

## **INVITATION FOR BIDS**

IFB RFX Number: 3160005793  
TV Integration Services for  
Master Control Restoration  
Issue Date: April 14, 2023

## **CLOSING TIME AND DATE**

Bids must be received by:  
2:00 PM CST, May 11, 2023

## **CLOSING LOCATION**

Mississippi Public Broadcasting  
3825 Ridgewood Road  
Jackson, Mississippi 39211

## **BID COORDINATOR**

Alicia Harris, CFO  
Telephone: 601-432-6770  
E-mail: [Alicia.harris@mpbonline.org](mailto:Alicia.harris@mpbonline.org)



Mississippi Public Broadcasting

## Advertisement for Bids

**Text of Ad:** **04/11/2023**

### ADVERTISEMENT FOR BIDS

Mississippi Authority for Educational Television dba Mississippi Public Broadcasting is soliciting bids for television integration services and products for the purpose of Master Control Restoration. For inquiries, please contact Alicia Harris at 601-432-6770.

The solicitation may be accessed by potential offerors at [www.mpbonline.org](http://www.mpbonline.org) under the Legal section or via the Mississippi Contract/Procurement Opportunity Search Portal.

All responses to the solicitation must be submitted via MAGIC or shipped/mailed to the following address:

Mississippi Public Broadcasting  
Attn: Alicia Harris, CFO  
RFx: 3160005793  
3825 Ridgewood Road  
Jackson, MS 39211  
(DO NOT OPEN)

The deadline for receipt of bids is on or before Thursday, May 11, 2023, at 2:00 p.m., Central Standard Time (CST).

Master Control Restoration (Project Title)  
Mississippi Authority for Educational Television, aka Mississippi Public Broadcasting or "MPB" (Using Agency)  
3160005793 (RFx #)

A pre-bid meeting will be held at MPB headquarters on Tuesday, April 25, 2023, at 10:00 am until Noon, CST, and continuing to tour the master control facilities on the same day.

Bid preparation will be in accordance with General Instructions bound in the Invitation For Bids document. The Mississippi Authority for Educational Television reserves the right to waive irregularities and to reject any or all bids.

Royal Aills, Executive Director  
Mississippi Authority for Educational Television

Dates of Publication:  
4/14, 4/21/2023

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## GENERAL INSTRUCTIONS

### Section 1 – Background, Authority, and Purpose

Mississippi Public Broadcasting (hereinafter “Agency” or “MPB”) has issued this solicitation for the purpose of soliciting sealed bids from qualified providers to provide television integration services for Master Control Restoration. The Agency wants assistance to restore MPB’s TV master control system to full operational capability. The Contractor will furnish new equipment and integration services, including final designs, testing and commissioning for a complete integrated TV master control system. The goal of this project is to duplicate in-house the capabilities currently provided by an outsourced joint master control service.

### Section 2 – Timeline

Invitation for Bid Issue Date	Friday, April 14, 2023
Mandatory Pre-Bid Conference, Tour, & Site Visit	Tuesday, April 25, 2023 , 10:00 AM CST
Questions and Requests for Clarification to Agency Deadline	Monday, May 1, 2023 , 5:00 PM CST
Anticipated Posting of Written Answers to Questions	Thursday, May 4, 2023 , 5:00 PM CST
<b>Bid Package Submission Deadline</b>	<b>Thursday, May 11, 2023 , 2:00 PM CST</b>
Bid Opening	Thursday, May 11, 2023 , 2:00 PM CST
Anticipated Date of the Notice of Award	Thursday, May 25, 2023 , 5:00 PM CST
Anticipated Protest Deadline Date	Monday, June 5, 2023 , 2:00 PM CST
Date of Final Completion (120 days from estimated date of Notice to Proceed)	Wednesday October 18, 2023 , 5:00 PM CST

### Section 3 – Contact and Questions/Requests for Clarification

**3.1** Bidders must carefully review this solicitation, the contract, risk management provisions, and all attachments for defects, questionable, or objectionable material. Following review, vendors may have questions to clarify or interpret the IFB in order to submit the best bid possible. To accommodate the questions and requests for clarifications, vendors shall submit any such question via email by the deadline reflected in Section 2. All questions and requests for clarifications must be directed by email to:

Alicia Harris, CFO  
Telephone: 601-432-6770  
E-mail: [Alicia.harris@mpbonline.org](mailto:Alicia.harris@mpbonline.org)

**3.2** Vendors should enter “IFB RFx Number 3160005793 - Questions” as the subject for the email. Question submittals should include a reference to the applicable IFB section and be submitted in the format shown below:

	IFB Section, Page Number	Vendor Question/Request for Clarification
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1.		
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- 3.3** Official responses will be provided only for questions submitted as described above and only to clarify information already included in the IFB. The identity of the organization submitting the question(s) will not be revealed. All questions and answers will be published on the Mississippi Contract/Procurement Opportunity Search Portal website and the agency's website as an amendment to the IFB by the date and time reflected in Section 2.
- 3.4** The agency will not be bound by any verbal or written information that is not contained within this IFB unless formally noticed and issued by the contact person as an IFB amendment. Bidders are cautioned that any statements made by agency personnel that materially change any portion of the bid document shall not be relied upon unless subsequently ratified by a formal written amendment to the bid document.
- 3.5** All vendor communications regarding this IFB must be directed to the Bid Coordinator. Unauthorized contact regarding the IFB with other employees of the agency may result in the vendor being disqualified, and the vendor may also be suspended or disbarred from the State.
- 3.6 Mandatory Pre-Bid Conference, Tour, and Site Visit:** A mandatory pre-bid conference will be held at 10:00 AM CST on April 25, 2023 at MPB Headquarters, 3825 Ridgewood Road, Jackson. MS 39211. The purpose of the pre-bid conference is to allow potential bidders an opportunity to present questions to staff and obtain clarification of the requirements of the bid documents. Attendance sign-in will be taken. Minutes of the conference will not be published. A Summary of Pre-Bid Conference, Tour, and Site Visit will be published on the Mississippi Contract/Procurement Opportunity Search Portal website and the agency's website in a manner that all bidders as an amendment to the IFB by the date and time reflected in Section 2.
- 3.7 Acknowledgement of Amendments:** Should an amendment to the IFB be issued, it will be posted on the Mississippi Contract/Procurement Opportunity Search Portal website and the agency's website in a manner that all bidders will be able to view. Further, bidders must acknowledge receipt of any amendment to the solicitation in the space provided for this purpose on the bid form. The acknowledgment should be received by the agency by the time, date, and at the place specified for receipt of bids. It is the bidder's sole responsibility to monitor the websites for any updates or amendments to the IFB.
- 3.8** The IFB is comprised of the base IFB document, any attachments, any amendments issued prior to the submission deadline, and any other documents released before contract award.

#### **Section 4 – Scope of Work**

- 4.1** Contractor shall perform and complete the services described in **Attachment H "TECHNICAL SPECIFICATIONS"**, captioned "Scope of Work", which is attached hereto and made a part hereof by reference. The deadline date for final completion is stated above in **Section 2 -**

**Timeline.** The scope of Work is from procurement Invitation For Bids 3160005793, which was issued by the Agency and incorporated herein by reference.

- 4.1.1 State Furnished Property/Services:** Parts of a typical TV master control system owned by MPB are in-tact and operating properly. Those parts shall be integrated into a fully functional TV master control facility. See Attachment H.
- 4.1.2 Contractor-Furnished Property:** The basic equipment required to be furnished for this project consists of media servers, file transfer system, local content storage, SDI routing, KVM, and automation, as further described in the Technical Specifications.
- 4.1.3 Description of Specific, Results-Oriented Tasks:** The completed system following integration with the MPB legacy equipment shall provide the same capabilities as the current hybrid MPB/PMM joint master control system, which service will terminate around November 2023.
- 4.1.4 Quality Assurance:** The progress of the new equipment integration must not interfere with the MPB broadcasting operations currently made possible in conjunction with PMM. The performance of the new system shall not be less than the performance of the existing hybrid MPB/PMM system.
- 4.1.5 Applicable Laws, Rules, and Directives:** The completed system shall comply with 47CFR part 73 for digital television broadcasting. The completed system shall not degrade the quality of program files acquired or created by MPB and shall not materially change the technical parameters of MPB program or transport streams that comply with the Advanced Television Systems Committee (ATSC) standards for digital television terrestrial transmission.
- 4.1.6 Technical Exhibits:** See Attachment H – **TECHNICAL SPECIFICATIONS**. It is the intent of the specifications to obtain products and integration services that will adequately meet the needs of MPB while promoting the greatest extent of competition that is practicable. The minimum specifications stated herein are used to set a standard and in no case are used with the intention to discriminate against any prospective bidder. It is the responsibility of the prospective bidder to notify Mississippi Public Broadcasting if the specifications, terms, or conditions are formulated in a manner that would unnecessarily restrict competition.
- 4.1.7 Deliverables:** The project requires a final design, selection and furnishing new equipment, installation and integration of new equipment, hardware, and materials, rewiring and removal of unneeded equipment, and setup and testing of the final master control as a complete operating system.

**4.1.8 Location of Work:** The Work is to be performed, completed, and managed at the following location: MPB headquarters at 3825 Ridgewood Road, Jackson, MS 39211. Copies of all documents related to the Work shall be maintained at this location. MPB will provide Workspace for the contractor. The Contractor is responsible for all travel costs, such as costs for transportation, lodging, per diem, etc.

**4.2 The Contractor shall:**

- 4.2.1** Assign a Contractor Account Representative to Work directly with the Contracting Agency Representative.
- 4.2.2** Ensure all Contractor personnel are well-groomed and in uniform or have visible identification at all times. Uniforms and/or dress code shall be inclusive of, but not limited to, neat and clean company uniforms with visible company logo appropriately and easily identifiable. Contractor identification badges as well as personal identification of the individual employee shall be worn and clearly visible while on state property. Contractor personnel may be required to provide photographic identification for inspection upon entering state facilities.
- 4.2.3** All state facilities are non-smoking; the Contractor and its personnel must adhere to this requirement. The use of tobacco products is prohibited, except within designated smoking areas.
- 4.2.4** It is illegal to have in one's possession any illegal drug or alcoholic beverage while on state property.
- 4.2.5** The Contractor's employees should refrain from using foul, abusive, or profane language on state property.
- 4.2.6** The Contracting Agency reserves the right to inspect and search all Contractor personnel and/or vehicles anytime while on facility grounds.
- 4.2.7** Contractors are required to sign-in and sign-out at most state facilities. Security provisions for all state facilities must be strictly observed.
- 4.2.8** Be responsible for all damages and shall be held responsible for replacing or repairing any damage due to negligence on the part of the Contractor or Contractor personnel to any person(s) and/or property. The Contractor shall replace and repair any damage to any building or property, including but not limited to the replacement of any cracked or broken concrete (sidewalks, curbs, etc.) caused by on-site activities. Contracting Agency may withhold payment or make such deductions as deemed necessary to ensure reimbursement or replacement for loss or damage to property.

**4.2.9** Exercise precautions at all times for the protection of persons (including employees) and property. The Contractor shall make such investigations to enable them to fully understand the facilities, difficulties, and restrictions attending the execution of the Work on-site. The project shall at all times be properly supervised and adequately manned by an experienced crew of appropriate size. All Work shall be accomplished by skilled Workers familiar with and trained to do this type of Work. Workers shall be qualified to operate and/or use the equipment necessary to accomplish this Work. The Contractor shall be responsible for the supervision and direction of the Work performed by its personnel. The Contractor shall be responsible for instructing its personnel in all safety measures. All equipment used by the Contractor shall be maintained in safe operating condition at all times, and be free from defects or wear that may in any way constitute a hazard to any person or persons on state property. All incidents involving agency property or personnel shall be reported to the designated agency contact immediately upon occurrence.

**4.2.10** Abide by all State and/or agency policies, procedures, ordinances, and/or laws pertaining to the Contracting Agency's operation at all times, including but not limited to the items listed above. Deviations from these policies by the Contractor or its personnel will not be tolerated and will be considered grounds for contract termination.

**4.2.11** Perform all services provided in the contract between the bidder/Vendor and the Contracting Agency in accordance with customary and reasonable industry standards as well as in strict conformance to all laws, statutes, and ordinances and the applicable rules, regulations, methods and procedures of all government boards, bureaus, offices, and other agents. The Contractor shall be responsible for the complete performance of all Work; for the methods, means, and equipment used; and for furnishing all materials, tools, apparatus, and property of every description used in connection therewith. No statement within this IFB shall negate compliance with any applicable governing regulation. The absence of detail specifications or the omission of detail description shall be recognized as meaning that only the best commercial practices are to prevail and that only first quality materials and Workmanship are to be used.

**4.3** Contractors shall also:

**4.3.1** Administer and maintain all employment and payroll records, payroll processing, and payment of payroll checks and taxes, including the deductions required by state, federal, and local laws such as social security and withholding taxes for their business and employees;

**4.3.2** Make all unemployment compensation contributions as required by federal and state law(s) and process claims as required for their business and employees;



- 4.3.3** Perform a background check and/or drug screening prior to placement if requested by the Contracting Agency and verify and/or provide the results; and,
- 4.3.4** Replace immediately, at no additional expense to the Contracting Agency, any employee not performing satisfactorily.

## **Section 5 - Basis for Award**

- 5.1** All bids will be reviewed first to determine whether a vendor is responsive, responsible, and/or acceptable. Bids with errors that do not alter the substance of the bid can be accepted, and the Agency Chief Procurement Officer may allow the bidder to correct the problem prior to review as long as the irregularities are insignificant mistakes that can be waived or corrected without prejudice to other bidders.
- 5.2** The agency has the right to waive minor defects or variations of a bid from the exact requirements of the specifications that do not affect the price, quality, quantity, delivery, or performance time of the services being procured. If insufficient information is submitted by a bidder with the bid for the agency to properly evaluate the bid, the agency has the right to require such additional information as it may deem necessary after the time set for receipt of bids, provided that the information requested does not change the price, quality, quantity, delivery, or performance time of the services being procured.
- 5.3** All bids which are determined to be responsive and responsible will continue to the price bid.
- 5.4** The agency intends to award one contract to provide the services described in this IFB to the lowest responsible and responsive bidder based on the Base Bid price.

## **Section 6 – Minimum Bidder Qualifications**

The vendor must have:

- 6.1 Prior Experience:** Contractor must have been in business and provided services similar in requirements and scale to those described in this IFB for a minimum of five (5) years. The person(s) responsible for the master control system design and performance must be qualified by demonstrating experience performing the same tasks on at least three similar projects during the last five years, at least one of which was a PBS station preferably operating under sIX.
- 6.2 Required Certification, Accreditation, and/or Licenses:** Contractor shall provide notarized copies of all valid licenses and certificates required for performance of the Work. The notarized copies shall be delivered to the agency no later than ten days after Contractor receives the Notice of Award from the agency. Current notarized copies of licenses and certificates shall be provided to the agency within twenty-four hours of demand at any time during the contract term. Contractor must possess and maintain the minimum vendor

certifications, accreditations, and/or licensures described in this IFB, by way of illustration and not limitation, the following:

1. A business license. Registered to do business in Mississippi.

**6.3 Financial Stability or Solvency:** Contractor must be financially stable or solvent. Each vendor shall submit copies of the most recent years independently audited financial statements as well as financial statements for the preceding three years, if they exist. The submission must include the audit opinion, the balance sheet, and statements of income, retained earnings, cash flows, and the notes to the financial statements. If independently audited financial statements do not exist, Vendor must state the reason and, instead submit sufficient information to enable the Agency to access the financial stability or solvency of the vendor, such as financial statements, credit ratings, a line of credit, or other financial arrangements sufficient to enable the vendor to be capable of meeting the requirements of this IFB.

**6.4** The bidder may be required before the award of any contract to show to the complete satisfaction of the agency that it has the necessary facilities, ability, and financial resources to provide the service specified therein in a satisfactory manner. The bidder may also be required to give a past history and references in order to satisfy the agency in regard to the bidder's qualifications. The agency may make reasonable investigations deemed necessary and proper to determine the ability of the bidder to perform the Work, and the bidder shall furnish to the agency all information for this purpose that may be requested. The agency reserves the right to reject any bid if the evidence submitted by, or investigation of, the bidder fails to satisfy the agency that the bidder is properly qualified to carry out the obligations of the contract and to complete the Work described therein. Evaluation of the bidder's qualifications shall include:

1. the ability, capacity, skill, and financial resources to perform the Work or provide the service required;
2. the ability of the bidder to perform the Work or provide the service promptly or within the time specified, without delay or interference;
3. the character, integrity, reputation, judgment, experience, and efficiency of the bidder; and,
4. the quality of performance of previous contracts or services.

## **Section 7 – Duration**

The estimated period of performance of any contract resulting from this IFB is tentatively scheduled to begin on or about June 6, 2023 and to end on October 18, 2023.

## **Section 8 – Bid Submission Requirements**

### **8.1 Submission Format**

#### **8.1.1 BID COVER SHEET (Attachment A)**

**8.1.2 BID FORM (Attachment B)** - all pricing must be submitted on the bid form. Failure to complete and/or sign the bid form may result in bidder being determined nonresponsive.

**8.1.3 REFERENCES (Attachment C)** - each bidder must furnish a listing of **at least** three (3) trade references along with the contact person, address, and phone number for each. These references must be familiar with the bidder's abilities in the areas involved with this solicitation. Engineer will use these references to determine the bidder's ability to perform the services. It is the responsibility of the bidder to ensure that the reference contact information is correct and current. Engineer will not track down references. Bidders should verify before submitting their bid that the contact person and phone number are correct for each reference. Only bidders who are found responsive and/or responsible will have their bids considered. Bidder may submit as many references as desired. Engineer will begin contacting references at the top of the list and will continue down the list until they have completed interviews with two (2) references. After two interviews are completed, the reference check process will end.

## **8.2 Submission Requirements**

**8.2.1** One (1) copy of signed original bid package, one (1) redacted copy of original bid package, redacting only trade secret information. Bids can be mailed/delivered to MPB, 3825 Ridgewood Road, Jackson, MS 39211 or submitted electronically through MAGIC no later than the time and date specified for receipt of bids.

**8.2.2** The sealed envelope or package shall be marked with the bid opening date and time, and the number of the invitation for bids (2:00 PM CST, May 11, 2023; IFB Number 3160005793. Bids are subject to rejection unless submitted with the information included on the outside the sealed bid envelope or package.

