator Mouse	Chyron		Unit
Production Control	1	Character Generator Graphics Software	Chyron	Lyric Pro	Unit
Production Control	1	Monitor, Color, LCD, 24" Data	LG	W2420	Unit
Production Control	1	Character Generator KVM Transmit/Receive Set	Black Box	CATx KVM	Base
Production Control	1	DA, HD/SDI	Ensemble	7100	Base
Production Control	1	DA Tray, 1 RU	Ensemble	Avenue	Base
Production Control	1	Edit Suite, Non Linear (existing, but with new I/O panel), with;	Apple	Final Cut Pro	OFE

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Production Control	1	CPU	Apple	Mac Pro	OFE
Production Control	1	24" HD flat panel Cinema display monitor	Apple	Cinema Display	OFE
Production Control	1	17" HD flat panel Cinema display monitor	Apple	Cinema Display	OFE
Production Control	1	Serial Digital interface Breakout Box	Aja	Kona Lhi	Unit
Production Control	1	Recorder, P2	Panasonic	AG-HPG20	Unit
Production Control	1	Console, Production	Custom		Base
Production Control	1	Console, Camera Shading	Custom		Base
Production Control	1	Console Monitor Wall Structure	Custom		Base
Production Control	1	Mixing Console, Audio Analog/Digital, consisting of:	Tascam		
Production Control	1	Mixing Console, Audio Analog/Digital	Tascam	DM-4800	Unit
Production Control	1	Mixing Console AES Option Card	Tascam	IF-AE/DM	Unit
Production Control	1	Mixing Console Firewire Option Card	Tascam	IF-FW/DM MKII	Unit
Production Control	1	Mixing Console Meter Bridge	Tascam	MU-1000	Unit
Production Control	3	Monitor, Color, LCD, 4", Quad HD/SDI	Marshall	V-R44P-HDSDI	Unit
Production Control	1	VCA, Audio Monitor, with Remote	Oxmoor	DCA-2T/RC-16	Unit
Production Control	1	Stage Announce Page Switch	Custom		Base
Production Control	2	Speaker, Monitor, Small, Powered	Adam	A7	Unit
Production Control	2	Microphone, Wireless Systems	Shure	ULXP14/85	Unit
Production Control	1	Telephone Hybrid Assembly, consisting of:	Comrex	STAC	Unit
Production Control	1	Telephone Hybrid Chassis	Comrex	STAC	Unit
Production Control	1	Telephone Hybrid Control Surface	Comrex	STAC	Unit
Production Control	1	CD Recorder/Player, with rack mount	Tascam	CD-RW901SL	Unit
Production Control	1	Digital Audio Recorder	360 Systems	Instant Replay 2	Unit
Production Control	1	Patch Panel Assembly, consisting of:	Bitree		
Production Control	4	Patch Panel, Audio Bantam Stereo	Bitree	B96DC-HNOBT/ E3-M2OU12B	Base Base
Production Control	12	Patch Cords, Bantam Audio, 36"	Bitree		Base

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Production Control	24	Patch Cords, Bantam Audio, 24"	Bitree		Base
Production Control	1	Clock, Slave, Digital, .55" Display, 1RU	ESE	ES-161Unit/UL	Base
Production Control	1	DA, Stereo Audio	Oxmoor	MDA-26	Base
Production Control	1	Console, Audio w/Bridge	Custom		Base
Production Control	1	Equipment Rack, Sloped	Stantron	200 series	Base
Production Control		Camera System, Studio, HD, consisting of:	Panasonic		
Production Control	3	Camera Heads	Panasonic	HPX500	Unit
Production Control	3	HD lenses	Canon	KJ16ex7.7b irsd ps12	Unit
Production Control	3	Lens Control Package	Canon	MS22M	Unit
Production Control	3	Studio Viewfinders	Panasonic	BT-LH80W	Unit
Production Control	3	Studio Viewfinder Adapters	Panasonic	BT-Mount	Unit
Production Control	3	Studio Viewfinder Cables	Panasonic	BT-CS80G	Unit
Production Control	3	Base Stations	Panasonic	AG-BS300G	Unit
Production Control	3	Camera Adapters	Panasonic	AG-CA300G	Unit
Production Control	3	Camera Remote Control Panels	Panasonic	AJ-RC10G	Unit
Production Control	3	Camera Remote Control Panel Cables	Panasonic		Unit
Production Control	3	Camera Cables, 50 foot	Custom		Unit
Production Control	3	Tripod Adapter Plate	Panasonic	SHAN-TM700	Unit
Production Control	2	DA, Dual HD/SDI	Ensemble	7125	Base
Production Control	1	DA Tray, 1 RU	Ensemble	Avenue	Base
Production Control	1	Patch Panel, Camera	Bitree	CAM	Base
Production Control	4	Patch Cords, Camera, 36"	Bitree	CAM-PC	Base
Production Control	1	Power Distribution Panel, Camera	Custom		Base
Production Control	1	Monitor, Color, LCD, 4", Quad HD/SDI	Marshall	V-R44P-HDSDI	Unit
Production Control	1	Monitor, Color, 25.5" HD/SDI Multiformat	Panasonic	BTLH2550W	Unit
Production Control	1	Waveform Monitor/Vectorscope	Videotek	TVM-9100PKG	Unit

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Production Control	1	Waveform Monitor Dual Tray	Videotek		Unit
Production Control	1	Monitor Panel, Audio Analog	Wohler	AMP1-V2DA	Unit
Production Control		Camera Pedestal/Head Systems, consisting of:	Vinten		
Production Control	3	Pedestal, Studio Camera, with 5" wheels, cable guards	Vinten	Pro- Ped 3983-3C Studio	Unit
Production Control	3	Fluid Head, Studio Camera	Vinten	Vision 250	Unit
Production Control	3	Second telescoping pan bar for head	Vinten	Vision	Unit
Production Control	3	Extended Pan Bar Clamp	Vinten	Vision 250	Unit
Production Control	3	Camera mounting plate and screws	Vinten	Vision	Unit
Production Control	1	Teleprompter System, consisting of:			
Production Control	3	17" LCD On-Camera Displays	QTV	MSP 17	Unit
Production Control	3	Shrouds and Hoods for above	QTV		Unit
Production Control	3	Camera Sleds and Counterweights	QTV		Unit
Production Control	1	Teleprompter Graphics Card	QTV		Unit
Production Control	1	Speed/Remote Control	QTV	Hand Controller	Unit
Production Control	3	15" HD Talent Feedback Monitor	QTV		Unit
Production Control	1	Teleprompter software	QTV	Q Master software	Unit
Production Control	1	Teleprompter PC with Menu Monitor	Dell		OFE
Production Control	1	VITC Encoder, with Power SUnitply and Rack Mount	Horita	VG-50	Base
Production Control	1	Switcher, Video, 6x1, with Rack Mount	Extron	SW6AV	Base
Production Control	1	DA, Analog Video/AES	Ensemble	5150	Base
Production Control	1	DA Tray, 1 RU	Ensemble	Avenue	Base
Production Control	1	Console, Teleprompter, Mobile	Anthro	36" Anthrocart	Unit
Production Control	1	Amplifier, Audio Monitor	QSC	RX	Unit
Production Control	2	Speaker, Stage Announce	JBL	Control 28	Unit
Production Control	1	Studio Surveillance System, consisting of:	Panasonic		

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Production Control	1	Camera, Studio Surveillance	Panasonic	WV-CF294	Base
Production Control	1	Camera, Studio Surveillance, Mount	Custom		Base
Production Control	1	Monitor, Studio Surveillance	Panasonic	WV-LC1700	Base
Production Control	1	Camera Power SUnitply	Panasonic	PS-CAM	Base
Production Control	2	Monitor, Studio, Mobile, consisting of:			
Production Control	2	Monitor, Color, LCD/LED 55"	Samsung	UN55B6000	Unit
Production Control	2	HD/SDI to HDMI Adapter	AJA		Unit
Production Control	2	Monitor Stand Mobile	Premier	PSD-EB72CB	Unit
Production Control	2	AC power strip, 4 outlet	Tripp Lite		Base
Production Control	2	AC Power Extension, 25 foot	Tripp Lite		Base
Production Control	2	HD/SDI Extension, 25 foot	Custom		Base
Production Control	4	Panel, Studio Interface	Custom		Base
Production Control	2	"On-Air" Lights	Marketek	TLPO-1HB	Base
Production Control	1	Studio Equipment Rack Assembly, consisting of:	Stantron	Pioneer Series	Base
Production Control	1	Equipment Rack, Full Height	Stantron	Pioneer Series	Base
Production Control	1	Equipment Rack Castered Base	Stantron	Pioneer Series	Base
Production Control	1	Pull Out Workshelf	Middle Atlantic	SS	Base
Production Control	2	Storage Drawer	Middle Atlantic	D4	Base
Production Control	2	20A IG Full Height Plugstrips	Stantron		Base
Production Control	1	Full Height Copper Ground Strips	Stantron		Base
Production Control	1	Wire Management System	Stantron		Base
Production Control	1	Vent and Blank Panels, as required	Stantron		Base
Production Studio	48	Lighting Dimmer Module	ETC	Sensor	OFE
Production Studio	1	Lighting Dimmer Cabinet	ETC	Sensor	OFE
Production Studio	1	Lighting Dimming Console	ETC	Expression	OFE
Production Studio	8	Lighting Plug Strips, 12'	ETC	99 Series	OFE
Production Studio	4	Lighting Plug Wall Boxes	ETC	99 Series	OFE

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Production Studio	7	650 watt Fresnel hanging light, w/Barn Doors	Arri	650 Plus Fresnel	Unit
Production Studio	5	1000 watt studio Fresnel 7" hanging light, w/Barn Doors	Arri	ST1 Fresnel	Unit
Production Studio	3	2000 watt studio Fresnel 10" hanging light, w/Barn Doors	Arri	ST2 Fresnel	Unit
Production Studio	10	300 watt Fresnel hanging light, w/Barn Doors	Arri	300 Fresnel	Unit
Production Studio	11	150 watt Fresnel hanging light, w/Barn Doors	Arri	150 Fresnel	Unit
Production Studio	8	Light Stands	Arri	AS-2	Unit
Production Studio	8	Low Energy Cyc Light, with grid mount, stage pin connector	Kino-Flo	Image 45	Unit
Production Studio	2	Low Energy Soft Light, with grid mount, stage pin connector	Kino-Flo	PAR-400	Unit
Production Studio	4	Low Energy Soft Light, with grid mount, stage pin connector	Kino-Flo	PAR-200	Unit
Production Studio	1	Low Energy Soft Light, with grid mount, stage pin connector	Kino-Flo	VistaBeam 300	Unit
Production Studio	2	Low Energy Compact Light	Kino-Flo	Barfly 200	Unit
Production Studio	12	10 foot stage pin extension cables	ETC		Unit
Production Studio	12	Edison to Stage Pin Adapters	ETC		Unit
Production Studio	12	Telescoping Hanger, 8 foot	Mole	500424-8	Unit
Master Control	1	Switcher, Master Control, (control system shared with Routing Switcher), consisting of:	Grass Valley	Acappella	Unit
Master Control	1	Switcher Chassis, HD/SDI 16x4	Grass Valley	A164HR-P	Unit
Master Control	2	Switcher, Control Panel 16x2	Grass Valley	A164RCP	Unit
Master Control	1	Switcher, Bypass Logo HD/SDI, 2x1	Ensemble	7450	Base
Master Control	1	Switcher, Bypass System NTSC/Audio, 2x1	RDL	TX-MVX/ST-SSR1/ST-SSR1	Base
Master Control	1	Switcher, MC Monitor, HD/SDI, 10x1	Evertz	X-120H	Unit
Master Control	1	Switcher, MC Monitor, Control Panel	Evertz	X-120H Remote	Unit
Master Control	1	De-Embedder, HD/SDI to Analog Audio	AJA	HD10CEA	
Master Control	1	Monitor Panel, Analog Audio-Video	Wohler	AMP-1A	Unit
Master Control	1	Switcher I/O Distribution and Processing, consisting of:	Ensemble		
Master Control	3	DA, Dual HD/SDI	Ensemble	7125	Base
Master Control	1	Downconverter, HD/SD/NTSC	Ensemble	7925	Base
Master Control	2	DA, Analog Video/AES	Ensemble	5150	Base
Master Control	1	DA Control Module	Ensemble	5030	Base

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Master Control	1	DA Tray, 3 RU	Ensemble	Avenue	Base
Master Control	1	DA Tray, 3 RU, Power SUnitply	Ensemble	Avenue	Base
Master Control	2	DA, Analog Audio x4	Ensemble	BE33	Base
Master Control	1	DA Blank Panel	Ensemble	BEBP	Base
Master Control	1	DA Rack Mount	Ensemble	BERKMT	Base
Master Control	1	DA Power SUnitply	Ensemble	BEPS6	Base
Master Control	1	Logo Inserter System, consisting of:	Compix		Unit
Master Control	1	Logo Inserter Chassis, HD/SDI	Compix	CynerG2	Unit
Master Control	1	Logo Inserter Software	Compix	Autocast	Unit
Master Control	1	Logo Inserter Keyboard	Compix		Unit
Master Control	1	Logo Inserter Mouse	Compix		Unit
Master Control	1	Logo KVM Transmit/Receive Set, with Audio	Black Box	CATx KVM	Base
Master Control	1	Logo Audio Player, Network	WD	TV Live	Base
Master Control	1	Logo Audio Embedder, Analog to HD/SDI	AJA	HD10AMA	Base
Master Control	1	Monitor, Color, LCD, 24" Data	LG	W2420	Unit
Master Control	1	Emergency Bypass System, consisting of:			
Master Control	1	Emergency Bypass System Switcher, 3x1	RDL	RU-VSX4/RU-SX4A/RU	Base
Master Control	1	Emergency Bypass DVD Blue Ray Player, Code Free, HD/SDI	JVB Digital	BDP-83	Base
Master Control	2	Emergency Bypass VTR, DVCam	Sony	DSR-20	OFE
Master Control	1	Emergency Panel	Custom		Base
Master Control	1	Digital Control System, consisting of:	Crestron		
Master Control	1	Control System Chassis, Compact	Crestron	AV2	Base
Master Control	1	Control System Touch Panel	Crestron	TP4000	Base
Master Control	1	Control System Programming	Crestron		Base
Master Control	2	Monitor Panel, Analog Audio-Video	Wohler	VAMP Series	Unit
Master Control	1	Monitor, Color, LED 55"	Samsung	UN55B6000	Unit
Master Control	1	Monitor Interface, DM to HDMI	Crestron	DM-RMC-100	Base
Master Control	1	Video Wall Processor System, consisting of:	Evertz		Unit
Master Control	1	Video Wall Processor, 24 Input	Evertz	7787VIPA24-DUO-3G-DIN	Unit
Master Control	1	Video Wall Proc Tray, 3 RU	Evertz	7800FR	Unit
Master Control	1	Video Wall Proc Tray Power SUnitply	Evertz	7800PS	Unit
Master Control	1	Streaming Video Encoder	Granicus/Dell		OFE
Master Control	1	Digital Signage System, consisting of:	Scala		OFE
Master Control	1	Digital Signage Creation Chassis	Scala		OFE
Master Control	2	Digital Signage Payout Chassis	Scala		OFE
Master Control	1	Digital Signage Keyboard	Scala		OFE
Master Control	1	Digital Signage Mouse	Scala		OFE
Master Control	2	Digital Signage DVI to HD/SDI Converter	Ensemble	Mitto	Base
Master Control	1	Rack Mount for above	Ensemble	BERKMT	Base
Master Control	1	DA Power SUnitply	Ensemble	BEPS6	Base

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Master Control	1	Digital Signage KVM Transmit/Receive Set	Black Box	CATx KVM	Base
Master Control	1	Monitor, Color, LCD, 24" Data	LG	W2420	Unit
Master Control	1	Patch Panel, SDI/NTSC/AES	Bitree	B64T-2WTHD	Base
Master Control	1	Console, Master Control	Custom		Base
Master Control	1	Console Monitor Wall Structure	Custom		Base
Edit 1	1	Edit Suite, Non Linear, with;	Apple		Unit
Edit 1	1	2.66GHz 8-core w/ 'Nehalem' processor,			Unit
Edit 1		12GB RAM, 2TB 7200rpm serial ATA	Apple	Mac Pro	Unit
Edit 1	1	30" HD flat panel Cinema display monitor	Apple	Cinema Display	Unit
Edit 1	1	24" HD flat panel Cinema display monitor	Apple	Cinema Display	Unit
Edit 1	1	Apple Care Protection Plan (warranty)	Apple		Unit
Edit 1	1	Graphics Card	ATI	Radeon HD4870	Unit
Edit 1	1	Serial Digital interface HD-SDI	Aja	Kona Lhi	Unit
Edit 1	1	Serial Digital interface Breakout Box	Aja	Kona Lhi	Unit
Edit 1	1	17-inch MacBook, 3.06 GHz Intel Core Duo, 8GB 1066 MHZ DDR3 SDRAM – 2x4 GB, 500 GB Serial ATA Drive @7200 rpm	Apple	MacBook Pro	Unit
Edit 1	1	P2 card reader	Panasonic	AJ-PCD20P	Unit
Edit 1	1	LCD 42" HD Program Monitor	Sony	LMD-4250W	Unit
Edit 1	1	Mobile stand for Program Monitor	Custom		Base
Edit 1	1	5.1 Surround Sound Speaker System	Logitech	Z-5500	Unit
Edit 1	1	HDMI to SPDIF Adapter	Star Tech	HDMI2DVI	Unit
Edit 1	2	High Resolution Studio Audio Monitor	Adam	A7	Unit
Edit 1	1	14-ch Audio Mixer	Mackie	1402-VLZ3	Unit
Edit 1	2	Power strip with surge protection	Monster Power	MPAV800	Base
Edit 1	1	Edit Room Interconnect Plate	Custom		Base
Edit 1	1	Console, Edit Main	Custom		Base
Edit 2		Edit Suite, Non Linear, with;	Apple		
Edit 2	1	2.66GHz 8-core w/ 'Nehalem' processor,	Apple	Mac Pro	Unit
Edit 2		12GB RAM, 2TB 7200rpm serial ATA			Unit
Edit 2	2	24" HD flat panel Cinema display monitor	Apple	Cinema Display	Unit
Edit 2	1	Apple Care Protection Plan (warranty)	Apple		Unit
Edit 2	1	Graphics Card	ATI	Radeon HD4870	Unit
Edit 2	1	Serial Digital interface HD-SDI	Aja	Kona Lhi	Unit
Edit 2	1	Serial Digital interface Breakout Box	Aja	Kona Lhi	Unit
Edit 2	1	P2 card reader	Panasonic	AJ-PCD20P	Unit
Edit 2	1	Monitor, Color, 25.5" HD/SDI Multiformat	Panasonic	BTLH2550W	Unit
Edit 2	2	High Resolution Studio Audio Monitor	Adam	A7	Unit
Edit 2	1	14-ch Audio Mixer	Mackie	1402-VLZ3	Unit
Edit 2	2	Power strip with surge protection	Monster Power	MPAV800	Base

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Edit 2	1	Edit Room Interconnect Plate	Custom		Base
Edit 2	1	Console, Edit Main	Fusion		Base
Edit 3		Edit Suite, Non Linear, with;	Apple		
Edit 3	1	2.66GHz 8-core w/ 'Nehalem' processor,	Apple	Mac Pro	Unit
Edit 3		12GB RAM, 2TB 7200rpm serial ATA			Unit
Edit 3	2	24" HD flat panel Cinema display monitor	Apple	Cinema Display	Unit
Edit 3	1	Apple Care Protection Plan (warranty)	Apple		Unit
Edit 3	1	Graphics Card	ATI	Radeon HD4870	Unit
Edit 3	1	Serial Digital interface HD-SDI	Aja	Kona Lhi	Unit
Edit 3	1	Serial Digital interface Breakout Box	Aja	Kona Lhi	Unit
Edit 3	1	P2 card reader	Panasonic	AJ-PCD20P	Unit
Edit 3	1	Monitor, Color, 25.5" HD/SDI Multiformat	Panasonic	BTLH2550W	Unit
Edit 3	2	High Resolution Studio Audio Monitor	Adam	A7	Unit
Edit 3	1	14-ch Audio Mixer	Mackie	1402-VLZ3	Unit
Edit 3	2	Power strip with surge protection	Monster Power	MPAV800	Base
Edit 3	1	Edit Room Interconnect Plate	Custom		Base
Edit 3	1	Console, Edit Main	Fusion		Base
Legacy System	1	Switcher, Routing, Analog Video/Audio Stereo, 16x16, consisting of:	Grass Valley	A1616V-AA-LP	Unit
Legacy System	1	Analog Video Matrix 16x16	Grass Valley	Acappella	Unit
Legacy System	1	Analog Audio Stereo Matrix 16x16	Grass Valley	Acappella	Unit
Legacy System	1	Control Panel, Router, Master, X-Y	Grass Valley	Acappella	Unit
Legacy System	1	Redundant Power SUnitply	Grass Valley	Acappella	Unit
Legacy System	1	HD/SDI to NTSC/Audio Converter	Ensemble	BE92A	Base
Legacy System	1	NTSC/Audio to HD/SDI Converter	Ensemble	BE91A	Base
Legacy System	1	Video DA, 1x8	Ensemble	BE22	Base
Legacy System	1	DA Rack Mount	Ensemble	BERKMT	Base
Legacy System	2	USB to Ethernet Adapters	Linksys		Base
Legacy System	1	TBC/Proc Amp, NTSC, genlock, w/rack mount	TV One	TV1-1T-TBCGL	Base
Legacy System	1	Audio Processor	Dbx	166XL	Unit
Legacy System	1	Monitor, Color, 17" HD/SDI Multiformat, with rack mount	Panasonic	BTLH1710W	Unit
Legacy System	1	VITC:LITC Decoder/Display	Horita	VWG-50	Unit
Legacy System	1	Waveform Monitor/Vectorscope	Tektronix	1740	OFE
Legacy System	1	Waveform Monitor Dual Tray	Tektronix		OFE
Legacy System	1	Monitor Panel, Audio Analog	Wohler	AMP1A	Unit
Legacy System	1	Clock, Slave, Digital, .55" Display, 1RU	ESE	ES-161Unit/UL	Unit
Legacy System	2	Monitor, Color, LCD, 4", Quad NTSC	Marshall	V-R44P	OFE
Legacy System	1	VTR, Beta SP	Sony	UVW-1800	OFE
Legacy System	1	VTR, DVCam	Sony	DSR-45A	OFE
Legacy System	1	VTR, S-VHS	Panasonic	AG-7350	OFE

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Legacy System	1	VTR, VHS	Sony	SLV	OFE
Legacy System	1	VTR, U-matic	Sony	VO9800	OFE
Legacy System	2	DVD Recorder/Player	Philips		OFE
Legacy System	5	Audio Buffer I/O	RDL	RU-LA2D	Base
Legacy System	3	Rack Mount for Above	RDL	RU	Base
Legacy System	1	I/O Panel	Custom		Base
Legacy System	1	AC Power Panel, Front Mounted Receptacle	Middle Atlantic	PD-915R	Base
Legacy System	1	Edit Suite, Non Linear	Apple	Final Cut Pro	OFE
Legacy System	1	P2 card reader	Panasonic	AJ-PCD20P	Unit
Legacy System	1	Media Storage Cabinet System	Winstead		
Legacy System	2	Stationary Cabinet, 12"d x 48"w	Winstead	T2270	Unit
Legacy System	4	Moveable Cabinet, 12"d x 48"w	Winstead	T2374	Unit
Legacy System	4	Mechanical Drive for above	Winstead	20730	Unit
Legacy System	1	L- Shaped Table Top	Custom		Base
Legacy System	2	Equipment Rack, 45RU, 30" Deep	Stantron	Pioneer series	Base
Legacy System	4	20A IG Full Height Plugstrips	Stantron		Base
Legacy System	2	Full Height Copper Ground Strips	Stantron		Base
Legacy System	2	Wire Management System	Stantron		Base
Legacy System	1	Equipment Rack, 20RU, 30" Deep	Stantron	Pioneer series	Base
Legacy System	1	Vent and Blank Panels, as required	Stantron		Base
Legacy System	2	20A IG Full Height Plugstrips	Stantron		Base
Legacy System	1	Full Height Copper Ground Strip	Stantron		Base
Legacy System	6	Rack Shelves	Middle Atlantic		Base
Legacy System	1	Wire Management System	Stantron		Base
Work Room	1	Monitor, Color, LED, 46"	Samsung	UN46B8000	Unit
Work Room	1	Monitor Interface, DM to HDMI	Crestron	DM-RMC-100	Base
Work Room	1	Mount, Wall, Display	Peerless	SWT660P	Base
Work Room	1	DVD Blue Ray Player	Panasonic	DMP-BD70VK	Unit
Work Room	1	Processor, Audio LCRS	Denon	AVR-590	Unit
Work Room	1	Speaker System, 5.1	Bose	Acoustimass 6	Unit
Work Room	1	Receptacle Plate, Buffered	Custom		Base
Work Room	1	Control System Chassis, Compact	Crestron	QM-RMC	Base
Work Room	1	Control System Touch Panel	Crestron	TPM-6	Base
Work Room	1	Cabinet, Equipment	Custom		Base
Lobby	2	Monitor, Color, LED, 40"	Samsung	UN40B6000	Unit
Lobby	2	Monitor Interface, DM to HDMI	Crestron	DM-RMC-100	Base
Lobby	2	Mount, Wall, Custom	Peerless	SWT660P	Base
Voiceover	1	Microphone, Cardioid, w/cable	Neumann	TLM-103	Unit
Voiceover	1	Stand, Mini Boom, Mic	Neumann	M-252	Unit
Voiceover	1	Intercom Announcer Cue/Console	Clearcom	ANN-101	Base
Voiceover	1	Headphones, Stereo	Sennheiser	HD 280	Unit

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Voiceover	1	Clock, Countdown Display, Rack Mounted	ESE	ES-362Unit/UL	Unit
Voiceover	1	Processor, Audio Mic Preamp, AES/Analog	Symmetrix	A24	Unit
Green Room	1	Monitor, Color, LED, 40"	Samsung	UN40B6000	Unit
Green Room	1	Monitor Interface, DM to HDMI	Crestron	DM-RMC-100	Base
Green Room	1	Mount, Wall	Peerless	SWT660P	Base
Office	1	Monitor, Color, LED, 40"	Samsung	UN40B6000	Unit
Office	1	Monitor Interface, DM to HDMI	Crestron	DM-RMC-100	Base
Office	1	Mount, Wall	Peerless	SWT660P	Base
Flypack		Camera System, Studio, HD, consisting of:	Panasonic		
Flypack	3	High Definition Camera	Panasonic	HPX500	Unit
Flypack	1	Camera 2/3 inch Lens (21x)	Canon	KJ21ex7.6b irsd ps12	Unit
Flypack	2	Camera 2/3 inch Lens (16x)	Canon	KJ16ex7.7b irsd ps12	Unit
Flypack	8	64GB E-Series P2 Card	Panasonic	AJ-P2E064XG	Unit
Flypack	3	Hard camera case	Panasonic	AJ-HT901G	Unit
Flypack	3	Camera Microphone	Panasonic	AG-MC200G	Unit
Flypack	3	Camera Microphone Kit	Panasonic	AJ-MC700P	Unit
Flypack	3	Tripod Adaptor (Plate)	Panasonic	SHAN-TM700	Unit
Flypack	3	Camera Raincover	Panasonic	SHAN-RC700	Unit
Flypack	3	7.9 inch wide HD/SD LCD Camera Monitor	Panasonic	BT-LH80W	Unit
Flypack	3	Camera Monitor Mount for BTLH80W monitor	Panasonic	BT-Mount	Unit
Flypack	3	2 inch EVF 16:9/4:3 switchable Camera Viewfinder	Panasonic	AJ-VF20WB	Unit
Flypack	3	Viewfinder Cable, DC cable	Panasonic	BT-CS80G	Unit
Flypack	1	P2 Recorder	Panasonic	AG-HPG20	Unit
Flypack	3	Camera AC Power Adaptor	Panasonic		Unit
Flypack	3	Camera system Base Station	Panasonic	AG-BS300G	Unit
Flypack	3	Camera Adapter	Panasonic	AG-CA300G	Unit
Flypack	3	Camera Extension Control Unit	Panasonic	AG-EC4G	Unit
Flypack	3	Camera Remote Zoom & Focus Control Kit	Canon	MS22M	Unit
Flypack	4	Camera Tripd/Head Assemblies, consisting of:	Vinten		Unit
Flypack	4	Camera Tripod Pan Tilt Head	Vinten	Vision 8	Unit
Flypack	4	2-stage Pozi-Loc Tripod (Carbon Fiber)	Vinten	3776-3	Unit
Flypack	4	Tripod spreader	Vinten	3363-3	Unit
Flypack	4	Camera Tripod Hard Case	Vinten	5338-3	Unit
Flypack	4	Camera Tripod Soft Case	Vinten	3358-3	Unit
Flypack	1	Monitor, Color, LCD, 4", Quad HD/SDI	Marshall	V-R44P-HDSDI	Unit
Flypack	1	Monitor, Color, LCD, 7", Dual HD/SDI	Marshall	V-R82DP-HDSDI	Unit
Flypack	1	Waveform Monitor/Vectorscope, NTSC, with rack mount	Tektronix	1720	Unit
Flypack	1	HD/SDI to NTSC Converter	AJA		Unit
Flypack	1	High Definition Video Switcher	Ross	Crossover 12	Unit

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
Flypack	1	SDI to HD converter for Onwer furnished SDI Chyron	Ensemble	91-A	Unit
Flypack	1	Rackmount Audio Mixer	Alesis	Multimix 12R	Unit
Flypack	1	Compressor/Limiter, Dual Channel	Dbx	266XL	Unit
Flypack	1	DVD Recorder / Player	Sony	VRDMC10	Unit
Flypack	1	Frame Synchronizer and HD/SD Convertor	AJA	FS1	Unit
Flypack	1	Sync/Test Generator w/ Genlock	Ensemble	BE56	Unit
Flypack	1	Intercom Panel	RTS	MRT-327	Unit
Flypack	1	Intercom Power SUnitply	RTS	PS-20	Unit
Flypack	1	I/O Panel	Custom		Unit
Flypack	1	Mobile console	Mobile Studio	MS-RV700	Unit
ENG	1	2-position Camera Battery Charger	Anton/Bauer	T2	Unit
ENG	1	Lithium-Ion Camera Battery for HPX-500	Anton/Bauer	Dionic 90	Unit
ENG	1	HD Video Camera Assembly, with;	Panasonic		Unit
ENG	1	HD Video Camera	Panasonic	HVX-200A	Unit
ENG	1	HVX Battery	Panasonic	CGA-D54SE	Unit
ENG	1	HVX Battery charger	Panasonic	AGB25	Unit
ENG	1	Camera hard case	Pelican	1510	Unit
ENG	1	Shotgun Microphone Kit (w/ shock mount) for HVX	AudioTechnica	AT4073a	Unit
ENG	1	Two 300W, One 650W, One 1000W, 24"x32" Chimera Softbox, and all stands, scrims, barndoors, and stands	Arri	Softbank III Light Kit	Unit
ENG	1	Three 650W, One 1000W, 24"x32" Chimera Softbox, and all stands, scrims, barndoors, and stands	Arri	Softbank 2 Light Kit	Unit
ENG	1	24" x 32" 1000w Light Kit	Chimera	8005	Unit
ENG	1	24" China Ball light	Lanternlock		Unit
ENG	1	LED Camera Light	Lite Panels	Micro Pro	Unit
ENG	1	Kata "Survivor" Vari-Bag Production/Camera Bag	Panasonic / Kata	VARI-BAG	Unit
ENG	1	Wireless UHF Lavalier system (mics not incl.)	Lectrosonics	400 series	Unit
ENG	1	Lavalier Microphones (for use with wireless systems)	Sanken	COS-11 - black	Unit
ENG	1	Handheld Dynamic Microphone	Shure	SM63LB	Unit
ENG	1	Graphite 16' Boompole	Ktek	K202	Unit
ENG	3	Shockmount / windshield kit for boompole	Rycote	S-series 300 kit	Unit
ENG	3	Shotgun Microphone Kit (w/ shock mount) for HVX	AudioTechnica	AT4073a	Unit
ENG	3	.6 ND Grad filter (4" x 5.65") (Soft edge, horizontal)	Tiffen	4565CGN6SH	Unit
ENG	1	.9 ND Grad filter (4" x 5.65") (Soft edge, horizontal)	Tiffen	4565CGN9SH	Unit

Location	Qty	Description	Manufacturer	Model	Base Bid or Unit Price
ENG	1	1.2 ND Grad filter (4" x 5.65") (Soft edge, horizontal)	Tiffen	456CGN12SH	Unit
ENG	3	Polarizing filter	Tiffen	45650POL	Unit

APPENDIX C

PAYMENT PROCEDURES

1.0 PROGRESS PAYMENTS

1.1 Based upon Applications for Payment submitted to the City, the City shall make progress payments on account of the Contract Sum to the Contractor as provided below.

1.2 The period covered by each Application for Payment shall be one calendar month.

1.3 City shall make payment to the Contractor within thirty (30) days after receipt of a proper Application for Payment.

1.4 Each Application for Payment shall be based upon the approved Schedule of Values submitted by the Contractor. The Schedule of Values shall allocate the entire Contract Sum among the Various portions of the Work and be prepared in such form and supported by such data to substantiate its accuracy as may be required.

1.5 Applications for Payment shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for payment.

1.6 The amount of each progress payment shall be computed as follows:

1.6.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Sum allocated to that portion of the Work in the Schedule of Values, less retention of ten percent (10%).