**8.2.3** Sealed bids should be mailed or hand-delivered to and labeled as follows:

IFB for Master Control Restoration  
IFB RFx Number 3160005793  
Opening Date: 2:00 PM CST, May 11, 2023  
Mississippi Public Broadcasting  
Attention: Alicia Harris, CFO  
3825 Ridgewood Road  
Jackson, Mississippi 39211  
SEALED BID – DO NOT OPEN

**8.2.4** All bid packages must be received by the agency no later than 2:00 PM CST, May 11, 2023. Bids submitted via facsimile (fax) machine **will not** be accepted. It is suggested that if a bid is mailed to the agency, it should be posted in certified mail

with a return receipt requested. The agency will not be responsible for mail delays or lost mail. All risk of late arrival due to unanticipated delay – whether delivered by hand, U.S. Postal Service, courier or other delivery service or method – is entirely on the vendor. All vendors are urged to take the possibility of delay into account when submitting a bid.

- 8.2.5** Timely submission of the bid package is the responsibility of the bidder. Bids received after the specified time will be rejected and maintained unopened in the procurement file. A bid received at the place designated in the solicitation for receipt of bids after the exact time specified for receipt will not be considered unless it has been determined by the agency that the late receipt was due solely to mishandling by the agency after receipt at the specified address.
- 8.2.6** The time and date of receipt will be indicated on the sealed bid envelope or package by agency staff. The only acceptable evidence to establish the time of receipt at the office identified for bid opening is the time and date stamp of that office on the bid wrapper or other documentary evidence of receipt used by that office.
- 8.2.7** Each page of the bid form and all attachments shall be identified with the name of the bidder.
- 8.2.8** Failure to submit a bid on the bid form provided will be considered cause for rejection of the bid. **Modifications or additions to any portion of the bid document may be cause for rejection of the bid.** The agency reserves the right to decide, on a case-by-case basis, whether to reject a bid with modifications or additions as non-responsive.
- 8.2.9** Bidders taking exception to any part or section of the solicitation shall indicate such exceptions on the **IFB EXCEPTION(S)** form (Attachment G). Failure to indicate any exception will be interpreted as the bidder's intent to comply fully with the requirements as written. Conditional or qualified bids, unless specifically allowed, shall be subject to rejection in whole or in part. The bid must contain a high degree of acceptance of contract terms and conditions listed in **Attachment E and F** of this IFB.
- 8.2.10** A bid response that includes terms and conditions that do not conform to the terms and conditions in the bid document is subject to rejection as non-responsive. The agency reserves the right to permit the bidder to withdraw nonconforming terms and conditions from its bid response prior to a determination by the agency of non-responsiveness based on the submission of nonconforming terms and conditions.

**8.2.11** As a precondition to bid acceptance, the agency may request the bidder to withdraw or modify those portions of the bid deemed non-responsive that do not affect quality, quantity, price, or delivery of the service.

**8.2.12** Any bidder claiming that its response contains information exempt from the Mississippi Public Records Act (Miss. Code Ann. §§ 25-61-1 *et seq.* and 79-23-1), shall segregate and mark the information as confidential and provide the specific statutory authority for the exemption.

## **Section 9 – Bidder Certification**

The bidder agrees that submission of a signed bid form is certification that the bidder will accept an award made to it as a result of the submission.

## **Section 10 – Debarment**

By submitting a bid, the bidder certifies that it is not currently debarred from submitting bids for contracts issued by any political subdivision or agency of the State of Mississippi and that it is not an agent of a person or entity that is currently debarred from submitting bids for contracts issued by any political subdivision or agency of the State of Mississippi.

## **Section 11 – Registration with Mississippi Secretary of State**

By submitting a bid, the bidder certifies that it is registered to do business in the State of Mississippi as prescribed by Mississippi law and the Mississippi Secretary of State or, if not already registered, that it will do so within seven (7) business days of being notified by the agency that it has been selected for contract award.

## **Section 12 – Insurance, Bonds, or Other Sureties**

**12.1** Each successful bidder shall, at its own expense, obtain and maintain insurance, bond, or other surety which shall include the types and coverage limits outlined in Item 7. *Insurance, Bonds, or Other Surety* in Attachment E.

## **Section 13 – Bid Opening**

Bid opening will be open to the public; however, this will include opening, reading, and listing the name of each bidder and the bid price of each bid only. No discussions will be entered into with any bidder as to the quality or provisions of the specifications and no award will be made either stated or implied at the bid opening.

## **Section 14 – Award Notification**

Award(s) for this procurement will be posted on the Mississippi Contract/Procurement Opportunity Search Portal website and the agency website at <http://www.mpbonline.org>. Bidders will be notified via e-mail of the awards. Additionally, a letter will be sent to all bidders.

## **Section 15 – Procurement Methodology**

### **15.1 Restrictions on Communications with Agency and Agency Staff**

At no time shall any bidder or its personnel contact, or attempt to contact, any agency staff regarding this IFB except the contact person as set forth and in the manner prescribed in Section 3.

### **15.2 Bidder Investigations**

Before submitting a bid, each bidder shall make all investigations and examinations necessary to ascertain all site conditions and requirements affecting the full performance of the contract and to verify any representations made by the agency upon which the bidder will rely. If the bidder receives an award as a result of its bid submission, failure to have made such investigations and examinations will in no way relieve the bidder from its obligation to comply in every detail with all provisions and requirements of the contract documents, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim whatsoever for additional compensation.

### **15.3 Expenses Incurred in Preparing Bid**

The agency accepts no responsibility for any expense incurred by any bidder in the preparation and presentation of a bid. Such expenses shall be borne exclusively by the bidder.

### **15.4 Independent Price Determination**

By submitting a bid, the bidder certifies that the prices submitted in response to the solicitation have been arrived at independently and without, for the purpose of restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to those prices, the intention to submit a bid, or the methods or factors used to calculate the prices bid. The prices quoted shall be inclusive of, but not limited to the following: all required labor; all required equipment/material; all required insurance, bond, or other surety; all required overhead; all required profit; all required vehicles; all required fuel and mileage; all required labor and supervision; all required training; all required business and professional licenses, certifications, fees, or permits; and, any and all other costs. All pricing should include all associated costs with no additional or hidden fees.

### **15.5 Rejection of Bids**

A bid response that includes terms and conditions that do not conform to the terms and conditions in the IFB document is subject to rejection as non-responsive. Further, submission of a bid form that is not complete and/or signed is subject to rejection as non-responsive. The agency reserves the right to permit the bidder to withdraw nonconforming terms and conditions from its bid response prior to a determination by the agency staff of non-responsiveness based on the submission of nonconforming terms and conditions. Furthermore, if a bidder's price is substantially higher than those of other bidders, meaning those in excess of a twenty-five percent (25%) differential, the bidder's price will be deemed non-responsive.

### **15.6 Withdrawal of Bids**

If the price bid is substantially lower than those of other bidders, a mistake may have been made. A bidder may withdraw its bid from consideration if certain conditions are met:

- (1) The bid is submitted in good faith;
- (2) The price bid is substantially lower than those of other bidders because of a mistake;
- (3) The mistake is a clerical error, not an error of judgment; and,
- (4) Objective evidence drawn from original Work papers, documents, and other materials used in the preparation of the bid demonstrates clearly that the mistake was an unintentional error in arithmetic or an unintentional omission of a quantity of labor or material.

To withdraw a bid that includes a clerical error after bid opening, the bidder must give notice in writing to the agency of claim of right to withdraw a bid. Within two (2) business days after the bid opening, the bidder requesting withdrawal must provide to the agency all original Work papers, documents, and other materials used in the preparation of the bid.

A bidder may also withdraw a bid, prior to the time set for the opening of bids, by simply making a request in writing to the agency. No explanation is required.

No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other Work for the person to whom the contract is awarded, or otherwise benefit from the contract.

No partial withdrawals of a bid are permitted after the time and date set for the bid opening; only complete withdrawals are permitted.

### **15.7 Protests**

Any actual or prospective bidder who is aggrieved in connection with this solicitation or the outcome of this IFB may file a protest with Alicia Harris, CFO. The protest shall be submitted within seven (7) calendar days of notification of the contract award or on or before 5:00 PM CST, June 5, 2023, in writing after such aggrieved person or entity knows or should have known of the facts giving rise thereto. The written protest letter shall contain an explanation

of the specific basis for the protest. All protests must be in writing, dated, signed by the bidder or an individual authorized to sign contracts on behalf of the protesting bidder, and contain a statement of the reason(s) for protest, citing the law(s), rule(s) and regulation(s) or procedure(s) on which the protest is based. The protesting bidder must provide facts and evidence to support the protest. A protest is considered filed when received by Alicia Harris, CFO via either U.S. mail, postage prepaid, or by personal delivery. Protests filed after 5:00 PM CST, June 5, 2023, will not be considered.

## **Section 16 – Required Contract Terms and Conditions**

Any contract entered into with the Contracting Agency pursuant to this IFB shall have the required clauses found in Attachment E and those required by the *PPRB OPTFM Rules and Regulations* as updated and replaced by PPRB. The agency discourages exceptions from these required clauses. Such exceptions may cause a bid to be rejected as non-responsive. Bids which condition the bid based upon the State accepting other terms and conditions not found in the IFB, or which take exception to the State's terms and conditions, may be found non-responsive, and no further consideration of the bid will be given.

## **Section 17 – Optional Contract Terms and Conditions**

Any contract entered into with the Contracting Agency pursuant this IFB may have at the discretion of the Contracting Agency, the optional clauses found in Attachment F and those within the *PPRB OPTFM Rules and Regulations* as updated and replaced by PPRB. The agency discourages exceptions from these optional clauses. Such exceptions may cause a bid to be rejected as non-responsive. Bids which condition the bid based upon the State accepting other terms and conditions not found in the IFB, or which take exception to the State's terms and conditions, may be found non-responsive, and no further consideration of the bid will be given.

## **Section 18 – Agency Website**

This IFB, questions and answers concerning this IFB, and the Notice of Award will be posted on the agency website at <http://www.mpbonline.org> and on the Mississippi Contract/Procurement Opportunity Search Portal website.

## **Section 19 – Attachments**

The attachments to this IFB are made a part of this IFB as if copied herein in words and figures.



**Attachment A**

**BID COVER SHEET**

Bids are to be submitted as listed below, on or before 2:00 PM CST, May 11, 2023.

PLEASE MARK YOUR ENVELOPE:

IFB for Master Control Restoration  
IFB RFx Number 3160005793  
Opening Date: 2:00 PM CST, May 11, 2023  
Mississippi Public Broadcasting  
Attention: Alicia Harris, CFO  
3825 Ridgewood Road  
Jackson, Mississippi 39211  
SEALED BID – DO NOT OPEN

**Name of Company:** \_\_\_\_\_

**Quoted By:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City/State/Zip:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Fax Number:** \_\_\_\_\_

**E-Mail Address:** \_\_\_\_\_

**Name and phone number of Company Representative to be contacted by Agencies seeking to contract for services pursuant to this IFB:** \_\_\_\_\_

**In addition to providing the above contact information, please answer the following questions regarding your company:**

What year was your company started? \_\_\_\_\_

How many years has the firm been in business of performing the services called for in this IFB?

Please provide the physical location and mailing address of your company's home office, principal place of business, and place of incorporation. \_\_\_\_\_

\_\_\_\_\_

If your company is not physically located within the vicinity, how will you supply integration services to the agency?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Is your company currently for sale or involved in any transaction to expand or to become acquired by another business entity? If yes, please discuss the impact both in organizational and directional terms. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Is your company licensed and/or certified to provide integration services as required by any and all applicable Federal and State law(s)?

\_\_\_\_\_

List all licenses or permits your company possesses that are applicable to performing the services required in this IFB. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

For how many customers has your company provided TV Master Control integration services in the past two years?

\_\_\_\_\_

\_\_\_\_\_

What is the largest customer your company has provided TV Master Control integration services for in the past two years?

\_\_\_\_\_

\_\_\_\_\_

Describe any specific services which your company offers along with any specialized experience, certification, and/or education of your current staff. \_\_\_\_\_

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Describe experience to demonstrate compliance with Section 6 – Minimum Bidder Qualifications, 6.1 Prior Experience \_\_\_\_\_

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Enter business license number as registration to do business in Mississippi as required by Section 6 – Minimum Bidder Qualifications, 6.2 Required Certification, Accreditation, and/or Licenses \_\_\_\_\_

Submit detailed manufacturer's specifications for each component offered. Include data on features, ratings, and performance to demonstrate compliance with the Technical Specifications. Attach separate pages as necessary. \_\_\_\_\_

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**Attachment B**

**BID FORM**

<b>Company</b>	<b>Contact Person</b>	<b>Telephone Number</b>

The pricing quoted shall be a **firm fixed-price** inclusive of, but not limited to the following:

1. All required equipment/material;
2. All required insurance, bond, or other surety;
3. All required overhead;
4. All required profit;
5. All required vehicles;
6. All required fuel and mileage;
7. All required labor and supervision;
8. All required business and professional certifications, licenses, permits, or fees; and,
9. Any and all other costs.

All pricing for Master Control Restoration should include all associated costs for the items with no additional or hidden fees.

**BASE BID:** (Write in the amount of the base bid in words and numbers. In case of conflict, the written word governs.)

Words:	Dollars Figures:
	\$

By signing below, the company Representative certifies that he/she has authority to bind the company, and further acknowledges and certifies on behalf of the company:

1. Prices proposed shall be firm fixed prices that shall be firm through December 31, 2023. Adjustments will only be allowed for additional services being added by MPB or services being discontinued by MPB at the same fixed unit prices as originally offered and accepted. No other price adjustments will be allowed during the term of the contract.
2. That he/she has thoroughly read and understands the Invitation for Bids and Attachments thereto;
3. That the company meets all requirements and acknowledges all certifications contained in the Invitation for Bids and Attachments thereto;

4. That the company agrees to all provisions of the Invitation for Bids and Attachments thereto including, but not limited to, the Required and Optional Clauses to be included in any contract resulting from this IFB (Attachments E and F);
5. That the company will perform the services required at the prices quoted above;
6. That, to the best of its knowledge and belief, the cost or pricing data submitted is accurate, complete, and current as of the submission date;
7. The Contractor represents that its Workers are licensed, certified and possess the requisite credentials to provide TV Master Control integration services; and,
8. **NON-DEBARMENT:** By submitting a bid, the bidder certifies that it is not currently debarred from submitting bids for contracts issued by any political subdivision or agency of the State of Mississippi and that it is not an agent of a person or entity that is currently debarred from submitting bids for contracts issued by any political subdivision or agency of the State of Mississippi.
9. **INDEPENDENT PRICE DETERMINATION:** The bidder certifies that the prices submitted in response to the solicitation have been arrived at independently and without, for the purpose of restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to those prices, the intention to submit a bid, or the methods or factors used to calculate the prices bid/offered.
10. **PROSPECTIVE CONTRACTOR'S REPRESENTATION REGARDING CONTINGENT FEES:** The prospective contractor represents as a part of such Contractor's bid that such Contractor *has not* retained any person or agency on a percentage, commission, or other contingent arrangement to secure this contract.
11. **REPRESENTATION REGARDING CONTINGENT FEES:** Contractor represents that it *has not* retained a person to solicit or secure a State contract upon an agreement or understanding for a commission, percentage, brokerage, or other contingent fee, except as disclosed in the Contractor's bid.
12. **REPRESENTATION REGARDING GRATUITIES:** Contractor represents that it has not violated, is not violating, and promises that it will not violate the prohibition against gratuities set forth in Section 6-204 (Gratuities) of the *PPRB Rules and Regulations*.
13. **BREAKOUT OF CHARGES:** Contractor agrees to breakout the major components after award of a contract and to submit a list of the components with unit prices in a form like the following within ten (10) days after Notice of Award:

Unit Description	Unit Price
	\$
	\$

**14. AMENDMENTS ACKNOWLEDGMENT:** Receipt of all Amendments, including Questions & Answers amendments and the amendment for the Summary of the Pre-Bid Conference, Tour, and Site Visit. Enter the number of each Amendment received.

No. _____	No. _____	No. _____
No. _____	No. _____	No. _____

**Company Name:** \_\_\_\_\_

**Printed Name of Representative:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Note:** Failure to sign the bid form may result in the bid being rejected as non-responsive. Modifications or additions to any portion of this bid document may be cause for rejection of the bid.

## Attachment C

### REFERENCES

Bidder may submit as many references as desired by submitting as many additional copies of Attachment C, References, as deemed necessary. References will be contacted in order listed until two references have been interviewed and Reference Interview Sheets completed for each of the two references. No further references will be contacted; however, bidders are encouraged to submit additional references to ensure that at least two references are available for interview. Engineer must be able to contact two references within two (2) business days of bid opening to be considered responsive or no later than May 15, 2023

#### REFERENCE 1

Name of Company: \_\_\_\_\_

Dates of Service: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Cell Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Alternative Contact Person (optional): \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Cell Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

#### REFERENCE 2

Name of Company: \_\_\_\_\_

Dates of Service: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Cell Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Alternative Contact Person (optional): \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Cell Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

**REFERENCE 3****Name of Company:** \_\_\_\_\_**Dates of Service:** \_\_\_\_\_**Contact Person:** \_\_\_\_\_**Address:** \_\_\_\_\_**City/State/Zip:** \_\_\_\_\_**Telephone Number:** \_\_\_\_\_**Cell Number:** \_\_\_\_\_**E-mail:** \_\_\_\_\_**Alternative Contact Person (optional):** \_\_\_\_\_**Telephone Number:** \_\_\_\_\_**Cell Number:** \_\_\_\_\_**E-mail:** \_\_\_\_\_**REFERENCE 4****Name of Company:** \_\_\_\_\_**Dates of Service:** \_\_\_\_\_**Contact Person:** \_\_\_\_\_**Address:** \_\_\_\_\_**City/State/Zip:** \_\_\_\_\_**Telephone Number:** \_\_\_\_\_**Cell Number:** \_\_\_\_\_**E-mail:** \_\_\_\_\_**Alternative Contact Person (optional):** \_\_\_\_\_**Telephone Number:** \_\_\_\_\_**Cell Number:** \_\_\_\_\_**E-mail:** \_\_\_\_\_**REFERENCE 5****Name of Company:** \_\_\_\_\_**Dates of Service:** \_\_\_\_\_**Contact Person:** \_\_\_\_\_**Address:** \_\_\_\_\_**City/State/Zip:** \_\_\_\_\_**Telephone Number:** \_\_\_\_\_**Cell Number:** \_\_\_\_\_**E-mail:** \_\_\_\_\_**Alternative Contact Person (optional):** \_\_\_\_\_**Telephone Number:** \_\_\_\_\_**Cell Number:** \_\_\_\_\_**E-mail:** \_\_\_\_\_



**Attachment D**

**REFERENCES INTERVIEW SHEET**

**IFB 3160005793**  
**IFB for Master Control Restoration**

**TO BE COMPLETED BY ENGINEER**

**Company Name:** \_\_\_\_\_

**Reference Name:** \_\_\_\_\_

**Person Contacted, Title/Position:** \_\_\_\_\_

**Date/Time Contacted:** \_\_\_\_\_

**Service From/To Dates:** \_\_\_\_\_

Able to provide integration services when you called?	Yes	No
Satisfied with the integration services provided? If no, please explain.	Yes	No
Vendor easy to Work with in scheduling integration services?	Yes	No
Was the integration services completed on time and within budget?	Yes	No
Vendor listened when you had an issue and readily offered a solution? (If never had an issue, please check here ____.)	Yes	No
Would you enter into a contract with them again?	Yes	No
Would you recommend them?	Yes	No

Do you have any business, professional or personal interest in the vendor's organization? If yes, please explain.	Yes	No
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A "yes" to the above question will result in an automatic disqualification of the provided reference; therefore, resulting in responses to previous questions to become null and void.

**Notes:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Called by:** \_\_\_\_\_  
Signature Title Date

## Attachment E

### STATE REQUIRED CLAUSES

#### TERMS AND CONDITIONS

1. Applicable Law: The contract shall be governed by and construed in accordance with the laws of the State of Mississippi, excluding its conflicts of laws provisions, and any litigation with respect thereto shall be brought in the courts of the State. Contractor shall comply with applicable federal, state, and local laws and regulations.
2. Approval: It is understood that if this contract requires approval by the Public Procurement Review Board and/or the Mississippi Department of Finance and Administration Office of Purchasing, Travel and Fleet Management and this contract is not approved by the PPRB and/or OPTFM, it is void and no payment shall be made hereunder.
3. Availability of Funds: It is expressly understood and agreed that the obligation of the Agency to proceed under this agreement is conditioned upon the appropriation of funds by the Mississippi State Legislature and the receipt of state and/or federal funds. If the funds anticipated for the continuing fulfillment of the agreement are, at any time, not forthcoming or insufficient, either through the failure of the federal government to provide funds or of the State of Mississippi to appropriate funds or the discontinuance or material alteration of the program under which funds were provided or if funds are not otherwise available to the Agency, the Agency shall have the right upon ten (10) Working days written notice to Contractor, to terminate this agreement without damage, penalty, cost or expenses to the Agency of any kind whatsoever. The effective date of termination shall be as specified in the notice of termination.
4. Compliance with Laws: Contractor understands that the State of Mississippi is an equal opportunity employer and therefore, maintains a policy which prohibits unlawful discrimination based on race, color, creed, sex, age, national origin, physical handicap, disability, genetic information, or any other consideration made unlawful by federal, state, or local laws. All such discrimination is unlawful and Contractor agrees during the term of the agreement that Contractor will strictly adhere to this policy in its employment practices and provision of services. Contractor shall comply with, and all activities under this agreement shall be subject to, all applicable federal, State of Mississippi, and local laws and regulations, as now existing and as may be amended or modified.
5. E-Payment: Contractor agrees to accept all payments in United States currency via the State of Mississippi's electronic payment and remittance vehicle. The agency agrees to make payment in accordance with Mississippi law on "Timely Payments for Purchases by Public Bodies," which generally provides for payment of undisputed amounts by the agency within forty-five (45) days of receipt of invoice. Mississippi Code Annotated § 31-7-301 *et seq.*

6. E-Verification: If applicable, Contractor represents and warrants that it will ensure its compliance with the Mississippi Employment Protection Act of 2008, and will register and participate in the status verification system for all newly hired employees. Mississippi Code Annotated §§ 71-11-1 *et seq.*. The term “employee” as used herein means any person that is hired to perform Work within the State of Mississippi. As used herein, “status verification system” means the Illegal Immigration Reform and Immigration Responsibility Act of 1996 that is operated by the United States Department of Homeland Security, also known as the E-Verify Program, or any other successor electronic verification system replacing the E-Verify Program. Contractor agrees to maintain records of such compliance. Upon request of the State and after approval of the Social Security Administration or Department of Homeland Security when required, Contractor agrees to provide a copy of each such verification. Contractor further represents and warrants that any person assigned to perform services hereafter meets the employment eligibility requirements of all immigration laws. The breach of this agreement may subject Contractor to the following:
- a. termination of this contract for services and ineligibility for any state or public contract in Mississippi for up to three (3) years with notice of such cancellation/termination being made public;
  - b. the loss of any license, permit, certification or other document granted to Contractor by an agency, department or governmental entity for the right to do business in Mississippi for up to one (1) year; or,
  - c. both.

In the event of such cancellation/termination, Contractor would also be liable for any additional costs incurred by the State due to Contract cancellation or loss of license or permit to do business in the State.

7. Insurance, Bond, or Other Surety: Contractor represents that it will, at its own expense, obtain and maintain insurance, bond, or other surety which shall include at a minimum, the following types and coverage limits:
- a. **Workers Compensation** coverage as required by the State of Mississippi. The policy shall provide coverage for all states of operation that apply to the performance of scope of Work.
  - b. **General Liability** – Business Owner’s Policy with coverage of \$1,000,000.00 per occurrence limit for any single claimant and \$2,000,000.00 per occurrence limit for multiple claimants.
  - c. **Professional Liability** insurance, with minimum limits of \$1,000,000.00 per occurrence.
  - d. **Not used.**
  - e. **Not Used.**
  - f. **Professional Liability** insurance covers any damages caused by an error, omission or any negligent acts related to the services to be provided under this Contract. \$1,000,000.00 per occurrence limit for multiple claimants.
  - g. Not used.
  - h. **Surety required:**

- i. **Bid Surety:** A bid bond, cashier's check, or certified check in the amount of five (5%) percent of the amount of the bid made payable to the agency shall accompany each bid. The bid surety of all bidders shall be retained until after the award of the contract is made. The bid surety of the successful bidder shall be retained until the posting of a performance bond. The failure of the bidder to accept an award and file acceptable performance and payment bonds within fifteen days after award shall be just cause for cancellation of the award and the forfeiture of the bid surety to the agency as liquidated damages. Award may then be made to the next lowest responsive and responsible bidder. Bids submitted without the required bid surety will be rejected.
- ii. **Performance Surety:** A performance bond in the amount of 100 percent of the bid shall be required of the successful bidder to ensure satisfactory completion of the Work. If the Contractor fails to satisfactorily perform the contract, the bonding company that provided the performance surety will be required to pay the dollar amount to the State. The bond shall be a corporate surety bond issued by a surety company authorized to do business in the State of Mississippi.
- iii. **Payment Surety:** A payment bond in the amount of 100 percent of the bid shall be required of the successful bidder to guarantee payment of all persons who have and fulfill contracts with Contractor for performing labor or providing equipment or material in the performance of the Work provided for in the contract. The bond shall be a corporate surety bond issued by a surety company authorized to do business in the State of Mississippi.
- iv. **Alternative Surety:** A certified check for cash escrow deposit in the face amount of the contract such as a personal bond, property bond, or a bank or savings and loan association letter of credit may be tendered in lieu of a bid, payment, or performance bond subject to approval by the agency attorney.
- i. The Contractor is responsible for ensuring that any subcontractors provide adequate insurance and/or bond coverage for the activities arising out of subcontracts.

Additionally:

- In no event shall the requirement for an insurance, bond, or other surety be waived.
- All insurance policies will list the State of Mississippi as an additional insured.
- All insurance policies shall be issued by companies authorized to do business under the laws of the State of Mississippi, meaning insurance carriers must be licensed or hold a Certificate of Authority from the Mississippi Department of Insurance.
- Contractor shall submit to Agency within ten (10) days of notification of award, performance and payment bonds which outline the coverage and limits defined in the procurement and contract. There are no provisions for exceptions to this requirement. Failure to provide the bonds within the ten-day period may be cause for your bid to be declared non-responsive or for your contract to be cancelled.
- Contractor shall obtain at Contractor's expense the insurance and/or bond requirements specified in the procurement and contract prior to performing under this Contract, and Contractor shall maintain the required insurance and/or bond coverage throughout the duration of this Contract and all warranty periods. There are no provisions for exceptions to this requirement.

- Contractor shall not commence Work under this contract until it obtains all insurance and/or bond required under this provision and furnishes a certificate or other form showing proof of current coverage to the State. After Work commences, the Contractor will keep in force all required insurance and/or bond until the contract is terminated or expires.
  - Contractor shall submit renewal certificates as appropriate during the term of the contract.
  - Contractor shall instruct the insurers to provide the Agency thirty (30) days advance notice of any insurance cancellation.
  - Contractor shall ensure that should any of the above-described policies be cancelled before the expiration date thereof, or if there is a material change, potential exhaustion of aggregate limits or intent not to renew insurance and/or bond coverage(s), that written notice will be delivered to the Agency Chief Procurement Officer.
  - There shall be no cancellation, material change, potential exhaustion of aggregate limits or non-renewal of insurance and/or bond coverage(s) to Agency. Any failure to comply with the reporting provisions of this clause shall constitute a material breach of Contract and shall be grounds for immediate termination of this Contract by Agency.
8. Paymode: Payments by state agencies using the State's accounting system shall be made and remittance information provided electronically as directed by the State. These payments shall be deposited into the bank account of Contractor's choice. The State may, at its sole discretion, require Contractor to electronically submit invoices and supporting documentation at any time during the term of this Agreement. Contractor understands and agrees that the State is exempt from the payment of taxes. All payments shall be in United States currency.
9. Procurement Regulations: The contract shall be governed by the applicable provisions of the *PPRB Rules and Regulations*, a copy of which is available at 501 North West Street, Suite 701E, Jackson, Mississippi 39201 for inspection, or downloadable at <http://www.DFA.ms.gov>.
10. Representation Regarding Contingent Fees: Contractor represents that it has not retained a person to solicit or secure a state contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except as disclosed in Contractor's bid.
11. Representation Regarding Gratuities: The Contractor represents that it has not violated, is not violating, and promises that it will not violate the prohibition against gratuities set forth in Section 6-204 (Gratuities) of the *PPRB Rules and Regulations*.
12. Stop Work Order:
- a. Order to Stop Work: The Chief Procurement Officer, may, by written order to Contractor at any time, and without notice to any surety, require Contractor to stop all or any part of the Work called for by this contract. This order shall be for a specified period not exceeding 90 days after the order is delivered to Contractor, unless the parties agree to

any further period. Any such order shall be identified specifically as a stop Work order issued pursuant to this clause. Upon receipt of such an order, Contractor shall forthwith comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the Work covered by the order during the period of Work stoppage. Before the stop Work order expires, or within any further period to which the parties shall have agreed, the Chief Procurement Officer shall either:

- i. cancel the stop Work order; or,
  - ii. terminate the Work covered by such order as provided in the Termination for Default clause or the Termination for Convenience clause of this contract.
- b. *Cancellation or Expiration of the Order:* If a stop Work order issued under this clause is canceled at any time during the period specified in the order, or if the period of the order or any extension thereof expires, Contractor shall have the right to resume Work. An appropriate adjustment shall be made in the delivery schedule or Contractor price, or both, and the contract shall be modified in writing accordingly, if:
- i. the stop Work order results in an increase in the time required for, or in Contractor's cost properly allocable to, the performance of any part of this contract; and,
  - ii. Contractor asserts a claim for such an adjustment within 30 days after the end of the period of Work stoppage; provided that, if the Chief Procurement Officer decides that the facts justify such action, any such claim asserted may be received and acted upon at any time prior to final payment under this contract.
- c. *Termination of Stopped Work:* If a stop Work order is not canceled and the Work covered by such order is terminated for default or convenience, the reasonable costs resulting from the stop Work order shall be allowed by adjustment or otherwise.
- d. *Adjustment of Price:* Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the Price Adjustment clause of this contract.

**13. Termination for Convenience:**

- a. *Termination.* The Agency Head or designee may, when the interests of the State so require, terminate this contract in whole or in part, for the convenience of the State. The Agency Head or designee shall give written notice of the termination to Contractor specifying the part of the contract terminated and when termination becomes effective.
- b. *Contractor's Obligations.* Contractor shall incur no further obligations in connection with the terminated Work and on the date set in the notice of termination Contractor will stop Work to the extent specified. Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated Work. Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated Work. The Agency Head or designee may direct Contractor to assign Contractor's right, title, and interest under terminated orders or subcontracts to the State. Contractor must still complete the Work not terminated by the notice of termination and may incur obligations as are necessary to do so.

**14. Termination for Default:**

- a. *Default.* If Contractor refuses or fails to perform any of the provisions of this contract with such diligence as will ensure its completion within the time specified in this contract

or any extension thereof, or otherwise fails to timely satisfy the contract provisions, or commits any other substantial breach of this contract, the Agency Head or designee may notify Contractor in writing of the delay or nonperformance and if not cured in ten (10) days or any longer time specified in writing by the Agency Head or designee, such officer may terminate Contractor's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. In the event of termination in whole or in part, the Agency Head or designee may procure similar supplies or services in a manner and upon terms deemed appropriate by the Agency Head or designee. Contractor shall continue performance of the contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring similar goods or services.

- b. *Contractor's Duties.* Notwithstanding termination of the contract and subject to any directions from the Chief Procurement Officer, Contractor shall take timely, reasonable, and necessary action to protect and preserve property in the possession of Contractor in which the State has an interest.
- c. *Compensation.* Payment for completed services delivered and accepted by the State shall be at the contract price. The State may withhold from amounts due Contractor such sums as the Agency Head or designee deems to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders and to reimburse the State for the excess costs incurred in procuring similar goods and services.
- d. *Excuse for Nonperformance or Delayed Performance.* Except with respect to defaults of subcontractors, Contractor shall not be in default by reason of any failure in performance of this contract in accordance with its terms (including any failure by Contractor to make progress in the prosecution of the Work hereunder which endangers such performance) if Contractor has notified the Agency Head or designee within 15 days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of the public enemy; acts of the State and any other governmental entity in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, Contractor shall not be deemed to be in default, unless the services to be furnished by the subcontractor were reasonably obtainable from other sources in sufficient time to permit Contractor to meet the contract requirements. Upon request of Contractor, the Agency Head or designee shall ascertain the facts and extent of such failure, and, if such officer determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, Contractor's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the State under the clause entitled (in fixed-price contracts, "Termination for Convenience," in cost-reimbursement contracts, "Termination"). (As used in this Paragraph of this clause, the term "subcontractor" means subcontractor at any tier).
- e. *Erroneous Termination for Default.* If, after notice of termination of Contractor's right to proceed under the provisions of this clause, it is determined for any reason that the contract was not in default under the provisions of this clause, or that the delay was

excusable under the provisions of Paragraph (d) (Excuse for Nonperformance or Delayed Performance) of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the State, be the same as if the notice of termination had been issued pursuant to such clause.

- f. *Additional Rights and Remedies.* The rights and remedies provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

15. Termination Upon Bankruptcy: This contract may be terminated in whole or in part by Agency upon written notice to Contractor, if Contractor should become the subject of bankruptcy or receivership proceedings, whether voluntary or involuntary, or upon the execution by Contractor of an assignment for the benefit of its creditors. In the event of such termination, Contractor shall be entitled to recover just and equitable compensation for satisfactory Work performed under this contract, but in no case shall said compensation exceed the total contract price.

16. Trade Secrets, Commercial and Financial Information: It is expressly understood that Mississippi law requires that the provisions of this contract which contain the commodities purchased or the personal or professional services provided, the price to be paid, and the term of the contract shall not be deemed to be a trade secret or confidential commercial or financial information and shall be available for examination, copying, or reproduction.

17. Transparency: This contract, including any accompanying exhibits, attachments, and appendices, is subject to the "Mississippi Public Records Act of 1983," and its exceptions. See Mississippi Code Annotated §§ 25-61-1 *et seq.* and Mississippi Code Annotated § 79-23-1. In addition, this contract is subject to the provisions of the Mississippi Accountability and Transparency Act of 2008. Mississippi Code Annotated §§ 27-104-151 *et seq.* Unless exempted from disclosure due to a court-issued protective order, a copy of this executed contract is required to be posted to the Mississippi Department of Finance and Administration's independent agency contract website for public access at <http://www.transparency.mississippi.gov>. Information identified by Contractor as trade secrets, or other proprietary information, including confidential vendor information or any other information which is required confidential by state or federal law or outside the applicable freedom of information statutes, will be redacted.



## Attachment F

### MPB REQUIRED CLAUSES

#### TERMS AND CONDITIONS

1. Anti-assignment/Subcontracting: Contractor acknowledges that it was selected by the State to perform the services required hereunder based, in part, upon Contractor's special skills and expertise. Contractor shall not assign, subcontract, or otherwise transfer this agreement, in whole or in part, without the prior written consent of the State, which the State may, in its sole discretion, approve or deny without reason. Any attempted assignment or transfer of its obligations without such consent shall be null and void. No such approval by the State of any subcontract shall be deemed in any way to provide for the incurrence of any obligation of the State in addition to the total fixed price agreed upon in this agreement. Subcontracts shall be subject to the terms and conditions of this agreement and to any conditions of approval that the State may deem necessary. Subject to the foregoing, this agreement shall be binding upon the respective successors and assigns of the parties.
2. Antitrust: By entering into a contract, Contractor conveys, sells, assigns, and transfers to the Agency all rights, titles, and interest it may now have, or hereafter acquire, under the antitrust laws of the United States and the State that relate to the particular goods or services purchased or acquired by the Agency under said contract.
3. Attorney's Fees and Expenses: Subject to other terms and conditions of this agreement, in the event Contractor defaults in any obligations under this agreement, Contractor shall pay to the State all costs and expenses (including, without limitation, investigative fees, court costs, and attorney's fees) incurred by the State in enforcing this agreement or otherwise reasonably related thereto. Contractor agrees that under no circumstances shall the customer be obligated to pay any attorney's fees or costs of legal action to Contractor.
4. Authority to Contract: Contractor warrants: (a) that it is a validly organized business with valid authority to enter into this agreement; (b) that it is qualified to do business and in good standing in the State of Mississippi; (c) that entry into and performance under this agreement is not restricted or prohibited by any loan, security, financing, contractual, or other agreement of any kind; and, (d) notwithstanding any other provision of this agreement to the contrary, that there are no existing legal proceedings or prospective legal proceedings, either voluntary or otherwise, which may adversely affect its ability to perform its obligations under this agreement.
5. Change in Scope of Work: The Agency may order changes in the Work consisting of additions, deletions, or other revisions within the general scope of the contract. No claims may be made by Contractor that the scope of the project or of Contractor's services has been changed, requiring changes to the amount of compensation to Contractor or other adjustments to the

contract, unless such changes or adjustments have been made by written amendment to the contract signed by the Agency and Contractor.