1.6.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the City, suitably stored off the site at a location agreed upon in writing), less retention of ten percent (10%).

1.6.3 Subtract the aggregate of previous payments made by the City.

1.7 Reduction or limitation of retainage, if any, shall be upon written request by the Contractor. The City, at its discretion, may reduce the total retention withheld or release retention for a specific item of work where extended withholding of retention is not warranted.

1.8 Securities may be provided in lieu of retainage as follows:

1.8.1 At the request and expense of the Contractor, upon execution of a proper escrow agreement, securities equivalent to the amount withheld shall be deposited with the public agency as the escrow agent, or with a state or federally chartered bank as the escrow agent, and the public agency shall then pay such monies to the Contractor.

1.8.2 Upon satisfactory completion of the contract, the securities shall be returned to the Contractor.

1.8.3 Securities eligible for investment under this section shall include those listed in Section 16430 of Government Code, bank or savings and loan certificates of deposit, interest bearing demand

deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the City.

1.8.4 The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.

1.8.5 The escrow agreement to be used hereunder is attached hereto.

2.0 FINAL PAYMENT

2.1 Final Payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the City to the Contractor when (1) the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work as agreed to between the City and the Contractor; and (2) a final Certificate for Payment has been submitted by the Contractor and approved by the City; and (3) the work has been accepted by the City Council of the City of Beverly Hills; and (4) a Notice of Completion has been filed. Final payment shall be made by the City not more than forty (40) days after completion of the above, but only to the extent that no stop notices or other requirements to withhold funds are then in effect.

ESCROW AGREEMENT FOR SECURITY DEPOSITS
IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between _____
whose address is _____ (hereinafter called "City"),
_____ whose address is _____
(hereinafter called "Contractor"), and _____ whose address
is _____, (hereinafter called "Escrow Agent").

For consideration as hereinafter set forth, Owner, Contractor, and Escrow Agent agree as follows:

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by City pursuant to the Construction Contract entered into between City and Contractor for _____ in the amount of _____, dated (hereinafter referred to as the "Contract"). When Contractor deposits the securities as a substitute for Contract earnings, the Escrow agent shall notify City within ten days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between City and Contractor. Securities shall be held in the name of _____, and shall designate Contractor as the beneficial owner.

(2) _____ City shall make progress payments to Contractor for such funds which otherwise would be withheld from progress payment pursuant to the Contract provisions, provided that Escrow Agent holds securities in the form and amount specified above.

(3) Alternatively, City may make payments directly to Escrow Agent in the amount of retention for the benefit of Owner until such time as the escrow created hereunder is terminated.

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the escrow account. These expenses and payment terms shall be determined by Contractor and Escrow Agent.

(5) Interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to City.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from City to Escrow Agent that City consents to the withdrawal of the amount sought to be withdrawn by Contractor.

(7) City shall have the right to draw upon the securities in the event of default by Contractor. Upon seven days' written notice to Escrow Agent from City of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by City.

(8) Upon receipt of written notification from City certifying that the Contract is final and complete, and that Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from City and Contractor pursuant to Sections (4) to (6), inclusive, of this agreement and City and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of City, Contractor, and Escrow Agent in connection with the foregoing, and exemplars of their respective signatures are as follows:

City:

Contractor:

Escrow Agent:

At the time the Escrow Account is opened, City and Contractor shall deliver to Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Escrow Agreement by the proper officers on the date first set forth above.

City:

Contractor:

Escrow Agent:

4.0 UNIT PRICES

Bidder agrees to furnish and deliver equipment items including sales tax for the equipment unit prices listed below based on the quantities indicated.

4.1

Qty	Description	Manufacturer	Model	Unit Price	Total Price
7	Monitor, Color, LCD, 4", Quad HD/SDI	Marshall	V-R44P-HDSDI		
1	Switcher, Routing, HD/SDI. 64x64 capacity populated 32x32, with control system (shared with Master Control), consisting of;	Grass Valley	Concerto		
1	Switcher, Routing, HD/SDI Chassis 64x64, Power SUnitply, Matrix Controller and Fan Module.	Grass Valley	CRS-FRM64-CPL		
1	Switcher, Routing, Redundant Power SUnitply	Grass Valley	CRS-PS		
1	Switcher, Routing, HD/SDI Matrix Board 32x32	Grass Valley	CRS-HD64		
1	Switcher, Routing, Chassis Rear Panel, BNC	Grass Valley	CRS-HD-CP		
1	Switcher, Routing, Control Panel, Master, X-Y	Grass Valley	PRE-XY		
8	Switcher, Routing, Control Panel, 32 button w/display	Grass Valley	PRE-BPS		
4	Switcher, Routing, Control Panel, Eight Buss	Grass Valley	PRE-PMB		
1	Switcher, Routing, Configuration CPU, Rack Mount	Grass Valley	PRE-PC-4000		
1	Switcher, Routing, Configuration Software	Grass Valley	PRE-SW		
8	Switcher, Routing, OnSite Checkout	Grass Valley	CRS-MD-SPNT		
3	Monitor, Color, 17" HD/SDI Multiformat	Panasonic	BTLH1760W		
3	Monitor Rack Mount	Panasonic	BTLH-RK		
2	Waveform Monitor/Vectorscope	Videotek	TVM-9100PKG		
2	Waveform Monitor Dual Tray	Videotek			
1	Waveform/Vectorscope Raster Display	Videotek	VTM-2400		
2	Monitor Panel, Audio Analog	Wohler	AMP1-VTR		
3	Clock, Slave, Digital, .55" Display, 1RU	ESE	ES-161Unit/UL		
1	Monitor, Color, LCD, 4", Quad NTSC	Marshall	V-R44P		
3	Receiver, Satellite HD/SDI	Tandberg	RX1290		
2	Receiver, Satellite (4) RF Input for above	Tandberg			
2	Receiver, Satellite Adapter, D9 Pin to XLR	Tandberg			

Qty	Description	Manufacturer	Model	Unit Price	Total Price
1	Receiver, Satellite DVB-S, DVB-S2 sat Demod Card	Tandberg			
1	Receiver, Satellite DVB S2 QPSK License Key	Tandberg			
1	Receiver, Satellite Common Interface	Tandberg			
1	Receiver, Satellite Password Protect for Browser	Tandberg			
1	Receiver, Satellite Dolby AC3 License Kit	Tandberg			
1	Receiver, Satellite Provider Lock License Key	Tandberg			
1	Receiver, Satellite Main Cord	Tandberg			
1	Switcher, HD Production, 2 M/E Multi-format, consisting of:	Grass Valley	Kayak		
1	Switcher Chassis, HD Production, 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.	Grass Valley	Kayak HD-200C		
1	Switcher 2 M/E Control Panel, with control cable from from to chassis	Grass Valley	Kayak HD-200C		
1	Switcher, HD Production, RAM Recorder	Grass Valley	KHD-RAMREC		
2	Switcher, HD Production, Kurle Effects License	Grass Valley	KHD200-KURL-P, -1		
1	Switcher, HD Production, Second Power SUnitply	Grass Valley	KHD-PSU		
1	Switcher, HD Production, On Site Commissioning	Grass Valley	KHD-SPNT		
1	Chroma Key Generator System, consisting of:	Ultimatte			
1	Chroma Key Generator Chassis, HD	Ultimatte	11 HD/SD		
1	Chroma Key Generator Remote	Ultimatte	Smart Remote 2		
2	Monitor, Plasma Display, 42"	Panasonic	TH-42PF11UK		
2	Monitor, Plasma Input Card, HD/SDI	Panasonic	TY-FB10HD		
4	Monitor, Color, 17" HD/SD/NTSC	Panasonic	BTLH1710W		
2	Video Wall Processor, 24 Input	Evertz	7787VIPA24-DUO-3G-DIN		
2	Video Wall Proc Tray, 3 RU	Evertz	7800FR		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
2	Video Wall Proc Tray Power SUnitply	Evertz	7800PS		
2	Speaker, Monitor, Large	JBL	LR4312		
1	Clock, Slave, Digital, 1" Display, 2 RU	ESE	ES-166Unit/UL		
2	Clock, Countdown Display w/Remote	ESE	ES-362Unit/UL		
1	Character Generator System, consisting of:	Chyron			
1	Character Generator Chassis, HD/SD SDI	Chyron	HyperX3		
1	Character Generator Keyboard	Chyron			
1	Character Generator Mouse	Chyron			
1	Character Generator Graphics Software	Chyron	Lyric Pro		
3	Monitor, Color, LCD, 24" Data	LG	W2420		
4	Serial Digital interface Breakout Box	Aja	Kona Lhi		
1	Mixing Console, Audio Analog/Digital	Tascam	DM-4800		
1	Mixing Console AES Option Card	Tascam	IF-AE/DM		
1	Mixing Console Firewire Option Card	Tascam	IF-FW/DM MKII		
1	Mixing Console Meter Bridge	Tascam	MU-1000		
1	CD Recorder/Player, with rack mount	Tascam	CD-RW901SL		
1	VCA, Audio Monitor, with Remote	Oxmoor	DCA-2T/RC-16		
2	Speaker, Monitor, Small, Powered	Adam	A7		
2	Microphone, Wireless Systems	Shure	ULXP14/85		
1	Telephone Hybrid Assembly, consisting of:	Comrex	STAC		
1	Telephone Hybrid Chassis	Comrex	STAC		
1	Telephone Hybrid Control Surface	Comrex	STAC		
1	Digital Audio Recorder	360 Systems	Instant Replay 2		
6	HD Camera Head	Panasonic	HPX500		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
5	HD Camera Lens	Canon	KJ16ex7.7b irsd ps12		
6	Lens Remote Control Zoom/Focus Package	Canon	MS22M		
6	7.9 inch wide HD/SD LCD Camera Monitor	Panasonic	BT-LH80W		
6	Camera Monitor Mount for BTLH80W Monitor	Panasonic	BT-Mount		
6	Camera Monitor Cable	Panasonic	BT-CS80G		
6	Camera Base Station	Panasonic	AG-BS300G		
6	Camera Adapter	Panasonic	AG-CA300G		
3	Camera Remote Control Panel	Panasonic	AJ-RC10G		
3	Camera Remote Control Panel Cable	Panasonic			
3	Camera Cables, 50 foot	Custom			
6	Tripod Adapter Plate	Panasonic	SHAN-TM700		
3	Monitor, Color, 25.5" HD/SDI Multiformat	Panasonic	BTLH2550W		
1	Monitor Panel, Audio Analog	Wohler	AMP1-V2DA		
3	Pedestal, Studio Camera, with 5" wheels, cable guards	Vinten	Pro- Ped 3983-3C Studio		
3	Fluid Head, Studio Camera	Vinten	Vision 250		
3	Second telescoping pan bar for head	Vinten	Vision		
3	Extended Pan Bar Clamp	Vinten	Vision 250		
3	Camera mounting plate and screws	Vinten	Vision		
3	17" LCD On-Camera Displays	QTV	MSP 17		
3	Shrouds and Hoods for above	QTV			
3	Camera Sleds and Counterweights	QTV			
1	Teleprompter Graphics Card	QTV			
1	Speed/Remote Control	QTV	Hand Controller		
3	15" HD Talent Feedback Monitor	QTV			
1	Teleprompter software	QTV	Q Master software		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
1	Console, Teleprompter, Mobile	Anthro	36" Anthrocart		
1	Amplifier, Audio Monitor	QSC	RX		
2	Speaker, Stage Announce	JBL	Control 28		
3	Monitor, Color, LCD/LED 55"	Samsung	UN55B6000		
2	HD/SDI to HDMI Adapter	AJA			
2	Monitor Stand Mobile	Premier	PSD-EB72CB		
7	650 watt Fresnel hanging light, w/Barn Doors	Arri	650 Plus Fresnel		
5	1000 watt studio Fresnel 7" hanging light, w/Barn Doors	Arri	ST1 Fresnel		
3	2000 watt studio Fresnel 10" hanging light, w/Barn Doors	Arri	ST2 Fresnel		
10	300 watt Fresnel hanging light, w/Barn Doors	Arri	300 Fresnel		
11	150 watt Fresnel hanging light, w/Barn Doors	Arri	150 Fresnel		
8	Light Stands	Arri	AS-2		
8	Low Energy Cyc Light, with grid mount, stage pin connector	Kino-Flo	Image 45		
2	Low Energy Soft Light, with grid mount, stage pin connector	Kino-Flo	PAR-400		
4	Low Energy Soft Light, with grid mount, stage pin connector	Kino-Flo	PAR-200		
1	Low Energy Soft Light, with grid mount, stage pin connector	Kino-Flo	VistaBeam 300		
2	Low Energy Compact Light	Kino-Flo	Barfly 200		
12	10 foot stage pin extension cables	ETC			
12	Edison to Stage Pin Adapters	ETC			
12	Telescoping Hanger, 8 foot	Mole	500424-8		
1	Switcher, Master Control, (control system shared with Routing Switcher), consisting of:	Grass Valley	Acappella		
1	Switcher Chassis, HD/SDI 16x4	Grass Valley	A164HR-P		
2	Switcher, Control Panel 16x2	Grass Valley	A164RCP		
1	Switcher, MC Monitor, HD/SDI, 10x1	Evertz	X-120H		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
1	Switcher, MC Monitor, Control Panel	Evertz	X-120H Remote		
1	De-Embedder, HD/SDI to Analog Audio	AJA	HD10CEA		
2	Monitor Panel, Analog Audio-Video	Wohler	AMP-1A		
1	Logo Inserter System, consisting of:	Compix			
1	Logo Inserter Chassis, HD/SDI	Compix	CynerG2		
1	Logo Inserter Software	Compix	Autocast		
1	Logo Inserter Keyboard	Compix			
1	Logo Inserter Mouse	Compix			
2	Monitor Panel, Analog Audio-Video	Wohler	VAMP Series		
3	Edit Suite, Non Linear, with;	Apple			
3	2.66GHz 8-core w/ 'Nehalem' processor,				
	12GB RAM, 2TB 7200rpm serial ATA	Apple	Mac Pro		
1	30" HD flat panel Cinema display monitor	Apple	Cinema Display		
5	24" HD flat panel Cinema display monitor	Apple	Cinema Display		
3	Apple Care Protection Plan (warranty)	Apple			
3	Graphics Card	ATI	Radeon HD4870		
3	Serial Digital interface HD-SDI	Aja	Kona Lhi		
1	17-inch MacBook, 3.06 GHz Intel Core Duo, 8GB 1066 MHZ DDR3 SDRAM – 2x4 GB, 500 GB Serial ATA Drive @7200 rpm	Apple	MacBook Pro		
4	P2 card reader	Panasonic	AJ-PCD20P		
1	LCD 42" HD Program Monitor	Sony	LMD-4250W		
1	5.1 Surround Sound Speaker System	Logitech	Z-5500		
1	HDMI to SPDIF Adapter	Star Tech	HDMI2DVI		
3	14-ch Audio Mixer	Mackie	1402-VLZ3		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
6	High Resolution Studio Audio Monitor	Adam	A7		
1	Switcher, Routing, Analog Video/Audio Stereo, 16x16, consisting of:	Grass Valley	A1616V-AA-LP		
1	Analog Video Matrix 16x16	Grass Valley	Acappella		
1	Analog Audio Stereo Matrix 16x16	Grass Valley	Acappella		
1	Control Panel, Router, Master, X-Y	Grass Valley	Acappella		
1	Redundant Power SUnitply	Grass Valley	Acappella		
2	Audio Processor	Dbx	166XL		
1	VITC:LITC Decoder/Display	Horita	VWG-50		
1	Media Storage Cabinet System	Winstead			
2	Stationary Cabinet, 12"d x 48"w	Winstead	T2270		
4	Moveable Cabinet, 12"d x 48"w	Winstead	T2374		
4	Mechanical Drive for above	Winstead	20730		
1	Monitor, Color, LED, 46"	Samsung	UN46B8000		
1	DVD Blue Ray Player	Panasonic	DMP-BD70VK		
1	Processor, Audio LCRS	Denon	AVR-590		
1	Speaker System, 5.1	Bose	Acoustimass 6		
4	Monitor, Color, LED, 40"	Samsung	UN40B6000		
1	Microphone, Cardioid, w/cable	Neumann	TLM-103		
1	Stand, Mini Boom, Mic	Neumann	M-252		
1	Headphones, Stereo	Sennheiser	HD 280		
1	Processor, Audio Mic Preamp, AES/Analog	Symmetrix	A24		
1	Camera 2/3 inch Lens (21x)	Canon	KJ21ex7.6b irsd ps12		
1	300 Foot Camera Cable	Custom			
2	200 Foot Camera Cable	Custom			
8	64GB E-Series P2 Card	Panasonic	AJ-P2E064XG		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
3	Hard camera case	Panasonic	AJ-HT901G		
3	Camera Microphone	Panasonic	AG-MC200G		
3	Camera Microphone Kit	Panasonic	AJ-MC700P		
3	Camera Raincover	Panasonic	SHAN-RC700		
3	2 inch EVF 16:9/4:3 switchable Camera Viewfinder	Panasonic	AJ-VF20WB		
3	Viewfinder Cable, DC cable	Panasonic	BT-CS80G		
2	P2 Recorder	Panasonic	AG-HPG20		
3	Camera AC Power Adaptor	Panasonic			
3	Camera Extension Control Unit	Panasonic	AG-EC4G		
4	Camera Tripd/Head Assemblies, consisting of:	Vinten			
4	Camera Tripod Pan Tilt Head	Vinten	Vision 8		
4	2-stage Pozi-Loc Tripod (Carbon Fiber)	Vinten	3776-3		
4	Tripod spreader	Vinten	3363-3		
4	Camera Tripod Hard Case	Vinten	5338-3		
4	Camera Tripod Soft Case	Vinten	3358-3		
1	Monitor, Color, LCD, 7", Dual HD/SDI	Marshall	V-R82DP-HDSDI		
1	Waveform Monitor/Vectorscope, NTSC, with rack mount	Tektronix	1720		
1	HD/SDI to NTSC Converter	AJA			
1	High Definition Video Switcher	Ross	Crossover 12		
1	SDI to HD converter for Onwer furnished SDI Chyron	Ensemble	91-A		
1	Rackmount Audio Mixer	Alesis	Multimix 12R		
1	DVD Recorder / Player	Sony	VRDMC10		
1	Frame Synchronizer and HD/SD Convertor	AJA	FS1		
1	Sync/Test Generator w/ Genlock	Ensemble	BE56		
1	Intercom Panel	RTS	MRT-327		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
1	Intercom Power SUnitply	RTS	PS-20		
1	Mobile console	Mobile Studio	MS-RV700		
1	2-position Camera Battery Charger	Anton/Bauer	T2		
1	Lithium-Ion Camera Battery for HPX-500	Anton/Bauer	Dionic 90		
1	HD Video Camera Assembly, with;	Panasonic			
1	HD Video Camera	Panasonic	HVX-200A		
1	HVX Battery	Panasonic	CGA-D54SE		
1	HVX Battery charger	Panasonic	AGB25		
1	Camera hard case	Pelican	1510		
4	Shotgun Mic. Kit (w/ shock mount) for HVX	AudioTechnica	AT4073a		
1	Two 300W, One 650W, One 1000W, 24"x32" Chimera Softbox, and all stands, scrims, barndoors, and stands	Arri	Softbank III Light Kit		
1	Three 650W, One 1000W, 24"x32" Chimera Softbox, and all stands, scrims, barndoors, and stands	Arri	Softbank 2 Light Kit		
1	24" x 32" 1000w Light Kit	Chimera	8005		
1	24" China Ball light	Lanternlock			
1	LED Camera Light	Lite Panels	Micro Pro		
1	Kata "Survivor" Vari-Bag Production/Camera Bag	Panasonic / Kata	VARI-BAG		
1	Wireless UHF Lavalier system (mics not incl.)	Lectrosonics	400 series		
1	Lavalier Microphones (for use with wireless systems)	Sanken	COS-11 - black		
1	Handheld Dynamic Microphone	Shure	SM63LB		
1	Graphite 16' Boompole	Ktek	K202		
3	Shockmount / windshield kit for boompole	Rycote	S-series 300 kit		
3	.6 ND Grad filter (4" x 5.65") (Soft edge, horizontal)	Tiffen	4565CGN6SH		
1	.9 ND Grad filter (4" x 5.65") (Soft edge, horizontal)	Tiffen	4565CGN9SH		

Qty	Description	Manufacturer	Model	Unit Price	Total Price
1	1.2 ND Grad filter (4" x 5.65") (Soft edge, horizontal)	Tiffen	456CGN12SH		
3	Polarizing filter	Tiffen	45650POL		

5.0 TIME OF PERFORMANCE – Bidder proposes to complete the Work within the calendar days specified in the Bid Package, commencing from the Date of Notice To Proceed.

6.0 COMPENSATION FOR DELAY (PER DIEM)

Bidder shall determine and provide in the space below the amount of per diem compensation (costs to include any and all of Bidder’s overhead, profit and General Conditions as directly related to this project) for any Compensable Delay at any time during the performance of the Work:

\$ _____ Dollars Per Diem Per Day (in words) Dollars Per Diem Per Day (in figures)

Per Diem compensation multiplied by Twenty (20) days = \$ _____

7.0 TOTAL PROJECT BID

To determine the low Bidder, the City will calculate the sum of the Total Lump Sum Base Bid listed in paragraph 1.0, plus the amount of all alternate bid items listed in paragraph 2.0, plus the amount of the per diem for Compensable Delay listed in paragraph 5.0 multiplied by twenty (20) days. The Contract will then be awarded to the lowest responsive and responsible Bidder.

The use of the multiplier of twenty (20) days is not intended as an estimate of the number of days of Compensable Delay anticipated by the City. The City will pay the per diem compensation only for the actual number of days of Compensable Delay, as defined in the General Conditions. The actual number of days of Compensable Delay may be lesser or greater than the “multiplier” shown above.

8.0 DESIGNATION OF SUBCONTRACTORS/SUPPLIERS

In accordance with the “Subletting and Subcontracting Fair Practices Act”, Sections 4100-4113 of the Public Contract Code of the State of California, and any amendments thereto, each Bidder shall list below the dollar amount, name, location and trade of each Subcontractor or Supplier who will perform work, labor, render service or provide and install material and/or equipment to the Contractor in the construction of the Work in an amount *in excess of one-half of one percent (0.5%) of the Contractor’s total Bid* (Example: one-half of one percent (0.5%) of a \$1,500,000 project is equal to \$7,500). Only one Subcontractor for each such trade shall be listed. If the Contractor fails to specify a Subcontractor for any portion of the Work to be performed under the Contract, he shall be deemed to have agreed to perform such portion himself, and he shall not be permitted to subcontract that portion of the Work. For the convenience of the Contractor, rounding-off values to the nearest thousand dollars is permitted.

.....
NOTICE: Penalties for violations of the Subletting and Subcontracting Fair Practices Act will be enforced by the City for failure to list subcontractors as provided by that act.
.....

NOTES:

(1) SUBMISSION PROCEDURES:

- a. Upon submission of bid documents: Complete the forms as much as possible, but at a minimum include the Subcontractors/Suppliers name.

Respectively submitted,

APPENDIX E
TECHNICAL PLANS AND SPECIFICATIONS



CITY OF BEVERLY HILLS

MEDIA FACILITY

**331 NORTH FOOTHILL ROAD
BEVERLY HILLS, CA 90210**

Television Production Systems

SPECIFICATIONS

BID REVIEW SET – JANUARY 19, 2010

PREPARED FOR;
CITY OF BEVERLY HILLS

BEVERLY HILLS, CA

PREPARED BY;
BFA, LLC
COMMUNICATIONS TECHNOLOGY CONSULTANTS
144 SOUTH FIRST ST, SUITE 200
BURBANK, CA 91502

**CITY OF BEVERLY HILLS
MEDIA FACILITY
TELEVISION PRODUCTION SYSTEMS SPECIFICATIONS
BID REVIEW SET - JANUARY 19, 2010
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**CITY OF BEVERLY HILLS
MEDIA FACILITY
TELEVISION PRODUCTION SYSTEMS SPECIFICATIONS
BID REVIEW SET - JANUARY 19, 2010
PART I - SCOPE**

1. GENERAL

These are the Specifications for the Television Production Systems for the Beverly Hills Media Facility. The Facility will be moved from its present location to a new structure being built at 331 North Foothill Road. It is the intent of these specifications, and the related materials issued, to provide the Owner with complete and operational Television Production Systems as specified herein.

1.1 DEFINITIONS

For the purposes of these specifications, the following definitions shall apply;

1. The Project is the City of Beverly Hills Media Facility, 331 North Foothill Road, Beverly Hills, California 90210.
2. The Owner is City of Beverly Hills, Beverly Hills, California ("Owner" or "the City").
3. The Architect is Steven Ehrlich Architects, 10865 Washington Blvd., Culver City, CA 90232.
4. The Electrical Engineer is IBE, 14130 Riverside Drive, Suite 201 Sherman Oaks, CA 91423.
5. The Acoustician is Schaffer Acoustics Inc., 869 Via De La Paz, Suite A, Pacific Palisades, CA 90272.
6. The Broadcast and AV Consultant is BFA, LLC, 144 South First Street, Suite 200, Burbank, California 91502 ("BFA" or "the Consultant").
7. The Design Team includes representatives of the Owner, Architect, Electrical Engineer, Acoustician and Consultant, as delineated above, as well as any other specialty designers and consultants so designated by the Owner.
8. The System (or Systems) is/are the Television Production Systems and Equipment as specified herein.
9. The Bidder is a firm providing a proposal in response to these specifications.
10. The Contractor (or "Systems Contractor") or Contractors will be the successful Bidder or Bidders awarded the contracts for the systems as specified herein.
11. The Contract Documents are any and all specifications, drawings, sketches and related materials issued for this project.

1.2 OWNERSHIP OF DOCUMENTS

These specifications and all related materials issued by BFA for this section of the project are and shall remain the property of BFA, and shall not be used on any other project or any other section of this project, or disclosed to any party not involved with this project, without the express written consent of BFA. Materials issued to the Contractor by other design team members also remain the property of those members, and are subject to the same restrictions, unless indicated otherwise by the design team member issuing the materials. Any and all drawings issued by or prepared by the Contractor for use on this Project shall bear the name of the Architect, BFA and the City of Beverly Hills, referring to their roles in this Project.

1.3 CONVENTIONS

For the purposes of these specifications, the term "Owner" shall apply to the Owner as defined above, his designated representatives and any other party representing the Owner including, but not limited to, the Architect and the Consultant, or representatives of the same. Any directives given in these specifications, such as "Perform", "Install", "Provide", "Present" or any similar terms, shall be assumed to be preceded by the phrase "The Contractor shall", and will be incumbent upon the Contractor to execute as part of these specifications.

1.4 TERMS AND CONDITIONS FOUND ELSEWHERE

The terms and conditions as specified herein shall be considered to be the minimum requirements of this work. Bonding and Insurance requirements have been set by the Owner and are found elsewhere. The Television Production Systems Drawings are for general reference only and only as that information pertains to the Television Production Systems; refer to the Architectural and Electrical Drawings for details regarding general construction. Refer to the General Specifications of the project, as issued by the Architect, for additional terms and conditions. The omission from these specifications of any terms or conditions of the General Specifications shall not be construed to be a relaxation or exclusion of those terms or conditions. Prior to Contract Award, and as part of the contract negotiation, the Owner may elect to modify, delete or add any terms or conditions, such as bonding and insurance requirements, as the Owner sees fit.

1.5 OWNER'S RIGHTS REGARDING SPECIFICATIONS AND AWARD

The Owner reserves the right to accept or reject any or all bids, and to waive any or all parts of these specifications if it is deemed in the Owner's best interests. The Owner reserves the right to award any part of this work and/or any individual items of equipment to any bidder or bidders as the Owner sees fit. All proposals, samples and related materials submitted will become the property of the Owner.

1.6 ACKNOWLEDGMENT OF TERMS AND CONDITIONS BY BIDDER

By providing a Proposal in response to these specifications and other Contract Documents, the Bidder acknowledges that he has read and understands these documents fully, and agrees to all terms and conditions as specified herein, waiving any and all rights to any exceptions, exclusions or changes, except as included with the bid proposal and agreed to by the Owner. The Bidder also acknowledges that these specifications, in their entirety, will become part of the final contract, subject to any mutually agreed exceptions. The Bidder also grants permission to the Owner, his representatives and any other parties so designated by the Owner, to disclose information about the proposal as they see fit for the project.

1.7 ACCEPTANCE OF PROPOSAL

The acceptance by the Owner of any proposal shall not constitute nor indicate an agreement, contract, promise or other covenant by the Owner to the Bidder. The proposal is supplied by the Bidder to the Owner at the Bidder's risk, with no guarantees, implied or otherwise, that the Owner will act on the proposal.

2. PROJECT INFORMATION

The City of Beverly Hills currently operates media/television functions among several fragmented areas and buildings. The City is in the process of constructing a new building at 331 North Foothill Road to house a new Media Center to consolidate existing television production and post production functions and add a professional television studio with associated technical spaces to support the studio and the City's media operations. This specification covers the work required for two functional areas, the Media Facility and the Portable Production Flypack.

2.1 MEDIA FACILITY

The new Media Facility will be a state of the art high definition digital broadcast production and transmission facility, consisting of the following;

1. One (1) Rack Room, housing all central equipment in racks.
2. One (1) Production Studio
3. One (1) Production Control Room.
4. One (1) Audio Control Room
5. One (1) Green Room
6. One (1) Master Control Room, capable of multiple channel operation
7. Five (5) Non-linear Edit Stations
8. One (1) Media Library, housing a Legacy system and Media Storage
9. One (1) Work Room.
10. Reception Lobby and Staff Offices
11. One (1) Satellite, Microwave and Off-Air Antenna Complex on the Roof.

It is the intent of these specifications to establish a combined analog and digital video and audio plant with a minimum capability of 1.485 (1.5) Gb HDTV transmission as specified under SMPTE 292M. Although interim equipment and some Owner furnished items may not meet these criteria, all passive baseband video infrastructure and backbone cabling, connectors, patching and the like shall be capable of 3.0 Gb without modification or adjustment. Refer to the Architectural plans for details on the rooms involved.

2.2 PORTABLE PRODUCTION FLYPACK

A new portable production system, called the "Flypack" system, will be a high definition digital system, to permit recording and broadcast of field events. The Flypack will be a self-contained mobile studio control system, with cameras, switcher, audio and intercom systems. The Flypack system will consist of the following components;

1. Three (3) studio/field convertible camera packages, with support equipment and accessories.
2. One (1) Production mobile console, housing production switching, monitoring and I/O.
3. One (1) Production support mobile console, housing camera control, audio and support electronics.
4. All interconnecting cables between cameras, consoles and accessories.
5. Miscellaneous shipping cases.

The Flypack will be a standalone system, and will be on a separate installation and delivery schedule from the Media Facility. The City intends to use equipment items in ENG and EFP multi-camera live switched productions scenarios.

3. DESCRIPTION OF WORK

Furnish, remove, relocate, install, assemble, set up, test (hereinafter "provide") the systems as described herein in accordance with the Contract Documents. Provide complete and operational Media Center and Flypack Television Production Systems, consisting of Audio, Video, Control and Communications Systems. Contractor shall provide all necessary hardware, equipment, software, cabling, termination, installation, configuration, engineering, programming, and integration of the System with the City's existing video, audio and television equipment as described, and any additional services necessary to ensure the System is fully functional. Certain items of equipment may, at the Owner's option, be provided by others; the Contractor shall coordinate the location and installation of any third party equipment and shall be responsible for coordination of any Owner furnished or third party furnished items with the appropriate manufacturers and/or suppliers. The Owner reserves the right to award parts of the bid to separate contractors, if deemed in the best interests of the Project.

3.1 MEDIA FACILITY AREAS INCLUDED UNDER THESE SPECIFICATIONS

The areas of the facility with which this specification is concerned have been designated as the technical facilities of the new building. For the purposes of this specification, the Contractor will only be involved with installation of technical equipment in these areas. The Satellite, Microwave and Off-Air Antenna Complex will be installed by others and is not part of this work. The areas are, for the purposes of this specification, comprised of the following:

1. Rack Room
2. Production areas, including the Studio, associated Control Rooms and Green Room
3. Master Control
4. Edit Suites, including associated server and Media Library
5. Offices and support areas, including Work Room and Reception Lobby.

3.1.1 Rack Room

The Rack Room (409) is located on the fourth floor, adjacent to Master Control, and shall contain twelve (12) equipment racks, housing all terminal, switching, processing and support equipment for the systems. The Equipment Room will contain overhead cable tray, which will extend to include part of the Master Control Room. The Contractor shall provide a complete and operational Rack Room utilizing a combination of Owner Furnished and new equipment. A small number of items of equipment shall be moved by the Contractor from the existing facility.

3.1.1.1 RACK ROOM COMPONENTS

The components of the Rack Room are as follow;

1. Reference System, consisting of synchronization, timing, and master clock
2. Intercommunications System
3. Server System electronics and distribution
4. Central signal distribution, routing and conversion
5. Monitor signal distribution, conversion and control
6. PC based facility control and programming
7. Transmission and reception, including Satellite, Microwave, Off-Air and Streaming
8. Quality Control (QC) Stations
9. Radio Broadcast System
10. Support electronics for all other areas
11. Data/Telephone System Interconnects

3.1.1.2 RACK ROOM INTERCONNECTIONS

This area shall also include all interconnection to other areas of the project, including, but not limited to the following;

1. Master Control Room
2. Library
3. Studio
4. Production Control Rooms
5. Edit Suites
6. Satellite Facility on Roof
7. Data/Telephone Interface
8. Work Room
9. Monitors in Reception Lobby, Green Room and Manager's Office
10. City Council Chambers

3.1.2 Production Areas

The Studio and Production Control area consists of all technical facilities associated with production, including the following;

1. Control Rooms;
 1. *Production Control*
 2. *Audio Control*
2. Studio area
3. Green Room

The Contractor shall provide complete and operational high definition digital component studio production systems, utilizing a combination of Owner Furnished and new equipment. The Owner is in the process of acquiring new equipment for this area, and only a limited amount of equipment is planned to be moved from the existing facility at this time.