If Contractor believes that any particular Work is not within the scope of the project, is a material change, or will otherwise require more compensation to Contractor, Contractor must immediately notify the Agency in writing of this belief. If the Agency believes that the particular Work is within the scope of the contract as written, Contractor will be ordered to and shall continue with the Work as changed and at the cost stated for the Work within the contract.

6. Claims Based on a Procurement Officer's Actions or Omissions:

a. *Notice of Claim.* If any action or omission on the part of a Chief Procurement Officer or designee of such officer requiring performance changes within the scope of the contract constitutes the basis for a claim by Contractor for additional compensation, damages, or an extension of time for completion, Contractor shall continue with performance of the contract in compliance with the directions or orders of such officials, but by so doing, Contractor shall not be deemed to have prejudiced any claim for additional compensation, damages, or an extension of time for completion; provided:

i. Contractor shall have given written notice to the Chief Procurement Officer or designee of such officer:

- (1) prior to the commencement of the Work involved, if at that time Contractor knows of the occurrence of such action or omission;
- (2) within 30 days after Contractor knows of the occurrence of such action or omission, if Contractor did not have such knowledge prior to the commencement of the Work; or,
- (3) within such further time as may be allowed by the Chief Procurement Officer in writing.

This notice shall state that Contractor regards the act or omission as a reason which may entitle Contractor to additional compensation, damages, or an extension of time. The Chief Procurement Officer or designee of such officer, upon receipt of such notice, may rescind such action, remedy such omission, or take such other steps as may be deemed advisable in the discretion of the Chief Procurement Officer or designee of such officer;

- ii. The notice required by subparagraph (a) of this paragraph describes, as clearly as practicable at the time, the reasons why Contractor believes that additional compensation, damages, or an extension of time may be remedies to which Contractor is entitled; and,
- iii. Contractor maintains and, upon request, makes available to the Chief Procurement Officer within a reasonable time, detailed records to the extent practicable, of the claimed additional costs or basis for an extension of time in connection with such changes.

b. *Limitation of Clause.* Nothing contained herein shall excuse Contractor from compliance with any rules of law precluding state officers and Contractors from acting in collusion or

bad faith in issuing or performing change orders which are clearly not within the scope of the contract.

- c. *Adjustment of Price.* Any adjustment in the contract price made pursuant to this clause shall be determined in accordance with the Price Adjustment clause of this contract.

- 7. Information Designated by Contractor as Confidential: Any disclosure of those materials, documents, data, and other information which Contractor has designated in writing as proprietary and confidential shall be subject to the provisions of Mississippi Code Annotated §§ 25-61-9 and 79-23-1. As provided in the contract, the personal or professional services to be provided, the price to be paid, and the term of the contract shall not be deemed to be a trade secret, or confidential commercial or financial information.

Any liability resulting from the wrongful disclosure of confidential information on the part of Contractor or its subcontractor shall rest with Contractor. Disclosure of any confidential information by Contractor or its subcontractor without the express written approval of the Agency shall result in the immediate termination of this agreement.

- 8. Confidentiality: Notwithstanding any provision to the contrary contained herein, it is recognized that Agency is a public agency of the State of Mississippi and is subject to the Mississippi Public Records Act. Mississippi Code Annotated §§ 25-61-1 *et seq.* If a public records request is made for any information provided to Agency pursuant to the agreement and designated by the Contractor in writing as trade secrets or other proprietary confidential information, Agency shall follow the provisions of Mississippi Code Annotated §§ 25-61-9 and 79-23-1 before disclosing such information. The Agency shall not be liable to the Contractor for disclosure of information required by court order or required by law.
- 9. Contractor Personnel: The Agency shall, throughout the life of the contract, have the right of reasonable rejection and approval of staff or subcontractors assigned to the Work by Contractor. If the Agency reasonably rejects staff or subcontractors, Contractor must provide replacement staff or subcontractors satisfactory to the Agency in a timely manner and at no additional cost to the Agency. The day-to-day supervision and control of Contractor's employees and subcontractors is the sole responsibility of Contractor.
- 10. Copyrights: Contractor agrees that Agency shall determine the disposition of the title to and the rights under any copyright by Contractor or employees on copyrightable material first produced or composed under this agreement. Further, Contractor hereby grants to Agency a royalty-free, nonexclusive, irrevocable license to reproduce, translate, publish, use and dispose of, and to authorize others to do so, all copyrighted (or copyrightable) Work not first produced or composed by Contractor in the performance of this agreement, but which is incorporated in the material furnished under the agreement. This grant is provided that such license shall be only to the extent Contractor now has, or prior to the completion of full final settlements of agreement may acquire, the right to grant such license without becoming liable to pay compensation to others solely because of such grant.

11. Debarment and Suspension: Contractor certifies to the best of its knowledge and belief, that it:
- a. is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transaction by any federal department or agency or any political subdivision or agency of the State of Mississippi;
  - b. has not, within a three year period preceding this proposal, been convicted of or had a civil judgment rendered against it for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction;
  - c. has not, within a three year period preceding this proposal, been convicted of or had a civil judgment rendered against it for a violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - d. is not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of these offenses enumerated in paragraphs two (b) and (c) of this certification; and,
  - e. has not, within a three year period preceding this proposal, had one or more public transactions (federal, state, or local) terminated for cause or default.
12. Disclosure of Confidential Information: In the event that either party to this agreement receives notice that a third party requests divulgence of confidential or otherwise protected information and/or has served upon it a subpoena or other validly issued administrative or judicial process ordering divulgence of confidential or otherwise protected information that party shall promptly inform the other party and thereafter respond in conformity with such subpoena to the extent mandated by law. This section shall survive the termination or completion of this agreement. The parties agree that this section is subject to and superseded by Mississippi Code Annotated §§ 25-61-1 *et seq.*
13. Exceptions to Confidential Information: Contractor and the State shall not be obligated to treat as confidential and proprietary any information disclosed by the other party ("disclosing party") which:
- a. is rightfully known to the recipient prior to negotiations leading to this agreement, other than information obtained in confidence under prior engagements;
  - b. is generally known or easily ascertainable by nonparties of ordinary skill in the business of the customer;
  - c. is released by the disclosing party to any other person, firm, or entity (including governmental agencies or bureaus) without restriction;
  - d. is independently developed by the recipient without any reliance on confidential information;
  - e. is or later becomes part of the public domain or may be lawfully obtained by the State or Contractor from any nonparty; or,
  - f. is disclosed with the disclosing party's prior written consent.

14. Errors in Extension: If the unit price and the extension price are at variance, the unit price shall prevail.
15. Failure to Deliver: In the event of failure of Contractor to deliver services in accordance with the contract terms and conditions, the Agency, after due oral or written notice, may procure the services from other sources and hold Contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies that the Agency may have.
16. Failure to Enforce: Failure by the Agency at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the Agency to enforce any provision at any time in accordance with its terms.
17. Final Payment: Upon satisfactory completion of the Work performed under this contract, as a condition before final payment under this contract, or as a termination settlement under this contract, Contractor shall execute and deliver to the Agency a release of all claims against the State arising under, or by virtue of, the contract, except claims which are specifically exempted by Contractor to be set forth therein. Unless otherwise provided in this contract, by state law, or otherwise expressly agreed to by the parties in this contract, final payment under the contract or settlement upon termination of this contract shall not constitute waiver of the State's claims against Contractor under this contract.
18. Force Majeure: Each party shall be excused from performance for any period and to the extent that it is prevented from performing any obligation or service, in whole or in part, as a result of causes beyond the reasonable control and without the fault or negligence of such party and/or its subcontractors. Such acts shall include without limitation acts of God, strikes, lockouts, riots, acts of war, epidemics, governmental regulations superimposed after the fact, fire, earthquakes, floods, or other natural disasters ("force majeure events"). When such a cause arises, Contractor shall notify the State immediately in writing of the cause of its inability to perform, how it affects its performance, and the anticipated duration of the inability to perform. Delays in delivery or in meeting completion dates due to force majeure events shall automatically extend such dates for a period equal to the duration of the delay caused by such events, unless the State determines it to be in its best interest to terminate the agreement.
19. HIPAA Compliance: Contractor agrees to comply with the "Administrative Simplification" provisions of the Health Insurance Portability and Accountability Act of 1996, including electronic data interchange, code sets, identifiers, security, and privacy provisions, as may be applicable to the services under this contract.
20. Indemnification: To the fullest extent allowed by law, Contractor shall indemnify, defend, save and hold harmless, protect, and exonerate the agency, its commissioners, board members, officers, employees, agents, and representatives, and the State of Mississippi from

and against all claims, demands, liabilities, suits, actions, damages, losses, and costs of every kind and nature whatsoever including, without limitation, court costs, investigative fees and expenses, and attorney's fees, arising out of or caused by Contractor and/or its partners, principals, agents, employees and/or subcontractors in the performance of or failure to perform this agreement. In the State's sole discretion upon approval of the Office of the Mississippi Attorney General, Contractor may be allowed to control the defense of any such claim, suit, etc. In the event Contractor defends said claim, suit, etc., Contractor shall use legal counsel acceptable to the Office of the Mississippi Attorney General. Contractor shall be solely responsible for all costs and/or expenses associated with such defense, and the State shall be entitled to participate in said defense. Contractor shall not settle any claim, suit, etc. without the concurrence of the Office of the Mississippi Attorney General, which shall not be unreasonably withheld.

21. Independent Contractor Status: Contractor shall, at all times, be regarded as and shall be legally considered an independent contractor and shall at no time act as an agent for the State. Nothing contained herein shall be deemed or construed by the State, Contractor, or any third party as creating the relationship of principal and agent, master and servant, partners, joint ventures, employer and employee, or any similar such relationship between the State and Contractor. Neither the method of computation of fees or other charges, nor any other provision contained herein, nor any acts of the State or Contractor hereunder creates, or shall be deemed to create a relationship other than the independent relationship of the State and Contractor. Contractor's personnel shall not be deemed in any way, directly or indirectly, expressly or by implication, to be employees of the State. Neither Contractor nor its employees shall, under any circumstances, be considered servants, agents, or employees of the agency, and the Agency shall be at no time legally responsible for any negligence or other wrongdoing by Contractor, its servants, agents, or employees. The Agency shall not withhold from the contract payments to Contractor any federal or state unemployment taxes, federal or state income taxes, Social Security tax, or any other amounts for benefits to Contractor. Further, the Agency shall not provide to Contractor any insurance coverage or other benefits, including Worker's Compensation, normally provided by the State for its employees.
22. Infringement Indemnification: Contractor warrants that the materials and deliverables provided to the customer under this agreement, and their use by the customer, will not infringe or constitute an infringement of any copyright, patent, trademark, or other proprietary right. Should any such items become the subject of an infringement claim or suit, Contractor shall defend the infringement action and/or obtain for the customer the right to continue using such items. Should Contractor fail to obtain for the customer the right to use such items, Contractor shall suitably modify them to make them non-infringing or substitute equivalent software or other items at Contractor's expense. In the event the above remedial measures cannot possibly be accomplished, and only in that event, Contractor may require the customer to discontinue using such items, in which case Contractor will refund to the customer the fees previously paid by the customer for the items the customer may no longer use, and shall compensate the customer for the lost value of the infringing part to the phase

in which it was used, up to and including the contract price for said phase. Said refund shall be paid within ten (10) Working days of notice to the customer to discontinue said use.

Scope of Indemnification: Provided that the State promptly notifies Contractor in writing of any alleged infringement claim of which it has knowledge, Contractor shall defend, at its own expense, the State against, and pay all costs, damages and attorney fees that a court finally awards for infringement based on the programs and deliverables provided under this agreement.

23. Integrated Agreement/Merger: This agreement, including all contract documents, represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations or agreements, irrespective of whether written or oral. This agreement may be altered, amended, or modified only by a written document executed by the State and Contractor. Contractor acknowledges that it has thoroughly read all contract documents and has had the opportunity to receive competent advice and counsel necessary for it to form a full and complete understanding of all rights and obligations herein. Accordingly, this agreement shall not be construed or interpreted in favor of or against the State or Contractor on the basis of draftsmanship or preparation hereof.

24. Liquidated Damages:

When Contractor is given notice of delay or nonperformance as specified in Paragraph (1) (Default) of the Termination for Default clause of this contract and fails to cure in the time specified, Contractor shall be liable for damages for delay in the amount of \$16,000.00 plus a prorated amount per calendar day based on \$16,000.00 per month from date set for cure until either the State reasonably obtains similar services if Contractor is terminated for default, or until Contractor provides the services if Contractor is not terminated for default. To the extent that Contractor's delay or nonperformance is excused under Paragraph (4) (Excuse for Nonperformance or Delayed Performance) of the Termination for Default clause of this contract, liquidated damages shall not be due the State. Contractor remains liable for damages caused other than by delay.

25. Modification or Renegotiation: This agreement may be modified only by written agreement signed by the parties hereto. The parties agree to renegotiate the agreement if federal and/or state revisions of any applicable laws or regulations make changes in this agreement necessary.

26. No Limitation of Liability: Nothing in this agreement shall be interpreted as excluding or limiting any tort liability of Contractor for harm caused by the intentional or reckless conduct of Contractor or for damages incurred through the negligent performance of duties by Contractor or the delivery of products that are defective due to negligent construction.

27. Notices: All notices required or permitted to be given under this agreement must be in writing and personally delivered or sent by certified United States mail, postage prepaid,

return receipt requested, to the party to whom the notice should be given at the address set forth below. Notice shall be deemed given when actually received or when refused. The parties agree to promptly notify each other in writing of any change of address.

For the Agency:	For Contractor:
Alicia Harris, CFO	[Name, Title]
Mississippi Public Broadcasting	[Contractor Name]
3825 Ridgewood Road	[Address]
Jackson, MS 39211	[City, State, Zip]

28. Non-solicitation of Employees: Each party to this agreement agrees not to employ or to solicit for employment, directly or indirectly, any persons in the full-time or part-time employment of the other party until at least six (6) months after this agreement terminates unless mutually agreed to in writing by the State and Contractor.
29. Oral Statements: No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this contract. All modifications to the contract must be made in writing by the Agency and agreed to by Contractor.
30. Ownership of Documents and Work Papers: Agency shall own all documents, files, reports, Work papers and Working documentation, electronic or otherwise, created in connection with the project which is the subject of this agreement, except for Contractor's internal administrative and quality assurance files and internal project correspondence. Contractor shall deliver such documents and Work papers to Agency upon termination or completion of the agreement. The foregoing notwithstanding, Contractor shall be entitled to retain a set of such Work papers for its files. Contractor shall be entitled to use such Work papers only after receiving written permission from Agency and subject to any copyright protections.
31. Patents and Royalties: Contractor covenants to save, defend, keep harmless, and indemnify the Agency and all of its officers, departments, agencies, agents, and employees from and against all claims, loss, damage, injury, fines, penalties, and cost--including court costs and attorney's fees, charges, liability, and exposure, however caused--for or on account of any copyright or patented or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the Agency. If Contractor uses any design, device, or material covered by patent or copyright, it is mutually agreed and understood without exception that the contract price includes all royalties or costs arising from the use of such design, device, or materials in any way in the Work.
32. Priority: The contract consists of this agreement with exhibits, the IFB 3160005793 (hereinafter referred to as "IFB" and attached as Schedule A), and the bid dated [date] by [Contractor Name] (hereinafter referred to as "Bid" and attached as Schedule B). Any ambiguities, conflicts or questions of interpretation of this contract shall be resolved by first, reference to this agreement with exhibits and, if still unresolved, by reference to the IFB and, if still unresolved, by reference to the Bid. Omission of any term or obligation from this



agreement or attached Schedules A or B shall not be deemed an omission from this contract if such term or obligation is provided for elsewhere in this contract.

33. Quality Control: Contractor shall institute and maintain throughout the contract period a properly documented quality control program designed to ensure that the services are provided at all times and in all respects in accordance with the contract. The program shall include providing daily supervision and conducting frequent inspections of Contractor's staff and ensuring that accurate records are maintained describing the disposition of all complaints. The records so created shall be open to inspection by the Agency.
34. Record Retention and Access to Records: Provided Contractor is given reasonable advance written notice and such inspection is made during normal business hours of Contractor, the State or any duly authorized representatives shall have unimpeded, prompt access to any of Contractor's books, documents, papers, and/or records which are maintained or produced as a result of the project for the purpose of making audits, examinations, excerpts, and transcriptions. All records related to this agreement shall be retained by Contractor for three (3) years after final payment is made under this agreement and all pending matters are closed; however, if any audit, litigation or other action arising out of or related in any way to this project is commenced before the end of the three (3) year period, the records shall be retained for one (1) year after all issues arising out of the action are finally resolved or until the end of the three (3) year period, whichever is later.
35. Recovery of Money: Whenever, under the contract, any sum of money shall be recoverable from or payable by Contractor to the Agency, the same amount may be deducted from any sum due to Contractor under the contract or under any other contract between Contractor and the Agency. The rights of the Agency are in addition and without prejudice to any other right the Agency may have to claim the amount of any loss or damage suffered by the Agency on account of the acts or omissions of Contractor.
36. Right to Audit: Contractor shall maintain such financial records and other records as may be prescribed by the Agency or by applicable federal and state laws, rules, and regulations. Contractor shall retain these records for a period of three years after final payment, or until they are audited by the Agency, whichever event occurs first. These records shall be made available during the term of the contract and the subsequent three-year period for examination, transcription, and audit by the Mississippi State Auditor's Office, its designees, or other authorized bodies.
37. Right to Inspect Facility: The State may, at reasonable times, inspect the place of business of a Contractor or any subcontractor which is related to the performance of any contract awarded by the State.
38. Severability: If any part of this agreement is declared to be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision of the agreement that can be given effect without the invalid or unenforceable provision, and to this end the provisions

hereof are severable. In such event, the parties shall amend the agreement as necessary to reflect the original intent of the parties and to bring any invalid or unenforceable provisions in compliance with applicable law.

39. State Property: Contractor will be responsible for the proper custody and care of any state-owned property furnished for Contractor's use in connection with the performance of this agreement. Contractor will reimburse the State for any loss or damage, normal wear and tear excepted.
40. Third Party Action Notification: Contractor shall give the customer prompt notice in writing of any action or suit filed, and prompt notice of any claim made against Contractor by any entity that may result in litigation related in any way to this agreement.
41. Unsatisfactory Work. If, at any time during the contract term, the service performed or Work done by Contractor is considered by the Agency to create a condition that threatens the health, safety, or welfare of the citizens and/or employees of the State of Mississippi, Contractor shall, on being notified by the Agency, immediately correct such deficient service or Work. In the event Contractor fails, after notice, to correct the deficient service or Work immediately, the Agency shall have the right to order the correction of the deficiency by separate contract or with its own resources at the expense of Contractor.
42. Variations in Estimated Quantity: Upon the agreement of the parties, the quantity of services specified in this contract may be increased by a maximum of ten percent provided:
  - a. the unit prices will remain the same (except for any price adjustments otherwise applicable); and,
  - b. the Chief Procurement Officer makes a written determination that such an increase will either be more economical than awarding another contract, or that it would not be practical to award another contract.
43. Waiver: No delay or omission by either party to this agreement in exercising any right, power, or remedy hereunder or otherwise afforded by contract, at law, or in equity shall constitute an acquiescence therein, impair any other right, power or remedy hereunder or otherwise afforded by any means, or operate as a waiver of such right, power, or remedy. No waiver by either party to this agreement shall be valid unless set forth in writing by the party making said waiver. No waiver of or modification to any term or condition of this agreement will void, waive, or change any other term or condition. No waiver by one party to this agreement of a default by the other party will imply, be construed as or require waiver of future or other defaults.

**Attachment G**

**IFB EXCEPTION(s)**

**IFB Number 3160005793**

**Invitation For Bids for Master Control Restoration**

Bidder taking exception to any part or section of the solicitation shall indicate such exceptions on the table below. If no exceptions are taken, then the Bidder shall state in this section "No Exceptions Taken." Failure to indicate any exception will be interpreted as the Bidder's comply fully with the requirements as written. Conditional or qualified bids, unless specifically allowed, shall be subject to rejection in whole or in part.

<b>Procurement Section and Page Number</b>		<b>Original Language</b>	<b>Requested Change/Exception</b>	<b>Agency Decision</b>
1.				
2.				
3.				
4.				
5.				

## Attachment H

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## **PART 1 – GENERAL**

### **ENGINEER**

1. MPB retained Kessler and Gehman Associates, Inc. (hereinafter “KGA” or “Engineer”) to prepare these Technical Specifications. KGA will be MPB’s representative while Work is in progress and will provide administration of the Contract until the date KGA recommends approval of the final invoice. KGA will have authority to act on behalf of MPB only to the extent described herein. KGA Contacts: Robert Gehman, Jr., P.E. [bob@kesslerandgehman.com](mailto:bob@kesslerandgehman.com) or Jeffrey C. Gehman [jeff@kesslerandgehman.com](mailto:jeff@kesslerandgehman.com).
2. MPB and Contractor shall include KGA in all communications that relate to or affect KGA’s services or responsibilities. MPB shall promptly notify KGA of the substance of any direct communications between MPB and the Contractor otherwise relating to the Project. Communications by and with subcontractors and suppliers shall be through the Contractor. Communications by and with separate contractors shall be through MPB. The contract may specify other communication protocols.
3. KGA will review requests for information about the Technical Specifications. KGA’s response to such requests will be made in writing with reasonable promptness. KGA will issue supplemental documents in response to the requests for information, if appropriate.
4. KGA will visit the site at appropriate intervals in the stage of completion to become generally familiar with the progress and quality of the Work, and to determine in general if the installation is being performed in a manner indicating that the system will be in accordance with the technical specifications. However, KGA will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. KGA will not have control over, charge of, or responsibility for the execution means, methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor’s rights and responsibilities.
5. Based on the site visits, KGA will keep MPB reasonably informed about the progress and quality of the portion of the system completed, and report to MPB (1) known deviations from the Technical Specifications, (2) known deviations from the Contractor’s progress schedule, and (3) observed defects and deficiencies. KGA will not be responsible for the Contractor’s failure to perform the Work in accordance with the requirements of the Technical Specifications. KGA will not have control over or charge of and will not be responsible for acts or omissions of, the Contractor, its subcontractors, or their agents or employees, or any other persons or entities performing Work on the project.
6. Based on KGA’s evaluations of the Contractor’s invoices, KGA will review and certify the amounts due the Contractor and will recommend approval for Payment of such amounts.
7. KGA will prepare Change Orders and Change Directives and may order minor changes in the Work. KGA will investigate and make determinations and recommendations regarding concealed and unknown conditions.
8. KGA has authority to reject Work that does not conform to the Technical Specifications. Whenever KGA considers it necessary or advisable, KGA will have authority to require inspection or testing of components, whether the component is installed, or the system is completed. However, this

authority of KGA shall not imply a duty or responsibility of KGA to the Contractor, its subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

9. KGA will review and take other action upon the Contractor's submittals, but only for the purpose of checking for conformance with information given and the design concept expressed in the Technical Specifications. Review of such submittals is not for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Technical Specifications.
10. KGA's review shall not constitute approval of safety precautions or of any installation means, methods, techniques, sequences, or procedures. KGA's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
11. KGA will interpret and decide matters concerning performance and requirements of the Technical Specifications on written request of either MPB or Contractor. KGA's response will be made in writing with reasonable promptness.
12. Interpretations and decisions of KGA will be consistent with the intent of the Technical Specifications and will be in writing or in the form of drawings. When making such interpretations and decisions, KGA will endeavor to secure faithful performance by both MPB and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.
13. KGA's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Technical Specifications.
14. KGA will conduct inspections to determine the date or dates of substantial completion and the date of final completion; issue certificates of substantial completion; receive and forward to MPB, for MPB's review and records, written warranties and related documents required by the Contract and assembled by the Contractor; and issue a certificate of final completion.

## PURPOSE

1. MPB is seeking a Contractor to restore its television master control system back to full operation after an 7-year hiatus under a joint master control system operated by PMM (see <https://www.pmm.org/welcome/>). Also see Appendix F. The project includes the final design, selection, supply, installation and integration of new equipment, hardware, and materials, rewiring and removal of unneeded equipment, and setup and testing of the final TV master control as a complete operating system.
2. Simultaneously with this project MPB is switching to PBS' service Interconnection (sIX) System (see <https://software.pbs.org/support/solutions/9000114049> ). Also see Appendix D. The Contractor shall be familiar with sIX and ensure compatibility of the final master control system with sIX.

## BACKGROUND

1. **Master Control Status** – The TV master control system that was installed during 2006-2007 was in full and successful operation until the changeover to PMM that occurred in 2017. During the hiatus MPB

removed some of its digital master control system equipment (e.g., Iconmaster switchers, Omneon servers, and Harris Automation), which will now be replaced with new equipment.

2. **Restoration** – At a minimum the Contractor will supply new record/playout media servers, file transfer system, local content storage, SDI routing, KVM, and automation to run the operation, while integrating with the existing traffic system and existing master control equipment, such as routing, archive, etc. At this time, the primary intent is to continue the same operational capabilities as currently enjoyed with PMM and nothing additional.
3. **Distribution** – MPB delivers TV and radio programming from its master control in Jackson to its eight transmitter sites located throughout Mississippi over an MPB-owned and operated IP-based 6 GHz duplex microwave system with a 25 Mbps ASI and 99 Mbps Ethernet channel. ITS is in the process of providing MPLS circuits between the master control and transmitter sites. Separate from this TV master control project MPB is transitioning from the statewide microwave system to the new MPLS circuits as the primary method of interconnection between the master control and transmitter sites. The microwave system will be retained as a backup until further notice.

### **BASE BID SUMMARY**

1. This Work will be procured under a single contract in the best interests of MPB. The following briefly summarizes the Work required by the base bid:
  - 1.1. Develop a final signal flow/file movement design that is compatible with PBS sIX.
  - 1.2. Select new equipment.
  - 1.3. Develop procedures for equipment tests and acceptance tests for the new system.
  - 1.4. Supply and install new equipment, setup and test the completed system.
  - 1.5. Carefully remove existing equipment if any removal is necessary.
  - 1.6. Overall supervision of the project.

### **DEFINITIONS**

- ATSC: Advanced Television Systems Committee
- Bidder: Any Vendor interested in submitting a bid and/or who submits a bid
- Contractor: Vendor(s) who are awarded a contract for equipment and/or services
- DTV: Digital Television
- FCC: Federal Communications Commission
- ITS: MS Department of Information Technology Services
- MPLS: Multi-Protocol Label Switching. A virtual private network (VPN) circuit for securely connecting two or more locations over the public Internet or private MPLS VPN network.
- Owner/Agency: Mississippi Authority for Educational Television, aka “MPB” or “Mississippi Public Broadcasting”
- Engineer: Kessler and Gehman Associates, Inc.
- Substantial Completion: The stage in the progress of the Work when all or a designated portion thereof is sufficiently complete according to the Technical Specifications that the Owner can use the Work for its intended use.

- Final/Satisfactory Completion: Satisfactory completion will require the Contractor to resolve all punch list items on the certificate of substantial completion, if any, and submit all closeout documents (including but not necessarily limited to records, written warranties, and final payment request) to the Owner by the completion date established in the contract, in which case Engineer will issue a final certificate for payment and a certificate of final completion of the contract.
- The State of the project: Mississippi
- Work: The labor, equipment, materials, and services required by the Technical Specifications, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

## **BIDS**

1. Bidders must enter an amount for the **Base Bid** in the official Bid Form. The Base Bid is the lump sum amount for a contract to take account of all Work specified in this Attachment H, shown on the drawings, and required elsewhere in this Project Manual, including the Warranty for five years (1,825 calendar days) and SLA for two years (730 calendar days) after the date of Substantial Completion.
2. Bidders must enter unit prices in the Bid Form under Breakout of Charges. The unit prices will not be used to adjust the base bid; unit prices are for the purpose of increasing the quantity of units, if needed.

## **MANDATORY PRE-BID CONFERENCE AND SITE VISIT**

1. A Bidders' conference will be held at MPB headquarters in Jackson, MS. A site visit will be offered immediately after the conference to inspect the existing master control facilities.

## **DISRUPTION TO PROGRAMMING**

1. MPB will continue to operate under PMM during the restoration, so the contractor must develop a concept with procedures to keep MPB on the air during restoration until the final cutover.
2. If off-air time cannot be avoided, Contractors are required to explain to the Owner and coordinate with the Owner at least 3 days in advance to schedule off-air time.
3. The Owner conducts fund-raising events during targeted times of the year. These events are especially critical to the ability of the Owner to meet its financial goals for continued operation of the network. The Owner will not permit disruption to programming during those periods.

## **SUBMITTALS**

1. Bidders shall submit the following prior to award of a contract.
  - 1.1. Documents demonstrating experience in TV master control system design and integration. Submit within three (3) days after a written or email request from the Engineer.
2. The awarded Contractor shall submit the following to the Engineer prior to ordering equipment.
  - 2.1. Rack Elevation Drawings: Plans showing elevation of new equipment, placement in existing racks, and proximity to existing equipment. Include consideration for air-flow spaces.



- 2.2. Signal Flow/ File Movement Drawings: Plans showing the existing equipment and connections and new equipment and connections to existing equipment, including the appropriate connector types.
- 2.3. Schedule: Updated schedule of the anticipated dates for being off the air.

#### **WARRANTY & SERVICE LEVEL AGREEMENT ("SLA")**

1. A **warranty** shall be included in the base bid price. The minimum warranty period for all major equipment items and major Work shall be five (5) years from date of Substantial Completion. The Contractor shall be the single point of contact for all warranty issues on all equipment that the Contractor provides under the contract for the full warranty period. The warranty shall include the following:
  - 1.1. Written warranty, signed by Contractor agreeing to correct system deficiencies and replace components that fail in materials or Workmanship within specified warranty period when installed and used according to manufacturer's written instructions. This warranty shall be in addition to, and not limiting, other rights MPB may have under other provisions of the Contract Documents.
  - 1.2. If, within the warranty period, any of the Work is found to be Defective Work, the Contractor shall promptly upon receipt of written notice from the Owner or Engineer, and without expense to either, replace or correct the Defective Work to conform to the requirements of the Contract Documents, and repair all damage to the site, the building and its contents which is the result of Defective Work or its replacement or correction.
  - 1.3. The term "Defective Work" means (1) any product, material, system, equipment, or service, or its installation or performance, which does not conform to the requirements of the Contract Documents, (2) in-progress or completed Work the workmanship of which does not conform to the quality specified or, if not specified, to the quality produced by skilled workers performing work of a similar nature on similar projects, and (3) substitutions and deviations not properly submitted and approved or otherwise authorized.
  - 1.4. If the Contractor fails to proceed promptly to comply with the terms of the warranty, or to provide the Owner with satisfactory written verification that positive action is in process, the Owner may have the Defective Work replaced or corrected and the Contractor and the Contractor's Surety shall be liable for all expense incurred.
  - 1.5. The warranty specified in this Article shall not deprive MPB of other rights MPB may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract.
2. An **SLA** must also be included in the base bid price, consisting of a warranty uplift to include the following technical support items for a minimum of five (5) years from date of Substantial Completion:
  - 2.1. Technical Phone Support - Technical Phone Support will include a live representative answering the phone and providing technical phone support for the covered products. Technical phone support will be provided by Contractor twenty-four (24) hours per day, seven (7) days per week. Such technical phone support will be provided on a priority basis, with the same priority as technical phone support for the Contractor's warranty owners and ahead of technical phone support for its non-warranty, non-SLA owners.

- 2.2. Technical Documentation - Contractor shall provide access to additional documentation and its frequently-asked-questions library in a restricted-access area on its website. MPB may access the content that is applicable to the covered products electronically twenty-four (24) hours per day, seven (7) days per week.
- 2.3. Software - MPB may download applicable software updates or bug fixes for the software from the Contractor's software website at no additional charge to MPB. Contractor will also provide software upgrades at no additional charge to MPB.
- 2.4. Remote Access - Contractor will provide MPB with remote access support to be used in responding to MPB's requests for technical support. Remote Access Support may include remote diagnosis of problems with the equipment and/or software, remote repairs and similar remote assistance. MPB shall install specific agents, software or applications onto MPB's equipment that allow Contractor's technical support staff to remotely access MPB's facility to provide technical support (such as VPN). MPB will consent to such remote access by Contractor with the logistics and parameters of such Remote Access to be determined by mutual agreement of the parties.
- 2.5. Advance Equipment Exchange - Contractor will ship replacement equipment (equipment herein includes components), in advance, within a 24-hour period in exchange for MPB's defective equipment. MPB will request a return authorization (RMA) from Contractor prior to dispatch of equipment. Contractor will provide MPB with new, rebuilt, refurbished or alternate equipment of equal or improved quality, as exchange equipment to replace eligible defective equipment. Contractor will use commercially reasonable efforts to ship equipment with the same model number as the defective equipment within the period specified above. Contractor will be responsible for all shipment charges for all replacement equipment. Contractor bears the risk of loss or damage while the equipment is in transit to MPB and back to the Contractor. MPB will have thirty (30) days to ship the defective equipment to the Contractor.
- 2.6. Onsite Preventative Maintenance - MPB may utilize one (1) onsite visit for each 12 months by the Contractor's field engineer to MPB's facility on a mutually agreeable date to perform a routine equipment inspection and preventative maintenance review of the equipment at no additional charge to MPB. MPB is entitled to a refund if the Contractor fails to honor a request for such a visit in any period based on the Contractors prevailing rates for such services. Onsite Preventative Maintenance Visits are intended to provide routine equipment inspection including troubleshooting support and a preventative maintenance review. The onsite field engineer will make recommendations to MPB about possible updates and/or upgrades, and/or training recommendation that could improve the system efficiency and/or performance of the Contractor products. MPB has no obligation to act upon such recommendations.

## **PRODUCT SUPPORT**

1. Products priced more than \$5,000.00 shall be provided with a written end-of-life policy, which is a process leading to a product being obsolete and no longer sold, maintained, or supported. The written policy shall also apply to end-of-sale, which is the date when the product will no longer be offered for sale. The policy shall certify that the manufacturer will notify MPB in writing within 30 days after the end-of-life or end-of-sale date has been established for the product. The policy will also certify that the product includes:

- 1.1. Five (5) years of OEM or third-party technical support for hardware from the end-of-life date. Technical support for the software running on the hardware will be coterminous with the hardware.
- 1.2. Five (5) years of OEM or third-party replacement parts for hardware from the end-of-life date, in accordance with supplier's Return Materials Authorization (RMA) process.
- 1.3. OEM or third-party technical support for five (5) years from the from the end-of-life date or until the end of the term for subscription software.

## **NETWORK SECURITY**

1. Currently at MPB everything connects to a core Cisco Catalyst 9300 switch and through a redundant Fortinet, Inc. FortiGate firewall <https://www.fortinet.com/content/dam/fortinet/assets/data-sheets/fortigate-3000f-series.pdf> that connects through the State's Cisco Catalyst 9300 to get to the public internet.
2. This is like a blue and red network configuration, such that the red network never touches the public internet, but the red touches blue and the blue touches the public internet. See for example, <http://vunvulearadu.blogspot.com/2017/03/blue-and-red-network-topology-in-azure.html> Bidders shall review the current configuration and include in their bid whatever is necessary to maintain such "blue and red" requirements.

## **PROJECT MANAGEMENT & COORDINATION**

1. DESCRIPTION
  - 1.1. Scope: To set forth procedures, conditions and responsibility for coordination of the total project.
  - 1.2. In the interest of maintaining progress to comply with the Final Completion deadline these requirements will be rigidly enforced.
  - 1.3. Project Coordinator: The Contractor, as soon as practicable after the notice of award, and prior to commencement of any on-site Work, shall submit name(s) and qualifications of the proposed superintendent and any assistant superintendents. Upon the approval of the Engineer and the Owner, the Project Coordinator will remain until the Project is completed and cannot be removed during construction without the written consent of the Owner and the Engineer.
2. DUTIES OF PROJECT COORDINATOR
  - 2.1. General:
    - 2.1.1.Coordination: Coordinate the work of all Subcontractors and Material Suppliers.
    - 2.1.2.Supervision: Supervise the activities of every phase of work taking place on the Project.
    - 2.1.3.Communication: Establish lines of authority and communication at the job site.
    - 2.1.4.Location: The Project Coordinator must be present on the job all the time.
  - 2.2. Interpretations of Contract Documents:
    - 2.2.1.Consultation: Consult with the Engineer to obtain interpretations.
    - 2.2.2.Assistance: Assist in resolution of any questions.