3.1.2.1 PRODUCTION CONTROL ROOM COMPONENTS

The components of the Production Control Room are as follow;

1. Monitor Wall, consisting of;
 - Large Screen Displays fed via a monitor distribution system
 - Monitor signal/control interfaces
 - Camera Monitors
 - Custom Display Mount Assembly
 - Multi-Channel Display Processor
 - Control Room Monitor Speakers
 - Digital clock and timer displays
2. Main Console, housing;
 - Production Switcher Control with integral Still Store control
 - Chroma Key Control
 - Graphics and CG Control
 - Production Server Control
 - PL, IFB, Dial Up Locations
 - Router Panels
 - P2 Recorder/Player
 - Studio surveillance monitor
 - Teleprompter (also from studio panels)

3. Side Console Extension, housing;
 - Camera Shading/QC position
 - Camera Remote Control Panels

The Main Production Console shall be capable of up to four (4) operational personnel.

3.1.2.2 AUDIO CONTROL ROOM COMPONENTS

The Audio Control Room will be composed of new equipment. The components of the Audio Control Room are as follow;

1. Main Console, housing;
 - Digital Audio Production Console
 - Intercom and Router panels
 - Digital Audio Recorder
 - CD Recorder
 - Edit 4 Station
2. Console Overhead Bridge, housing;
 - Picture Monitors
 - Digital clock display
 - Near field monitor speakers
3. Under console rack, housing;
 - Edit system electronics
 - Edit system I/O interface
 - Telephone hybrid chassis
4. One Half Height Sloping Rack, housing;
 - Patch Panels
 - VCA Chassis

3.1.2.3 STUDIO COMPONENTS

The components of the Studio are as follow;

1. Cameras and support equipment, including Teleprompter supports, displays and interfaces
2. In-Studio RF transmission and reception;
 - Wired and wireless microphones
 - Wired and Wireless IFB and Intercom
3. Studio Video Displays
4. Studio Audio Monitors ("Stage Announce")
5. Studio Interconnect Panels
6. Studio Surveillance Camera

3.1.2.4 GREEN ROOM COMPONENTS

The components of the Green Room are as follow;

1. Wall mounted picture display
2. Monitor signal/control interface

3.1.2.5 PRODUCTION RACK ROOM COMPONENTS

The components of Studio and Production in the Rack Room are as follow;

1. Support electronics for Production Control
2. Production Record/Playout Server
3. Control Room and Studio signal distribution
4. Camera Control electronics and patching

3.1.3 Master Control Area

The Master Control Area consists of all technical facilities associated with on-air operations, and includes the following;

1. Master Control Room
2. Rack Room Racks associated with Master Control operations

The Contractor shall provide a complete and operational Master Control Suite, utilizing a combination of Owner Furnished and new equipment. Certain items of equipment shall be moved from the existing facility.

3.1.3.1 MASTER CONTROL ROOM COMPONENTS

The Components of the Master Control Room are as follow;

1. Monitor Wall, consisting of;
 - Large Screen Display fed via a monitor distribution system
 - Monitor signal/control interface
 - Custom Display Mount Assembly
 - Multi-Channel Display Processor
 - Control Room Monitor Speakers
2. Main Console, housing the following operations;
 - Master Control Monitors
 - On Air Operations and QC Monitoring
 - Server, Logo Generator and Digital Signage Control
 - System Control via Touch Panel
 - Transmission Control
 - Emergency Bypass System

The Main Console shall be capable of up to three (3) physical workstations, with the ability to control up to four (4) separate outgoing feeds. The initial operation will include two (2) outgoing program streams.

3.1.3.2 MASTER CONTROL RACK ROOM COMPONENTS

The Components of Master Control in the Rack Room are as follow;

1. Support electronics for Master Control
2. Master Control Program Record/Playout Server
3. Digital Signage and Logo Generator Electronics
4. Master Control signal transmission

3.1.4 Edit Systems

The Contractor shall provide complete and operational editing systems utilizing a combination of Owner Furnished and new equipment. The Edit System will consist of a total of five (5) separate edit stations, as follow;

1. Edit Suite 1, digital FCP edit station with 5.1 channel audio
2. Edit Suites 2 and 3, each a digital FCP edit station with binaural audio
3. Production Control Edit 4, a digital FCP edit, ingest and playout station with binaural audio
4. Legacy Edit 5, an analog FCP edit, ingest and playout station with binaural audio

Edit suites 1, 2 and 3 will be located across the hall from the Rack Room; Edit 4 will be located in Production Audio; Edit 5 will be located in the Media Library. All stations will be interconnected with the Editing Server, plus associated ingest machines, browse stations and support equipment. Each Edit Station shall be connected with the Rack Room via coax, shielded pair and network cables.

3.1.4.1 EDIT SUITE 1 COMPONENTS

The components of Edit Suite 1 are as follows;

1. Apple Final Cut Pro Non Linear Editing System
2. 24" Display
3. 30" Display
4. 42" HD/SDI Program Display
5. 5.1 channel audio monitor system
6. P2 Ingest deck
7. Analog audio mixer
8. Main Edit Console
9. Mobile Monitor Stand for 42" display
10. Rear Producer's Console

3.1.4.2 EDIT SUITE 2 AND 3 COMPONENTS

The components of Edit Suites 2 and 3 are each as follow;

1. Apple Final Cut Pro Non Linear Editing System
2. (2) 24" Display
3. 25" HD/SDI Program Display
4. 2 channel audio monitor system
5. P2 Ingest deck
6. Analog audio mixer
7. Main Edit Console

3.1.4.3 EDIT STATION 4 COMPONENTS

The components of Edit Suite 4 are as follows;

1. Apple Final Cut Pro Non Linear Editing System (existing)
2. (1) 17" Display
3. (1) 24" Display
4. 2 channel audio monitor system
5. P2 Ingest deck

3.1.4.4 EDIT STATION 5 COMPONENTS

The components of Edit Suite 5 are as follows;

1. Apple Final Cut Pro Non Linear Editing System (existing)
2. (2) 24" Display
3. 2 channel audio monitor system
4. Analog audio mixer

3.1.5 Library/Legacy System

The Media Library is located on the fourth floor, across from Master Control, and will contain up to three (3) equipment racks, housing the Legacy equipment. The Contractor shall provide a complete and operational Legacy System, utilizing a combination of Owner Furnished and new equipment. This shall consist of analog VTR's, DVD's, an existing SD server, routing and processing for the purpose of interformat transfer, duplication, up and downconversion to and from HD/SDI signals. The majority of equipment will be Owner Furnished, and shall be moved by the Contractor from the existing facility.

3.1.5.1 LIBRARY/LEGACY SYSTEM COMPONENTS

The components of the Legacy System are as follow;

1. Existing SD Server
2. Existing VTR's and DVD Player/Recorders
3. New interface electronics
4. New audio-video routing and distribution
5. New D to A and A to D conversions
6. New audio and video processing equipment
7. New Intercommunications Panel
8. Existing Final Cut Pro edit station
9. Tie lines to and from Rack Room
10. Two (2) New Full Height Equipment Racks
11. One (1) New Half Height Equipment Rack
12. One (1) New Console/Table Top

3.1.6 Work Room

The Work Room is located on the fourth floor, adjacent to Production Control, and is intended for presentation and monitoring functions, Media will include signals from the Rack Room, DVD's, Blu-Ray discs, and computer based presentations via VGA or DVI connection.

3.1.6.1 WORK ROOM COMPONENTS

The components of the Work Room are as follow;

1. 50" Multi-Format Large Screen Display
2. Display Wall Mount
3. Monitor signal/control interface
4. Blu-Ray/DVD Player
5. 5.1 Audio Playback System
6. Digital Control System
7. Tie lines to and from Rack Room

3.1.7 Reception Lobby Display System

The Reception Lobby Display System will consist of two (2) 40" displays wall mounted in the reception area. This system is intended for display of outgoing program signals, as well as any signals selected by personnel from available Rack Room and CATV sources.

3.1.7.1 RECEPTION LOBBY DISPLAY SYSTEM COMPONENTS

The components of the Reception Lobby Display System are as follow;

1. (2) 40" LCD Monitor/Receivers
2. Dual display wall mount
3. (2) Monitor signal/control interface
4. Tie lines from Rack Room

3.1.8 Manager's Office Display System

The Manager's Office Display System will consist of one (1) wall mounted 40" display. This system is intended for display of outgoing program signals, as well as any signals selected by personnel from available Rack Room and CATV sources.

3.1.8.1 MANAGER'S OFFICE DISPLAY SYSTEM COMPONENTS

The components of the Manager's Office Display System are as follow;

1. (1) 40" LCD Monitor/Receiver
2. Wall mount
3. Monitor signal/control interface
4. Wireless Touch Panel
5. Wireless Control Interface
6. Tie lines from Rack Room

3.2 SYSTEMS INTERCONNECTION

The Contractor shall generate all drawings and information necessary for the complete installation and wiring of the system. Interconnection of the separate areas of the systems shall be via conduit and hallway cable tray. Refer to the project Electrical Drawings for receptacle, conduit and cable tray locations and details. The Contractor shall provide all cabling, connectors, hardware and accessories as required for all equipment and systems, whether new or Owner Furnished, and shall be responsible for the provision of all ancillary materials, interfaces, control cables and the like, to ensure proper operation of all equipment and systems. The Contractor shall provide on-site installation and wiring of the system, and supervision of the installation including coordination with other trades.

3.2.1 Interconnection to other Areas

The interconnections to and from the Rack Room to and from every other area shall be considered part of the Rack Room, up to the demarcation point in each other area. That demarcation point shall be the patch panel connection or the intermediate interface block, if used.

3.2.2 Demarcation Interface Blocks

Demarcation Interface Blocks shall be used to designate the incoming and outgoing tie lines to the Rack Room. These blocks shall consist of fiber and Coaxial bulkhead through connectors on panels, shielded and unshielded audio, intercom and control lines on Weidmuller or Phoenix DIN blocks, and RF coaxial bulkheads via grounding F-81 feed through blocks.

3.3 SYSTEMS CONCEPT

For the purposes of this project, the overall systems concept has been developed by the City and BFA, and consists of five main components. Although these components may share some common equipment and spaces, they represent the four primary functions of the facility, as follow;

3.3.1 Ingest operations

Ingest operations includes all equipment and systems required for the acquisition of signals from outside sources, including studio, City Council Chambers, satellite, microwave, off-air, land lines and other transmission methods, and the devices necessary to record those signals.

3.3.2 Studio Operations

Studio operations include all live production equipment and systems and the associated support facilities.

3.3.3 Editing Operations

Editing operations includes all equipment and systems required to manipulate materials received from the ingest and studio operations systems, as well as any recorded materials received, in preparation for integration into programming and web based delivery via video file servers.

3.3.4 Master Control Operations

On-Air operations includes all systems and equipment associated with actual "on-air" operations, including program playout, live and recorded feeds, and outside signal retransmission (both real time and time delayed).

3.3.5 Field Production

Field production operations include all systems and equipment associated with remote (off-site) production, including those utilizing portable equipment or the Flypack.

3.4 BROADCAST STANDARDS

A digital standard to be used for production and internal operation has been adopted. This document provides specifications for a digital backbone of sufficient bit rate to meet all current, proposed ATV standards, as provided by SMPTE 292M (1080i/60, 1080p/24, 720p/60) 1.5 Gb/s serial data rate. Provision shall be made within the System to manipulate video tapes of various, (legacy) formats recorded in (analog) NTSC, digitizing and up-converting as necessary. Original programming will be native (HD/SD SDI) in the 720P format. Incoming Network signals may be "passed-through" or decrypted and re-transmitted. Network storage shall be capable of DV25, DV50 and DV100 storage formats.

3.5 SUBSYSTEMS

The overall technical systems have been identified as follows;

3.5.1 Serial Digital Subsystem

The Serial Digital Subsystem shall consist of Switching, Distribution, Interface and Format Conversion equipment as specified herein, designed to operate at a bandwidth of no less than 1.5 Gb on-time signals. All cabling and installation shall meet or exceed criteria for SMPTE 292M specifications, 3.0Gbs data rate.

3.5.2 Composite Video Subsystem

The Composite Video Subsystem shall consist of legacy devices, such as VTR's, Off-Air Demodulator/decoders, Switching, Distribution, Interface and Format Conversion equipment as specified herein, designed to operate within SMPTE NTSC RS-170A specifications. The system will be equipped with Serial Digital Video equipment in the future. As such, all cabling and installation shall meet or exceed criteria for SMPTE 292M Specifications, 3.0Gbs data rate.

3.5.3 Intercommunications System

The Intercommunications System shall consist of both two and four wire systems for production intercommunications. Equipment shall include panels, switching matrix, IFB, telco interface, two way radio interface, wired and wireless belt packs and accessories.

3.5.4 Central Plant Timing

The Central Plant Timing system shall consist of all GPS reception, synchronization, time of day clocks, timecode and test signal generation and distribution.

3.5.5 Edit Systems

The Edit Systems will consist of Edit Rooms interconnected with the Editing Servers, and associated VTR's, browse stations and support equipment. The proposed systems all have a common general architecture.

3.5.6 Server System

The City intends to expand the role of its present server system this facility. Although this will be a single central server system, for the purposes of this specification, the servers have been defined under five general functions. The actual physical configuration may be different. Those headings are;

- Production Ingest and Playout Server*
- Editing Server*
- Master Control Program Playout Server*
- Legacy System Server*
- Existing City Council Chamber Ingest and Playout Server*

The Server System shall have a dual 24TB storage capacity, via NAS

3.5.6.1 PRODUCTION INGEST AND PLAYOUT SERVER

The Production Ingest and Playout Server is intended for two primary functions as follow;

1. Recording studio productions
2. Playout of segments into productions

This server configuration will be a one input, two output HD/SDI channels with embedded audio, and will supply HD/SDI feeds to the Main Routing and Production Switchers.

3.5.6.2 EDITING SERVER

The Editing Server is intended to act as a common file storage for the three edit suites and two additional edit stations (Production Control and Legacy System in Library), providing a central storage bank for pre and post edit programs. The Editing Server shall be employed to service the separate edit rooms, providing a central storage bank for pre and post edit programs. Ingest into the edit server will be via the individual edit suites and stations, via file transfer from the Production server or through direct HD/SDI signal input.

3.5.6.3 MASTER CONTROL INGEST AND PLAYOUT SERVER

The Master Control Ingest and Playout Server is intended for three primary functions, as follow;

1. Play to air of program segments
2. Ingest of outside signals from satellite. Microwave and off-air
3. Ingest of archived library and outside source materials.

Signals shall be received from satellite receivers, off-air, land lines and designated VTR's. Outgoing signals shall be sent to modulators for exterior transmission. The Master Control server will have a minimum of one (1) HD/SDI input channel and a minimum of two (2) HD/SDI output channels, and will supply HD/SDI feeds to the Main Routing and Master Control Switchers.

3.5.6.4 LEGACY SERVER

The Legacy Server is an existing SD server that shall be installed by the contractor as part of the Legacy System in the Library. The Legacy Server shall also ingest of archived library materials (e.g., VTR).

3.5.6.5 EXISTING CITY COUNCIL CHAMBERS INGEST AND PLAYOUT SERVER

The City Council Chambers Ingest and Playout Server is an existing SD system that will be interconnected with the new Production, Editing and Master Control Servers and the Legacy Server.

3.6 EQUIPMENT LIST

A list of the intended equipment is included in the Appendix to these specifications. It is the intention of this document to specify complete assemblies as noted. Quantities may be changed if in the best interests of the Owner, or to meet project needs.

3.6.1 Alternative Equipment

The Owner has designated certain items of equipment as alternatives to those specified. The Bidder is to provide pricing on all specified and Owner alternative equipment as listed herein. Alternates proposed by the Bidder are to be listed separately, in an attachment to the proposal, with reference to the specific item the alternative is proposed to replace.

3.6.2 Equipment Provided by the Owner or Others

Certain items of equipment and certain subsystems may, at the Owner's option, be provided by the Owner or by others. Designations are as follow;

1. "OF" – Owner Furnished Equipment. This relates to all items the owner presently has or will have by the date of installation. This will include existing equipment presently in use by the Owner, as well as new items the Owner will acquire before systems installation. The move and installation of OFE items are to be considered as part of this work.
2. No designation or "LS" – Lump Sum, Base System Equipment. This relates to all items that are to be supplied as part of the Contractor's installation. These are considered to be part of the "base system". Although the phrase "Lump Sum" is used, the Contractor shall provide unit prices for each item. Absent any other notation (such as OF or UP) all equipment in the list shall be considered LS
3. "UP" – Unit Pricing Contractor Furnished Equipment. This relates to all items that may be supplied by the Contractor, or may be purchased separately by the Owner. If the latter, the Contractor shall be responsible for coordination of such equipment.

The Contractor shall be responsible for coordination of any Owner furnished or third party furnished items with the appropriate manufacturers and/or suppliers, and shall be responsible for the provision of all ancillary materials, interfaces, control cables and the like, to ensure proper operation of all equipment and systems. Coordination of all equipment deliveries, whether purchased from the Contractor or by the Owner, shall be the responsibility of the Contractor, as part of his Project Management duties. Under no conditions will the Owner pay any premium, surcharge or additional hourly rate for handling OFE or third party equipment. Further, the Owner reserves the right to delete items of equipment from the lists, as required for budget reasons.

3.6.3 Equipment Location

All equipment, other than antennae and receptacles, shall be located in consoles or equipment racks as shown, or in the Rack Room. Equipment not having rack mounts shall be provided with appropriate rack shelves or mounting hardware, as applies. All rack shelves for non-rack mountable VTR's or other transports shall be slide out type, fully extendible to the depth of the mounted device, plus 3 inches at a minimum.

4. RELATED WORK SPECIFIED AND FOUND ELSEWHERE IN THE PROJECT

1. Electrical Systems
2. Lighting Systems
3. Life Safety Systems
4. Telephone and Data Cabling Systems
5. Carpentry and Cabinetry
6. Miscellaneous Metal
7. Interior Finishes
8. Satellite Antennae
9. Surveillance Systems (other than Studio surveillance)

5. PROJECT SCHEDULE

A schedule of the overall construction project has been developed by the General Contractor. Based upon that schedule, and the intentions of the client to transfer operations to the new facility, the following are the anticipated milestones for the general construction for the Media Center;

1. 02/01/2010 - Facility first available for cable measurements and pulls.
2. 02/15/2010 - Permanent Power
3. 02/20/2010 - Rooms Broom Clean
4. 03/01/2010 - HVAC Systems Balanced
5. 03/15/2010 - TCO
6. 04/01/2010 - Final turnover of building from GC

The above schedule is predicated upon the general construction schedule. The schedule may be modified by the City to meet their needs, and to accommodate other conditions, including additional training.

6. QUALITY ASSURANCE

6.1 STANDARDS

Provide equipment in accordance with the latest edition and revisions of all applicable standards and specifications of all appropriate agencies including, but not limited to, the following:

1. The City of Beverly Hills
2. FCC - Federal Communications Commission
3. ATSC - Advanced Television Standards Committee
4. NTSC - National Television Standards Committee
5. SMPTE - The Society of Motion Picture and Television Engineers
6. AES – Audio Engineering Society
7. EIA - The Electrical Industries Association (U. S.)
8. UL - Underwriters' Laboratories
9. NEC - The National Electrical Code
10. OSHA - Occupational Safety and Health Administration
11. Cal-OSHA - California Occupational Safety and Health Administration
12. ANSI - American National Standards Institute
13. IEEE - Institute of Electrical and Electronic Engineers
14. IEC - International Electrotechnical Committee
15. NCTA - National Cable Television Association
16. ADA - Americans with Disabilities Act

6.2 CODES

Perform installation in accordance with all applicable international, federal, state, county and municipal codes and ordinances.

6.3 CONFLICTS

Present to the Owner any conflicts between codes, ordinances, regulations, specifications and/or requirements prior to the commencement of the scheduled work.

7. WORK COMPLETION

7.1 ORGANIZATION

Organize the work of this section and coordinate with all other trades to ensure that this work will proceed as expeditiously as possible toward scheduled completion.

7.2 DELIVERY

Deliver all equipment, devices and materials required for the work of this section at least five (5) days prior to the completion date for the associated area of the project, unless specifically instructed otherwise by the Owner or the Owner's representative.

7.3 INSTALLATION

Install, program, test, commission and ready all of the work of this section for Acceptance Testing at least thirty (30) days prior to the project completion date. Provide, at no cost to the Owner, temporary equipment to function in place of the specified equipment which is found to be incomplete or unacceptable as of thirty (30) days prior to the completion date.

8. WARRANTY SERVICE

8.1 WARRANTY

Warrant all of the work of this section to be free from defects in materials and workmanship for a period of twelve (12) months from the date of Owner Acceptance.

8.2 FACILITIES

Maintain regular service facilities and provide a qualified technician familiar with the work of this section at the site within twenty-four (24) hours of receipt of a notice of malfunction. Provide the Owner with the number of a telephone attended twenty-four hours a days, seven days a week, to be called in the event of a malfunction. Provide, at no expense to the Owner and at the Owner's request, all material, devices, equipment and personnel necessary to provide alternate facilities, services and systems for the duration of the repairs to any defective work of this section. Install approved alternate temporary equipment and facilities at the job site, complete and operational, within forty-eight (48) hours after notification of a malfunction.

8.3 SERVICE

Conduct all warranty repairs and service at the jobsite unless in violation of the manufacturer's warranty. In the latter event, provide substitute systems, equipment and/or devices acceptable to the Owner for the duration of such off-site repairs. Transport warranty, substitute and/or test systems, equipment, devices, materials, parts and personnel to and from the job site at no expense to the Owner.

8.4 PREVENTATIVE MAINTENANCE

Perform bimonthly examinations by trained personnel, including all necessary adjustments, measurements, lubrication and parts replacement to keep the systems in full compliance with the specifications. This service shall continue for a period of not less than 180 days after acceptance, up to one year after acceptance, or until the City personnel are sufficiently trained to assume these duties.

8.5 SCHEDULING

Perform all maintenance work, except emergency repairs, during regular working hours of regular working days, except as dictated by production schedules. During the latter, maintenance shall be scheduled to accommodate the area needs. The facility is a twenty-four hour per day, seven day a week operation. As such regular working hours include Saturday and Sunday. Perform emergency repairs when a system or component malfunctions during use, and on an immediate basis. Maintenance work by personnel shall not be subcontracted or assigned unless the Owner has approved such assignment in writing. Maintenance shall be scheduled with the City to ensure no disruption of on-air or post production sessions.

8.6 RENEWABLE SERVICE AGREEMENT

Submit a renewable annual maintenance agreement for the servicing and adjustment of this work.

9. BIDDER QUALIFICATION

9.1 FACILITIES

The work shall be performed by an Television Production Systems Contractor who has at least five (5) years' direct experience with the devices, equipment and systems of the type specified herein, and who has a fully staffed and equipped maintenance and repair facility.

9.2 PERSONNEL

The Contractor shall provide a full time project manager for this project. This project manager and all contractor supervisors shall have at least five (5) years' direct experience in similar work. Installation and maintenance personnel shall have at least three (3) years' direct experience in similar work.

9.3 PRESENTATION

As part of the bid submission process, bidders shall make a technical presentation to the City and the Design team. This presentation is detailed under Bid Submittals, specified later in this document.

10. SUBMITTALS

10.1 SUBMITTAL FORMAT

Each submittal from the Contractor for each project shall be numbered in consecutive order. Quantity and format of submitted materials are specified under the respective sections of this specification. Under no conditions will posting to an FTP site be considered an acceptable submittal. All submittals and information contained therein become the property of the Owner. Nomenclature, legend, symbols, and abbreviations on submitted material shall be the same as used in Contract Documents. Each submittal shall include a complete index with the following information:

1. Project title and number
2. Submittal number.
3. Date of submission and indication of dates of previous submissions.
4. Referenced addendum or change order number as applicable.
5. Names of Contractor, supplier and manufacturer.
6. Referenced specification Division, Section, Title, paragraph, and page number or drawing reference as applicable.
7. Description of item.

8. Stamp with Contractor's stamp, initialed or signed certifying the following:
 - 1) *Review and acceptance of submittal.*
 - 2) *Verification of products, field measurements, and field construction criteria.*
 - 3) *Coordination of information in submittal with requirements of work of this Division and other Divisions of Contract Documents.*

10.1.1 Documentation Definitions

For the purposes of this Project and these Specifications, the following documentation definitions shall apply;

10.1.1.1 PRELIMINARY DRAWINGS

Preliminary Drawings are conceptual drawings used for approval of design approach, practice, and formats and become the foundation for the final documents. These drawings have sufficient detail, showing equipment, devices, and interconnecting signal paths with appropriate reference designations, to permit design review.

10.1.1.2 FIELD AND SHOP DRAWINGS

Field and Shop Drawings are works in progress, showing development and construction details for use as instruction materials in shop and on site. These include single line, block and elevation drawings, cable run sheets and the like. These are further developments of the preliminary drawings.

10.1.1.3 "AS-BUILTS"

"As Built" documents show the actual final condition of how the devices or systems were installed. These drawings reflect all field conditions, and are free of correction marks, revision notes or other extraneous indications.

10.1.1.4 BLOCK DIAGRAMS

Block Diagrams are basic fundamental drawings which contain a minimum degree of detail simply showing equipment or devices only as simple blocks or symbols interconnected by single lines and may show simple signal path direction. The symbols representing equipment or devices have only simple reference designations used for low level identification. These shall be prepared using industry standard symbols (blocks), with device specific designations within the blocks (internal). "Flag" or other skeletal type drawings shall not be acceptable.

10.1.1.5 SINGLE LINE (S/L) DIAGRAMS

Single Line (S/L) Diagrams are drawings containing greater detail than block diagrams and show, by means of graphic symbols and interconnecting lines, the course of a system and the component devices used therein. They also depict cable reference numbers, device reference designations, device connector reference designations, and where applicable, jackfield references and signal reference levels. Single Line Diagrams are usually segregated into, but not limited to, the following categories: RF, audio, video, control, data, timing, and power.

10.1.1.6 SCHEMATIC DIAGRAMS

Schematic Diagrams show, by means of industry accepted graphic symbols of components, the electrical connections and functions of a specific circuit arrangement. These diagrams facilitate tracing the circuit and its functions without regard to the actual physical size, shape, or location of the component devices or parts. They also show device and connector details including part numbers, component values, pin numbers, voltage references, and signal reference levels or values.

10.1.1.7 WIRING DIAGRAMS

Wiring Diagrams show the electrical connections of an installation or component devices or parts. They may cover internal or external connections or both, and contain such detail to make or trace connections that are involved, including device reference designations, and device pin numbers. Wiring diagrams show the general physical arrangement of the component devices or parts as it would appear to a wireman.

10.1.1.8 INTERCONNECTION DIAGRAMS

Interconnection Diagrams are forms of wiring diagrams that show only external connections between units, sets, devices, groups, and systems. They also show cable reference numbers, connector reference designations, and usually, functional reference designations of cables.

10.1.1.9 SYMBOLS LIST

The Symbols List is a tabular data listing of mnemonics and/or graphic symbols used as reference designations in the representation of devices or components shown on system drawings. The mnemonics are listed together with a definition of the device or component, including manufacturer's name and model number where applicable. This listing is provided on 8-1/2" x 11" vellum or bond media. Other formats include graphic symbol depiction used in the design drawings.

10.1.1.10 JACK FIELD LAYOUT

The Jack Field (or Patch Bay) Layout drawing shows simplified jack locations on a panel (from front) with jack position numbers (alpha-numeric), cable reference numbers, and abbreviated functional designation for source/destination of circuits passing through the jack panel.

10.1.1.11 EQUIPMENT RACK ELEVATIONS

Equipment Rack Elevation drawings show the physical layout of equipment or panels in a rack and are usually viewed from the front. They also show incremental delineation of panel locations, 1 rack unit each (1-3/4"), and numbered from 1 - "x", 1 being the lower most rack unit. These drawings will also depict the over-all height of the racks, including any base.

10.1.1.12 CONSOLE ELEVATIONS

Console Elevation drawings show the physical layout of equipment or panels in a console and are usually viewed from the front. It also shows incremental delineation of panel locations, 1 rack unit each (1-3/4"), and numbered from 1 - "x", 1 being the lower most rack unit. This drawing will also depict the over-all height of the vertical panel opening (V.P.O.) in each section of the console.

10.1.1.13 MONITOR HOUSING LAYOUTS

A Monitor Housing Layout drawing is one which shows the positional location of picture monitors, functional reference identification of each monitor, and physical sizes of monitors within the housing.

10.1.1.14 CABLE SCHEDULE

The Cable Schedule (or run sheet) is a book form listing consisting of tabular from-to data establishing wiring connections within or between devices or equipment within a system or facility. The cable schedule is prepared on 8-1/2" x 11" vellum or bond media. The principal sections of a cable schedule are as follows:

1. Cable number with system ID prefix
2. Source connection identification, including device and connection point
3. Destination connection identification, including device and connection point
4. Cable type (manufacturer's number)
5. Cable length
6. Functional description of cable in system
7. Connector wiring diagram reference codes

10.1.1.15 LUG COUNT SCHEDULES

A Lug Count Schedule is a detailed book form listing consisting of tabular from-to data establishing cable connections between termination blocks, demarcation blocks and/or bulkhead panels within a system or facility by showing row and column coordinates of terminating lugs. It will also show cable type, color code, connector reference designation, and connector pin numbers where applicable. Typically, the lug count schedule is prepared on 8-1/2" x 11" vellum or bond media.

10.1.2 Resubmission Requirements

Make any corrections or changes in submittals required. Resubmit for review until no exceptions are taken. Clearly note resubmittal and indicate all changes from previous submittal. Revise initial drawings or data and submit as specified for initial submittal. Indicate any changes that have been made other than those requested. Submit new samples as required for initial submittal.

10.1.3 Substitutions and Product Options

Wherever catalog numbers and specific brands or trade names followed by designation "or equal" are used, they are used to establish standards of quality, utility, and appearance required. Whenever catalog numbers and specific brands or trade names are used and not followed by designation "or equal", no substitution will be accepted. Within a period of fifteen (15) days after award of Contract or as specified, whichever is greater, Owner or Owner's designated representative will consider formal requests from Contractor for substitution of products in place of those specified. After the end of that period, requests will be considered only in case of product unavailability or other conditions beyond the control of Contractor. Product unavailability shall be verified in writing by the manufacturer.

10.1.3.1 CONTRACTOR SELECTION OPTIONS

1. For products specified only by reference standard, select product meeting that standard, by any manufacturer.
2. For products specified by naming several products or manufacturers, select any one of the products and manufacturers named which complies with specification.
3. For products specified by naming one or more products or manufacturers, submit request as for substitutions for any product or manufacturer that is not specifically named.

10.1.3.2 CONTRACTOR SUBSTITUTION REQUEST FORMAT

Submit a separate request for each substitution. Support each request with:

1. Reason for substitution
2. Advantage to Owner for substitution
3. Complete data substantiating compliance of proposed substitution with requirements stated in Contract Documents.
4. Product identification, including manufacturer's name and address, and manufacturer's literature, identifying;
 - 1) *Products' description.*
 - 2) *Reference standards.*
 - 3) *Performance and test data.*
5. Samples, as applicable.
6. Name and address of similar projects on which product has been used, and dates of each installation.
7. Itemized comparison of proposed substitution with product specified; list significant variations.
8. Impact on project schedule.
9. Any effect of substitution on work of other contractors.
10. List of changes required in other work or products.
11. Accurate cost data comparing proposed substitution with product specified.
12. Designation of required license fees or royalties.

10.1.3.3 UNACCEPTABLE SUBSTITUTION REQUESTS

Substitutions will not be considered for acceptance when:

1. They are indicated or implied on shop drawings or product data submittals without formal request from Contractor.
2. They are requested directly by subcontractor or supplier.
3. Acceptance will require substantial revision of Contract Documents, unless the Contractor bears the cost of redesign by Architect, Engineer or Consultant.
4. Insufficient information is submitted.

10.1.3.4 SUBSTITUTION CONFIRMATION

Substitute products will not be ordered or installed without prior written approval. In making a formal request for substitution, confirm that:

1. Proposed product has been investigated and has been determined equal to or superior in all aspects to that specified.
2. Same warranties shall be provided for the substitution as for the specified product.

3. Installation of the accepted substitution shall be coordinated into project by Contractor.
4. Such changes as may be required for work to be complete in all respects shall be made.
5. Contractor waives claims for additional costs caused by substitution which may subsequently become apparent.
6. Cost data is complete and includes related costs under his Contract, but not:
 - 1) *Costs under separate Contracts.*
 - 2) *Architect's, Engineer's and/or Consultant's costs for redesign or revision of Contract Documents.*

10.1.3.5 CONTRACTOR'S RESPONSIBILITY REGARDING SUBSTITUTIONS

Approval of substitutions shall not relieve Contractor from complying with requirements of Contract Documents. The Contractor shall be responsible at his own expense for any changes resulting from his proposed substitutions which affect work of other Divisions, or work of other contractors. Where any redesign of electrical or mechanical work is required due to the Contractor's use of a substitution, arrangement, or equipment layout other than herein specified or shown, the Contractor shall, subject to the Architect and Owner's approval, perform or contract for such redesign and produce detailed plans at no cost to the Owner.

10.1.4 Change Orders

Change Order requests from the Contractor must be made in writing as early as possible prior to the need for such work. Each Change Order request must follow the format for substitutions, above, and be justified. The Contractor shall not commence any Change Order without written confirmation from the Owner or his representatives. Any changes or additional work performed by the Contractor without written permission shall be considered to be gratis to the Owner; any costs for removing such work, whether at the wish of the Owner or to permit the execution of specified work, shall be borne by the Contractor, including those involving project delays.

10.2 RFP SUBMITTAL

Submit five (5) copies of the following as part of the Request for Proposal:

10.2.1 Itemized Quotation List

Separate itemized quotation lists (or "Bills of Quantities") for each system, detailing unit prices for each device, and separate prices for installation, engineering, programming and testing. Each unit price shall include any and all overhead, expenses, taxes, shipping (including to job site), insurance or other normal charges.

10.2.2 Change Order Pricing

An itemized list showing hourly rates for change orders, broken down by classification of labor (supervisor, wiremen, engineer, etc.) and also detailing administrative, overhead and any other charges resulting from change orders.

10.2.3 Additional Charges

An itemized list of any additional charges anticipated, including expenses (such as travel, lodging, etc.), consumables, equipment rental, fees and the like. These charges can be quoted as a lump sum based upon the proposed project schedule with allowances for slippage, but shall also be detailed by time.

10.2.4 Proposed Alternates

In a separate section, data sheets on any proposed alternates or substitutions to the equipment, systems or installation techniques specified herein, together with a statement detailing differences between the specified items and those proposed, advantages, technical, financial, operational and temporal, to the Owner, and reasons for offering the substitutions. Refer to earlier sections for further information regarding substitutions and changes.

10.2.5 Exceptions to the Specifications

In a separate section, the Bidder shall provide any objections or exceptions taken to any part of the specifications or any other part of the bid documents. These exceptions must include the nature of the exception, the reasons for the exception, the Bidder's proposed alternate or solution, and the impact on the project, including cost and schedule. The absence of any exception at the time of Bid submittal shall constitute unqualified acceptance of all terms and conditions of the specifications and any other parts of the bid package.

10.2.6 Verification of Facilities and Qualifications

Detailed verification that the company has competent design, installation, service and maintenance personnel and facilities, and can operate legally within the state of California. This shall include all contractor's licenses, proofs of insurance, compliance with local, state and national agencies' requirements. This must include a California State contractor's license, verification for compliance with state unemployment and insurance requirements, and corresponding details from appropriate local agencies.

10.2.7 Proof of Experience

Proof that the Bidder has been regularly engaged in the business of designing, installing and servicing systems and equipment of this type for at least the immediate past five (5) years. This shall also include a list describing at least three (3) installations comparable in scope and nature to that specified herein, completed by the Bidder within the last eighteen (18) months, including the name, current position and telephone number of a representative of each owner, photographs of the project, and a recapitulation of budgets, quoted pricing and final costs for each project.

10.2.8 Personnel Roster

A personnel roster for the project management and installation crew for this project. The project manager shall be assigned solely to this project, and shall be available full time at the Owner's request. Resumes of the project manager and other installation personnel shall also be submitted for review. The Owner and other members of the design team reserve the right to reject any or all of the candidates for this project with or without cause.

10.2.9 List of Subcontractors

A list of proposed or intended subcontractors, with statements of qualifications for each as detailed above.

10.2.10 Proposed Implementation Schedule

A proposed systems implementation schedule, in number of days and milestones, including dates for submittals, testing and equipment delivery and implementation scheduling, critical path and resources necessary to complete the project. This schedule shall include personnel assignments and estimate crew sizes.

10.2.11 Sample Documentation

A sample documentation package from one or more previous projects of similar magnitude and type. This sample shall become the property of the Owner, and shall consist of at least one (1) of each the following from the same project, at a minimum;

1. Single Line Diagram
2. Block Diagram
3. Equipment Plan
4. Electrical and Signal Conduit Plan
5. Rack Elevation
6. Cable Schedule (one page)
7. Test Result Schedule (Proof of Performance)
8. Bill of Quantities (one page)
9. Programming Code and Graphical User Interface

10.3 BIDDER'S PRESENTATION

At the Owner's option, Bidders shall make a formal technical presentation to the Owner and the Design Team. This presentation shall include a complete discussion of the bidder's proposed implementation schedule, qualifications and proposed alternatives. At this time, the bidder will also be given an opportunity to explain any exceptions taken in the bid submittal. This presentation shall be given by bidder's personnel, including the proposed project manager, and shall include both visual media and handouts. There will be a question and answer session with members of the Design team.

10.4 POST AWARD SUBMITTALS

No more than fifteen (15) days after Contract Award, submit three (3) copies and one (1) reproducible of the following:

10.4.1 Updated Implementation Schedule

An updated project implementation schedule, reflecting changes negotiated during the bid process. This schedule shall finalize personnel assignments, with names of key personnel.

10.4.2 Updated Pricing

An updated priced proposal, incorporating any changes or modifications agreed to by the Owner.

10.4.3 Bills of Quantities

Complete Bills of Quantities for each system as specified herein, including all equipment, devices and components required for this work. The Bills of Quantities shall include quantity, description, make and model number and proposed location of each device.

10.4.4 Data Sheets

Manufacturers' specification and data sheets for each item as listed in the Bills of Quantities, keyed to those lists and the specifications.

10.4.5 Drawing List

A proposed drawing tree and list, identifying types, quantities and sizes of proposed drawings and related materials.

10.4.6 Proposed Cable Identification

Verification of the proposed format for numbering and identifying cables, including a sample cable run sheet for this project, and sample cable labels.

10.4.7 Verified List of Subcontractors

A verified list of selected subcontractors, with statements of qualifications for each as detailed above.

10.5 CRITICAL DESIGN REVIEW

No more than thirty (30) days after Contract Award, or as directed by the Consultant and/or the Owner, the Contractor shall participate in a Critical Design Review meeting, which will address the following issues;

10.5.1 Contractor Suggested Alternates

Contractor Suggested Alternate equipment, devices and subsystems will be reviewed for quality, efficiency, performance and value to the Owner. Contractor will be encouraged to present alternate methods of achieving the goals of the systems.

10.5.2 Value Engineering

Value Engineering Review will be conducted to realize maximum value for cost. This will include evaluation of alternate items of equipment and methods.

10.5.3 Changes and Updates in Technology

Any changes or updates in technology and equipment will be reviewed, including impacts on systems performance.

10.5.4 Schedule

Review of the systems implementation schedule, noting impact of equipment delivery, changes in technology and critical delivery items, based upon delivery information received from manufacturers.

10.5.5 Updated Equipment List

Update of the equipment as a result of the Critical Design Review.

10.6 FIELD AND SHOP DRAWING SUBMITTALS

After acceptance of the preceding submittals, and prior to the work involved, submit three (3) copies and one (1) reproducible of the following as required for each section of the work:

10.6.1 Corrected Submittals

Corrected items from any preceding submittals.

10.6.2 Rack and Console Elevations

Proposed rack and console equipment elevations, showing equipment locations, sight lines, clearances and other pertinent data.

10.6.3 Block Diagrams

Complete block diagrams of each system as specified herein, indicating signal levels where appropriate, coordinated with the Bills of Quantities.

10.6.4 Single Line Diagrams

Complete single line diagrams of each system as specified herein, indicating signal levels, input and output designations, jack numbers, cable numbers and equipment identification, coordinated with the Bills of Quantities.

10.6.5 Custom Panels

Elevation and detail drawings of any custom panels or the like.

10.6.6 Electrical Plans

Complete, scaled (1/8"=1'-0") plans, prepared by an Electrical Engineer licensed in the State of California, showing the locations throughout the project of all receptacles, conduits, wireways, trays, pullboxes, junction boxes, racks, equipment and other devices with appropriate designations and fill.

10.6.7 Riser Diagrams

Complete system riser diagrams, showing all elevations, room numbers, conduit sizes, types and fills, box sizes and types.

10.6.8 Rack Elevations

Complete, scaled (1"=1'-0") equipment rack elevation drawings, showing equipment designation, make and model number, and rack location.

10.6.9 Jack Field Layouts

Detailed Jack Panel Elevations, showing proposed nomenclature for panel labels and circuit assignments, and two (2) samples on Mylar base of typical Jack Panel labels, cut for mounting.

10.6.10 Cable Schedules

Complete cable schedules and run sheets associated with each system, including the wire number, cable designation code, make and type number, wire color, source and destination devices, locations and terminal designations keyed to both the system block diagrams and equipment rack elevation drawings.

10.6.11 Contractor Fabricated Items

Detailed, scaled drawings of all Contractor fabricated items, showing all components, devices and equipment, including dimensions, finishes, component values, terminal designations, types, locations and quantities.

10.6.12 Programming Documentation

Intermediate program flow diagrams, Program Code, User Interfaces and nomenclature for all programmable devices and equipment in the system.

10.7 FINAL SUBMITTALS

No more than fifteen (15) days after completion of installation, but prior to Acceptance Testing, submit the following:

10.7.1 Bills of Quantities

Three (3) copies of the final Bills of Quantities (Final Inventory), including item number, description, make and model number, serial number and location of each device.

10.7.2 As-Builts

Three (3) copies of each of the system block diagrams, single line diagrams, risers, plans, equipment rack elevations, jack field layouts, cable schedules and run sheets, and detail sheets. One (1) copy of each drawing on ISO format CD-ROM disk, in AutoCAD 2000 "DWG" format. One (1) copy of each cable schedule and run sheet on ISO format CD-ROM disk, in MS Excel format.

10.7.3 Mounted Drawings

One (1) each "D" size block diagram of each system, dry mounted to matte board and set under clear acrylic covers, and one (1) each "B" size elevation of each equipment rack, dry mounted to matte board, set under clear acrylic covers, and mounted on the corresponding inside rear rack door.

10.7.4 Jack Panel Labels

Two (2) copies on Mylar base of all Jack Panel labels cut for mounting.

10.7.5 Miscellaneous Data

One (1) original and one (1) copy each of any and all licenses, permits, certificates of operation and compliance, as required.

10.7.6 Warranty Statements

One (1) copy of each manufacturer's warranty statements.

10.7.7 Operating Manuals

At least one (1), but no less than two (2) total, copies of manufacturers' operating instruction manuals for each piece of equipment supplied by the Contractor.

10.7.8 Maintenance Manuals

Two (2) copies of manufacturers' maintenance manuals for each individual type of equipment supplied by the Contractor.

10.7.9 Software

One (1) copy on disk and three (3) printed copies of the source code listing, and two (2) machine-language copies on disks of any custom software programs or command sets written for this project. Disc formats shall be ISO format CD-ROM for the listings and either ISO format CD-ROM disk or as required by the equipment for the machine language programs. This software and all rights thereto shall become the property of the Owner.

10.7.10 Systems Manual

Two (2) copies of a Systems Manual for each area, prepared by the Contractor, detailing the final systems commissioning and test results, reduced drawings, cable run sheets, a copy of the final Bills of Quantities and the service telephone number specified under Warranty Service.

10.7.11 Owner Personnel Training

No more than thirty (30) days after completion of installation, but prior to Acceptance Testing, and at the convenience of the Owner, the Contractor shall provide on the job training of personnel designated by the Owner for instruction in the proper operation and general maintenance of the system, as detailed in the Owner Personnel Instruction Plan submitted and approved under these specifications. This training shall consist of a minimum of five (5) eight-hour days on site.

10.7.12 Final Corrections

No more than fifteen (15) days after System Acceptance, and as a condition of final payment, submit any corrections of the above.

END OF PART I

**CITY OF BEVERLY HILLS
MEDIA FACILITY
TELEVISION PRODUCTION SYSTEMS SPECIFICATIONS
BID REVIEW SET - JANUARY 19, 2010
PART II - PRODUCTS**

1. GENERAL

Material and equipment specified herein have been selected as the basis of acceptable quality and performance and have been coordinated to function as components of the included systems. Where a particular material, device, piece of equipment or system is specified directly, the current manufacturer's specifications for the same shall be considered to be a part of this document as if completely detailed herein. Refer to Part I of these specifications for information regarding substitutions.

1.1 MANUFACTURE

All materials specified herein shall be new and the manufacturer's latest model, permanently labeled with the manufacturer's name, model number and serial number. All active circuitry shall be solid state and shall be rated for continuous use. Similar devices shall be of the same manufacturer, unless specifically noted otherwise herein.

1.2 ACCESSORIES

All auxiliary and incidental equipment necessary for the operation and protection of the systems specified herein shall be furnished and installed as if specified in full herein.

1.3 SAFETY

All equipment and devices shall be UL, CSA or other approved testing agency listed. The Contractor shall verify compliance of all equipment.

1.4 POWER RATING

All devices connected to the project electrical service shall be designed to operate from 105 to 130 VAC, 54-66 Hertz with stable performance and fully in accordance with these specifications. All such devices shall have integral fuse or circuit breaker protection. All circuit breakers shall be fully magnetic.

1.5 DOCUMENTATION AND MISCELLANEOUS ACCESSORIES

All manuals, registrations, licenses and other documentation, and any other miscellaneous accessories supplied with equipment shall be inventoried and retained by the Contractor, and delivered to the Owner prior to Acceptance.

1.6 EQUIPMENT DELIVERY VERIFICATION

Notify the Owner upon delivery of all items of equipment to the initial receiving point from the manufacturer or supplier, whether it is the jobsite or the Contractor's facility for fabrication. Verify operation and integrity of each item of equipment upon said delivery; notify the Owner or his representative of any shortages, damage or discrepancies from the specified items.

2. MISCELLANEOUS PRODUCTS

The following miscellaneous products are acceptable as required herein, unless specifically noted otherwise herein or on the drawings:

2.1 CONNECTION DEVICES

1. SDI Video, Analog Video and AES Audio connectors; Kings or Trompeter dual crimp type true 75 ohm BNC with gold center pins; Trompeter dual crimp type true 75 ohm BNC with gold center pins, 45 and 90 degree connectors to mate with wall plates. Connectors must be capable of operation at or above 3.0 GHz. Equipment supplied with RCA type video connectors shall be supplied with RCA to BNC adapters.
2. SDI Video, Analog Video and AES Audio Patch Panels; Bitree B64T-2MWTHTD Panels and VPC3600-75 Patch Cords.
3. Analog Audio Connectors; Single Circuit - Neutrik or Switchcraft D3F, D3M, A3F, A3M; Multiple Circuit - Elco or EDAC
4. Analog Line Level Audio Patch Panels; Bitree Dual Bantam B96DC-HNOBT/E3 S2OU7B Panels and Jacks, 3/4" designation strips, DP-3600 Patch Cords.
5. Analog Microphone Level Audio Patch Panels; Bitree B96DC-FNOBT/E3 M2OU7B Panels and Jacks, 3/4" designation strips, LPC2400-110 Patch Cords.
6. MATV RF Connectors; General Instrument or Gilbert true compression fit F-59, F-56, F-11, General Instrument VSF-500SS or equal by Gilbert
7. Control Connectors; Switchcraft "QC" series (up to six pin), Winchester, Elco or EDAC (six pin or over), or as required by manufacturer.
8. RS-232/422 Data Connectors; Amphenol or Souriau DB-25, DB-9 as required.
9. RS-422 Patch Panels; Bitree 422A32 Panels and Jacks, 3/4" designation strips, DPC-3600 Patch Cords.
10. Terminal Strips; Cinch-Jones, Weidmuller or Phoenix

2.2 CABLE

The following cable part numbers represent non-plenum rated cable. Where plenum and riser rated cables are required, use the plenum and riser versions of the following, as applies;

1. Coaxial Analog and SDI Video and AES Audio; Belden 1694A, (RG-6 general use); Belden 1505A, (RG-59 internal runs less than 50 feet inside racks).
2. Coaxial RF; Antenna - Belden 9292; Headend Inter and Intra-Rack - Belden 9290; Trunk Line - Cableflex 32-500CX or CommScope P-3 75-500JCA; Feeder - Belden 9292; Room Risers - Belden 1189A or 9248; In-Room Drops - Belden 9100 or 9243.
3. Analog Audio Microphone Level in Racks and Conduit, all Analog Audio Line Level and Analog Intercom; Belden 8451, 8762, or 9451.
4. Audio Portable Microphone Cables; Belden 1192A.
5. Audio Speaker Level; Belden 8473.
6. Low Voltage AC (<50 Volts) Power; Belden 8471, 8473, or 8477 as required to limit voltage drop to ensure proper equipment performance.
7. Control; Belden multiconductor, 977 or 987 series, #22 gauge minimum or Belden 9259 coaxial as required
8. RS-232/422 Copper Data; Belden Datalene Series, 22 gauge or larger.

3. EQUIPMENT

The final list of equipment will be developed as part of the ongoing engineering effort, and after Contract Award. As noted earlier, a significant portion of the equipment will be either existing equipment, or will be provided by the Owner. The equipment listed is considered the minimum acceptable quality. Quantities and configurations are listed for reference only. The Contractor shall verify quantities, configurations, accessories and applicability of the items for the systems as specified. Any changes or substitutions to this equipment must be done in accordance with Part I of these specifications.

3.1 EXISTING EQUIPMENT

Existing equipment is defined as those items which are presently in use at the Owner's facility, and which will need to be moved to the new facility. Moving shall include disconnection, removal, cleaning, shipping to the new location and initial setup. It shall be the responsibility of the Contractor to coordinate and schedule moving of all existing equipment with the Owner's personnel to minimize disruption of operations and downtime. It shall be the Contractor's responsibility to verify operation of equipment prior to the move, and to notify the Owner of any non-operation or potential damage to existing equipment prior to the transition. The Owner will entertain suggestions from the Contractor regarding economic advantages by replacing existing equipment with new or rental equipment during the transition. Such suggestions must include economic advantages such as reduced downtime, quicker transition and the replacement of obsolete items. Lists of existing equipment are attached, segregated by areas.

3.2 OWNER FURNISHED NEW EQUIPMENT

The Owner is in the process of purchasing certain items of equipment, and will supply the same to the Contractor for installation. The Contractor shall coordinate delivery of all third party items with the manufacturers and/or supplying agents, as required.

3.3 EQUIPMENT LISTS

The equipment lists are included in the Appendix, separated by area. The major items are listed; the final list will be determined at Critical Design Review. Assignment to areas is arbitrary, based upon the physical location. Certain of the items are actually subsystems, consisting of a number of components. Where a subsystem covers a number of areas, the primary location of the central equipment determines the list assignment. Manufacturers and model numbers are shown for information only; Owner may substitute alternative brands as required.

END OF PART II

**CITY OF BEVERLY HILLS
MEDIA FACILITY
TELEVISION PRODUCTION SYSTEMS SPECIFICATIONS
BID REVIEW SET - JANUARY 19, 2010
PART III - EXECUTION**

1. GENERAL

Perform the work of this section in accordance with acknowledged industry and professional standards and practices and the procedures specified herein. Furnish and install all materials, devices, components and equipment required for complete and operational systems.

1.1 MATERIAL AND SITE REVIEW

It shall be the responsibility of the Contractor to familiarize himself with the materials provided and site conditions, and to review the same for design integrity and applicability. The Contract Documents have been prepared based upon information provided by the appropriate design team members and as a result of field examinations. However, the Contractor shall be responsible for verification of field conditions prior to any installation, and shall review the existing conditions prior to the start of any on-site work.

1.1.1 Requests for Materials

The Owner or his representative will provide materials, such as information, drawings, clarifications, interpretations and the like, as deemed necessary by the Owner and at the request of the Contractor. The Contractor shall issue formal Requests for Information (RFI's) for such materials. Informal or verbal requests will not constitute RFI's. The failure of the Contractor to request any materials or information or to issue proper RFI's shall in no way relieve the Contractor of his responsibilities with regard to the Contract Documents.

1.1.2 Notification of Discrepancies

It shall be the responsibility of the Contractor to notify the Owner or the Consultant of any variations in field conditions or provided materials, or other discrepancies, which might adversely affect the systems as specified herein, or the project timetable, no later than one working day after such conditions are observed.

1.2 COORDINATION

Coordinate the work of this section with other trades to ensure proper systems interface. Provide all necessary personnel and information to other trades as required to ensure systems completion.

1.2.1 Contractor's Responsibility

It shall be the responsibility of the Contractor to contact and coordinate with any and all other parties to provide any and all needed facilities for the successful completion of the project.

1.2.2 Failure to Coordinate

The failure of the Contractor to make contact with, coordinate with, or to obtain information, personnel or services from any other trade, design team member, or any other party shall not be cause for additional costs to the Owner or delay in the project, unless such failure is totally outside the power of the Contractor, as verified and agreed to by the Owner, Owner's representative or the Consultant.

1.3 CONDUCT OF CONTRACTOR'S PERSONNEL

The Contractor shall assume complete and total responsibility for the conduct of his on-site personnel during the course of the project. The Owner and the Consultant reserve the right to instruct the Contractor to remove and replace any member of the Contractor's on-site staff deemed unacceptable for any reason by the Owner, his representatives, the Consultant or any other party so designated by the Owner or the Consultant. Upon receipt of such an instruction, the Contractor shall remove and replace the designated party immediately.

1.4 PROJECT SCHEDULE

A schedule of the major project milestones was listed in Part I of this document. As noted, that schedule is predicated upon the general construction schedule and the needs of the City for training and operations. The schedule may be modified by the City to meet their needs, and to accommodate other conditions, including additional training. A certain degree of flexibility will be required of the Contractor to accommodate those changes as dictated by the City or its representatives without additional costs or expenses.

2. EQUIPMENT AND RACK INSTALLATION

2.1 RACKS AND CONSOLES

Secure all free-standing racks, cabinets and consoles to the floor unless specifically ordered otherwise by the Owner, Owner's representative, Architect or Consultant. All structures must be secured to meet local seismic codes and requirements. Secure all wall or ceiling mounted racks or cabinets with a safety factor of at least three (3).

2.1.1 Rack Rails

Provide corresponding front and rear rack mounting rails on all consoles and racks. All rack mounting rails within consoles, racks or other equipment shall be tapped and threaded according to EIA specifications, and shall be secured to metal framing members of the assembly in which they are contained. Under no conditions will rack rails be secured to wood or other nonmetallic supports. Rack rails shall be adjustable to allow variable depth of rail location.

2.1.2 Spacers

Where shown, inter-rack spacers for cabling shall be provided between racks. Each spacer shall be at least six inches wide, and the full height and depth of the associated racks. Spacers shall be constructed of the same structural materials as the racks, with removable front and rear panels, allowing complete access to the interior of the spacer. The top and bottom of the spacer shall allow complete, unobstructed access for cables.

2.1.3 Grounding

Install a full-height copper grounding strip in each rack, electrically isolated from the rack, and connected via a single green #10TW stranded wire to a base mounted single screw type terminal strip in the base of the rack. The copper grounding strip shall be mounted near the rear framing member of the rack, at the side opposite the inter-rack spacers, if used.

2.1.4 Power

Install at least two (2) isolated ground full-height outlet strips with outlets on 6" centers, each ready to be served by its own branch circuit via a junction box at the base of each pair or equipment racks. The outlet strip and box shall be electrically continuous within the racks, mounted near the rear framing member of the racks, at the side opposite the inter-rack spacers, adjacent to the copper grounding strip.

2.1.5 Doors and Panels

Provide each rack with a locking rear door, all keyed alike, and equipped with protective plastic covers for required documentation. Install matching blank and vent panels as shown on drawings, and perforated top panels in each rack. Fill all unused space with blank panels.

2.1.6 Identification

Provide a permanent label on the front and rear of each equipment rack, including the rack designation as assigned and referenced consistently throughout the project and the circuit breaker number and associated electrical distribution panel designation servicing same. Racks shall be designated via four character alphanumeric codes, as follows;

AB 34

Where the first two letters (or two letters and a number) before the space (AB on the example) shall be the room or system in which the rack is located, according to the following schedule;

MC	-	Master Control
LR	-	Library/Media Storage
RR	-	Rack Room
PC	-	Production Control
AU	-	Audio Control
GR	-	Green Room
ST	-	Studio
DR	-	Studio Dimmer Area
EDx	-	Edit Rooms (where 'x' is the edit room 1-3)
LB	-	Reception Lobby
MG	-	Manager's Office
WR	-	Work Room
SAT	-	Rooftop Satellite Area

The remaining two digits shall be the sequential number of the rack that group. Leading zeroes shall be used for numbers less than 10.

2.2 CUSTOM CONSOLES AND MONITOR WALLS

The Contractor shall furnish, install, assemble, set up, test (hereinafter "provide") the custom console assemblies as described herein in accordance with the Contract Documents. Provide complete and operational Custom Console Assemblies, including all accessories as required. The Contractor shall provide and frame out all cuts for switchers, audio mixers and any other table top mounted equipment. All consoles shall comply with local seismic, electrical and fire codes.

2.2.1 Console Structures

All console assemblies shall utilize powder coated steel frames, and shall include wire management systems and internal AC power distribution. Final design of the consoles will be determined during Critical Design Review (specified later in this document).

2.2.2 Console Bidder Qualification

The custom console work shall be performed by an Custom Console Assemblies Contractor, licensed in the state of California, who has at least five (5) years' direct experience with the devices, equipment and systems of the type specified herein, and who has a fully staffed and equipped maintenance and repair facility within three hundred (300) miles of the site.

2.2.3 Console Installation

The Custom Console Assemblies Contractor shall;

- Generate all drawings and information necessary for the complete installation. Refer to the project Electrical Drawings for receptacle, conduit and cable tray locations and details.
- Provide structure and finish samples to the Owner and Architect for approval.
- Provide mock-ups of the consoles for review and approval by the design team.
- Perform all modifications, cuts, trimming and finishes to fit the consoles in the room areas designated.
- Perform all cutting, patching and framing to accept designated equipment in the console structures and tabletops.
- Provide all hardware and accessories as required for assemblies, and all ancillary materials, interfaces, control cables and the like, to ensure proper operation.
- Provide on-site cuts, finish, installation and supervision of the installation including coordination with other trades.

2.2.4 Production Control Room Console

Provide a custom main console assembly as shown on the drawings, consisting of standard rack width desk height sections, desk top turret sections, side and end sections, and a vertical table work surface, at least 1" thick, with bullnose. Each separate console section, as well as the overall console, shall be a steel frame structure; each rack section and turret shall be a 19" EIA compliant rack. The Production Console shall be capable of supporting at up to five (5) operators, depending upon the location.

2.2.4.1 PRODUCTION CONTROL ROOM MONITOR WALL

Provide a custom monitor wall assembly as shown on the drawings, consisting of custom wall/floor plasma mounts. Each section shall be a steel frame structure. Each section shall also include wire management channel and Isolated Ground AC plug strips.

2.2.4.2 LOWER CONSOLE SECTION

Each lower rack section shall be 30" deep, with 21" (12RU) clear rack mounting space, including adjustable front and rear tapped and threaded EIA mounting rails and all blank and closure panels, a removable rear panel and shall also include a full height copper grounding strip, a full height wire management channel and two (2) full height Isolated Ground AC plug strips.

2.2.4.3 TURRET SECTION

Each half height turret rack section shall be 12.25" (7RU) clear rack mounting space. The full height turret rack section shall be 21" (12RU) clear rack mounting space. Each turret section shall also include top venting, adjustable front and rear tapped and threaded EIA mounting rails, all blank and closure panels, a removable rear panel and shall also include a full height copper grounding strip, a full height wire management channel and two (2) full height Isolated Ground AC plug strips.

2.2.4.4 WORK SURFACE

The work surface shall be a continuous section, as shown on the drawings, with hinged access sections as indicated. The surface shall be 1" thick minimum laminated wood, supported by a steel structure, and equipped with a radiussed bullnose at the operator's position. The work surface shall also include, in the open space between the rack sections, a full width copper grounding strip, two (2) full width wire management channels and two (2) full width Isolated Ground AC plug strips. Structure shall be designed to accommodate any potential position of the production switcher or other equipment intended for table top mounting, while maintaining safe loading. Contractor shall provide appropriate cutouts for any equipment to be mounted in table surface.

2.2.4.5 CAMERA SHADING SECTION

The Camera Shading Section shall be a continuous work surface with turrets, as shown on the drawings. The surface shall be 1" thick minimum laminated wood, supported by a steel structure, and equipped with a radiussed bullnose at the operator's position. The Camera Shading Section shall also include a full width copper grounding strip, one (1) full width wire management channel and one (1) full width Isolated Ground AC plug strip. The structure shall be designed to accommodate up to six (6) camera Remote Operation Panels (ROP), with three (3) panels as part of this work. Cover plates shall be installed for the future panels. Contractor shall provide appropriate cutouts for any equipment to be mounted in table surface.

2.2.5 Audio Control Room Console

Provide a custom audio control room console assembly as shown on the drawings, consisting of a table top assembly surrounding the audio mixing console, two (2) side rack turrets and an overhead monitor bridge with three (3) sections. The overall console shall be a steel frame structure with wood laminate surface. The side rack sections shall include front and rear tapped and threaded EIA mounting rails and all blank and closure panels. Each side rack shall also include a full height copper grounding strip, a full height wire management channel and two (2) full height Isolated Ground AC plug strips. Each bridge section shall be a 19" EIA compliant, with 12.25" (7RU) clear rack mounting space, including front and rear tapped and threaded EIA mounting rails and all blank and closure panels, and shall also include a full height copper grounding strip and two (2) full height Isolated Ground AC plug strips. The Audio Control Room Console shall be capable of supporting up to two (2) operators.

2.2.6 Master Control Room Console

Provide a custom console assembly as shown on the drawings, consisting of standard rack width desk height sections, desk top turret sections, side and end sections and a wraparound table surface. The overall console shall be a steel frame structure; each rack section and turret shall be a 19" EIA RS-310 compliant rack. The Console shall be capable of up to three (3) physical workstations, with the ability to control multiple incoming and outgoing feeds.

2.2.6.1 MASTER CONTROL ROOM MONITOR WALL

Provide a custom monitor wall assembly as shown on the drawings, consisting of custom wall/floor display mounts. Each section shall be a steel frame structure. Each section shall also include wire management channel and Isolated Ground AC plug strips.

2.2.6.2 LOWER CONSOLE SECTION

Each lower rack section shall be 30" deep, with 21" (12RU) clear rack mounting space, including adjustable front and rear tapped and threaded mounting rails and all blank and closure panels, a removable rear panel and shall also include a full height copper grounding strip, a full height wire management channel and two (2) full height Isolated Ground AC plug strips.

2.2.6.3 TURRET SECTION

Each turret rack section shall be 12.25" (7RU) clear rack mounting space. Each turret section shall also include top venting, adjustable front and rear tapped and threaded mounting rails, all blank and closure panels, a removable rear panel and shall also include a full height copper grounding strip, a full height wire management channel and two (2) full height Isolated Ground AC plug strips.

2.2.6.4 WORK SURFACE

The work surface shall be a wraparound structure, as shown on the drawings. The surface shall be 1" thick minimum laminated wood, supported by a steel structure, and equipped with a radiussed bullnose at the operator's position. The work surface shall also include, in the open space between the rack sections, a full width copper grounding strip, two (2) full width wire management channels and two (2) full width Isolated Ground AC plug strips. Structure shall be designed to accommodate any potential position of any equipment intended for table top mounting, while maintaining safe loading. Contractor shall provide appropriate cutouts for any equipment to be mounted in table surface.

2.2.7 Edit Consoles

Provide three (3) custom Edit Console assemblies as shown on the drawings, consisting of a dual height table top assembly, with two (2) moveable side rack sections. Also provide one (1) separate fixed height rear producer's console. The dual height console assembly shall be electrically adjustable for overall height, to allow editing in a standing or seated position. The console and the side racks shall be steel frame structures. The side rack sections shall be castered units, 30" deep, with 21" (12RU) clear rack mounting space, including front and rear tapped and threaded EIA mounting rails, a hard top, all blank and closure panels, and shall also include a full height copper grounding strip and two (2) full height Isolated Ground AC plug strips. The Edit Console shall be capable of supporting up to two (2) operators.

2.3 EQUIPMENT

2.3.1 Mounting in Racks

Fasten all rack mounted equipment with sufficient screws and washers to occupy all rack mounting holes. Provide conforming washers for all rack screws. Rack screws and washers shall be the same color as the rack, or as directed by the Owner.

2.3.2 Mechanical Support in Racks

Provide rear rack rail support for oversize or heavy equipment, as required, including service loops for the same. Refer to Part II for rack slides information.

2.3.3 All Other Devices

Secure all other system devices and equipment. Items located in the racks shall be mounted to rack panels. Devices located in the field shall be secured to the nearest wall member or at the direction of the Architect. Under no conditions will devices be supported by cable connections.

3. CONDUIT, WIRE AND CABLE INSTALLATION

Refer to the General Specifications for requirements regarding the installation of conduit and boxes. Conduit as shown on the Contract Documents is by others. Provide pull lines and identification for all empty conduits for present and future systems. Any additional conduit or boxes shall be the responsibility of the Contractor.

3.1 CABLE INSTALLATION IN CONDUIT

Cable routed between consoles, cabinets, racks, and other equipment shall be installed in an approved conduit, signal duct, cable duct, or cable tray that is secured to building structure. Clean and deburr all conduits prior to any cable installation. Apply a chemically inert lubricant to all wire and cable prior to pulling. Do not subject wire and cable to tensions greater than that recommended by the manufacturer. Under no circumstances shall wire and cable be "jerked" through conduit. Fiber cables shall also be installed inside innerduct.