- 2.2.3. Transmission: Transmit written interpretations to concerned parties.
- 2.3. Cessation of Work: Stop all work not in accordance with the requirements of the Contract Documents.
- 2.4. Division One: Coordinate and assist in the preparation of all requirements of Division One and specifically as follows:
  - 2.4.1. Cutting and Patching: Supervise and control all cutting and patching.
  - 2.4.2. Project Meetings: Schedule and preside at all project meetings.
  - 2.4.3. Construction Schedules: Prepare and submit all construction schedules; supervise work to monitor compliance with schedules.
  - 2.4.4. Shop Drawings, Product Data and Samples: Administer the processing of all submittals required by the Project Manual.
  - 2.4.5. Testing: Coordinate all required testing.
  - 2.4.6. Temporary Facilities and Controls: Allocate, maintain and monitor all temporary facilities.
  - 2.4.7. Substitutions and Product Options: Administer the processing of all substitutions.
  - 2.4.8. Project Closeout: Conduct final inspections and assist in collection and preparation of closeout documents.
  - 2.4.9. Cleaning: Direct and execute a continuing cleaning program throughout construction.
  - 2.4.10. Project Record Documents: Maintain up-to-date project record documents.
  - 2.4.11. Safety Measures: Plan and enforce all safety requirements.
- 2.5. Changes: Recommend and assist in the preparation of requests to the Engineer for any changes in the Contract.
- 2.6. Application for Payment: Assist in the preparation and be knowledgeable of each entry in the Application and Certificate for Payment.

## **PROJECT MEETINGS**

### **1. DESCRIPTION**

- 1.1. Contractor's Responsibilities: The Contractor (Project Coordinator) will administer all progress meetings which include the following:
  - 1.1.1. Prepare agenda.
  - 1.1.2. Distribute written notice of meetings to listed attendees seven (7) days in advance.
  - 1.1.3. Make physical arrangements for and presiding at the meetings.
  - 1.1.4. Meetings may be held virtually when appropriate using a video meeting app like Zoom, Skype, etc.
  - 1.1.5. Record minutes.
  - 1.1.6. Distribute copies of the minutes to listed attendees, regardless of actual participation, within four (4) days.

1.2. Pre-Construction Meeting: The Engineer will schedule a pre-construction meeting as soon as possible after the issuance of a Notice to Proceed.

1.2.1.Attendees:

- 1.2.1.1. Owner
- 1.2.1.2. Engineer
- 1.2.1.3. Contractor (Project Coordinator)

1.2.2.Minimum Agenda: (prepared by the General Contractor/ Project Coordinator)

- 1.2.2.1. Distribute and discuss preliminary construction schedule.
- 1.2.2.2. Critical work sequencing.
- 1.2.2.3. Designation of responsible personnel.
- 1.2.2.4. Procedures for maintaining record documents.
- 1.2.2.5. Use of premises, including office and storage areas.
- 1.2.2.6. Owner's requirements.
- 1.2.2.7. Security procedures.
- 1.2.2.8. Housekeeping procedures.

1.2.3.Progress Meetings: The Owner will schedule regular meetings at the time of the pre-construction conference.

- 1.2.3.1. Hold all meetings as progress of work dictates.
- 1.2.3.2. Increase meeting occurrences to weekly if progress falters.

1.2.4.Attendees:

- 1.2.4.1. Owner
- 1.2.4.2. Engineer
- 1.2.4.3. Contractor

1.2.5.Minimum Agenda:

- 1.2.5.1. Review, approve minutes of the previous meeting.
- 1.2.5.2. Review work progress since last meeting.
- 1.2.5.3. Note field inspections, problems and decisions.
- 1.2.5.4. Identify problems which impede planned progress.
- 1.2.5.5. Review off-site fabrication problems.
- 1.2.5.6. Revise schedule, as indicated.
- 1.2.5.7. Plan progress during the next work period.
- 1.2.5.8. Review proposed changes.
- 1.2.5.9. Complete other current business.

1.3. Inspections/ Commissioning Meetings:

1.3.1. The Contractor will schedule inspection and commissioning scoping meetings after the pre-construction conference. Inspection/ Commissioning Meetings will coincide with regularly scheduled Progress Meetings until such time that the Commissioning Process requires separate meetings. The Contractor will chair, facilitate and document all Commissioning Meetings.

1.3.2. Attendees:

1.3.2.1. Owner

1.3.2.2. Engineer

1.3.2.3. Contractor

1.3.3. Minimum Agenda:

1.3.3.1. Review, approve minutes of the previous meeting.

1.3.3.2. Review Issues Log

## **PROGRESS SCHEDULES**

### **1. DESCRIPTION**

1.1. Scope: Provide projected construction schedules for the entire Work and revise periodically. The following is a minimum requirement and other type schedules are acceptable with Engineer's approval.

1.2. Form of Schedules: Prepare in form of horizontal bar chart like Microsoft Project.

1.2.1. Provide separate horizontal bar for each milestone.

1.2.2. Scale and space to allow for updating milestones.

1.3. Contents of Schedule:

1.3.1. Provide complete sequence of project by milestone based on the Scope of Work.

1.3.2. Indicate dates for beginning and completion of each milestone of the project.

1.3.3. Identify work of other logically grouped activities.

1.3.4. Show projected percentage of completion for each item of work as of first day of month.

1.4. Updating:

1.4.1. Show all changes occurring since previous submission of updated schedule.

1.4.2. Indicate progress of each activity and completion dates.

1.5. Submittals:

1.5.1. Submit initial schedule to the Engineer within fifteen (15) days after date of Notice to Proceed.

1.5.2. Submit to Engineer weekly updated schedules accurately depicting progress to first day of each week.

1.5.3. Submit two (2) copies, one (1) to be retained by the Engineer and the other forwarded to the Owner.

## PART 2 – PRODUCTS

### SPECIFIC VIDEO AND AUDIO REQUIREMENTS

- At a minimum the new system must be able to handle all the parameters in the following six profiles. Contractor shall validate the system for profile P014 and configure to P011, which provides LT/RT stereo mix.

		Profile		
		P003	P011	P014
Video Info	Container	MXF	MXF	MXF
	Format	AS-03	AS-03	AS-03
	V-codec	MPEG-2	MPEG-2	MPEG-2
	V-bitrate	25 Mbps	25 Mbps	25 Mbps
	V-format	1080i	1080i	1080i
Audio Tracks	1	Lf	Lt	Lt
	2	Rf	Rt	Rt
	3	C		Lf
	4	Lfe		Rf
	5	Ls		C
	6	Rs		Lfe
	7	DVI		Ls
	8	SAP		Rs
	9			SAP
	10			DVI
	11			Dolby AC-3/ Dolby AC-3
	12			
	13			
	14			
	15			
	16			
	Stereo	N/A	Stereo	Stereo
	5.1	5.1	N/A	5.1
	AC-3	N/A	N/A	AC-3
Captions	Standard	Smpte-436	Smpte-436	Smpte-436

- The existing Harmonic X2S encoder is licensed to operate at ATSC 1.0 for 3 HD and 3 SD channels. The 3<sup>rd</sup> SD channel is FM Radio and not part of this system. The FM AES signal and Slate are inserted at the encoder. At a minimum, the new system shall comply with the following parameters:
  - Storage: 50 TB,  $\pm$ 5 TB
  - Numbers of ingest channels:
    - Primary: (Qty 3) Selectable from a router
  - Numbers of playout channels:
    - Primary HD: (Qty 3) MPB HD, World/CTV, Future HD channel
    - Primary SD: (Qty 3) PBS Kids, Create, Future SD channel
    - Backup HD: (Qty 3) MPB HD, World/CTV, Future HD channel

#### 2.3.4. Backup SD: (Qty 3) PBS Kids, Create, Future SD channel

### **GENERAL DESCRIPTION**

1. One or more of the products described in this section are expected to be integrated into the final design. Quantities are as-needed, as determined by the Contractor. All products provided by the Contractor shall be new current production models. Products formerly used as demonstration models, out of production models, and used equipment is not acceptable.
2. The new TV master control system will consist of the existing equipment, software, racks and wiring (see Appendix A – C), the new PBS sIX interconnect system to be installed by others (Appendix D & E), and whatever additional new equipment, software, racks and wiring will be required to replace the capabilities of the PMM equipment and software (Appendix F & G) when it is turned-off, all for a complete operational master control system operating under automation.
3. The master control automation system shall, among other things, manage the recording of programs from satellite feeds, keep track of where all content is located, set up and play programs and program breaks following a program log, ingest media from various sources, monitor and control continuous multiple player outputs, maintain as-run and discrepancy logs, and integrate with traffic.
4. The goal is to restore MPB's master control equipment to a fully automated, high performance, fully redundant multi-channel master control facility with no additional staff. The intent is to use as much of MPB's existing master control facilities as practicable, but the basic design will be the Bidder's responsibility, subject to the Owner's approval not to be unreasonably withheld. It will be the Bidder's decision whether to reuse, replace and/or add to the existing facilities. If any of MPB's existing equipment will not be compatible with the proposed new equipment, will not otherwise be sufficient when for integration with the new equipment, or will not be an economical solution, then the Contractor shall include such new equipment to resolve the matter.
5. The completed system must be capable of automated recording from and switching between multiple satellite receivers and local SDI streams selected from the Platinum router, movement of files from one storage medium to another, trimming/marking files for start/stop, and simultaneous playout of multiple SDI streams from television program and interstitial files and switching between live and recorded clips for broadcasting, including but not limited to the following:

### **GENERAL REQUIREMENTS**

1. The newly restored system shall comply with the following:
  - 1.1. Incorporate the capability to manage content, proxy files, ingest content, playlists & playout content, search files, transfer files & metadata; import, export, & transfer files, and logging.
  - 1.2. Provide the capability to create and manage low-resolution proxy media, such as browsing, monitoring, logging, editing, proxy operations, common edit decision lists/playlists, common metadata keywords and markers, and content management.
  - 1.3. Include the capability to increase media channels, storage capacity, file transfer bandwidth or operational bandwidth. The server must be proficient as a media server and a file server.
  - 1.4. Provide high availability for playout and recording 24/7, which requires a design that has no single point of failure. Such a design shall include redundant RAID controllers, redundant network



interface controllers connected via multiple servers, and multiple switches. Hardware shall include redundant power supplies, redundant cooling and redundant storage drives.

- 1.5. The system shall provide multipurpose channels that can manage audio/video recording, audio/video playout, recording of super slow-motion, recording and playout of combined video/key, multiple compression formats and resolution, up/down/cross-conversion. clip store, editing, channel control and playout.
- 1.6. The media server shall support a storage network that provides access to consolidated storage. The networked storage devices must be accessible to the servers such that they appear as if they are locally attached to the operating system, allowing direct read/write requests to the storage disks. It shall host a shared file system to allow application and network interaction. Media servers shall comply with the following minimum requirements or similar arrangement:
  - 1.6.1. SSD based RAID 1 mirror for OS drive
  - 1.6.2. Redundant PSUs
  - 1.6.3. Dual 10 Gbps Ethernet NICs
  - 1.6.4. Win2019 Server
  - 1.6.5. SATA 3 drives in RAID 6 configuration with SAS2 RAID controller
    - 1.6.5.1. Two (2) spare drives per device
  - 1.6.6. 5 GB graphics card
- 1.7. Files must be stored as elementary streams on disk for direct editing and metadata operations. Capable to import and export media in parallel with other operations to networked storage, removable media, editors, and archive. Media files must support the standard MPEG-2 video compression format. Additional formats such as MPEG-4 and DV may be included. These files shall be available for sharing using the common MXF wrapper. Additional wrappers such as QuickTime may be included. Compatibility with other file types such as WAV for audio, QuickTime 32 for graphics and MPEG transport/program stream for video may be helpful. Files shall be transferable using standard FTP and SMB protocol, as well as via direct iSCSI connections. To help automate the process of moving files, there should be watch folder services to bring files on and off the server platform.
- 1.8. Include the capability of creating, saving, and exchanging metadata associated with media files by the server system using an open standard such as XML.
- 1.9. KVM-over-IP switch, which is a device that allows the user to switch between multiple PCs or servers from a single keyboard, monitor, and mouse. The KVM-over-IP Switch shall provide remote access and management for PC's, servers, and other networking equipment. KVM shall allow troubleshooting, reconfiguration, rebooting, and power cycling servers remotely. It shall connect across LAN, WAN, Internet and via modem in emergencies. It shall connect to servers and Workstations supporting VGA, DVI, HDMI, and DisplayPort video. The video engine shall support BIOS-level server access and control over IP. Additional KVM requirements:
  - 1.9.1. Capable of off-site browser log-in remote access over the Internet.
  - 1.9.2. Dual power and dual Gigabit Ethernet with automatic failover
  - 1.9.3. 1920 X 1080 video resolution at 30 frames-per-second
  - 1.9.4. Support for dual video, digital audio, and dual monitors
  - 1.9.5. Remotely install OS and software

- 1.9.6. Java-free, IP-based access to servers and Workstations
- 1.9.7. IP User Station fully compatible with the KVM switch provided. Providing KVM-over-IP access, supporting two 1080p video sessions at 30 FPS with less than 50 ms latency with simultaneous access to eight or more servers, dual monitors, audio, and virtual media.

## **PART 3 - EXECUTION**

### **QUALITY ASSURANCE**

1. Provide an experienced installer for this Project to supervise installation of the system. Comply with FCC 47 CFR 73.

### **DEMARCATATION**

1. Refer to Appendix E to identify the points of demarcation for the Work.

### **EXAMINATION**

1. The concept is to operate under PMM to keep the TV stations on the air to the maximum extent possible while Work is being performed on the new system. In this regard Bidders shall:
  - 1.1. Examine the buildings for space limitations related to the placement of new equipment and access to the electrical power source.
  - 1.2. Examine the sites existing equipment and other conditions affecting installation.
  - 1.3. Proceed with installation only after unsatisfactory conditions have been corrected.
  - 1.4. Field-check all dimensions.

### **PROJECT CONDITIONS**

1. System components shall be equipped and rated for the environments where installed. Contractor shall verify the following environmental conditions for this region, the existing building, and specific room(s).
  - 1.1. Service Conditions for Outdoor Electrical/Electronic Equipment: Rate equipment for continuous operation under the following environmental conditions, unless otherwise indicated:
    - 1.1.1. Temperature: -20°C to 45°C or ~0 deg F to plus 110 deg F.
    - 1.1.2. Equipment temperature outdoors in direct sun may reach 150 deg F.
    - 1.1.3. Relative Humidity: 5 to 100 percent.
    - 1.1.4. Weather: Enclosure housings to prevent entry of moisture due to melting ice build-up or driven rain or snow.
  - 1.2. Service Conditions for Indoor Electrical/Electronic Equipment: Rate equipment for continuous operation under the following environmental conditions, unless otherwise indicated:
    - 1.2.1. Temperature: 10°C to 40°C or ~50 deg F to ~100 deg F.
    - 1.2.2. Relative Humidity: 0 to 95 percent, non-condensing.
  - 1.3. System components shall be equipped and rated for the electrical facilities where installed.
    - 1.3.1. This project anticipates that all equipment supplied by the Contractor will operate on the existing utility service, backed-up by the existing emergency generator.
    - 1.3.2. Contractors shall verify the utility power configuration at the site.

### **COORDINATION, PLANNING AND ACCESS**

1. Coordinate Work with requirements of the Owner, through the Engineer.
2. Coordinate layout and installation of equipment and system components with existing equipment.

3. Coordinate testing with the Owner, through the Engineer.
4. Include Workflow diagrams, system drawings and IP Network/VLAN assignments.
5. Provide a primary contact to coordinate scheduling prior to arrival on site. Confirm Owner requirements and ensure facility access for Contractor personnel.
6. Investigate IP configuration guidelines including IP Network Design / Configuration Services.
7. Include commissioning, such as enter IP address, activate configuration inter-face, update firmware/software, configure according to requested features and functions, test to confirm equipment operation meets product specifications, integrate with other provided components, and integrate with existing components and systems.
8. Commissioning Process: a quality focused process for enhancing the delivery of a project. The process focuses upon verifying and documenting that the facility and all its systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the Owner's Project Requirements
9. Provide technical product training and operational training as specified in the project scope. Include go-live technical support and post project tuning and optimization services.
10. Obtain access to the public internet.

## **EXISTING INFRASTRUCTURE**

1. Identify all needed existing IP network LAN routers, switches, patch cables, and WAN connections.
2. Contractor shall become familiar with the following:
  - 2.1. Existing Platinum routers, which are controlled by X-Y bus using Harris RCP-ABA2E-XYP panels, except one ethernet. There is an edge gateway device for each Platinum router (Harris Edge Protocol Translator) to translate between Harris and other manufacturers' routing control systems.
  - 2.2. MPB's local archive, which is a Dell R440 Windows 2019 server with a Drobo B1200i BeyondRaid archive backup drive [http://www.drobo.com/downloads/products/DS-0054-01\\_B1200i.pdf](http://www.drobo.com/downloads/products/DS-0054-01_B1200i.pdf).
  - 2.3. Myers ProTrack - Traffic software is the main handler for the automation system to retrieve and ingest programs and interstitials. Myers is MPB's software provider of the traffic and the media asset management systems that must be integrated into the new system. Contact Christ Myers at (413) 585-9820 or Kristen Doogan, Director of Professional Services, at (413) 727-8201 or [kdoogan@myersinfosys.com](mailto:kdoogan@myersinfosys.com) to set-up the Myers systems.
  - 2.4. The MPB Cisco Catalyst 9300 core switch located in master control.
  - 2.5. The Digital Alert Systems DASDEC II EAS receiver for television.
  - 2.6. The Evertz 5600MSC redundant Master Clock with automatic changeover switch.
  - 2.7. The PBS-provided Magnubox associated with sIX.
3. Identify all needed existing cables and patch panels required to support the solution.
4. Investigate floor space and required equipment rack space.
5. Provide electrical and cooling system sufficient to meet published product specifications.
6. Arrange for secure storage and inventory control of equipment and materials on-site.
7. Immediately notify Owner of any shipping issues

## **SITE PREPARATION ACTIVITIES**

1. Install equipment in racks with power and proper spacing.
2. Make all connections, including sources and destinations (inputs/outputs) to equipment, control interfaces, related wiring and IP Network configuration and cabling, and KVM to enable keyboard/display access to equipment.
3. Provide or coordinate with Owner for the use of appropriate test and measurement equipment, including video and audio monitors.
4. Install and cable to existing equipment.
5. Make existing equipment operational if needed to test operation of new equipment.
6. Coordinate with Owner for a classroom environment for Training.
7. Each training class shall accommodate eight (8) of the Owner's designated staff that require such training.
8. Go-live technical support services shall include monitoring of the system during the go-live period to confirm the Contractor provided system configuration is operating according to specifications, and to assist the customer with adjustments to equipment as required to optimize operations.