3.1.1 Box Loops

Provide a box loop for all wire and cable routed through junction boxes or distribution panels. Cable shall not be bent at a radius less than that recommended by the manufacturer.

3.1.2 Cable Integrity

All wire and cable shall be continuous and splice-free for the entire length of run between designated connections or terminations. Under no conditions shall cable be spliced inside conduit. Under no conditions shall intermediate blocks, bulkheads, tie points or interfaces be utilized, without the express direction of the Consultant or the Owner.

3.1.3 Cable Support

Secure all wire and cable run vertically in conduit for distances of greater than thirty (30) feet at the vertical run terminations, or outside conduit at distances of no more than ten (10) feet. Under no conditions shall any cable in the system be supported by a connection point. All cables shall be secured prior to any connections. Under no conditions will adhesive plates be used for securing cable ties, and under no conditions will cable ties be secured to removable equipment.

3.1.4 Coaxial and Fiber Optics Cables

Symmetrical conforming, nonmetallic bushings and clamps shall be provided for all coaxial cable. Fiber cables shall be contained within innerduct.

3.1.5 All Other Cables

All other cables shall be secured by screw flange nylon cable ties or similar approved devices by Panduit, Thomas and Betts or others. Non-coaxial cables shall be secured to receptacle plates prior to any connection, i.e., no stress shall be put upon any receptacle connections.

3.2 CABLE INSTALLATION IN RACKS AND TRAYS

Cables in racks, consoles, panels and cable tray shall be grouped into harnesses which are bundled and tied. Harnessed wires or cables shall be combed straight, formed, and dressed in either a vertical or horizontal relationship to equipment, controls, components or terminations. Harnesses with intertwined members are not acceptable.

3.2.1 Cable Grouping and Routing

Except as indicated herein, conduit, wireways and cable bundles shall contain only wiring of a single signal classification. Signal cables in racks shall be routed via the cable spacers between racks if spacers are present, or via the rack rear open area if not, and shall break out horizontally to the appropriate equipment in the rack. Each cable that breaks out from a harness for connection or termination shall have been tied off at that harness or bundle point, and provided with a neatly formed service loop.

3.2.2 Mechanical Integrity

Dress, lace or harness all wire and cable to prevent mechanical stress on electrical connections; no wire or cable shall be supported by a connection point. Cables shall be installed and fastened without causing sharp bends or rubbing of the cables against sharp edges. Cables shall be fastened with hardware which will not damage or distort them.

3.2.3 Service Loops

Provide service loops where harnesses or different classes cross, where equipment is mounted on rack slides, where equipment not on rack slides must be removed from the front, or where hinged panels are to be interconnected. Service loops shall permit full extension of rack slides, or removal plus one foot of front access equipment not on rack slides, without visible stress on service loop.

3.2.4 Fanout

Provide proper fanout of cables, using adequate cable ties, for successive connections from one side of the equipment connected. Fanout shall be accomplished in a logical manner, with a minimum of cable crossover and stress on cables. Fanout points shall permit easy access to cable identification labels.

3.3 CABLE TERMINATION

Terminate all cables in appropriate connection devices as specified under part II of these specifications.

3.3.1 Cable Shielding

All shielded cable shall be insulated. Do not permit shields to contact conduit, raceway, boxes, panels or equipment enclosures. Tin terminated shield drain wires and insulate with heat shrinkable tubing.

3.3.2 Coaxial Cables

Coaxial cables shall be terminated in crimp-type connectors as specified under Part II of these specifications, utilizing ratcheted hex type crimping tools. Where coaxial cables terminate in receptacle plates, cables shall be fitted with standard connectors as specified herein, and receptacle plates shall be fitted with "feed-through" type bulkhead connectors or directional couplers, also as specified herein. Under no conditions will coaxial cables be terminated directly to receptacle plate connectors.

3.3.3 Fiber Optics Cables

Fiber Optics cables shall be terminated in SC or ST connectors as specified under Part II of these specifications, utilizing proper preparation and termination tools consistent with the data specifications.

3.3.4 Audio Cables

Line and microphone level audio cables shall be terminated in solder type connectors as specified under Part II of these specifications. Speaker level cables shall be terminated with crimp type insulated spade lugs or banana plugs, as required by equipment. Insulate soldered connections with heat shrinkable tubing.

3.3.5 Control and Data Cables

Control and data cables shall be terminated in crimp or solder-type connectors as specified under Part II of these specifications. Insulate soldered connections with heat shrinkable tubing.

3.3.6 Terminal Block Connections

Make all connections to screw-type terminal barrier blocks with insulated crimp type spade lugs. Size all lugs properly to assure high electrical integrity, i.e., low resistance connections. Captive Euro-style terminal strips will also be acceptable; cables shall use ferrules for this application.

3.3.7 Solder Connections

Use only rosin core 60/40 tin/lead or true eutectic/ROHS compliant solder for all solder connections.

3.4 CABLE IDENTIFICATION

Cables shall be identified by both jacket color and cable labels. The following is the proposed schedule for color and numeric identification, but will be reviewed by the Owner during the Critical Design Review. For the present, the following should be assumed to be the minimum acceptable system.

3.4.1 Color Codes

Consistent cable jacket color codes shall be maintained throughout the facility. Signal cables shall be color coded according to the following schedule;

HD/SD/SDI/Analog Video	-	Orange
AES Audio	-	Violet
Analog Audio	-	Black
Intercom (PL)	-	Black
Intercom (Matrix)	-	Green
RF (MATV/CATV)	-	White
RF (Satellite)	-	Black
RS-422/232/Discrete Control	-	Grey
Reference/Timecode	-	Black
Network	-	Blue

3.4.2 Labeling

Identify all wire and cable clearly with permanent labels printed and wrapped about the full circumference of the line at least 4" and no more than 6" from the connector, so that cable identification can be read without the need to turn or rotate the cable. Indicate the cable identification code as designated on the associated field and shop drawings and run sheets.

3.4.2.1 DESIGNATION

Cable identification codes shall be alphanumeric, with groupings to designate signal type and system location from the generation (start) of the signal. Narrative description type labels shall not be acceptable, except where ordered by the Owner, and only in addition to specified labels. The cable numbering format shall be as follows;

AB1234 or ABC1234

Where the first two or three letters (AB and ABC on the examples) shall be the signal carried, according to the following schedule;

DV	-	SDI Video
RG	-	Component Analog (RGBHV or Y/Pb/Pr)
DA	-	AES Audio
AV	-	Analog Video
AA	-	Analog Audio, Mono
AAx	-	Analog Audio, Multichannel; "x" is channel number
IC	-	Intercom
TV	-	MATV/CATV RF Signals
SAT	-	Satellite
REF	-	House Reference/Timecode
CT	-	Control
DT	-	Data/Network
TEL	-	Analog Telephone
ANT	-	Antenna

The remaining four digits shall be the sequential number of the cable in that group. Leading zeroes shall be used for numbers less than 1000.

3.4.2.2 NARRATIVE DESCRIPTION LABELS

Narrative labels shall only be utilized, in addition to the specified alphanumeric labels, at the inputs and outputs of VTR's, monitors, and any portable or mobile equipment not permanently mounted in racks or consoles, and at other locations specifically designated by the Owner. Narrative labels shall be located no less than 6 inches and no more than 12 inches from the connector, and shall be oriented the same as the alphanumeric labels. Narrative labels shall be a single line of information, and shall describe the near side termination (e.g., "To VTR-01 SDI Input").

3.4.2.3 ASSIGNMENT

Assign wire and cable designations consistently throughout a given system so that each wire and cable shall carry the same labeled designation over its entire run.

3.4.2.4 LOCATION

Provide identification within six (6) inches of each connection, and, where wire and cable enter or exit from conduit or boxes, within twelve (12) inches of the point of entry or exit.

3.4.2.5 MATERIALS

Label materials shall be durable, with non-erasable identification clearly visible below any protective covering. Lettering shall be of sufficient density to afford reading in reduced rack lighting. Minimum character size shall be 1/8", utilizing either 24 pin dot-matrix printers in high density mode, or laser printers. Labels shall be self-laminating type, printed with cable identity codes only, repeated continuously and completely about the circumference of the cable, and shall be of sufficient size to show printable area completely around the cable. Under no conditions will descriptive labels be used except as noted herein. Labels shall be by Brady, Panduit or Thomas and Betts, or approved equal.

3.5 CORRECTION OF UNACCEPTABLE CONDITIONS

Correct any and all of the following unacceptable wiring conditions:

1. Deformed, brittle or cracked insulation.
2. Insulation shrunken or stripped further than one-eighth (1/8) inch away from the actual point of connection within a connector, or on a termination block.
3. Cold solder joints, flux joints and/or solder splatter.
4. Ungrommeted, unbushed, or uninsulated wire or cable entries.
5. Deformation or improper bend radius of wire or cable, especially coaxial and fiber cables.
6. Improperly crimped or deformed coaxial cable connectors.
7. Unlabeled or improperly labeled cables.

4. SIGNAL HANDLING PROCEDURES

4.1 GROUNDING

Observe consistent grounding practices throughout the project, to minimize ground loops..

4.1.1 Enclosures

All equipment enclosures shall be connected to the Rack Ground Strip by a single green #14TW or larger stranded wire. Each ensemble of enclosures shall include a single screw type terminal strip to land the individual enclosure grounds.

4.1.2 Cable Shields

Shielded cables of this section shall be grounded exclusively to Signal Ground. Where approved, shields shall be permitted to carry low duty cycle DC control signals. Cable shields shall be grounded by a single path, unless otherwise noted. Shields shall be tied to Signal Ground at one end only, i.e., at the low potential end of run, unless otherwise noted. There shall be no Signal Ground current paths, unless otherwise noted.

4.1.3 Isolation

Signal and electrical system grounds shall be isolated except at the local distribution panel or project ground field connections. Signal Ground provisions shall realize less than 0.15 ohms to the primary ground connection.

4.1.4 Balanced audio signal connector convention

Signal	Connector	Wire
Phase ("High" or "+")	Pin 2 or Tip	Red or White
Inverse Phase ("Low" or "-")	Pin 3 or Ring	Black
Shield	Pin 1 or Sleeve	Drain Wire

4.1.5 Video/RF and other unbalanced signal connector convention

Signal	Connector	Wire
Phase ("High" or "+")	Center Pin	Center
Signal Return	Shell	Shield

4.1.6 RGBHV High Density signal connector convention

In compliance with IBM SVGA/XGA standards.

4.2 SIGNAL TERMINATION

All circuits, except for analog line and microphone level audio, shall be terminated at the destination end of the line (device input), unless specifically noted otherwise. Analog line level audio shall be terminated at the source output, and inputs shall be bridging. All unused outputs shall be terminated.

4.2.1 Analog Audio Circuits

All analog audio circuits shall be balanced to ground. All wiring for analog audio circuits, except speaker circuits, shall utilize paired, shielded cable as specified in Part II of these specifications, regardless of the balance condition of the circuit being wired. Analog audio circuits terminating in unbalanced connectors shall use balanced cable.

4.2.2 Digital Audio Circuits

All 110 ohm AES/EBU digital audio devices shall be converted to 75 ohm unbalanced AES/EBU digital audio for transmission.

4.3 IMPEDANCES

The system standard impedances shall be;

1. Analog and Digital Video; 75 ohms +/- 1.0% unbalanced
2. TV RF; 75 ohms +/- 5.0% unbalanced
3. AES/EBU Digital Audio (balanced), 110 ohms +/-10%
4. AES/EBU Digital Audio (unbalanced), 75 ohms +/- 5%
3. Analog Audio, Line Level; 600 ohms +/- 5% balanced
4. Analog Audio, Microphone Level; 150 ohms +/- 5% balanced

5. Analog Audio, Speaker Level; 4, 8 or 16 ohm balanced, or appropriate impedance at 70.7 Volts

4.4 LEVELS

Maintain consistent signal levels throughout the facility for each type of signal carried. Patch points shall be unity gain, "flat" equalization, unless specifically noted otherwise herein or on the drawings. The reference signal levels shall be;

1. Analog Video; 1.0 Volt peak to peak composite signal, sync tip to peak white, defined as "100 IRE", or "100% signal".
2. HD/SDI Video; as defined in SMPTE 259M, 292M and 424.
3. TV RF; 1000 microVolts, defined as "0 dBmV"
4. Digital Audio, Line Level; -20 dbfs, defined as "0 VU"
5. Analog Audio, Line Level; +4 dBu, defined as "0 VU"
6. Analog Audio, Microphone Level; -50 dBm, 150 ohms
7. Analog Audio, Speaker Level; Greater than +20 dBm
8. Data and Control; As defined by the specification for the signal carried, e.g., RS-232, RS-422 or any other such appropriate standard

5. CLEANUP

Maintain the premises in a clean and orderly condition at all times. Clean up at regular intervals during construction and remove all packing material and rubbish resulting from the work of this section from the job site. Remove all unnecessary tools and equipment, unused material, rubbish and debris from each area where the work of this section has been completed, unless designated for storage. Remove all tools, equipment, unused material, and rubbish and debris from the job site upon completion of the project and Owner Acceptance of all of the work of this section.

6. SYSTEMS PROGRAMMING

The Contractor shall provide systems, device and operational programming for all devices requiring such, including, but not limited to, following;

1. Control System
2. Routing Switchers
3. Video/Data Displays
4. DSP audio control and processing
5. Any other equipment requiring programming

This programming shall include all necessary code, identifiers, parameters and the like to guarantee operation of the equipment, compliance with these specifications and manufacturers' equipment specifications, and compatibility with all other equipment in the system. This programming shall allow all units to operate in complete compliance with these specifications, and to attain the performance requirements of the systems as specified herein.

6.1 PROGRAM SCOPE

The programming shall include, at a minimum, the following;

1. Operation of the Control Systems, including device interface, functional control, user interface, control panel programming, error trapping and timing loops.
2. Configuration of signal processors, including format definition files for various input formats, input assignment, delays and output routing.
3. Configuration of display devices, including profiles for various input formats, input assignment and aspect ratios.
4. Configuration of any other programmable devices, including internal clocks, timers, input setup and/or assignment and control interfaces.
5. Configuration of Engineering Test Equipment and Set Up.

6.2 GRAPHICAL USER INTERFACES

Contractor created Graphical User Interfaces shall be written in a style and layout acceptable to the Owner and Consultant, and shall be part of the review process. Contractor shall submit GUI schemes for review by the Owner and the Design Team. All designs and schemes shall become the property of the Owner, without reservations.

6.3 SYSTEM CODE

System code shall be written in a clear and concise manner, utilizing industry and Owner standard terms and structure. All system code, whether in a partial or complete mode, shall become the property of the Owner. Code will be released to the Owner at regular intervals for review.

6.4 SYSTEM CODE TESTING

System code shall be exhaustively tested to ensure reliability, functionality, efficiency and speed. Error-trapping, feedback and checking shall be utilized to ensure proper systems operation. The code shall permit efficient, reliable control with a minimum of overhead.

7. SYSTEM COMMISSIONING

Conduct complete and detailed systems commissioning at the completion of equipment installation. Commissioning will consist of all programming, testing and verification to fully activate the systems, and to ensure compliance with the specifications. Coordinate all commissioning with the Owner, the Consultant, and the equipment manufacturers.

7.1 PRELIMINARY CHECKS AND TESTING

Conduct preliminary checks and testing proper to performance testing and subsequent to completion of related or adjacent work of other trades, as applies. Verify safe and proper operation of all components, devices, or equipment, nominal signal levels within the systems and the absence of extraneous or degrading signals.

7.1.1 Initial Procedures

Perform the following verification and/or testing procedures, and correct unacceptable conditions as required:

1. Mechanical integrity of device mounting.
2. Proper grounding of devices and equipment.
3. Integrity of signal and electrical system ground connections.
4. Proper provision of power to devices and equipment.
5. Integrity of all insulation, shield terminations and connections.
6. Absence of solder splatter, bridges, debris of any kind, tools, etc.
7. Proper routing and dressing of wire and cable.
8. "Wire-checking" of all circuitry, including phase and continuity, with reference to cable designations on run sheets, and field and shop drawings.
9. Mechanical integrity of all support and positioning equipment.
10. Freedom from rattles, buzzes or other mechanically or electrically induced noise.
11. Proper adjustment and level set of all other equipment.

7.1.2 Preliminary Adjustments

7.1.2.1 SEQUENCE

Determine the proper sequence of energizing systems to minimize the risk of damage.

7.1.2.2 DOCUMENTATION OF SETTINGS

After successfully energizing the systems, make all preliminary adjustments and document the setting of all controls, parameters of all corrective networks, voltages at key system interconnection points, gains and losses, as applicable.

7.1.2.3 TABULATION OF DATA

Tabulate all data along with an inventory of test equipment, a description of testing conditions, and a list of test personnel, as itemized in paragraph D., below.

7.1.2.4 SUBMISSION OF DATA

Copies of preliminary test data shall accompany copies of performance testing data as part of the final submittal.

7.1.3 Verification of Parameters

Verify the performance parameters of the individual systems following established professional procedures, in addition to those specified herein.

7.1.4 Documentation of Testing

Document all acceptance testing, calibration and correction procedures, in addition to those specified herein, as follows:

1. Type and description of the given procedure, date and conditions of performance.
2. Parameters measured and their values, including values measured prior to calibration or correction, as applicable.
3. Parameters associated with calibration or corrective networks, components, or devices.
4. The names of personnel conducting the procedure.
5. The equipment used to conduct the procedure.

7.1.5 Labeling of Control Settings

Provide permanent "wedge" type labels on all controls, as applies, to indicate correct settings after performance testing and adjustment procedures have been successfully completed.

7.2 SYSTEMS PERFORMANCE TESTING

Conduct all necessary performance testing, adjustment and documentation procedures to verify and realize compliance with the performance specifications herein. All performance testing shall be conducted at the convenience of the Architect, Owner, Owner's representative or Consultant, so as to minimize project disruption.

7.2.1 Facilities

Make available at least one (1) technician familiar with this work, and all required test equipment for the duration of performance testing verification.

7.2.2 Access to Areas

It shall be the responsibility of the Contractor to verify access to the areas of the project and to coordinate such access with all appropriate personnel.

7.2.3 Conditions

During performance testing all equipment shall be operated under standard conditions as recommended by the manufacturers.

7.2.4 All Systems

7.2.4.1 PROCEDURES

Notwithstanding any other requirements, standards and miscellaneous criteria specified elsewhere within these documents, performance testing, adjustment, and documentation procedures for all systems shall include measurement of the following parameters, as applies:

1. Control; full mechanical and electrical operation of all remote and local controls, activators and the like.
2. Continuity; testing of all lines for continuity, DC resistance, phasing and the like, from origination point to final destination.
3. Line Impedance; testing of all devices for proper impedances, termination matches and loading factors.

7.2.5 Video Systems

7.2.5.1 PROCEDURES

Notwithstanding any other requirements, standards and miscellaneous criteria specified elsewhere within these documents, performance testing, adjustment, and documentation procedures for all Video section of the Video Systems shall include measurement of the following parameters, as applies:

1. HD/SD SDI Digital Video bandwidth, pulse form and level at 270 and 360 Megabits and 1.5 Gigabits
2. Analog Composite Video Frequency Response from 100 KHz to 20 MHz, referenced to 1.0 MHz.
3. Analog Component/RGBHV Video Frequency Response from 100 KHz to 350 MHz, referenced to 1.0 MHz.
4. Video Signal to Noise Ratio.
5. Video Differential Phase and Gain.
6. Video Signal to Crosstalk Ratio.
7. Analog Video timing.

7.2.5.2 PERFORMANCE

Unless restricted by the published specifications of a particular piece of equipment, or unless specifically indicated otherwise herein or in the attachment, the following performance standards shall be met by the Video section of the Video Systems;

1. Digital performance concurrent with SMPTE 292M HDTV requirements at 1.5 Gigabits.
2. Analog Composite Video Frequency Response: 100 KHz to 20 MHz within 0.5 dB
3. Analog Component/RGBHV Video Frequency Response: 100 KHz to 350 MHz within 3.0 dB
4. Digital and Analog NTSC Video Signal to Noise Ratio: at least 65 dB.
4. Analog RGBHV Video Signal to Noise Ratio: at least 58 dB.
5. Analog Video Differential Phase and Gain: no more than 0.5 degrees and 0.5 percent, respectively.
6. Analog and Digital Video Signal to Crosstalk Ratio: at least 50 dB.
7. Analog Video Timing; no more than .25 degrees variation at 3.58 MHz between any two parallel lines to the same location.

7.2.6 Audio Systems

7.2.6.1 PROCEDURES

Notwithstanding any other requirements, standards and miscellaneous criteria specified elsewhere within these documents, performance testing, adjustment, and documentation procedures for the Audio Systems shall include measurement of the following parameters, as applies:

1. Audio Frequency Response from 20 Hz to 20 KHz, referenced to 1.0 KHz, as measured at the output of the switchers.
2. Audio Signal to Noise Ratio.
3. Audio Total Harmonic Distortion.
4. Audio Signal to Crosstalk Ratio.
5. Stereo Channel Separation.
6. Interference To and From Other Systems.

7.2.6.2 PERFORMANCE

Unless restricted by the published specifications of a particular piece of equipment, or unless specifically indicated otherwise herein or in the attachment, the following performance standards shall be met by the Audio Systems;

1. Audio Frequency Response: 20 Hz to 20 KHz within 0.5 dB.
2. Audio Signal to Noise Ratio: at least 70 dB.
3. Audio Total Harmonic Distortion: less than 1%.
4. Audio Signal to Crosstalk Ratio: at least 60 dB to 15 KHz.
5. Stereo Channel Separation: at least 45 dB at 10KHz
6. Interference From Other Systems: 70 dB or better below the standard signal level of the system.

7.2.7 Control Systems

7.2.7.1 PROCEDURES

Notwithstanding any other requirements, standards and miscellaneous criteria specified elsewhere within these documents, performance testing, adjustment, and documentation procedures for the Control Systems shall include measurement of the following parameters, as applies:

1. Functional Control of each device
2. Repeatability of control
3. Control latency

7.2.7.2 PERFORMANCE

As part of final testing, the Contractor shall document the performance of the following;

1. Functional control: demonstrate all remote controllable functions.
2. Repeatability: .
3. Latency: Measured time from control initiation to execution.

7.3 COMMISSIONING DOCUMENTATION

Document and coordinate all commissioning data in the Systems Manual for each area, as required under Part I of these specifications.

8. FINAL PROCEDURES

After completion of all above specified work, conduct the following final procedures.

8.1 REMEDIAL WORK

Perform any and all remedial work, at no expense to the Owner, to correct inadequate performance or unacceptable conditions of, or relating to any of the work of this section, as determined by the Architect or Owner.

8.2 PORTABLE EQUIPMENT

Furnish all portable equipment to the Owner along with complete documentation of the materials presented. All portable equipment shall be presented in the original manufacturer's packing, complete with all included instructions and miscellaneous manuals and documents processed in accordance with the Guarantee provisions, as described herein.

8.3 PRESENTATION OF MATERIALS

Present, review and clarify all materials to the Owner, Owner's representative and/or operating personnel, as required under the provisions of Final Submittals, and fully demonstrate the operation and maintenance of the systems, equipment, and devices specified herein.

8.4 POST-ACCEPTANCE SYSTEMS CHECK

Check, inspect, and, if necessary, adjust all systems, equipment, devices, and components specified, at the Owner's convenience, at both sixty (60) and ninety (90) days after acceptance of the work in this section.

9. ACCEPTANCE OF WORK

Upon completion of all work, and compliance with all requirements of this section, including submittals, tests, etc., required herein, the Owner or Consultant may elect to verify the Contractor's test data as part of the acceptance procedure.

9.1 PERFORMANCE VERIFICATION

Provide personnel, facilities and equipment, at the convenience of the Owner, to demonstrate any aspect or parameter of system performance and to assist with such tests.

9.2 TESTING COSTS

All costs associated with acceptance testing and parameter verification shall be the responsibility of this Contractor and shall be included in the original proposal.

9.3 PROVISION OF TEMPORARY FACILITIES

Failure of any component or system to meet specifications shall require immediate remedial action. In the event that material, device, equipment, system, or workmanship shall be found unacceptable by the Owner, the Consultant, or other representative, fifteen (15) days prior to the completion date of the associated area, the Contractor shall assume costs associated with the temporary installation of operational components of systems satisfactory to the Owner or his representative, until Owner Acceptance of the latter work.

9.4 ADDITIONAL TESTING AND COSTS

Should failure of any or all of the systems to pass Acceptance Testing, in the opinion of the Consultant, require additional testing and verification by the Consultant, the Contractor shall compensate the Owner for the Consultant's charges for the additional tests including, but not limited to, professional fees, travel expenses and any and all reimbursable expenses. This compensation may, at the Owner's option, be charged as an offset to the contract price.

9.5 PROJECT DELAYS AND ASSOCIATED COSTS

Should delays resulting from the Contractor's failure to meet schedules, to conform with the specifications, and/or to perform in any other way in accordance with the contract result in additional time for the Consultant or other team members, the Contractor shall compensate the Owner for any such charges including, but not limited to, professional fees, travel expenses and any and all reimbursable expenses. This compensation may, at the Owner's option, be charged as an offset to the contract price.

9.6 FAILURE TO COMPLY

Should the Contractor refuse or fail to comply with any part of the specifications, and fail to remedy the situation in a reasonable amount of time, the Owner may, at the Owner's option, assign or contract the remedial work to another party, and deduct charges by that third party from the contract price.

9.7 OWNER'S RIGHT TO USE EQUIPMENT

Owner Acceptance of systems provided as part of the work of this section will be after completion of corrections and adjustments required by the "Punch List" which results from inspection of the completed installation of all systems. The Owner reserves the right to use equipment, material and services provided as part of the work of this section prior to acceptance without incurring any obligation to accept any equipment or completed systems until all Punch List work is completed and all systems are acceptable or to pay additional costs or charges above those included in the contracts of the parties involved.

END OF PART III



CITY OF BEVERLY HILLS

MEDIA FACILITY

**331 NORTH FOOTHILL ROAD
BEVERLY HILLS, CA 90210**

Television Production Systems

SPECIFICATIONS

ADDENDUM 1 - MARCH 18, 2010

PREPARED FOR;
CITY OF BEVERLY HILLS

BEVERLY HILLS, CA

PREPARED BY;
BFA, LLC
COMMUNICATIONS TECHNOLOGY CONSULTANTS
144 SOUTH FIRST ST, SUITE 200
BURBANK, CA 91502

**CITY OF BEVERLY HILLS
MEDIA FACILITY
TELEVISION PRODUCTION SYSTEMS SPECIFICATIONS
ADDENDUM 1 - MARCH 18, 2010
GENERAL**

This is the first addendum for the se are the Specifications for the Television Production Systems for the Beverly Hills Media Facility. The following changes, notations and updates are to clarify issues that have arisen since the original specification issue.

1.1 DRAWINGS

Drawing TV-301 Rev B (Bid Issue Set) has been replaced by TV-301, Rev C, (Revisions for Low Ceiling) to reflect the lowered rack room ceiling condition and the reallocation of equipment within the racks.

1.2 SPECIFICATIONS

No changes to specifications

1.3 EQUIPMENT LIST

The following equipment items are changed as follow;

Rack Room;

Item 10 4 *Equipment Rack, 45RU, 36" deep* *Stantron Pioneer Series*

changed to

10 Equipment Rack Row 1, consisting of;

10.1 4 Equipment Rack 40RU, 36" deep Stantron BRF4036

10.2 1 Equipment Rack Baying Base 4 Bay Stantron BRB436

10.3 1 Equipment Rack Side Panel, 40RU, 36" Deep Stantron BRSS4036

Item 11 8 *Equipment Rack, 45RU, 30" deep* *Stantron Pioneer Series*

changed to

10 Equipment Rack Row 2 and 3, consisting of;

11.1 8 Equipment Rack 40RU, 30" deep Stantron BRF4030

11.2 2 Equipment Rack Baying Base 4 Bay Stantron BRB430

11.3 2 Equipment Rack Side Panel, 40RU, 30" Deep Stantron BRSS4030

Production Control;

Item 18 1 *Console, Production* *Custom*

changed to

18 1 Console, Production Hi Tech Furnishings

Item 19 1 *Console, Shading* *Custom*

changed to

19	1	Console, Shading	Hi Tech Furnishings
Item 20	1	Console Monitor Wall Structure	Custom
changed to			
20	1	Console Monitor Wall Structure	Hi Tech Furnishings
Item 32	1	Console, Audio w/Bridge	Custom
changed to			
32	1	Console, Audio w/Bridge	Hi Tech Furnishings
Item 19	1	Equipment Rack, Sloped	Stantron 200 series
changed to			
33	1	Equipment Rack, Sloped	Hi Tech Furnishings
Master Control;			
Item 2.01	3	DA, Dual HD/SDI	Ensemble 7125
changed to			
2.01	11	DA, Dual HD/SDI	Ensemble 7125
Item 2.05	1	DA Tray, 3 RU	Ensemble Avenue
changed to			
2.05	2	DA Tray, 3 RU	Ensemble Avenue
Item 2.06	1	DA Tray, 3 RU Power Supply	Ensemble Avenue
changed to			
2.06	2	DA Tray, 3 RU Power Supply	Ensemble Avenue
Item 13	1	Console, Master Control	Custom
changed to			
13	1	Console, Master Control	Hi Tech Furnishings
Item 14	1	Console Monitor Wall Structure	Custom
changed to			
14	1	Console Monitor Wall Structure	Hi Tech Furnishings

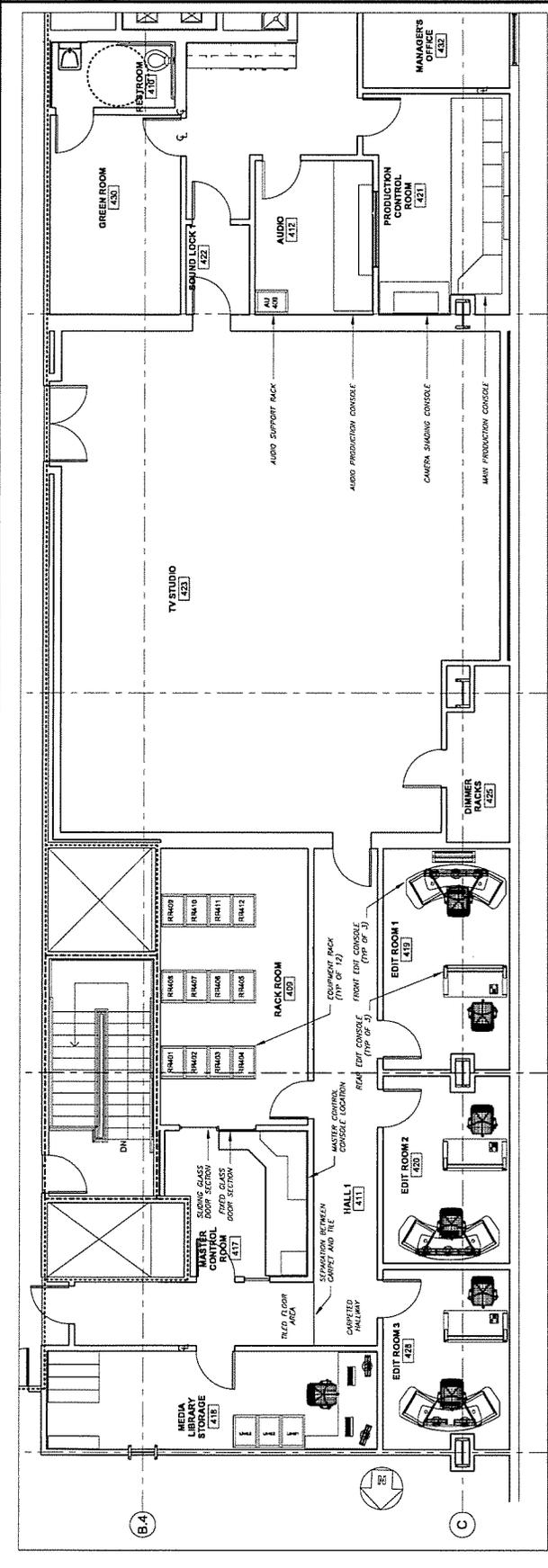
END OF ADDENDUM



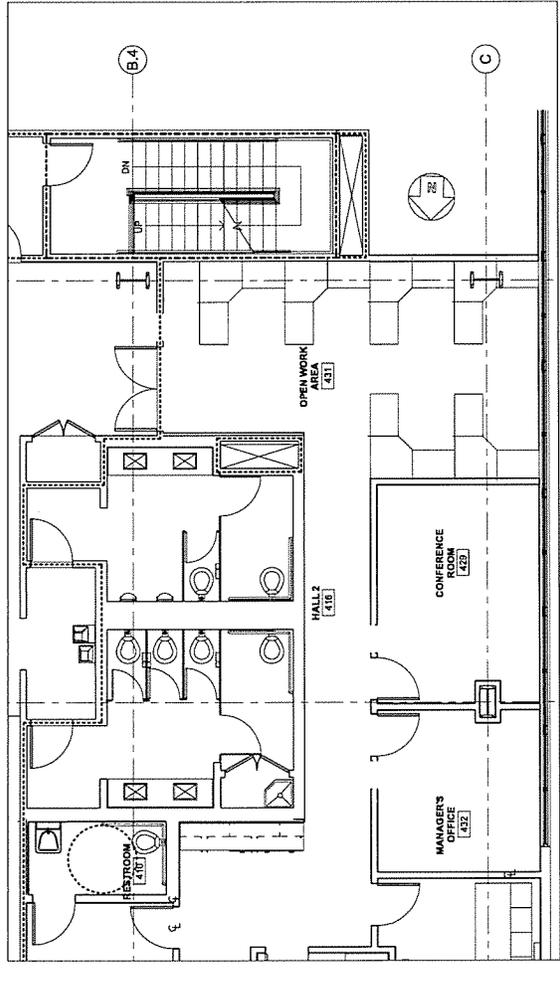
144 S. TRINIDAD ST. #200
 BEVERLY HILLS, CALIFORNIA 90210
 TEL: 310.559.2205 FAX: 310.559.2386

CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California 90210

Sheet Size: 11" x 17"	Scale: 1/4" = 1'-0"
Project No: 100000000	Revision No: 01
Client: City of Beverly Hills	Architect: bpa
Contract No: 2777/09	Date: 12/11/08
Project Name: TV-1.01	Project No: 100000000
Project Location: Beverly Hills, CA	Project No: 100000000



1 EQUIPMENT FLOOR PLAN, STUDIO, CONTROL, EDIT, LIBRARY AND RACK ROOMS
 SCALE: 1/4" = 1'-0"



2 EQUIPMENT FLOOR PLAN OFFICES AND SUPPORT AREAS
 SCALE: 1/4" = 1'-0"

NOTES
 For Television Production Systems Information only. Not for General Construction. Refer to the Architectural, Electrical and Structural Drawings for details regarding equipment and installation. All equipment and wiring are for general information only. Verify actual conditions in field.

Production Center
 Title Sheet



144 S. First St., Ste 200
Beverly Hills, CA 91602
T: 818.559.2205 F: 818.559.2386

CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California 90210

Sheet Size: 11' 0" x 17' 0"

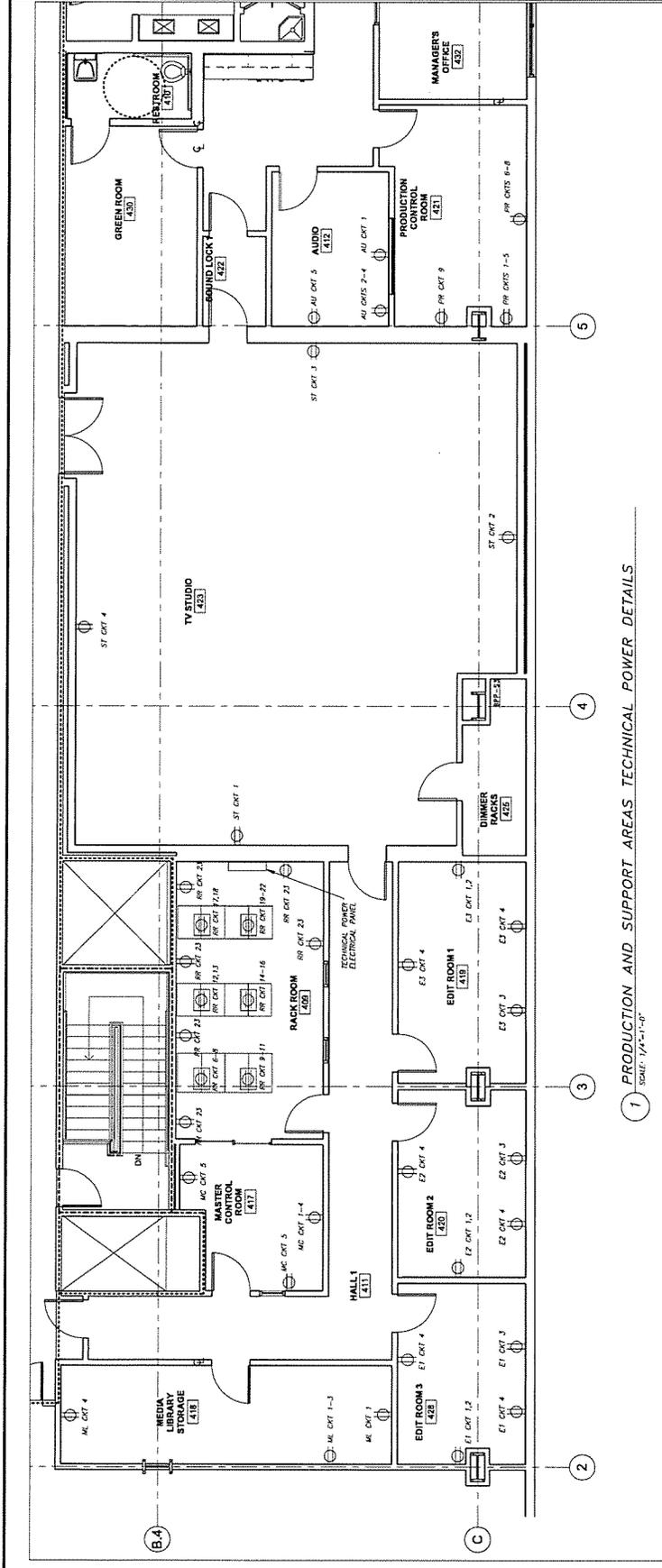
REVISIONS

A	RD REVIEW SET	08/17/10
B	RD ISSUE SET	08/20/10

SHEET TITLE

Production Center
Technical Systems Power
Room Details

DATE: 07/27/10
DRAWN: JKS
CHECKED: JKS
SCALE: AS SHOWN
PROJECT: TV-103
P.L.S. PROJECT: 102



1 PRODUCTION AND SUPPORT AREAS TECHNICAL POWER DETAILS
SCALE: 1/4"=1'-0"

BEVERLY HILLS CITY ADDRESS: 144 S. FIRST ST., STE. 200, BEVERLY HILLS, CA 91602

DATE: 07/27/10

PROJECT: TV-103

SCALE: AS SHOWN

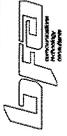
REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD.
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2	08/17/10	RD REVIEW SET	JKS	JKS
3	08/20/10	RD ISSUE SET	JKS	JKS

NOTES

For Television Production Systems Information only: Not for Construction. For General Construction, Electrical and Structural Drawings for details regarding General Construction, Locations, sizes, dimensions and routing are for general information only; verify actual conditions in field.

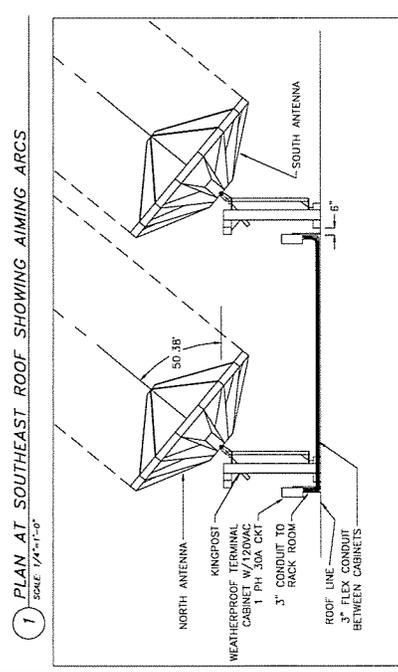
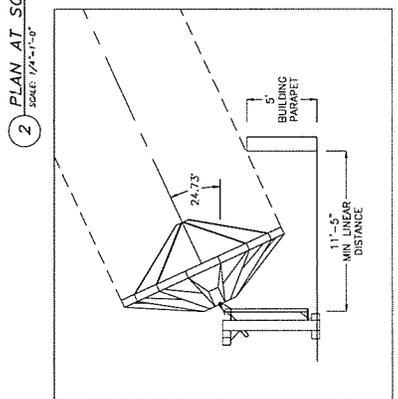
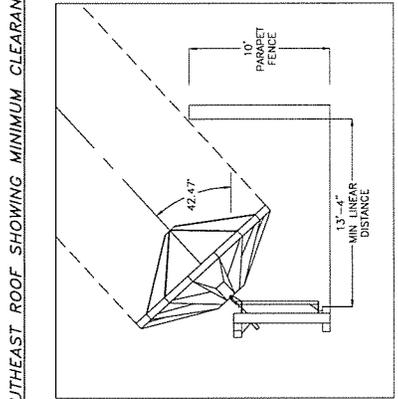
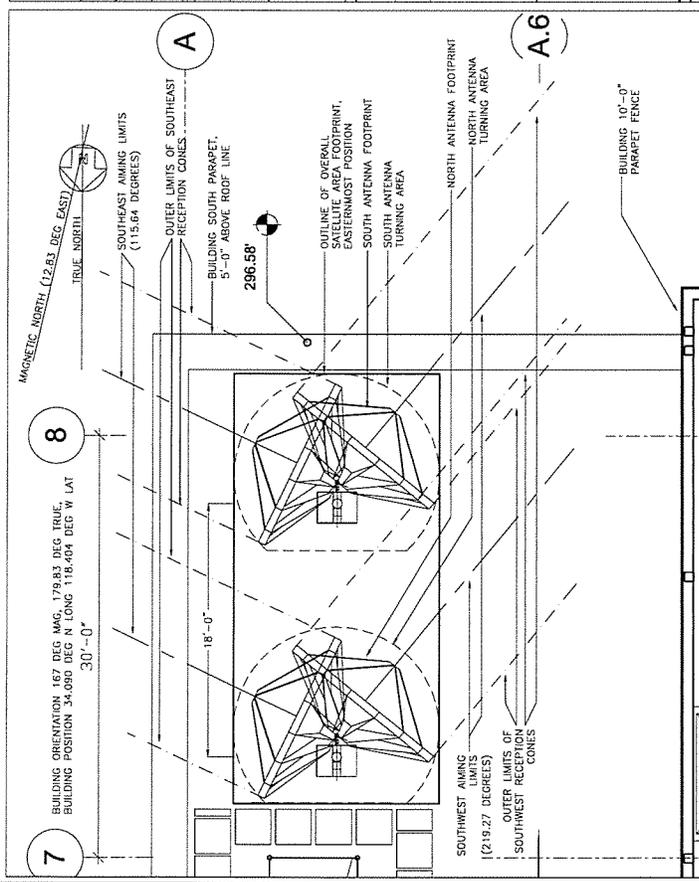
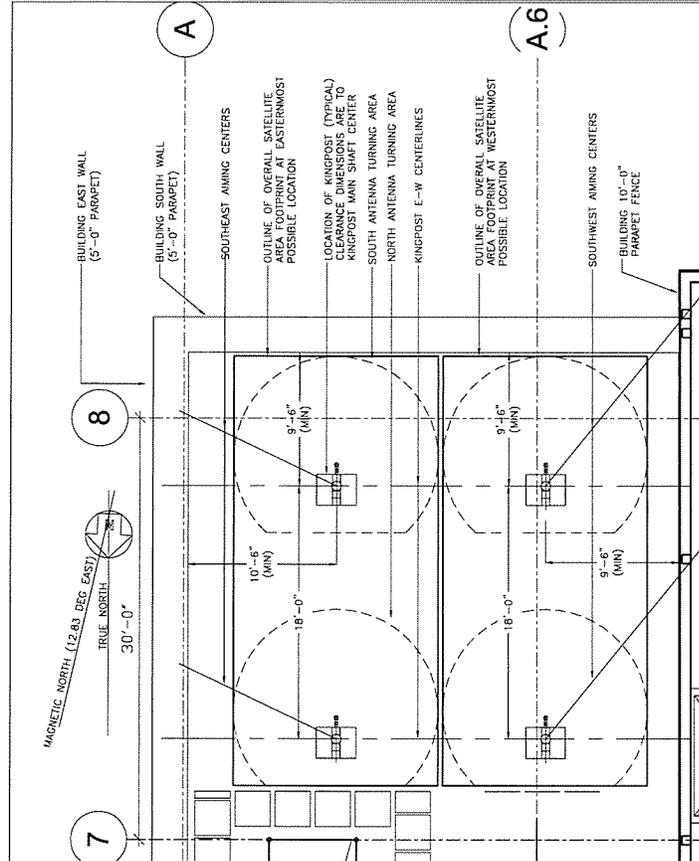
Room	Area (sq. ft.)	Volume (cu. ft.)	Power (VA)	Current (A)	Notes
Media Library Storage (418)	1,100	11,000	1,100	5.0	...
Master Control Room (417)	1,100	11,000	1,100	5.0	...
Rack Room (400)	1,100	11,000	1,100	5.0	...
Edit Room 1 (419)	1,100	11,000	1,100	5.0	...
Edit Room 2 (420)	1,100	11,000	1,100	5.0	...
Edit Room 3 (428)	1,100	11,000	1,100	5.0	...
Edit Room 4 (429)	1,100	11,000	1,100	5.0	...
Dimmer (426)	1,100	11,000	1,100	5.0	...
TV Studio (425)	1,100	11,000	1,100	5.0	...
Green Room (430)	1,100	11,000	1,100	5.0	...
Rehearsal Room (410)	1,100	11,000	1,100	5.0	...
Audio (412)	1,100	11,000	1,100	5.0	...
Production Control Room (431)	1,100	11,000	1,100	5.0	...
Managers Office (432)	1,100	11,000	1,100	5.0	...



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Sheet Size (in):	0	1/2"	1"	1 1/2"
REVISIONS				
A	NO. KNOWN SET	DATE	BY	DATE
B	NO. REVISION SET	DATE	BY	DATE



NOTES
For Television Production Systems Information only; Not for General Construction. Refer to the Architectural, Mechanical, Electrical, and Structural Drawings for General Construction. Locations, sizes, dimensions and routing are for general information only; verify actual conditions in field.

PRODUCTION CENTER
Production Center
Planned Details
REVISIONS
DATE
BY
DATE

CONDUIT/BOX DETAILS AND SOUTH AIMING CLEARANCES
SCALE: 1/4"=1'-0"

SOUTHWEST AIMING CLEARANCES
SCALE: 1/4"=1'-0"

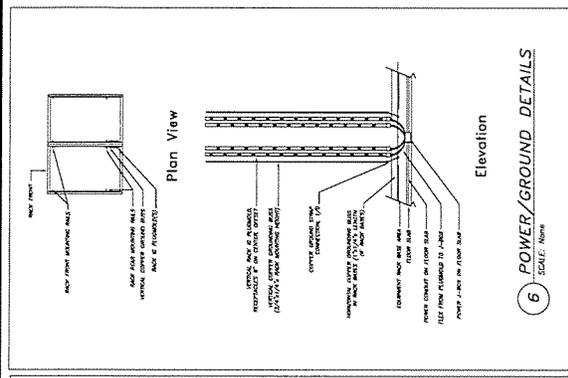
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PAGE: 14 OF 14
PROJECT: BEVERLY HILLS

CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

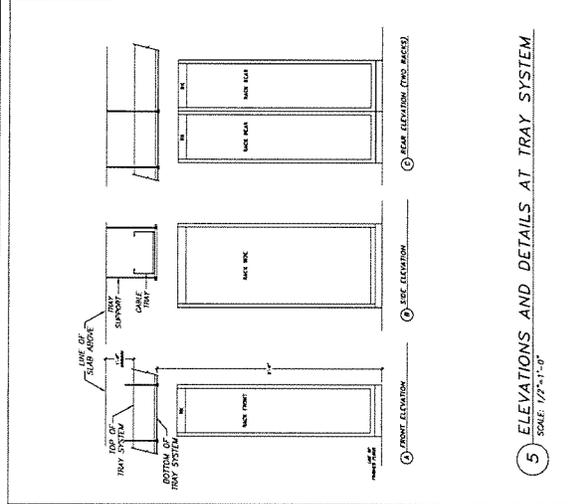
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2	REV. 02/02/09
3	REV. 02/02/09
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5	REV. 02/02/09
6	REV. 02/02/09

Production Center
 Rack Room 409
 Elevations and Details

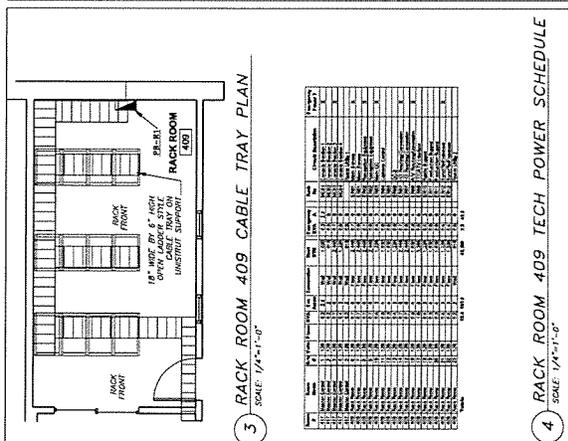
DATE: 02/02/09
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 SHEET NO. 1001



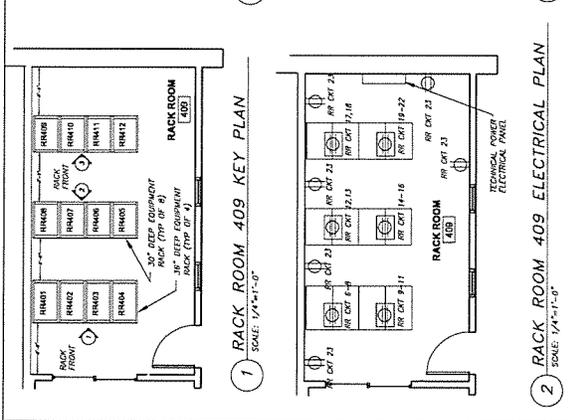
6 POWER/GROUND DETAILS
 SCALE: NONE



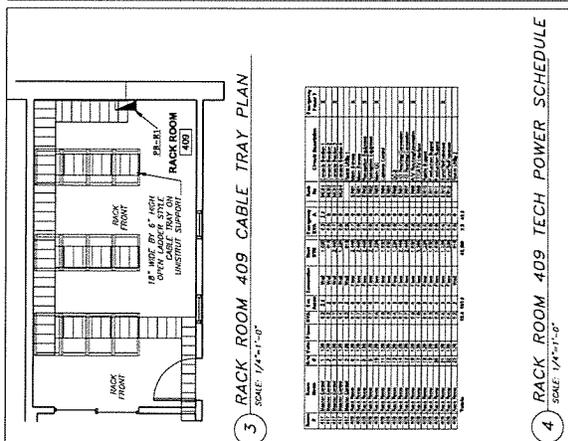
5 ELEVATIONS AND DETAILS AT TRAY SYSTEM
 SCALE: 1/2"=1'-0"



3 RACK ROOM 409 CABLE TRAY PLAN
 SCALE: 1/4"=1'-0"



1 RACK ROOM 409 KEY PLAN
 SCALE: 1/4"=1'-0"



4 RACK ROOM 409 TECH POWER SCHEDULE
 SCALE: 1/4"=1'-0"

UNIT	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL PRICE	DATE
RR401	STUDIO CAMERAS	1	10000.00	10000.00	01/20/09
RR402	SERVERS	1	10000.00	10000.00	01/20/09
RR403	SATELLITES/ANTENNA	1	10000.00	10000.00	01/20/09
RR404	STUDIO CAMERAS	1	10000.00	10000.00	01/20/09
RR405	MASTER CONTROL	1	10000.00	10000.00	01/20/09
RR406	STUDIO	1	10000.00	10000.00	01/20/09
RR407	OC-1	1	10000.00	10000.00	01/20/09
RR408	ROUTER 1	1	10000.00	10000.00	01/20/09
RR409	IT/CATY	1	10000.00	10000.00	01/20/09
RR410	RADIO	1	10000.00	10000.00	01/20/09
RR411	DIGITAL STORAGE	1	10000.00	10000.00	01/20/09
RR412	REF/COMM	1	10000.00	10000.00	01/20/09

7 FRONT ELEVATION AT RACKS RR401-RR404
 SCALE: 1"=1'-0"

8 FRONT ELEVATION AT RACKS RR404-RR408
 SCALE: 1"=1'-0"

9 FRONT ELEVATION AT RACKS RR409-RR412
 SCALE: 1"=1'-0"

NOTES

For Television Production Systems Information only. Not for General Construction. Refer to the Production Center Standard Construction Details for all equipment General Construction. Locations, sizes, dimensions and routing are for general information only. verify actual conditions in field.



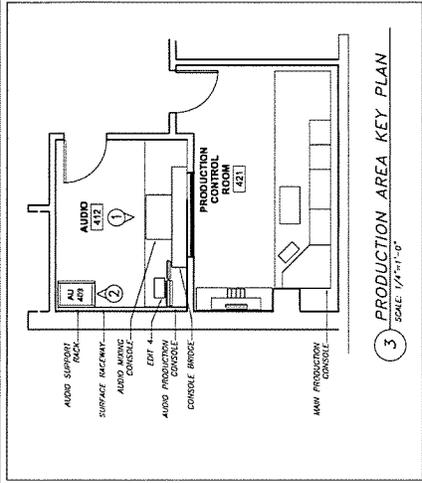
144 S. Foothill, Ste. 200
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Tel: 818.559.2205 Fax: 818.559.2396

CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

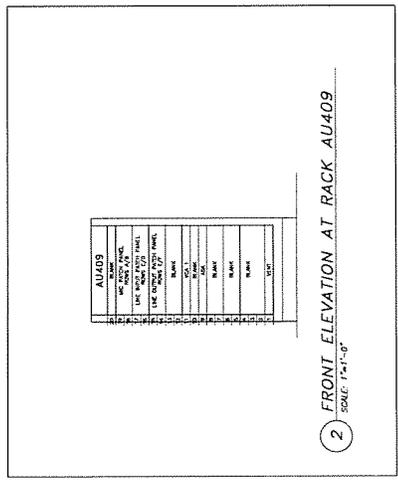
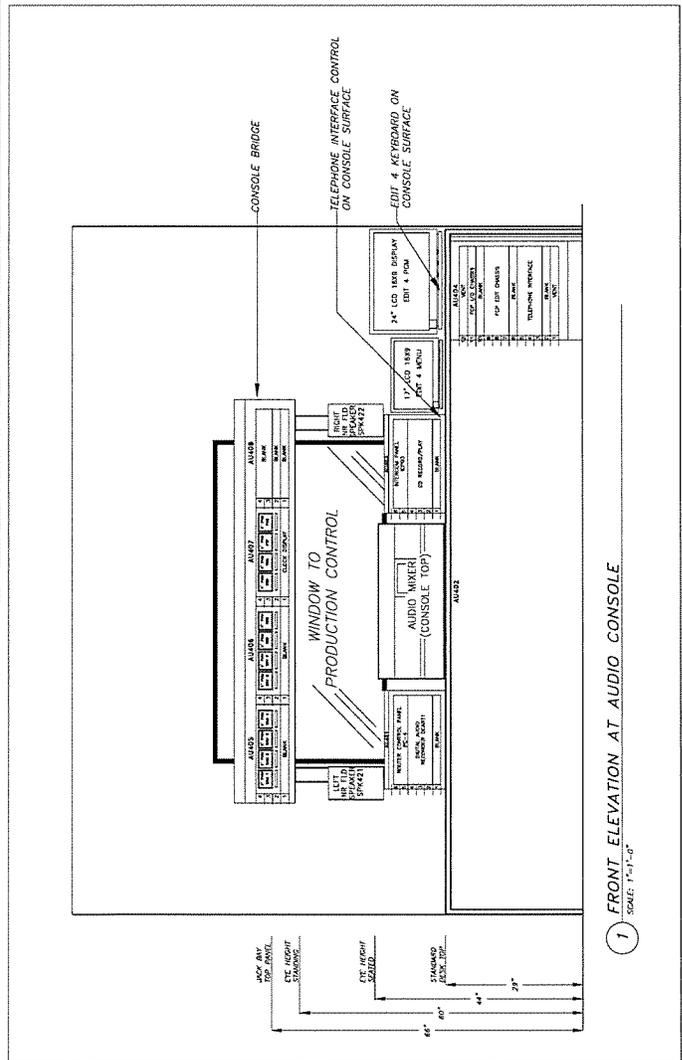
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10	010	08/12/09	JM	JM

PROJECT TITLE
Production Center
Production Control Area
Elevations and Details 2

DATE: 08/12/09
SCALE: TV-3.03
FILE: TVCA1203



NOTES
For Television Production Systems elevations only. Not for use in the design of any other systems. All elevations, electrical and structural drawings for details regarding General Construction, Locations, sizes, dimensions and routing are general information only, vary actual conditions in field.





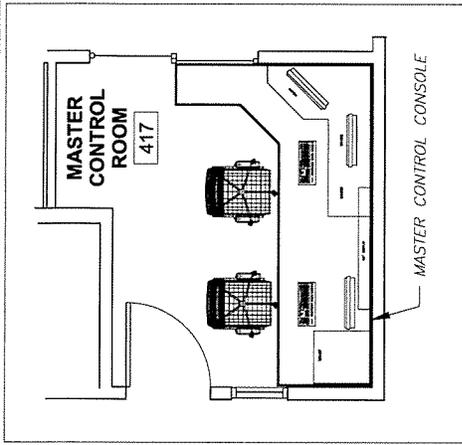
144 S. Phelps St. Ste. 200
Beverly Hills, CA 90212
T: 818.559.2200 F: 818.559.2386

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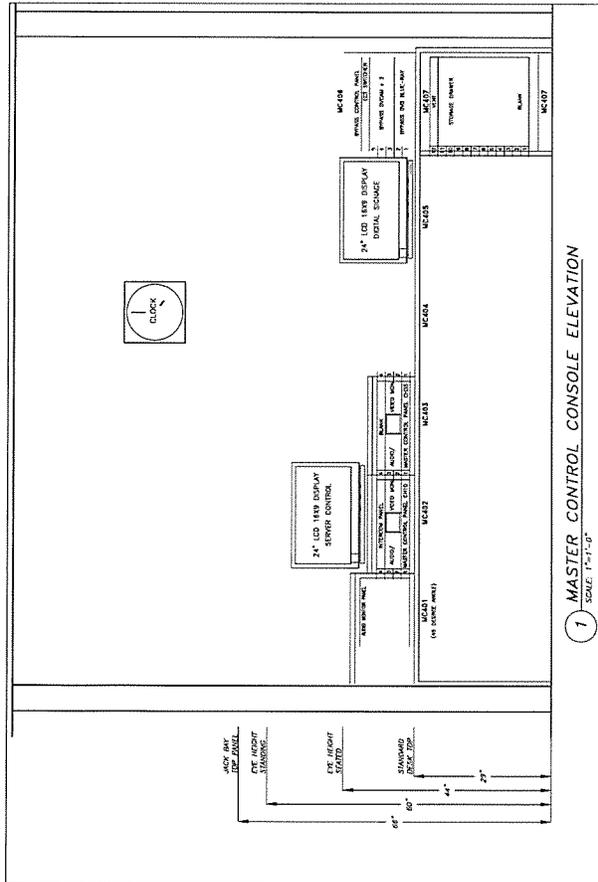
Beverly Hills, California

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2. REVISED WORK	11/17/14
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4. REVISED WORK	11/17/14
5. REVISED WORK	11/17/14
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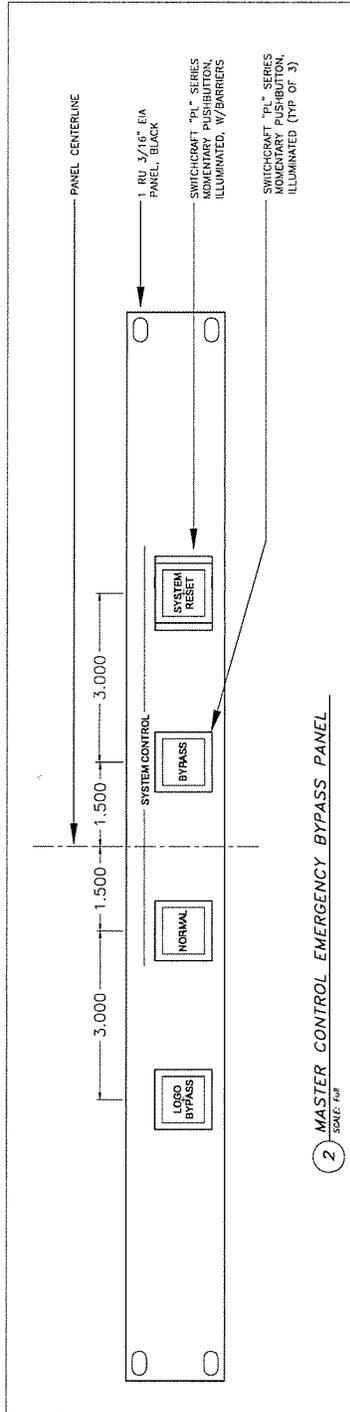
SHEET TITLE	
Production Center	Master Control Elevations and Details
DESIGNED BY	DAVID J. JONES
CHECKED BY	DAVID J. JONES
DATE	8/21/14
SCALE	NONE
PROJECT NO.	144 S. PHELPS ST.



3 MASTER CONTROL KEY PLAN
SCALE: 1/2"=1'-0"



1 MASTER CONTROL CONSOLE ELEVATION
SCALE: 1"=1'-0"

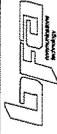


2 MASTER CONTROL EMERGENCY BYPASS PANEL
SCALE: 1/2"=1'-0"

NOTES

For Television Production Systems Information only; Not for Construction. All dimensions are for general information only; verify actual conditions in field.

Electrical and Structural Drawings for details regarding General Construction. Locations, sizes, dimensions and routing are for general information only; verify actual conditions in field.

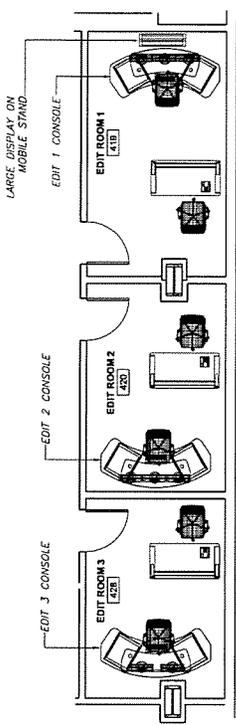


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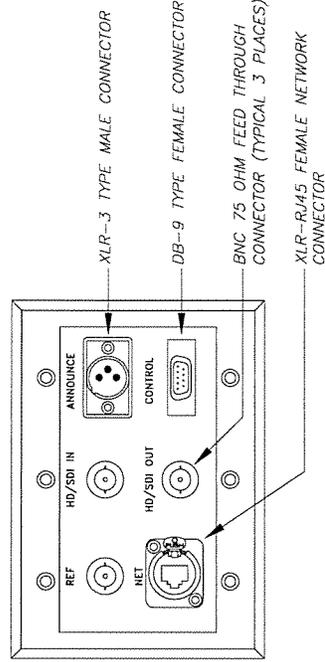
CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

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7	DATE
8	BY
9	DATE
10	BY
11	DATE
12	BY
13	DATE
14	BY
15	DATE
16	BY
17	DATE
18	BY
19	DATE
20	BY

SCHEDULE	
NO.	DESCRIPTION
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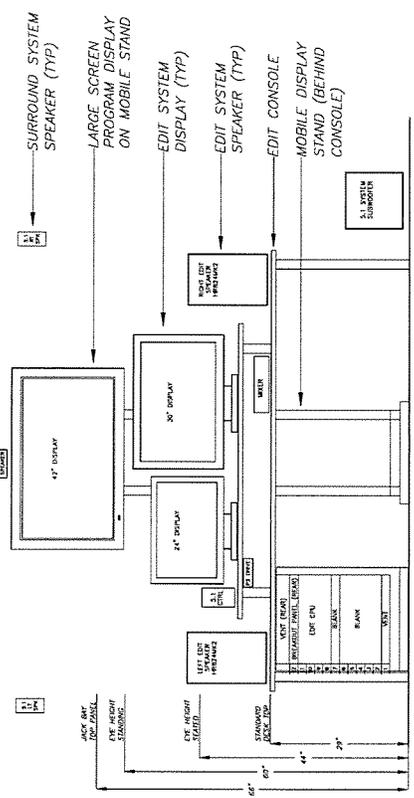


3 EDIT ROOMS 1-3 KEY PLAN
SCALE: 1/4"=1'-0"

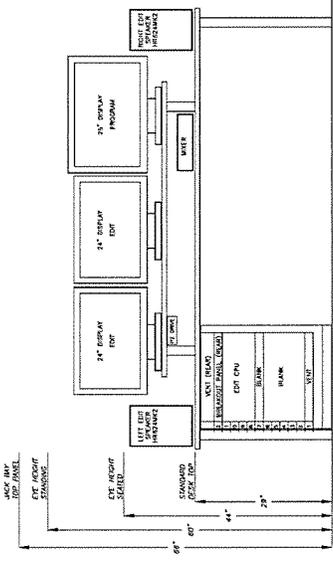


4 EDIT ROOM 1-3 INTERCONNECT PLATE ELEVATION (TYPICAL OF 3)
SCALE: 1/4"=1'-0"

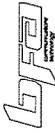
NOTES
For Television Production Systems Information only: Not for General Construction. Refer to the Architectural, Electrical and Structural Drawings for details regarding equipment, materials, and construction. All dimensions and loadings are for general information only; verify actual conditions in field.