## **SCOPE OF WORK**

1. Contractor shall provide a final design, select and furnish new equipment, install and integrate new equipment, hardware, and materials, rewire and remove unneeded equipment, and setup and test the final master control as a complete operating system. In that regard, Contractor shall provide equipment and services as necessary for a complete operable system, including but not necessarily limited to the following.
  - 1.1. Supply and install a new KVM system. MPB does not have a KVM. Configure the KVM for this project, which will also be expandable to the whole facility in the future.
  - 1.2. Supply and install two (2) media prep stations. Dell is the PC used by MPB.
  - 1.3. Supply and install two (2) new Ethernet switches (for redundancy) and run one wire from each to MPB's core switch, which is also located in Master Control
  - 1.4. It will be acceptable to provide a small SDI router like the existing PMM node if that is the least cost solution. Inputs, outputs, protocol and control as needed for this project.
  - 1.5. Examine the existing MPB network and confirm that it complies with the network security requirements described above or upgrade as needed.
  - 1.6. Develop a final signal flow design from the design concept included in these specifications. Include steps to implement the design with minimal disruption to MPB broadcasts. Submit drawings to Engineer for review.
  - 1.7. Select new equipment to implement the project. Submit equipment make, model and technical specifications to Engineer for review.
  - 1.8. Develop procedures to test the new equipment and existing equipment included in the integration. See sample below. Submit written testing procedures to Engineer for review.
  - 1.9. Develop a procedure to pretest and test the new system. Submit written testing procedures to Engineer for review.
  - 1.10. Supply and install new equipment, hardware, materials and wiring and setup and test the complete integrated system.

- 1.11. The Contractor shall contract with Myers for their assistance. Contact Christ Myers at (413) 585-9820 or Kristen Doogan, Director of Professional Services, at (413) 727-8201 or [kdoogan@myersinfosys.com](mailto:kdoogan@myersinfosys.com) . Myers is aware of this project.
- 1.12. The Contractor must be involved in the setup, testing and going live on air. Demonstrate proper operation between Master Control and the output demarcation.
- 1.13. Carefully remove the existing unused equipment, if any removal is necessary, and set aside for future use.
- 1.14. The Contractor shall be responsible for the overall supervision of its project. The Contractor shall be the single point of contact for all warranty issues on all equipment that the Contractor provides under the contract for the full warranty period.
- 1.15. Other Work as more fully described in this Division.

### **MASTER CONTROL TRANSITION**

1. Contractor shall develop written transition plans like the following and submit a copy of the plans to the Engineer for review.
  - 1.1. Buildout the new master control without interfering with the existing operations.
  - 1.2. This can be accomplished by using unoccupied ports on the router and/or adding a small router such as the one used in the PMM node.
  - 1.3. Inspect the new system and installation and supervise pretesting, testing, and adjusting of equipment under the supervision of the project manager.
  - 1.4. Verify that units are properly installed.
  - 1.5. Pretest equipment, components and functions (see below) to verify that they comply with specified requirements prior to installation. Replace malfunctioning or damaged items. Retest until satisfactory performance and conditions are achieved. Prepare equipment for acceptance and operational testing.
  - 1.6. Schedule tests after pretesting has successfully been completed and system has been in normal functional operation for at least 3 days. Provide a minimum of 10 days' notice of test schedule.

### **EQUIPMENT TESTS**

1. Contractor shall develop written equipment test procedures like the following, adapted to the equipment proposed, and submit a copy of the procedures to the Engineer for review.

<b>VERIFY</b>	<b>RESULTS</b>
Device information.	
Manufacturer:	
Model:	
Serial Number:	
Firmware Ver.:	
MAC Address:	
Proper method is used to connect the device to the system / network	
Device is securely mounted in cabinet.	
Device power supply(s) is(are) present and energizes the unit.	
Device is properly bonded to Earth ground.	

Device has been properly labeled with signal type, input, output / IP address, MAC Address, Serial number, Hostname,	
All cabling is labeled with the to/from on each end and at any major transition point and is neatly managed throughout the cabinet	
Access to the device via the console port.	
Access to the device by using the correct login credentials.	
Device has a configuration file. Issue command "show configuration snapshot" to display current configuration	
VLAN settings if applicable.	
Running configuration matches certified configuration	
Communication Settings are set to appropriate values per the IP plan (IP, MASK, GATEWAY)	

## ACCEPTANCE TESTS

1. Contractor shall develop written acceptance test procedures like the following and submit a copy of the procedures to the Engineer for review.
2. Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes using Contractor-owned test equipment.
  - 2.1. At the beginning of the Acceptance Test phase, the Contractor shall submit written report of the certified equipment test results for approval by the Engineer.
  - 2.2. The Engineer shall approve all equipment testing prior to the Contractor starting the Acceptance Testing.
  - 2.3. Conduct Acceptance Testing in accordance with agreed testing documentation for all field and related equipment once the system has been integrated to form a complete subsystem (signals and network connectivity).
  - 2.4. The Acceptance Testing consists of a 30-day period of operations without major failure of equipment. An MPB engineer can require the Acceptance Testing be restarted if any major failure occurs. A major failure for the device is defined as any failure of the equipment associated with the primary function of the device.
  - 2.5. Demonstrate that the total system (hardware, firmware, software, materials, and construction) is properly installed, free from problems, exhibits stable and reliable performance, and meets project requirements.
  - 2.6. Once per week, the Contractor shall demonstrate that all system functions tested in the Acceptance Testing are operational and meets requirements.
  - 2.7. The Contractor shall coordinate through the Engineer to have a representative present for the onsite inspection.
  - 2.8. The Contractor must provide proof that each device has been tested each week for the duration of the testing period witnessed by an MPB representative.
  - 2.9. The testing time must be scheduled a minimum of one week prior and coordinated and approved by the Engineer.
3. Record test results.

4. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.

#### **CLEANING**

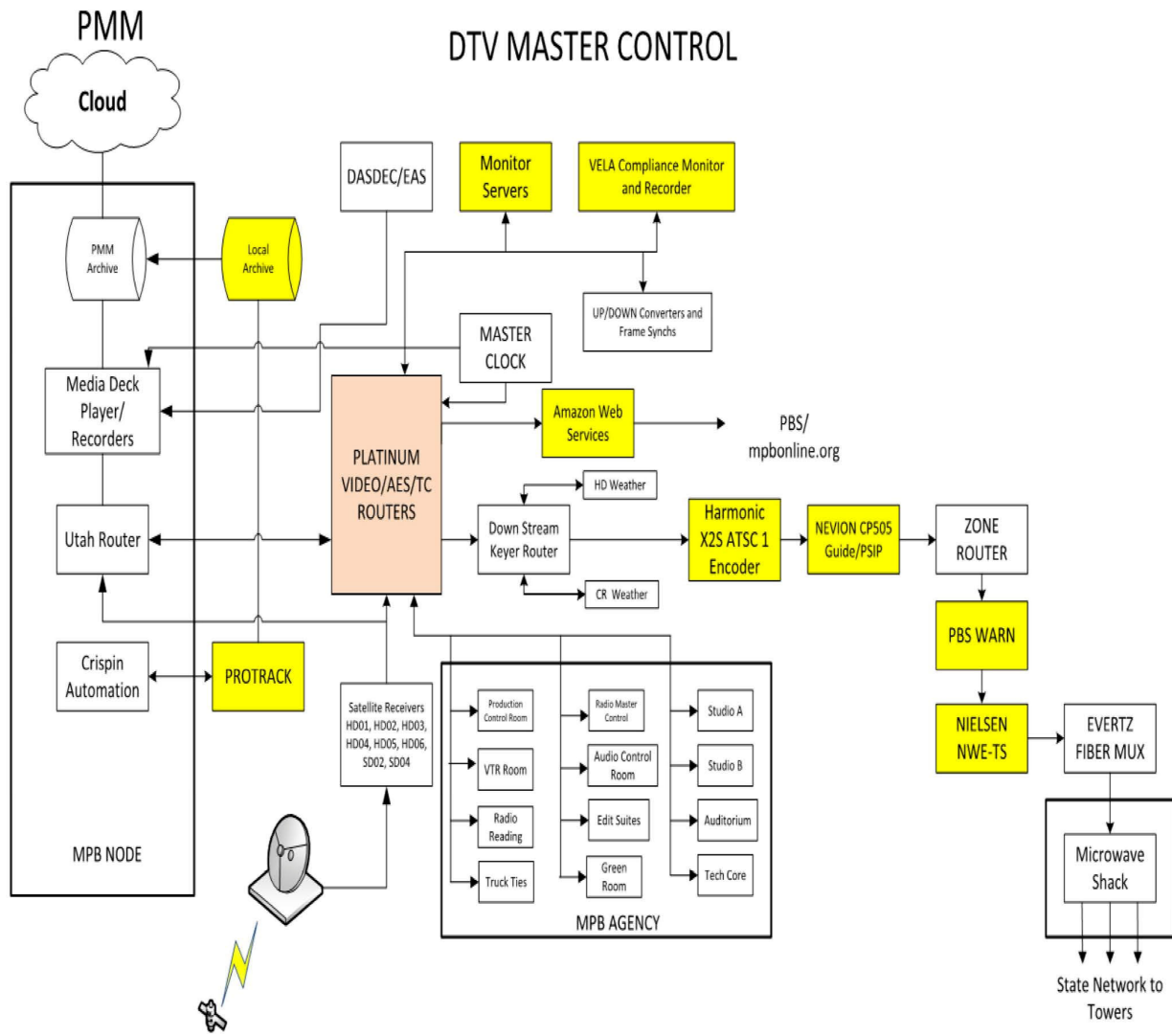
1. Contractor shall clean the sites and leave them in a condition as good as found.



## **DRAWINGS AND CHARTS**

<b>APPENDIX A</b>	<b>MPB PMM-BASED MASTER CONTROL LAYOUT</b>
<b>APPENDIX B</b>	<b>MPB MASTER CONTROL INVENTORY LIST</b>
<b>APPENDIX C.1</b>	<b>MPB PMM ROUTER INPUTS</b>
<b>APPENDIX C.2</b>	<b>MPB PMM ROUTER OUTPUTS</b>
<b>APPENDIX D</b>	<b>PBS SIX DIAGRAM</b>
<b>APPENDIX E</b>	<b>MASTER CONTROL DEMARCATION POINTS</b>
<b>APPENDIX F</b>	<b>PMM DIAGRAM</b>
<b>APPENDIX G</b>	<b>SONY CDS NODE</b>

## APPENDIX A – MPB PMM-BASED MASTER CONTROL LAYOUT<sup>1</sup>



<sup>1</sup> Drawing created by MPB

## APPENDIX B – MPB MASTER CONTROL INVENTORY LIST<sup>2</sup> (2 pages)

MASTER CONTROL EQUIPMENT LIST			
ITEM	Qty	DESCRIPTION	Rack
WARN ROSS OG	1	PBS WARN SYSTEM WITH SAT RXs AND GROOMERS	8
CISCO 2960S	1	LOCAL AREA NETWORK SWITCH	8
ERRICSON RX8200	8	ADVANCED MEDIA RECEIVER	9
WHOLER RM-3270W-362	4	RACK VIDEO MONITORS	9
VELLA	1	COMPLIANCE MONITOR SERVER	10
DELL R440	1	MPB LOCAL ARCHIVE WINDOWS 2019 SERVER	11
DROBO B1200i	1	ARCHIVE BACKUP DRIVE	11
VIDEOTEK TVM-950	1	VIDEO/AUDIO ANALYZER	14
WHOLER AMP2-E8	1	AUDIO MONITOR	16
LEITCH ABA2EXyp	1	ROUTER CONTROLLER X+Y BUS	16
WHOLER AMP-1A	1	AUDIO MONITOR	19
DASDEC-II	1	EAS SERVER	19
ADC AUDIO PATCH	1	ADC HD PATCH PANELS	19
MARSHALL V-R72DP-2C	2	RACK VIDEO MONITOR FOR VTRs	20
SONY DVW-A500	1	DIGITAL BETACAM	20
SONY HDW-M2000	2	HDCAM VIDEO RECORDER	22
WHOLER AMP-1A	1	AUDIO MONITOR	22
MARSHALL V-R72DP-2C	1	RACK VIDEO MONITOR FOR VTRs	22
SONY XDCAM	1	DIGITAL VIDEO RECORDER	22
VIDEOTEK TVM-950	1	VIDEO/AUDIO ANALYZER	23
WHOLER AMP2-E8	1	AUDIO MONITOR	23
LEITCH ABA2EXyp	1	ROUTER CONTROLLER X+Y BUS	23
SONY MEU-WX2	1	SONY MONITOR INTERFACE	23
WHOLER AMP-2-EB	1	AUDIO MONITOR	23
LEITCH NUCLEUS CONTROLLER	1	LEITCH NUCLEUS CONTROLLER FOR NEO FRAMES	23
Z230 SIMULCAST COMPUTER	1	IBM/WSI WEATHER COMPUTER SYSTEM	24
Z440 LIVE WIRE COMPUTER	2	IBM/WSI WEATHER COMPUTER SYSTEM HD AND SD CHANNEL	24
BROADCAST TOOLS SILENT SENTINAL	2	STUDIO SILENT SENSORS FOR THINK AND MUSIC RADIO	24
ADC AUDIO PATCH	10	AES AUDIO PATCH PANELS	26
HARRIS PLATINUM ROUTER	1	AES AUDIO ROUTER 16 IN AND 20 OUT CARDS	26
NEO LEITCH FRAMES	4	UP/DOWN CONVERTERS	27
HEDCO HAD HPS110	1	+/- 15 V	27
AJA FS-1	3	AJA FRAME SYNCH	27
LEITCH 6800	11	FRAME SYNC, EM/DE-BEDDER, TC, DARS, GEN-LOCK, DELAY	28
EVERTZ 5600 MSC	2	EVERTZ MASTER CLOCK	29

<sup>2</sup> List created by MPB

MASTER CONTROL EQUIPMENT LIST			
ITEM	Qty	DESCRIPTION	Rack
EVERTZ 5600AC02	1	AUTOMATIC CHANGE OVER	29
ADC HD PATCH	11	ADC HD PATCH PANELS	29
VIDEOTEK TVM-950	1	VIDEO/AUDIO ANALYZER	30
WHOLER AMP2-E8	1	AUDIO MONITOR	30
LEITCH ABA2EXyp	1	ROUTER CONTROLLER X+Y BUS	30
ADC HD PATCH	3	ADC HD PATCH PANELS	30
LOW PROFILE PC	1	WINDOWS LOW PROFILE COMPUTER	30
LEITCH NUCLEUS CONTROLLER	1	LEITCH NUCLEUS CONTROLLER FOR NEO FRAMES	31
ADC HD PATCH	5	ADC HD PATCH PANELS	31
HARRIS DL 860	1	HD/SD LEGALIZER	32
VBRICK 9000	2	IP/VIDEO DECODER	32
ADC HD PATCH	8	ADC HD PATCH PANELS	32
HARRIS PLATINUM ROUTER	1	HD/SDI ROUTER 14 HD/8 SD-SDI IN, 16 HD/7SD-SDI 1 ANALOG OUT CARDS	32
EVERTZ HD9725LGA	1	HD/SD MEDIA KEYER	33
EVERTZ 9000 MKT-AUX	1	INTERFACE FOR MEDIA KEYER	33
EVERTZ 9625LG	1	LOGO INSERTER	33
NEILSEN NEW-TS	1	NEILSEN WATER MARK ENCODER FOR MPB MAIN CHANNEL	33
ADC HD PATCH	6	ADC HD PATCH PANELS	33
LEITCH 16X16 PANACEA ROUTER	2	LEITCH DOWN STREAM KEYER AND ICON ROUTER	33
LEITCH 32X32 PANACEA ROUTER	1	LEITCH ZONE ROUTER	33
TRIXBOX	1	VOIP SERVER APPLIANCE FOR SITE PHONES	34
SANGOMA FX0-4	2	8 LINE ANALOG PHONE INTERFACE FOR TRIXBOX	34
CISCO 2900	1	VOIP SERVER FOR MICROWAVE RADIOS	34
EVERTZ 7800FR	1	MULTIFRAME WITH 2 7707VT-4-HS ASI/FIBER AND 3 7707DA-7 DA CARDS	34
HARMONIC ELECTRA X2S	2	ATSC-1 ENCODER, 3 HD AND 3 SD CHANNELS	35
NEVION CP505	2	ATSC-1 PSIP AND GUIDE BUILDER	35
AJA FS-1	3	RADIO AES 3 CHANNELS TO SDI FOR ENCODER PROGRAM 5	35
DORROUGH	3	LEVEL MONITORS FOR THINK RADIO, RRSM, AND MUSIC RADIO	35
DELL R440	3	CINEGY MONITOR SERVERS	35
TEKTRONIX	1	MTM400 MPEG TS MONITOR/ANALYZER	36
ADC HD PATCH	1	ADC HD PATCH PANELS	36
SONY MONITOR LCD4610-BK(A)	4	LCD MONITORS FOR AXESS, SOURCES, AND CONFIDENCE FROM SITES	
SONY 23' MONITORS	4	QC VIDEO MONITORS	

## APPENDIX C.1 – MPB PMM ROUTER INPUTS<sup>3</sup>

			PMM NODE [MPB ]			
			UTAH-UDS 100/20 NODE RACK			
DESCRIPTION	DEVICE	PATCH	RSI	MNEM	MNEM	RSO
	IRD-1	01 < 1 > 33	1	HD1	TX1	1
	IRD-2	02 < 2 > 34	2	HD2	TX2	2
	IRD-3	03 < 3 > 35	3	HD3	TX3	3
	IRD-4	04 < 4 > 36	4	HD4	TX4	4
	IRD-5	05 < 5 > 37	5	HD5		5
	IRD-3S	06 < 6 > 38	6	HD6	MON01	6
	IRD-2S	07 < 7 > 39	7	SD2	MC1	7
	IRD-5S	08 < 8 > 40	8	SD5	MC2	8
MPB PLATINUM ROUTER		09 < 9 > 41	9	UTIL1	MC3	9
MPB PLATINUM ROUTER		10 < 10 > 42	10	PCR1	MC4	10
CHANNEL PORT PGM OUT (PRIMARY)	SMEDIADECK1-SLT1 OPA	25 < 25 > 57	11	PGM1	MC01B	11
CHANNEL PORT PGM OUT (PRIMARY)	SMEDIADECK1-SLT1 OPB	26 < 26 > 58	12	PGM2	MC02B	12
CHANNEL PORT PGM OUT (PRIMARY)	SMEDIADECK1-SLT2 OPA	27 < 27 > 59	13	PGM3	REC1	13
CHANNEL PORT PGM OUT (PRIMARY)	SMEDIADECK1-SLT2 OPB	28 < 28 > 60	14	PGM4	REC2	14
CHANNEL PORT PGM OUT (SECONDARY) 1:1	SMEDIADECK2-SLT1 OPA	29 < 29 > 61	15	PGM1B		15
CHANNEL PORT PGM OUT (SECONDARY) N+1	SMEDIADECK2-SLT1 OPB	30 < 30 > 62	16	PGM2B		16
MEDIA PORT RECORD FOR NODE	SMEDIADECK2-SLT2 OPA	31 < 31 > 63	17	REC1	MON11	17
MEDIA PORT RECORD FOR NODE	SMEDIADECK2-SLT2 OPB	32 < 32 > 64	18	REC2	MON12	18
			19		MON13	19
			20		MON14	20

### Notes:

IRD-*n* = Existing MPB-owned Ericsson RX8200 satellite receivers

PGM*n* – MPB-HD and World/CTV are 1080i, PBS Kids and Create are 480i

<sup>3</sup> Drawing created by PMM

## APPENDIX C.2 – MPB PMM ROUTER OUTPUTS<sup>4</sup>

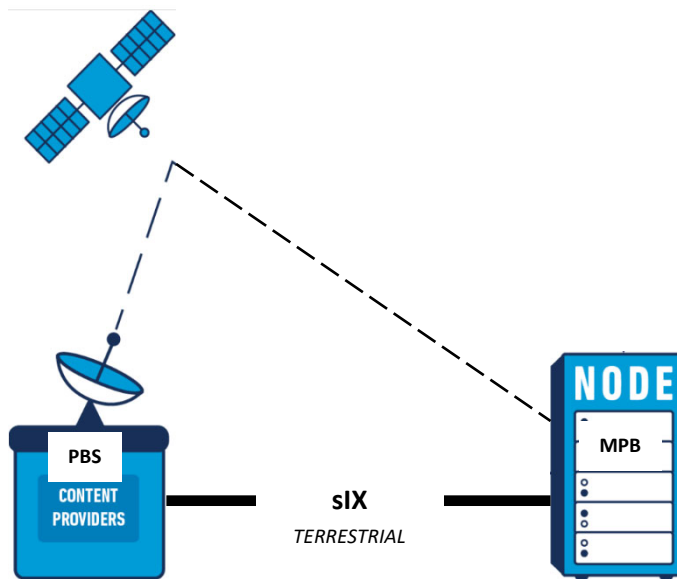
PMM NODE [MPB ]						
UTAH-UDS 100/20 NODE RACK						
RSI	MNEM	MNEM	RSO	PATCH	DEVICE	DESCRIPTION
1	HD1	TX1	1	11 < 11 > 43	BYPASS SWER	PGM 1 - MPB-HD
2	HD2	TX2	2	12 < 12 > 44	BYPASS SWER	PGM 2 - PBS KIDS
3	HD3	TX3	3	13 < 13 > 45	BYPASS SWER	PGM 3 - CREATE
4	HD4	TX4	4	14 < 14 > 46	BYPASS SWER	PGM 4 - World/CTV
5	HD5		5	15 < 15 > 47		REC1 MONITOR
6	HD6	MON01	6	16 < 16 > 48	ENCODER MONITOR	MONITORING ENCODER
7	SD2	MC1	7	17 < 17 > 49	SMEDIADECK1-SLT1 OPA	CHANNEL PORTLIVE IP (PRIMARY)
8	SD5	MC2	8	18 < 18 > 50	SMEDIADECK1-SLT1 OPB	CHANNEL PORTLIVE IP (PRIMARY)
9	UTIL1	MC3	9	19 < 19 > 51	SMEDIADECK1-SLT2 OPA	CHANNEL PORTLIVE IP (PRIMARY)
10	PCR1	MC4	10	20 < 20 > 52	SMEDIADECK1-SLT2 OPB	CHANNEL PORTLIVE IP (PRIMARY)
11	PGM1	MC01B	11	21 < 21 > 53	SMEDIADECK2-SLT1 OPA	CHANNEL PORTLIVE IP (SECONDARY) 1:1
12	PGM2	MC02B	12	22 < 22 > 54	SMEDIADECK2-SLT1 OPB	CHANNEL PORTLIVE IP (SECONDARY) N+1
13	PGM3	REC1	13	23 < 23 > 55	SMEDIADECK2-SLT2 OPA	MEDIA PORT RECORD FOR NODE
14	PGM4	REC2	14	24 < 24 > 56	SMEDIADECK2-SLT2 OPB	MEDIA PORT RECORD FOR NODE
15	PGM1B		15			REC1 MONITOR
16	PGM2B		16			
17	REC1	MON11	17		MCR MONITOR	Master Contol Monitoring
18	REC2	MON12	18		MCR MONITOR	Master Contol Monitoring
19		MON13	19		MCR MONITOR	Master Contol Monitoring
20		MON14	20		MCR MONITOR	Master Contol Monitoring

### Notes:

PGMn – MPB-HD and World/CTV are 1080i, PBS Kids and Create are 480i

<sup>4</sup> Drawing created by PMM

## APPENDIX D – PBS sIX DIAGRAM (2 pages)



The new configuration based on the PBS sIX model using pictures from the PMM diagram. The left part of the diagram represents PBS and the NODE is the station local content storage (MagnuBox) located at MPB master control facilities in Jackson, MS. The broadband connection will be the primary method for distributing PBS content to MPB with the satellite link used to receive real-time PBS broadcasts.

### ProTrack Interoperability with PBS Six Interconnect (sIX)<sup>5</sup>

- **Checking feeds for sIX** – PBS will not be offering a feed schedule for content that will be available in sIX. The PBS NOC will have visibility into what MPB should be expecting to become available for download from sIX. When an entry for media is added to the sIX system, ProTrack will become aware of the entry and add it to MPB's inventory from which MPB can see specifically when the file is expected to be available for download.
- **Remote media appearance to MPB in ProTrack** – When ProTrack becomes aware of a new entry in the sIX system, a media attachment will be automatically generated in the PBS NOC ProTrack system, and therefore be viewable to MPB node in the RMT Media section of the Media Information window in MPB's ProTrack system. MPB will usually see entries populate for content in sIX 2-3 months out.
- **PBS NOC acquisition of media from sIX** – All content that is offered in sIX has a download window in which it can be pulled down to the NOC. As soon as media has a valid download window, ProTrack will initiate a download request for the file down to the NOC. Once the file is downloaded to the NOC, it will be run through their normal QC process and be made available in

<sup>5</sup> Information from PBS website edited for this project

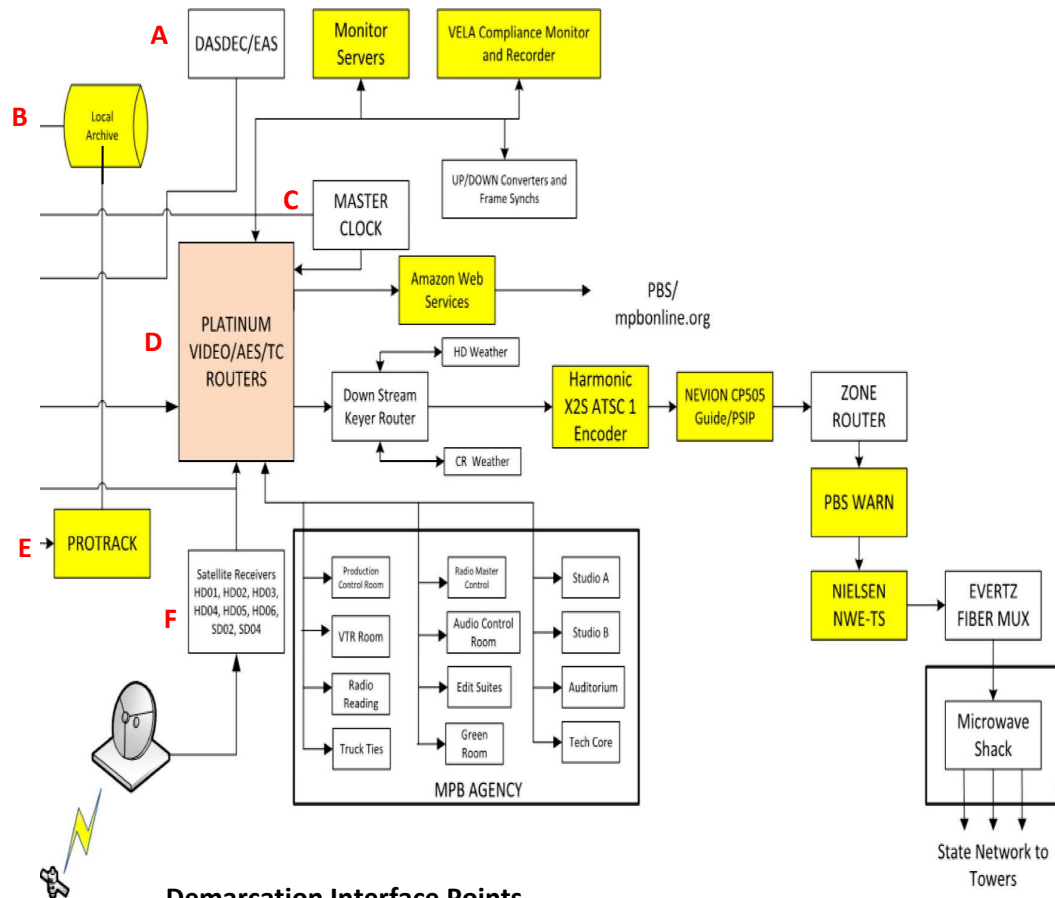
Ci. (Note: Ci is a cloud platform developed by Sony with applications to create, share, and collaborate with media.)

- **Download windows effect on PMM nodes** – The download windows are in place in order, to better manage rights and revisions for media offered over sIX. The PBS NOC will not be able to download content until the window for the media is available. This means if a site has a revision scheduled before the download window opens, the NOC will not have access to this content until that time. Note that the current PMM logic will still be in place for revisions, meaning if a newer version becomes available for a scheduled program, the media maintenance routine in ProTrack will update the air date to use the newer version.



## APPENDIX E – MASTER CONTROL DEMARCATION POINTS<sup>6</sup>

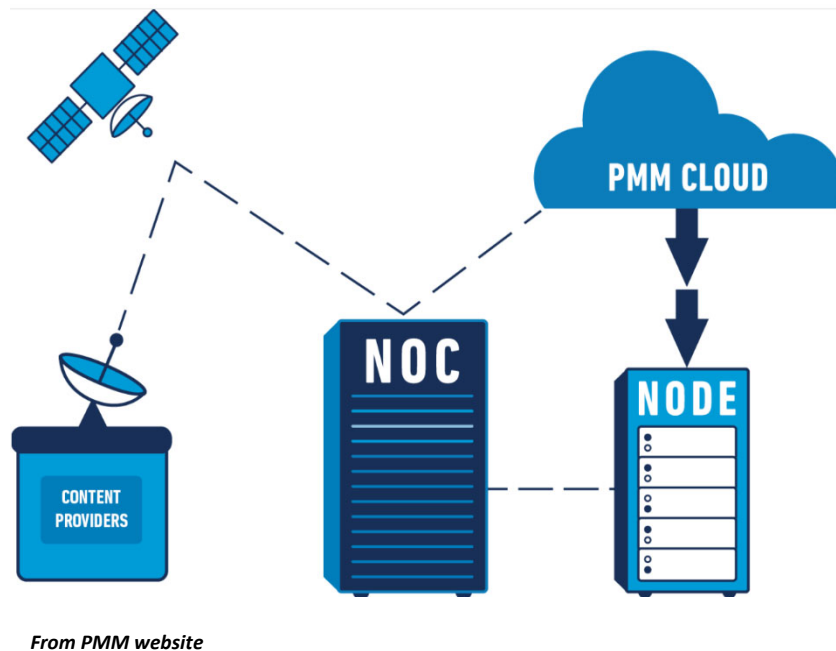
### DTV MASTER CONTROL



THE NEXT PAGE IS APPENDIX F

<sup>6</sup> Drawing created by MPB, modified by KGA

## APPENDIX F – PMM DIAGRAM<sup>7</sup>



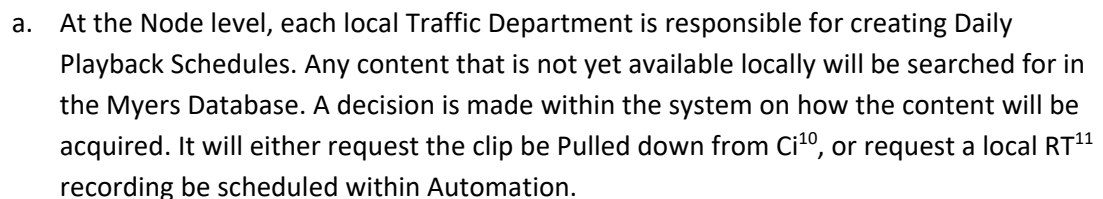
In this case, the left part of the diagram represents PBS prior to sIX implementations, the NOC is PMM and the NODE is the station local content storage and playout located at MPB master control facilities in Jackson, MS. The node will be removed at the conclusion of the master control restoration.

PMM utilizes Dalet AmberFin wrapping in ASO-3 to PBS standards. At the NODE content is stored on Harmonic MediaDeck 7 broadcast servers. Local servers may hold up to 30 days of content. Local content program, branding and interstitials are inserted. Crispin automation runs the system. Utah Scientific for 20 input/output 3G routing. Wohler and Evertz monitoring. Cisco Catalyst switches. Tripplite KVM system. Individual node Workstations run Sony's Ci Cloud software. Aspera file acceleration is used at the NOC level facilitates 100 Mbps transfer to the local node.

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<sup>7</sup> Diagram from PMM

Each Node<sup>9</sup> consists of a Software/Hardware package that handles Local Content Capturing, Sony CDS Content Deliveries, Playlist scheduling and Automated Playback. This can be broken down into the following Components:



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- a. Aspera acts as the front end for Content stored in Ci. If a clip that exists only in Ci is scheduled for Playback, Myers uses Aspera's API to request the file be downloaded.

### **3. Crispin Automation**

- a. Similar to how MBEMS is in the middle of all NOC content acquisition Workflows, Crispin is in the middle of all Node Workflows. It consists of the following components and functions:
  - i. Node pull down service
    - 1. When Myers identifies content that needs to be downloaded from the Cloud, it submits a request to Aspera, and monitors until complete (Via Aspera's API). Once the file has been downloaded to the configured Aspera Cache folder, Myers sends a BXF "Registration" message to Crispin's BXF End point.
    - 2. When a Registration message is received, Crispin's BXF submits a Copy request to its LoadingDock system. The LoadingDock Copies the clip from the Aspera Cache to its internal Nearline Storage (10TB are available for this purpose). It reports back to Myers that this is complete by way of a BXF add Notification.
    - 3. Crispin's ClipCopX monitors the currently loaded playlist. It queues a transfer of content from Nearline to Playback server when it detects missing Playlist material. Myers also has the ability to send a pull list to Automation if Traffic needs a clip copied from Nearline to Server prior to it being included in a Loaded Playlist.
  - ii. Local RT Recordings.
    - 1. If a needed piece of content will not be available for pull down from Ci in time for a stations playback schedule, Traffic has the ability to schedule a local RT Recording. The Traffic system will include a RT Feed on its Daily Record Schedule, transmitted to Automation via BXF.
    - 2. Automation will route the appropriate Video Source to one of the systems 2 Encoder ports (on the "Backup MediaDeck"), and Record the feed at the scheduled time. Automation begins mirroring this content from the Backup MediaDeck to its Primary as soon as 10seconds of material captured. This allows the playback of this Live recording shortly after the Recording has started. When the recording has completed, Myers is informed by way of a BXF Add notification.
    - 3. Any last minute "Ad Hoc" recordings that start/end at a scheduled time can be used with the Record Schedule as well. They
  - iii. Local MediaPrep/Manual QC
    - 1. For any content not nationally distributed, the user can utilize Crispin's Dubber/DubX MediaPrep tool. This is a manual process, with no automated Workflow.
    - 2. Once content is manually recorded or edited via Dubber, Crispin informs Myers via BXF Media Updates (Adds and Updates).

iv. “Housekeeping Tasks”

1. Myers and Crispin Work together to ensure that only needed content remains on both Playback Servers and the Nearline. Myers will send Automation “Cleanup” messages.
2. When a Cleanup message is received, the BXF Service updates the Copy Expiration dates of Assets included in the Cleanup message. This triggers ClipCopX to purge the expired copies from the system.
3. Once the Copies have been removed via ClipCopX, BXF informs Myers via a KillConfirm message.

v. On-Air playback

1. For On-Air playback, Traffic sends Crispin a Full day Playback Schedule via BXF.
2. Once received, Crispin Translates the Schedule into a Playlist that consists of a series of scheduled events. Each event instructs the system to synchronously control all required playback devices at precise times.
3. This list is automatically appended to the Playlist that is already being executed in its RapidPlayX Client.

**4. Harmonic**

- a. 2 Harmonic Mediadeck Frames are utilized (A primary and Backup). They both contain a Channelport Module (Consisting of 2 Decoders that each have 4 layers of internal GFX generation, and a 2x1 internal Router). The Backup also contains a Standard Mediadeck (Consisting of 2 Encoder/decoders) for Real Time ingest and media prep.

**5. Utah Scientific**

- a. A Utah Scientific Router is being controlled by Automation for use with Scheduled Real-Time recordings at the Node, as well as an expansion of the ChannelPort’s internal Switcher.

**End of Attachment H - TECHNICAL SPECIFICATIONS**