1 EDIT 1 CONSOLE ELEVATION
SCALE: 1/4"=1'-0"



2 EDITS 2 AND 3 CONSOLE ELEVATION (TYPICAL OF 2)
SCALE: 1/4"=1'-0"



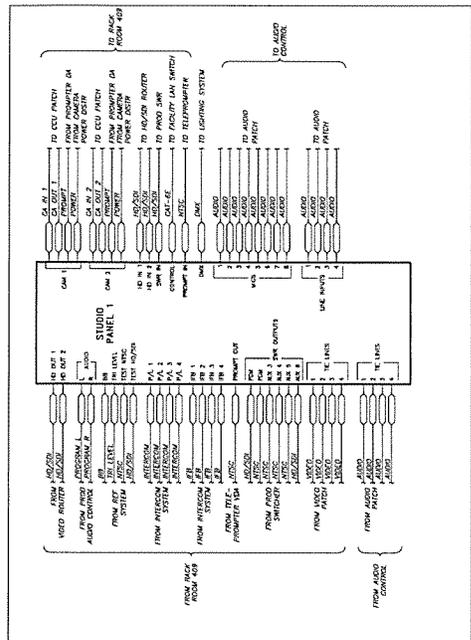
144 S. First St., Ste. 200
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CITY OF BEVERLY HILLS MEDIA CENTER

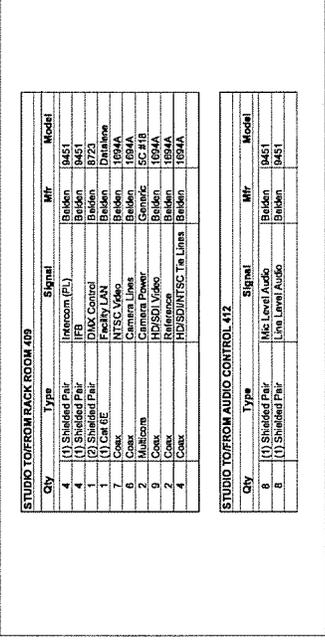
Beverly Hills, California

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20	04/01/09	JK	REVISED PER PERMITS

Production Center
Studio Interconnect Panels
Elevation, Rear and Details
Drawing No. 100-100000-000
Revision No. 100-100000-000
Scale: 1/4" = 1'-0"
Date: 04/01/09
Sheet No. TV-3.11
Rev. 100-100000-000

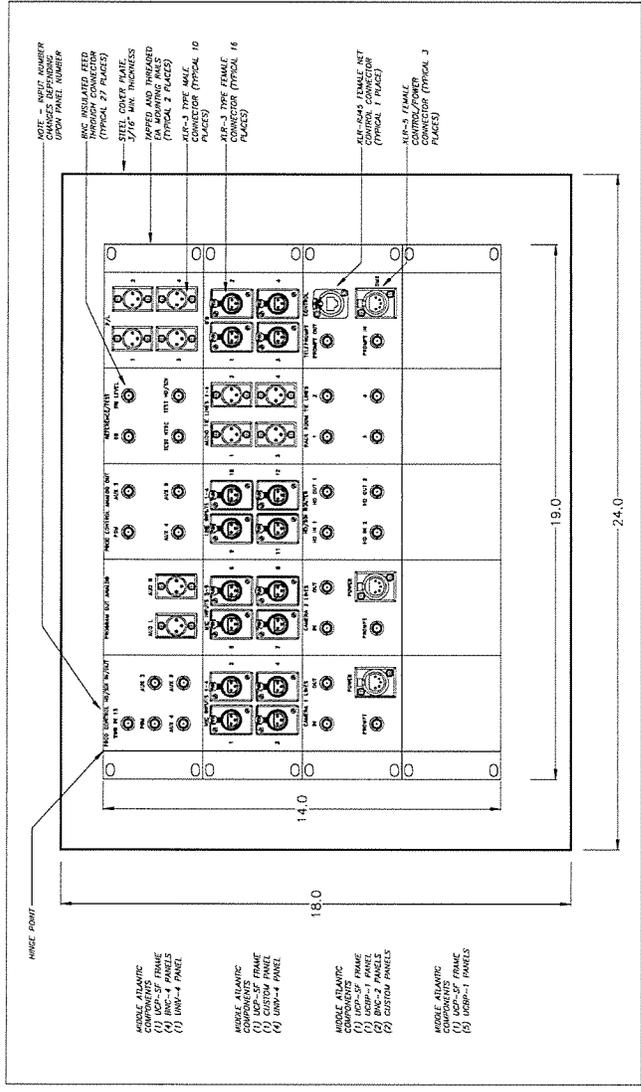


3 STUDIO INTERCONNECT PANEL CONNECTIONS (TYP OF 4)
SCALE: None

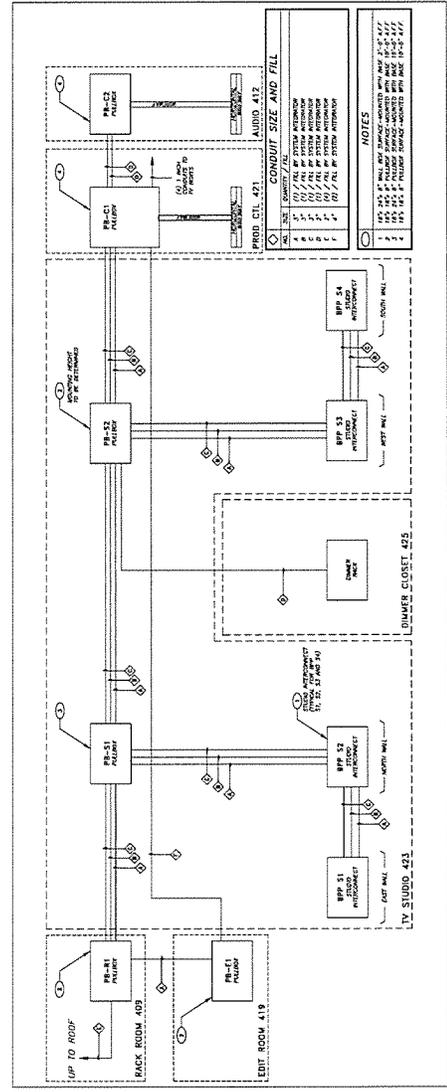


4 STUDIO INTERCONNECT PANEL CABLE SCHEDULE (TYP OF 4)
SCALE: None

NOTES
For Television Production Systems Information only: Not for General Construction. Refer to the Architectural, Electrical and Structural Drawings for details regarding routing and installation. Verify actual conditions in field.



1 STUDIO INTERCONNECT PANEL ELEVATION, TYPICAL OF (4)
SCALE: 1/4" = 1'-0"



2 STUDIO INTERCONNECT PANEL RISER DIAGRAM
SCALE: None

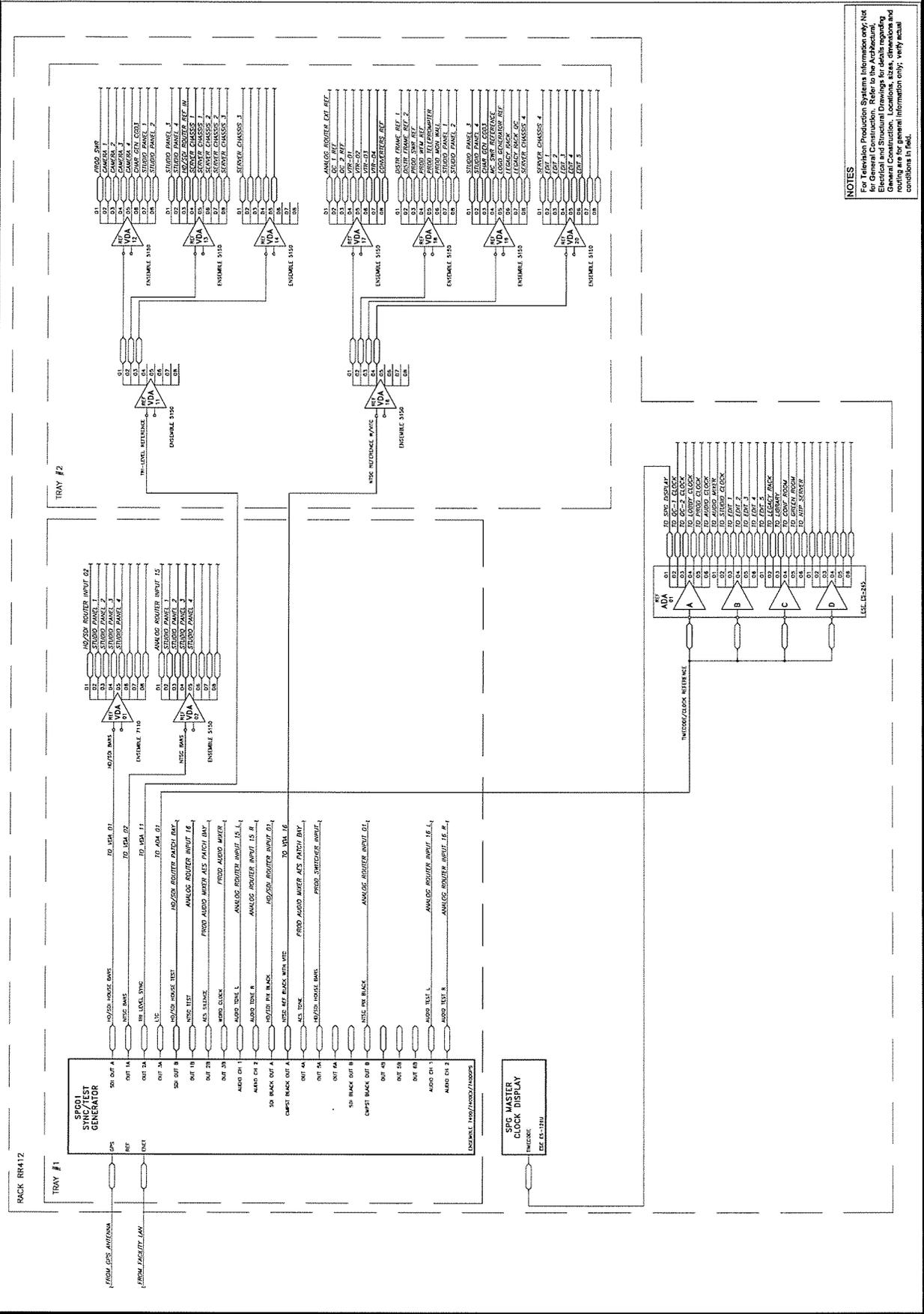


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CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

REVISIONS	
A	REV. 01/04/09
B	REV. 02/27/10

SHEET TITLE	
Production Center Reference System Single Line Diagram	
DATE:	07/27/09
BY:	TV-4,02
CHKD BY:	
INSTR. NO.:	



NOTES
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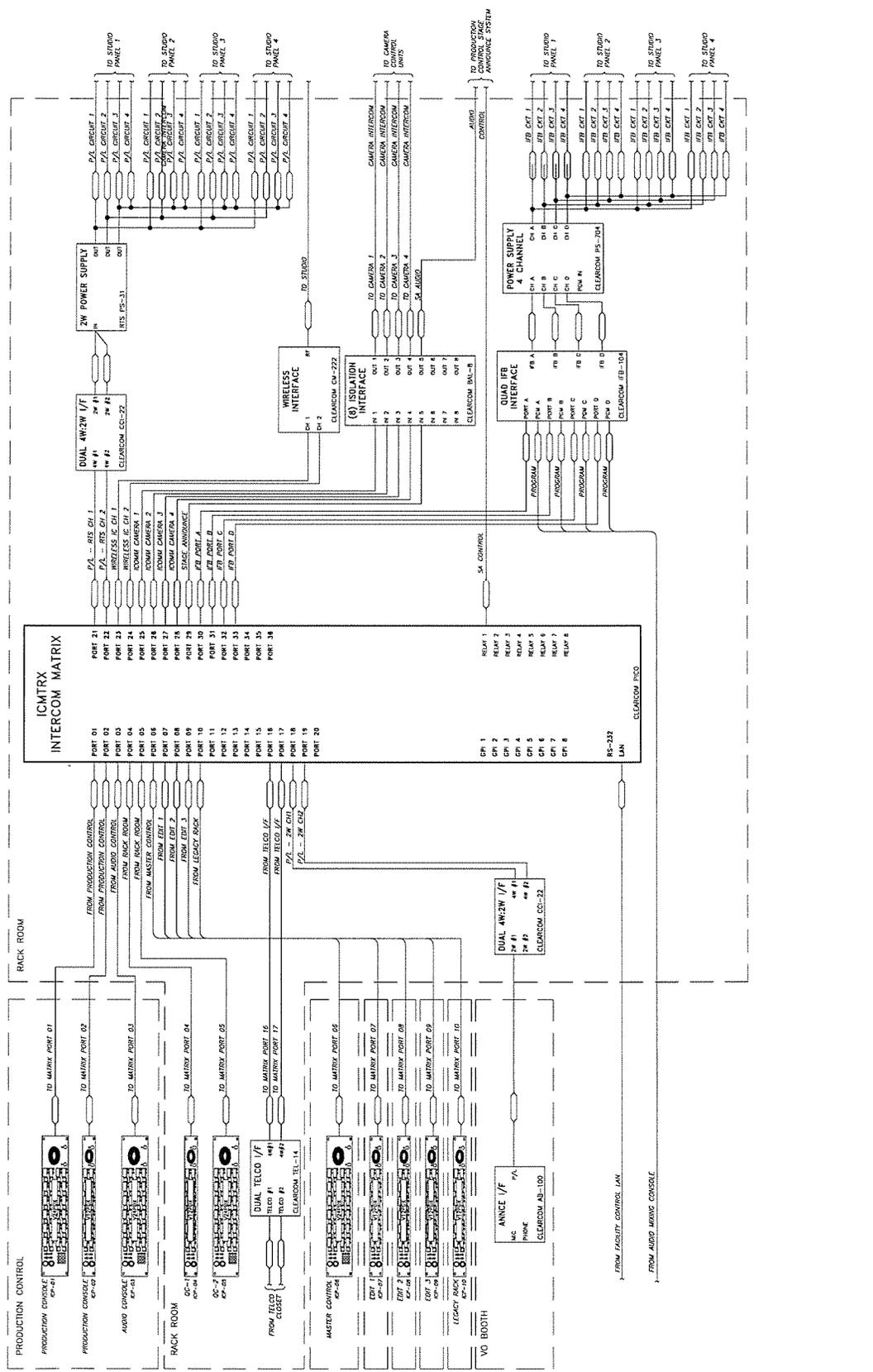


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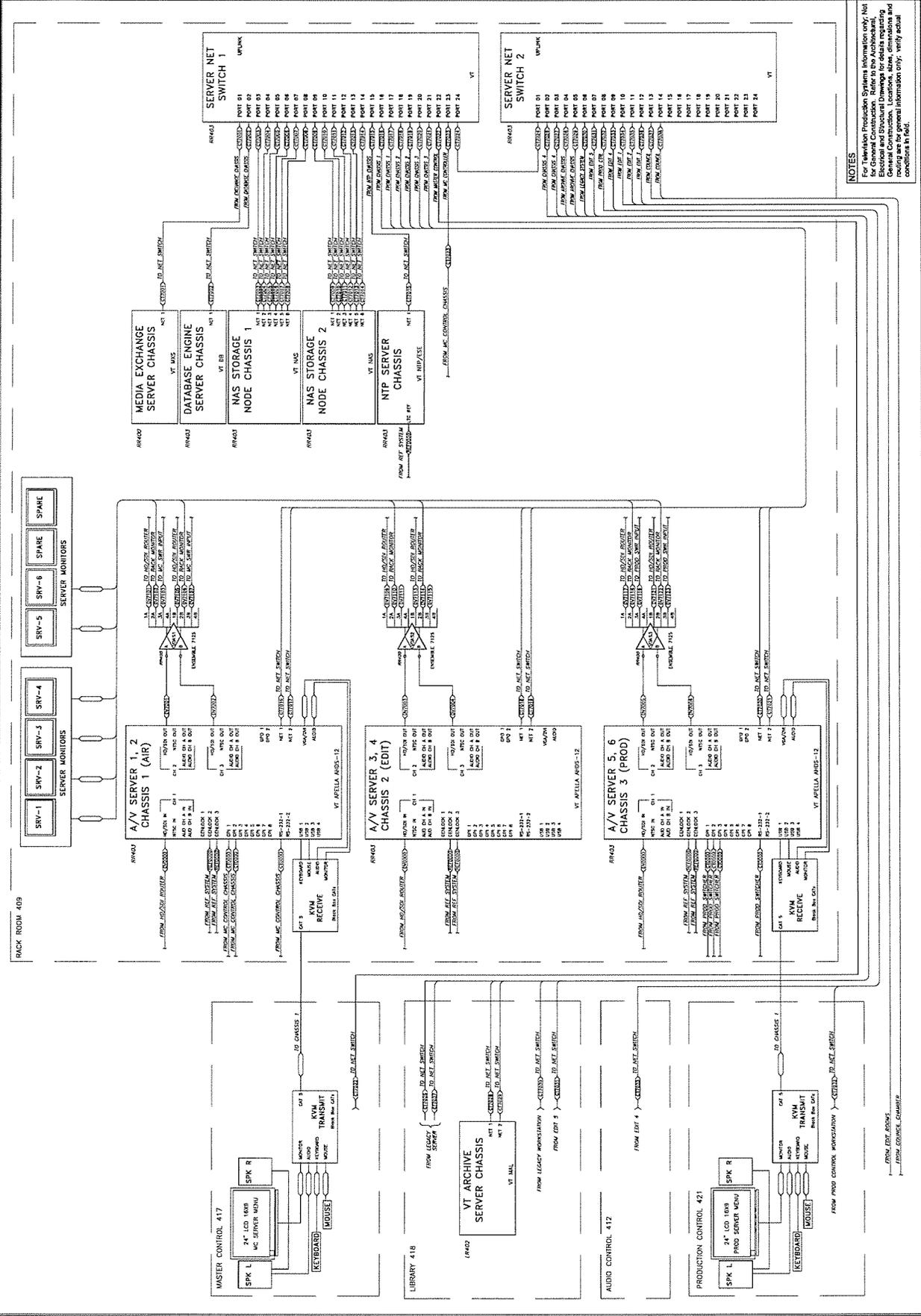
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20	11/10/05	ISSUE FOR PERMIT

PROJ. NO. 05-00000000
SHEET NO. 05-00000000
REVISED DATE 11/10/05
REVISED BY JMM
CHECKED BY JMM
DESIGNED BY JMM
DRAWN BY JMM
PROJECT NAME
TV-4.03
PROJ. TITLE
Production Center
Intercom System
Single Line Diagram



NOTES
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CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California



NOTES
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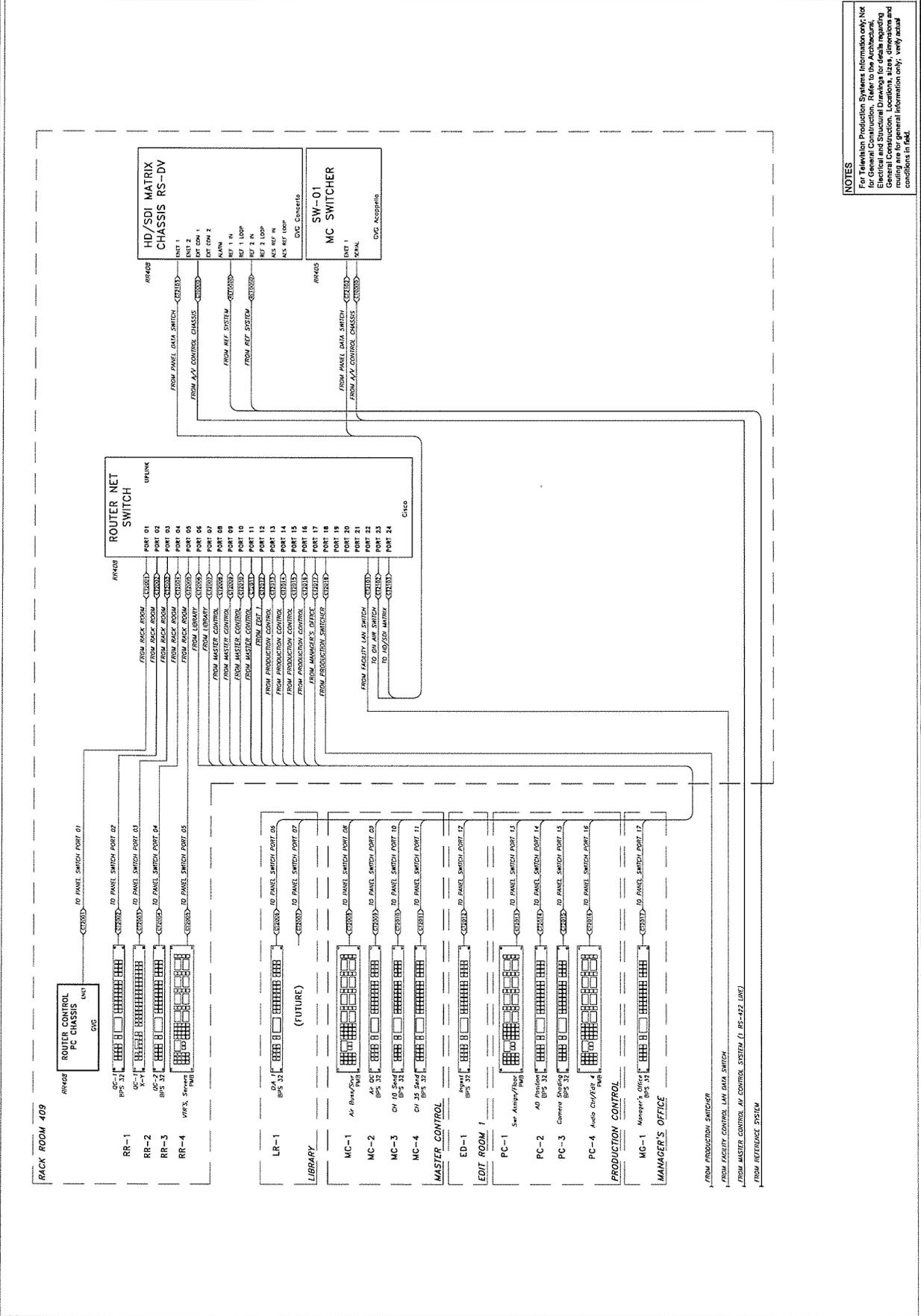


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CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

REV	DESCRIPTION	DATE
1	ISSUE FOR SET	07/12/09
2	ISSUE FOR SET	08/20/09

SHEET TITLE	
Production Center HD/SDI Routing Switchers Control Single Line Diagram	
DATE: 07/12/09	SCALE: AS SHOWN
PROJECT NO: 09-0000	TV-4-06
DESIGNER: J. M. HARRIS	C.D.G. ELECTRICS



NOTES
For Television Production Systems Information only; Not for Construction. This diagram is a schematic diagram of the Electrical and Structural Drawings for details regarding General Construction. Locations, sizes, dimensions and routing are for general information only; verify actual conditions in field.



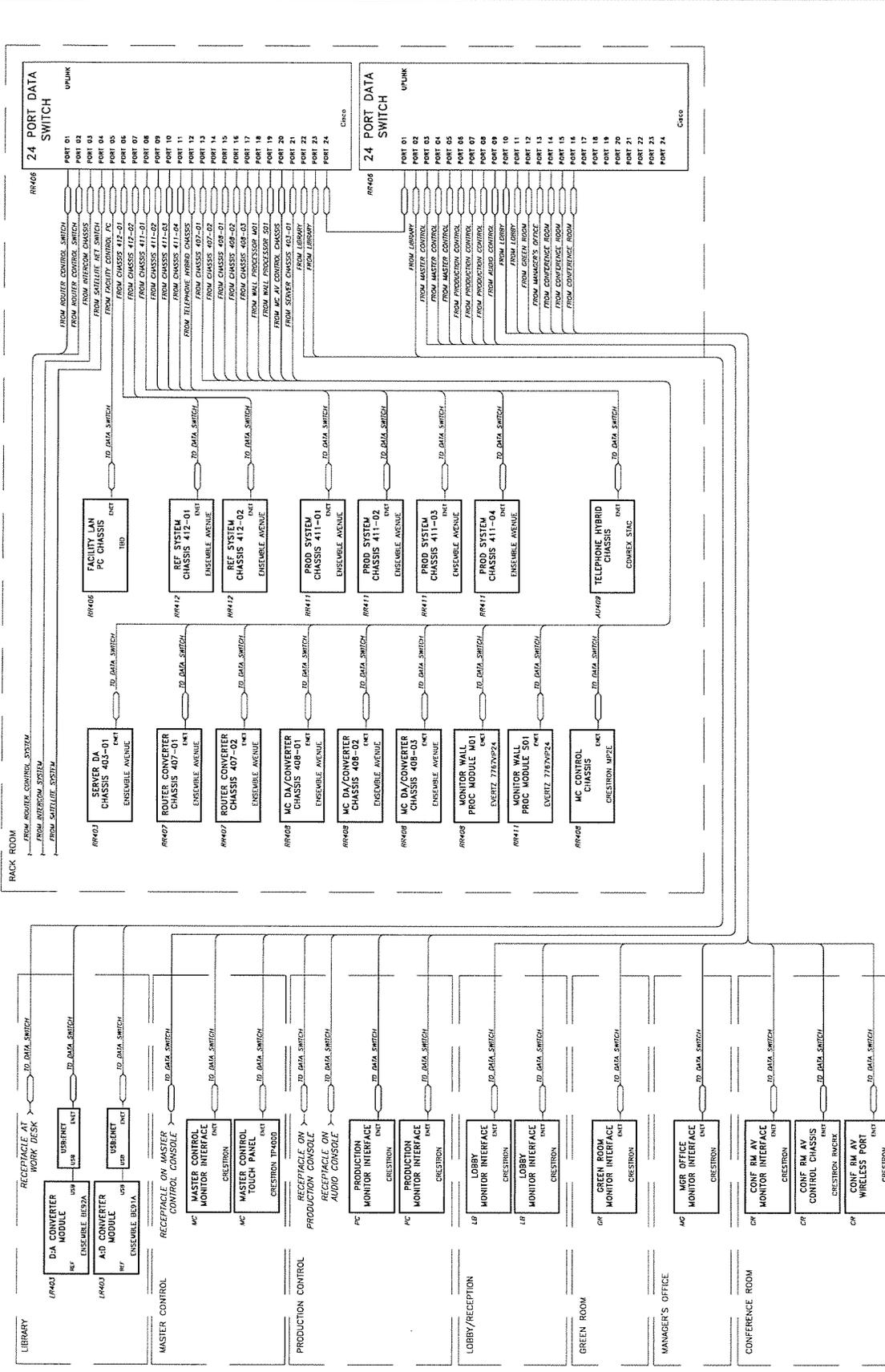
144 S. Pico St., Ste 200
 Beverly Hills, CA 90212
 TEL: 310.559.2205 FAX: 310.559.2396

CITY OF BEVERLY HILLS MEDIA CENTER

Beverly Hills, California

NO.	REVISION	DATE	BY	APP.
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2	REVISED	07/27/09		
3	REVISED	07/27/09		
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100	REVISED	07/27/09		

PRODUCTION CENTER
 Facility Control LAN
 Single Line Diagram
 DRAWN: JPH
 CHECKED: JPH
 DATE: 7/27/09
 SCALE: AS SHOWN
 SHEET NO.: TV-4.08
 TOTAL SHEETS: 10



NOTES
 For Television Production Systems Information only: Not
 to be used for Construction. This diagram is for
 Electrical and Structural Drawings for cable routing,
 General Construction, Locations, sizes, dimensions and
 routing are for general information only. verify actual
 conditions in field.

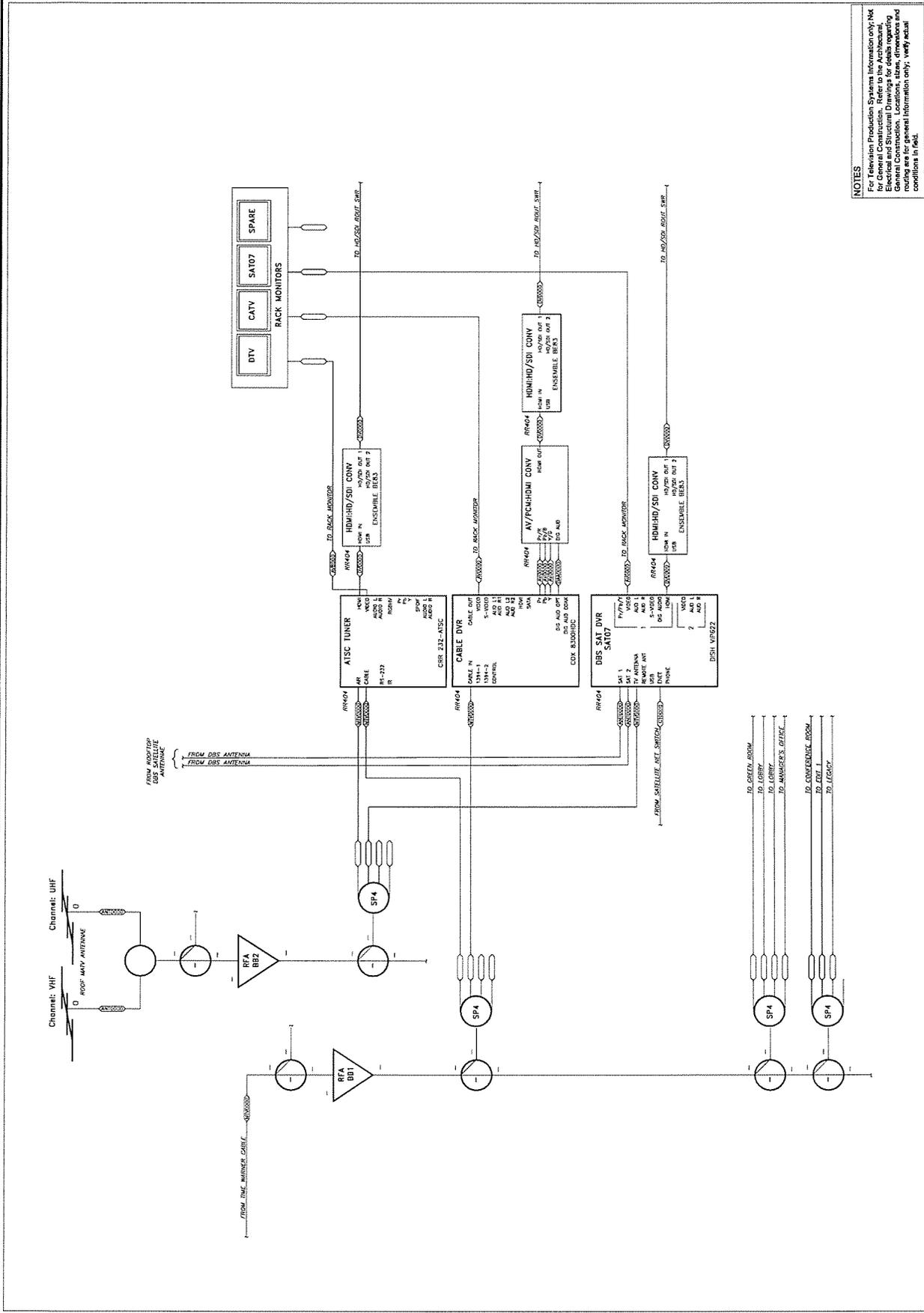


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CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

REVISIONS	
A	1.00 REVISED SET
B	1.00 ISSUED SET
C	
D	
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SHEET TITLE	
PROJECT	Production Center
DESCRIPTION	Transmission-Air/DSS/CATV Single Line Diagram
DRAWN BY	WJF
CHECKED BY	WJF
DATE	07/25/09
SCALE	1/4" = 1'
SHEET NO.	11
TOTAL SHEETS	11



NOTES
 For Television Production Systems Information only; Not for General Construction. Refer to the Architectural, Electrical and Structural Drawings for details regarding Construction. All dimensions and notes are for general information only; verify actual conditions in field.



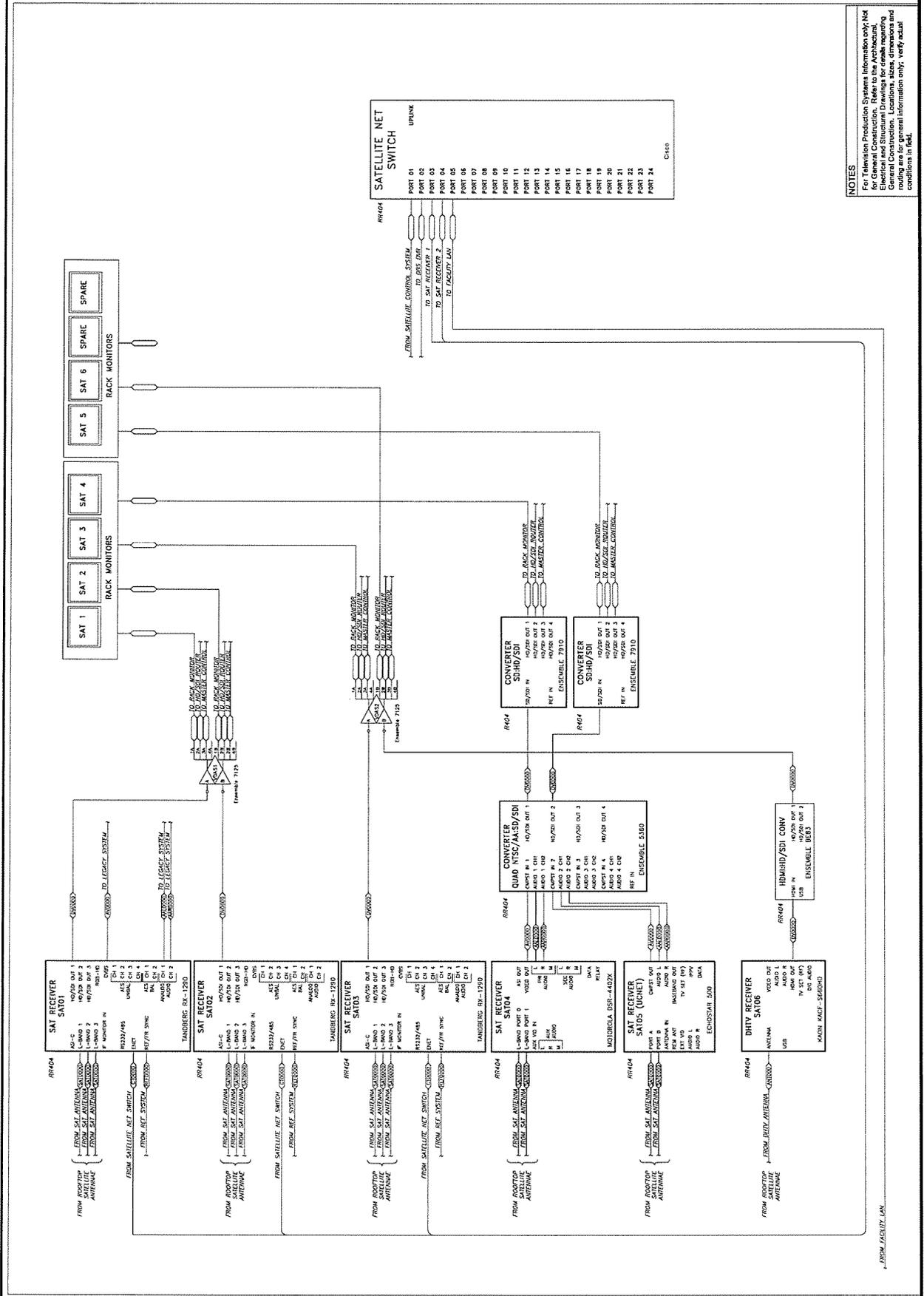
144 S. First St., Ste 200
Burbank, CA 91502
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CITY OF BEVERLY HILLS MEDIA CENTER

Beverly Hills, California

REVISIONS	
A	RD 0000 2/17/09
B	RD 0004 07/15/09

SHEET TITLE	
Production Center	
Transmission - Satellites	
Single Line Diagram	
DATE: 07/15/09	DRAWN: JES
CHECKED: JES	SCALE: N/A
DATE: 07/15/09	PROJECT: TV4.12
DATE: 07/15/09	FILE: BK11411



NOTES
 For Television Production Systems Information only. Not
 to be used for Electrical and Structural Drawings for construction
 General Construction. Locations, sizes, dimensions and
 routing are for general information only; verify actual
 conditions in field.

CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

NO.	DATE	DESCRIPTION
1	11/11/09	ISSUED FOR PERMIT
2	01/27/10	REVISED PER COMMENTS
3	02/10/10	REVISED PER COMMENTS
4	02/10/10	REVISED PER COMMENTS
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SHEET TITLE
 Production Control
 Video Single Line Diagram

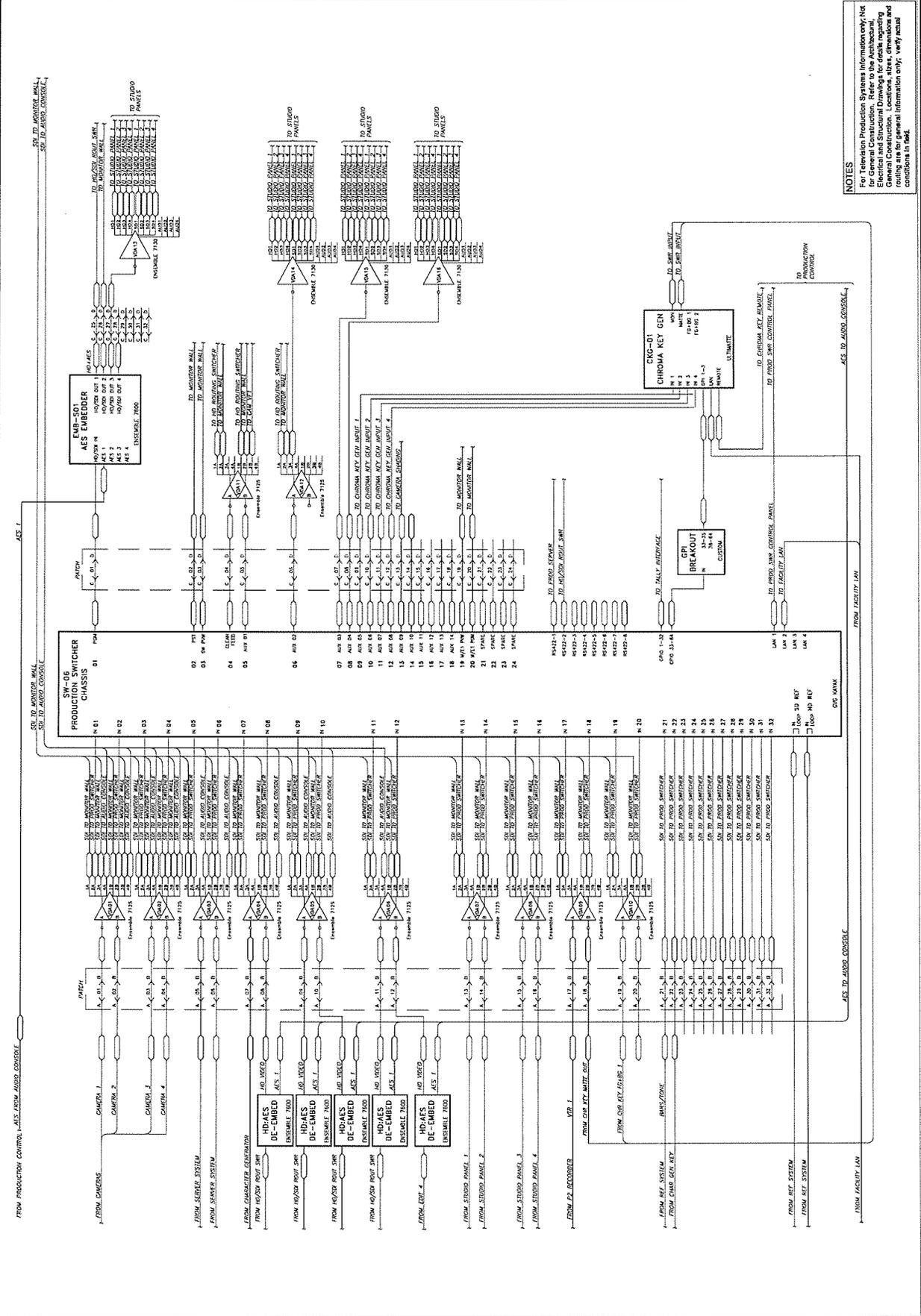
CONTRACT NO.
 09-00000000

PROJECT NO.
 09-00000000

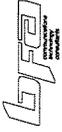
DATE
 02/10/10

SCALE
 TV-4.21

DWG. NO.
 09-00000000



NOTES
 For Television Production Systems Information only; Not
 to be used for Construction. Locations, sizes, dimensions and
 General Construction. Locations, sizes, dimensions and
 routing are for general information only; verify actual
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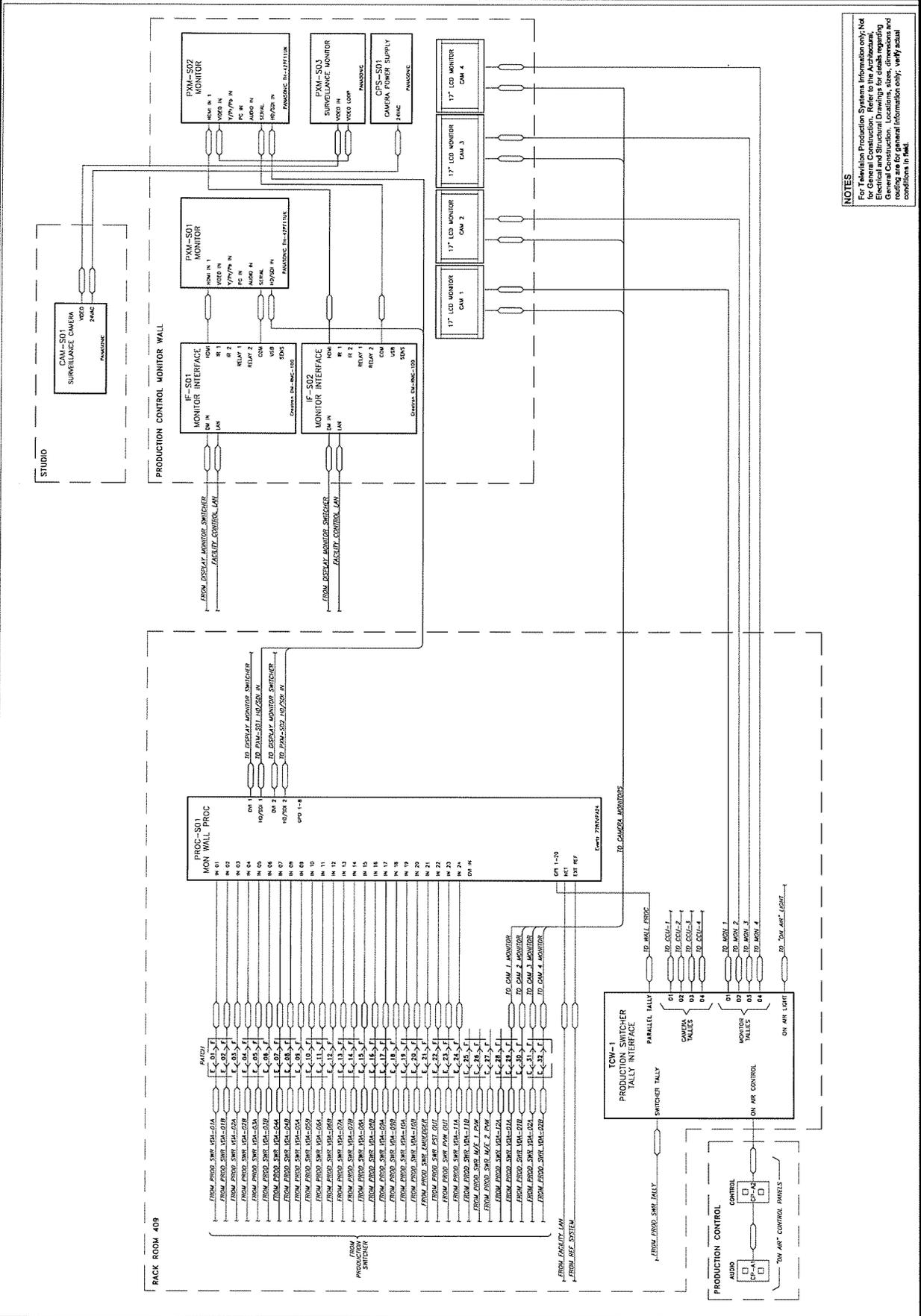


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CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

NO.	DATE	DESCRIPTION
1	12/15/09	REVISED

PROJECT NO.	144 S. FOOTHILL BLVD. 200
DATE	07/27/09
SCALE	TV-4, 2.2
NO.	12.0
SECTION	N.O. SECTION



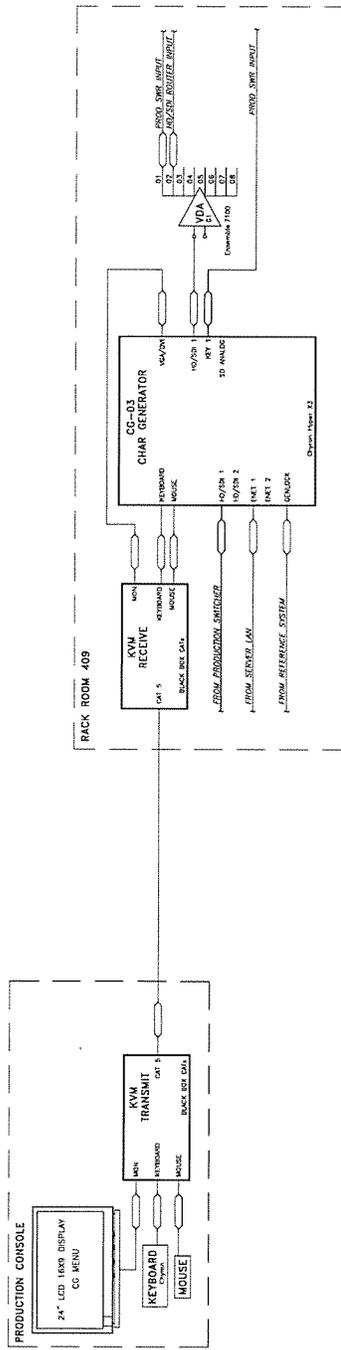
NOTES
For Television Production Systems Information only; Not for Construction. This drawing is a Single Line Diagram. Electrical and Structural Drawings for details regarding General Construction, Locations, sizes, dimensions and routing are for general information only; verify actual conditions in field.



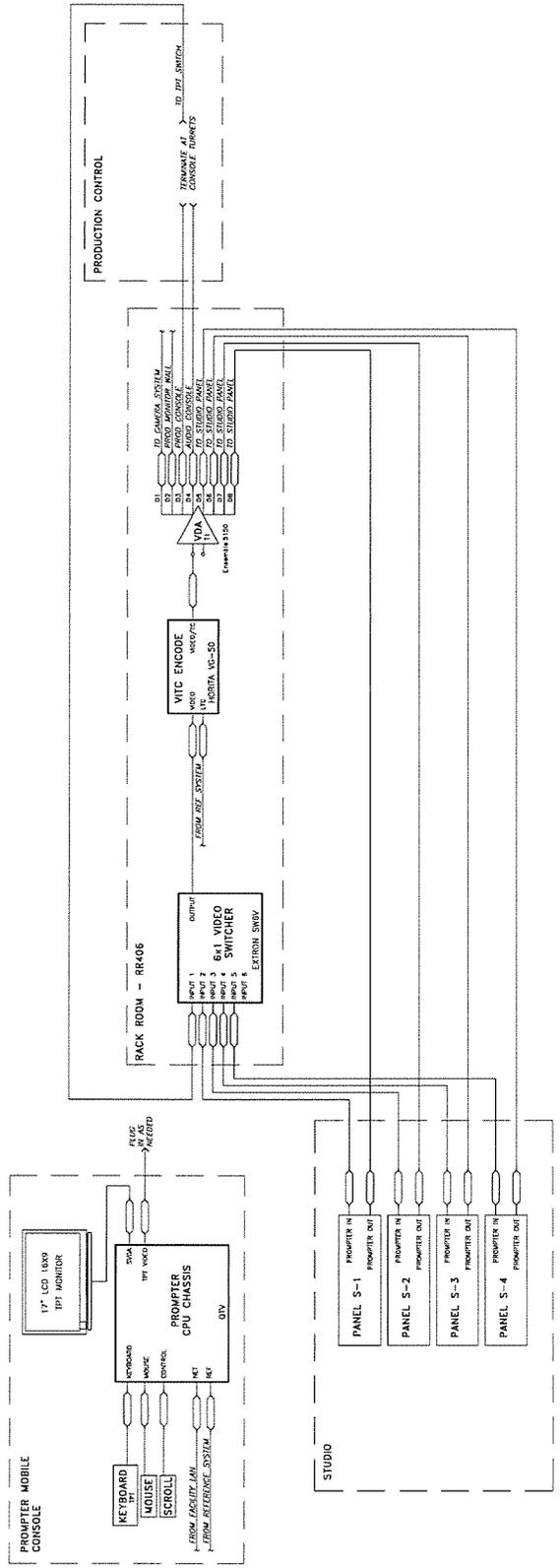
144 S. Fair St., Ste 200
Beverly Hills, CA 90212
Tel: 310.559.2200
Fax: 310.559.2888

CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

SHEET TITLE	
1	CHARACTER GENERATOR SYSTEM
2	TELEPROMPTER SYSTEM
3	PRODUCTION CONTROL
4	STUDIO
5	PRODUCTION CONTROL
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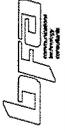


1 CHARACTER GENERATOR SYSTEM
SCALE: None



2 TELEPROMPTER SYSTEM
SCALE: None

NOTES
 1. See Specifications Production System Information only; Not for General Construction. Refer to the Architect, Electrical and Structural Drawings for details regarding General Construction. Locations, sizes, dimensions and quantities are for general information only; verify actual conditions in field.
 2. DATE: 02/27/02
 3. DRAWN BY: [Name]
 4. CHECKED BY: [Name]
 5. DESIGNED BY: [Name]
 6. APPROVED BY: [Name]

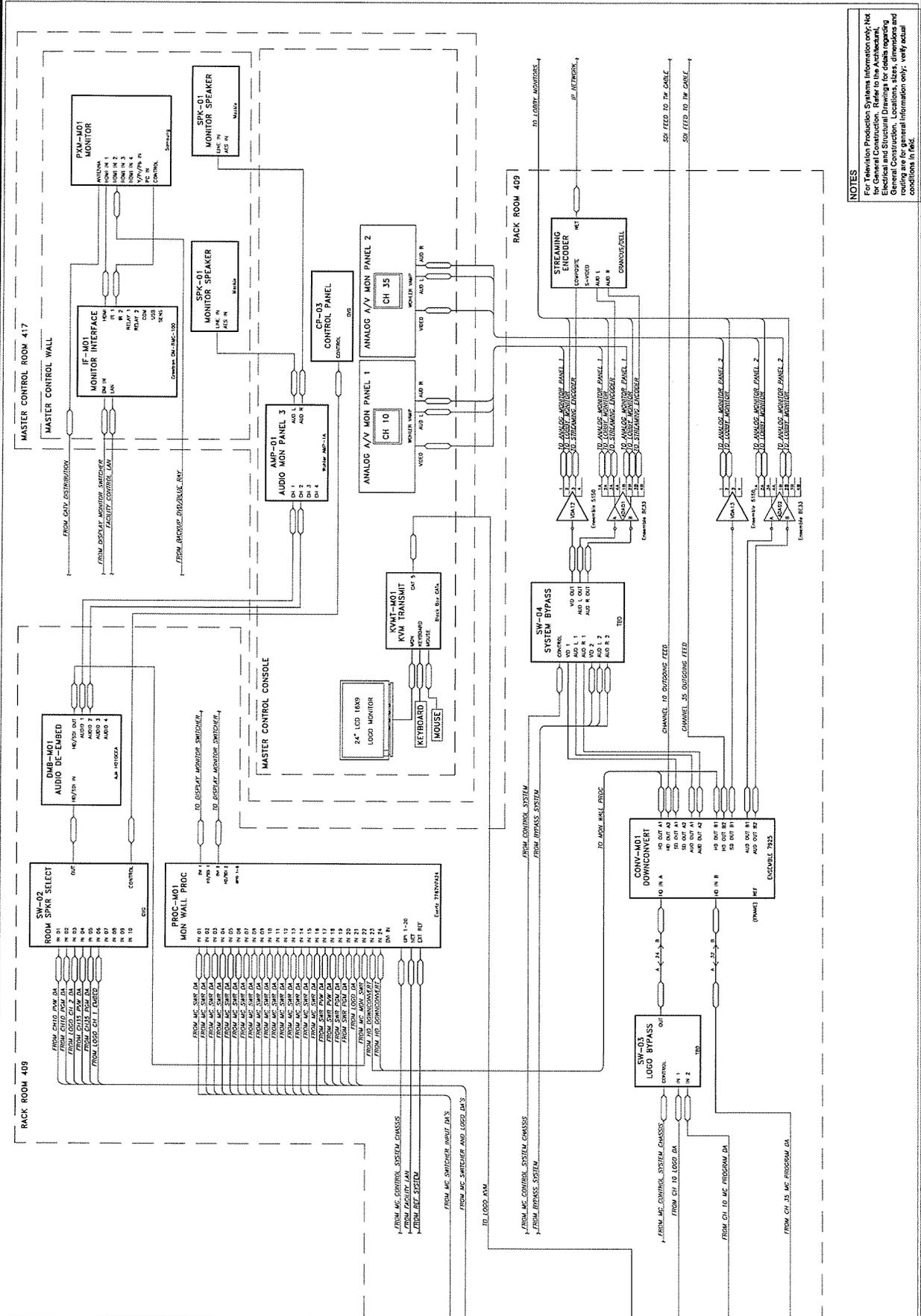


145 FMSL Sub 200
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CITY OF BEVERLY HILLS MEDIA CENTER Beverly Hills, California

NO.	REVISIONS	DATE	BY
1	REVISED SET	01/12/2019	

SHEET TITLE
Production Center
 Master Control
 Video Single Line Diagram 2
 DATE: 01/12/2019
 SHEET: TV-4.32
 PROJECT: 145 FMSL



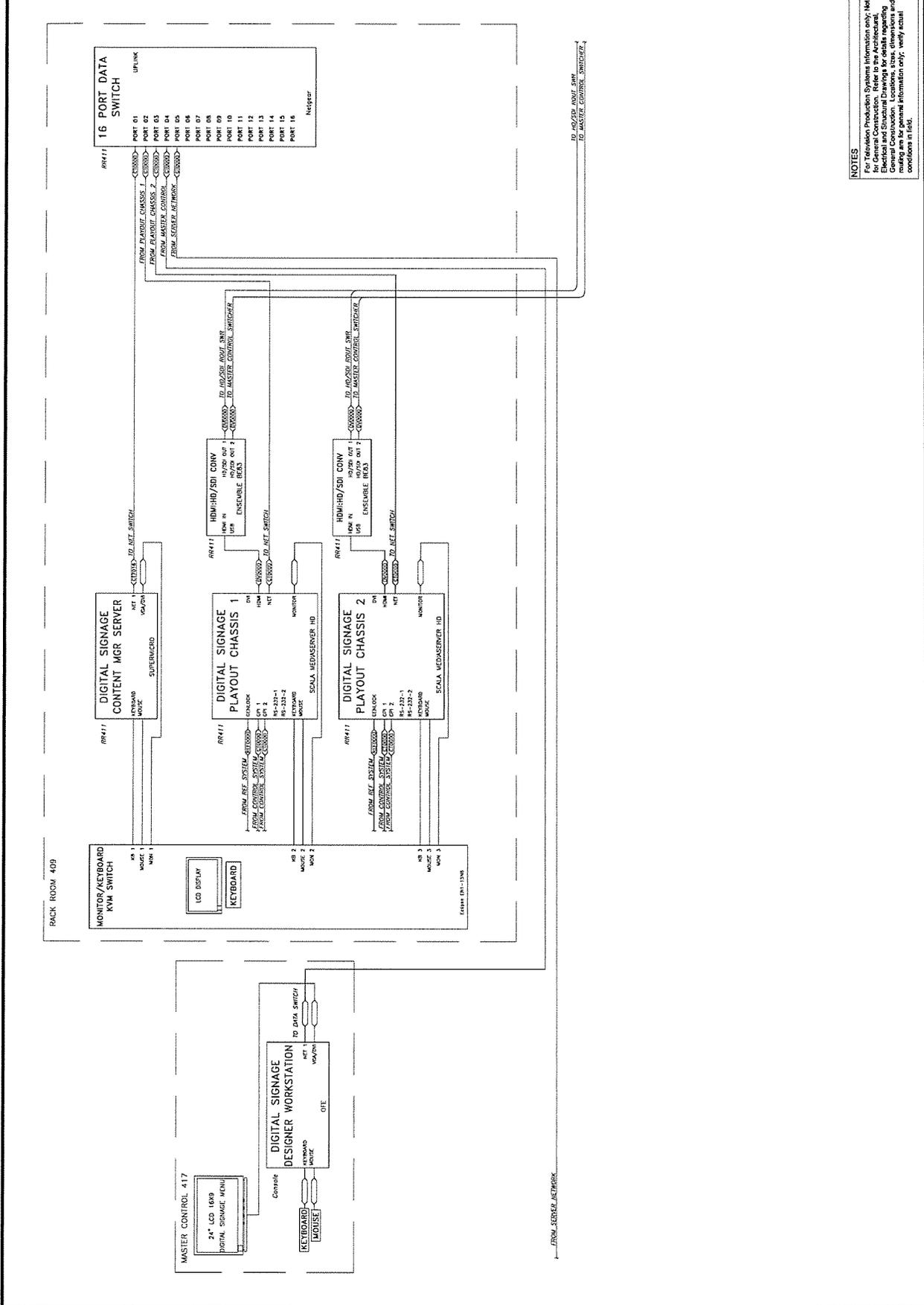
NOTES
 For Television Production Systems Information only. Not for General Construction. Refer to the Architectural, Electrical and Structural Drawings for details regarding equipment, dimensions, and routing. All equipment and routing are for general information only. verify actual conditions in field.



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CITY OF BEVERLY HILLS MEDIA CENTER

Beverly Hills, California



NOTES
For Television Production Systems Information only. Not for General Construction. Refer to Architectural, Electrical and Structural Drawings for details regarding equipment and materials. This drawing is for general information only, verify actual conditions in field.

REVISIONS

NO.	DATE	BY	DESCRIPTION
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PROJECT INFORMATION

Production Center
Master Control Digital
Signage Single Line Diagram
Drawing No. TV-4.34
Scale: As Shown
Date: 11/11/10
Sheet No. 12 of 12



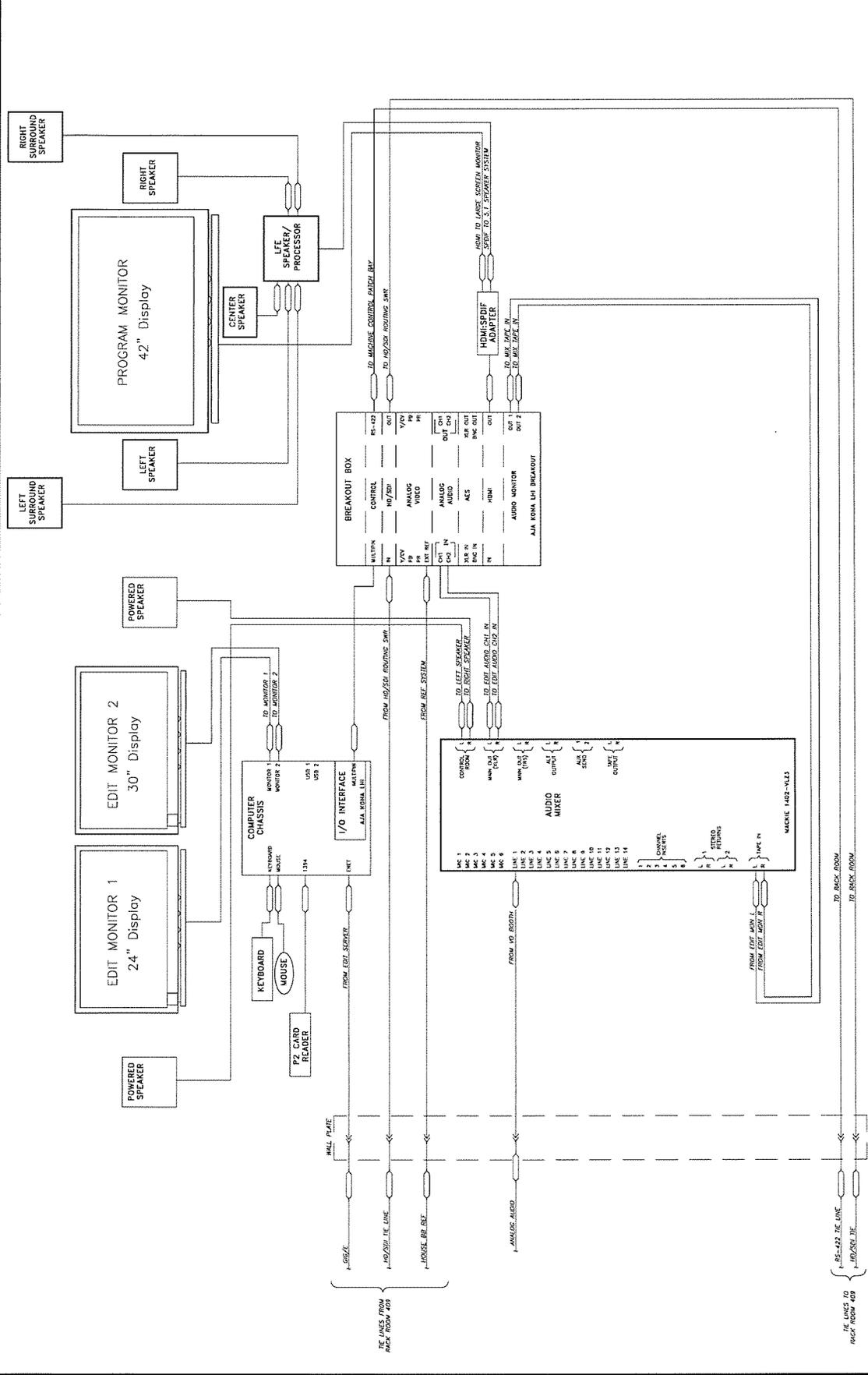
144 S. First St., Ste 200
Beverly Hills, CA 91602
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CITY OF BEVERLY HILLS MEDIA CENTER

Beverly Hills, California

NO.	REVISIONS	DATE
1	REVISED	12/12/02

PROJECT NO.	TV-4.41
DATE	12/12/02
BY	
CHECKED	
SCALE	
APP. NO.	
APP. DATE	
APP. NAME	
APP. TITLE	



NOTES
 For Revision Production Systems Information only, Not for General Construction. Refer to the Architectural, Electrical and Structural Drawings for details regarding General Construction. Locations, sizes, dimensions and quantities are general information only, verify actual conditions in field.

1 EDIT SYSTEM 1
 SCALE: NONE



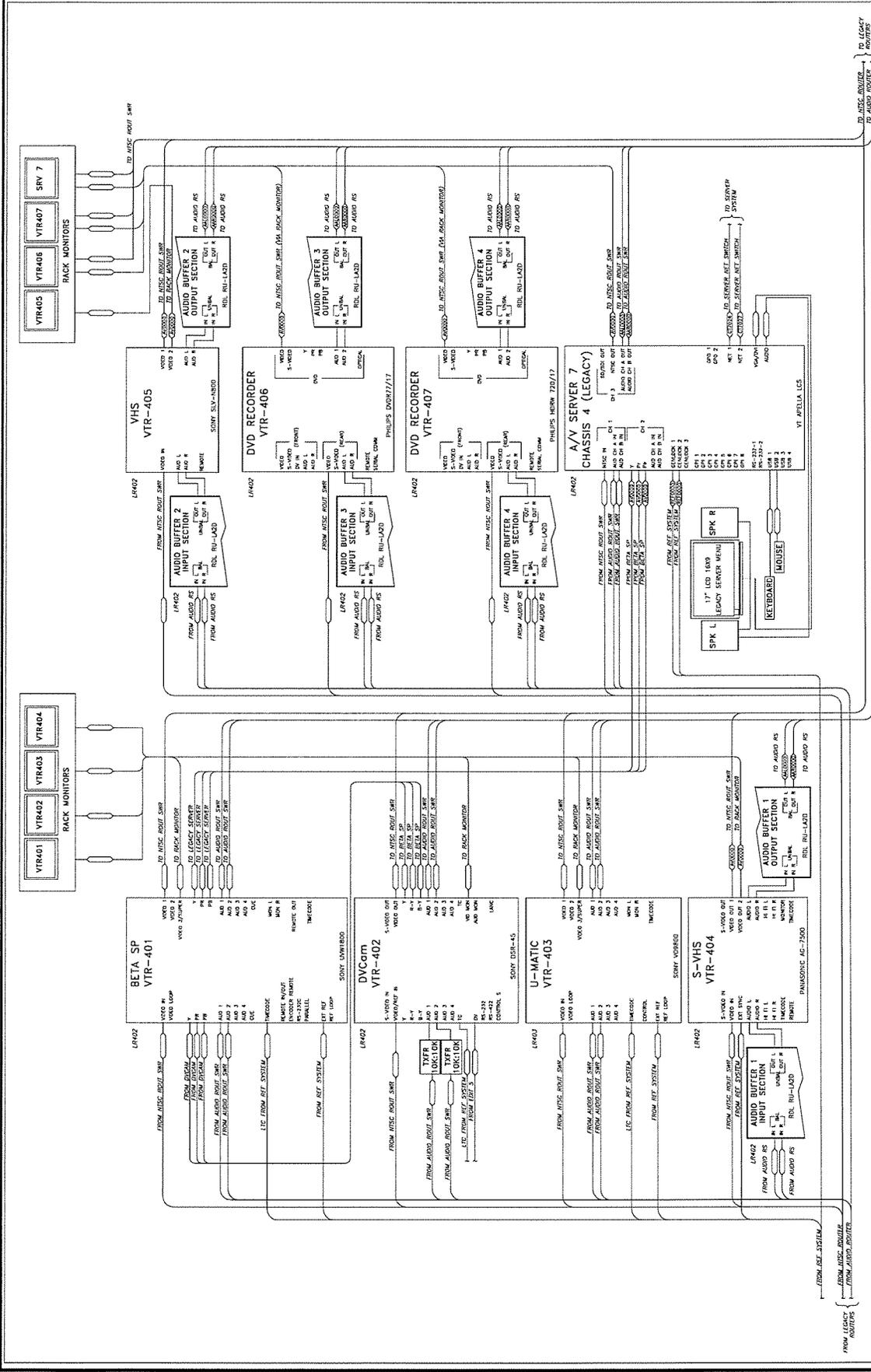
144 S. Fri St., Ste 200
Beverly Hills, CA 91602
Tel: 818.558.2205 Fax: 818.558.2288

CITY OF BEVERLY HILLS MEDIA CENTER

Beverly Hills, California

REVISED BY	DATE
1	12/12/08

Production Center
Agency: [Blank]
Project: [Blank]
Contract #: [Blank]
Order #: [Blank]
Rev: [Blank]
Date: [Blank]
TV-4.51
[Blank]



NOTES
 1. This is a preliminary production system. Identifications only. Not for construction.
 2. For General Construction. Refer to the Architectural, Electrical and Structural Drawings for details regarding equipment and system specifications.
 3. All equipment and system components are subject to change without notice. Information only. Verify actual conditions in field.

