



New 53' Expandable Mobile Television Production Trailer

Solicitation 6913 OF

State of Nebraska, State Purchasing Bureau

1526 K St., Suite 130
Lincoln, NE 68508

Project Proposal

Diversified Media

October 11, 2024 v1

Valid for 90 Days



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1 Executive Summary

Diversified is pleased to provide this Project Proposal to the State of Nebraska for a new 53' Expandable Mobile Television Production Trailer for Nebraska Public Media (NPM). This Proposal is based on the information presented in your Solicitation and four (4) subsequent Addendums. Diversified acknowledges receipt of all 4 Addendums and has developed this Proposal based on the updates and directives provided.

The construction of a new television trailer is an exciting project for NPM and a large step forward in capturing the benefits of the latest IP television technology to produce live and recorded television content for the people of Nebraska. Live sports and cultural events are of tremendous interest to Nebraska residents and the build out of a new NPM mobile unit will enable better and more reliable coverage of these key events for many years in to the future.

Diversified has carefully studied your Solicitation's documents and developed this initial project Proposal for your review. As noted in your Solicitation, the final truck layout and functional capabilities will be developed in close collaboration with NPM's technical and operations staff. Importantly, we recognize this new trailer project will leverage and redeploy equipment from NPM's existing truck that have plenty of useful life remaining. This transfer of existing, very serviceable equipment will bring a number of benefits including reducing overall project cost, eliminating equipment delivery lead time issues and shorten the training period required as operations of existing gear will not change.

This Proposal should be viewed as an initial foundation for the Detailed Design phase of the new trailer project. We have followed the guidance and directives in your Solicitation, as well as extrapolated the natural extensions of such assertions to present a complete, initial mobile unit plan. In Appendix 1 we have provided a detailed listing of all major equipment (Bill of Materials – BoM) for each operational space of the new mobile unit, showing both new equipment and equipment expected to be transferred from the old to the new trailer. You'll note, we have also shown replacement of some gear with new versions due to their anticipated End of Life status or providing a more modern and cost-effective solution for specific functionality. We fully anticipate working closely with the NPM design team to determine the truck's final layout, equipment and operational capabilities. We expect there will be both minor and perhaps significant changes required to tailor the new truck to NPM's production requirements. Based on the foundation presented in this Proposal, all changes will tracked and executed through Diversified's Change Management process, as requested in your Solicitation.

At this time, we anticipate the entire project will span approximately 57 calendar weeks in duration, primarily driven by the period for fabrication and delivery of the new trailer itself. Gerling and Associates, the new trailer fabricator, has advised delivery of a typical double expanding side mobile unit is currently running between 240-270 calendar days from receipt of an order and down payment along with timely progress payments as required.

Based on the anticipated duration of this project, Diversified will work with NPM to develop a project schedule that best accommodates all of the project's individual elements including the availability of equipment for transfer from the existing to the new trailer. Completion and delivery of the new truck is unlikely to meet your Solicitation's original July 31st 2025 target, due to Gerling's trailer fabrication time. It may be possible to expedite the trailer's fabrication schedule for an additional fee, but such possibilities are entirely driven by the load in the Gerling shop at the time of ordering. Diversified will require 12-14 weeks to buildout the new systems, including transfer of gear from the old truck, which will need to take place shortly after delivery of the new truck to Diversified's shop in Santa Clara, CA.



Diversified has a great deal of experience developing project schedules around many moving elements, including redeployment of existing gear into new trailers. Addendum 4 indicated a secondary delivery target date of August, 2026. This date is certainly possible to meet, and depending on the availability of equipment from the existing truck, (based on the truck's production commitments and schedule), it may be quite possible to advance the new truck's completion date, well ahead of August, 2026. Diversified will work with the NPM team to develop a practical schedule for completion and delivery of the new truck that best accommodates the range of scheduling variables in this project including equipment manufacturer lead times and the existing truck's production commitments.

We should note this project will require deposits and progress payments throughout its lifecycle, which Diversified will work with the State's procurement team to develop a practical Payment Schedule that meets the requirements of the State, the manufacturers selected for this project and other project stakeholders as required.

Since its inception in 1993, Diversified has built nearly 100 mobile units for the country's leading broadcasters and content producers. In fact, many of our highly regarded staff have come from the mobile unit business and have been involved in the tv truck business long before Diversified was established. It is also important to say, that Diversified's entire business focus is designing and building media technology projects for our customers. We are not a production or facilities company. System integration is not a side-line or even a minor element of our business. Rather, it is the primary focus of our business, the heart and soul of our efforts, which we believe delivers greater intelligence, broader industry perspective and most certainly the best manufacturer relationships and prices for our customers.

We look forward to your review and discussion of this Proposal . We're excited about working with NPM's technical staff and the State's procurement team to design, build and deliver a new 53' double expando television production trailer for Nebraska Public Media!

Should you have any questions about this Proposal, please don't hesitate to contact Ken Clark, Diversified's Senior Account Executive at 818.726.5711 or kenclark@onediversified.com .

Happy reading!

CONTRACTUAL AGREEMENT FORM

BIDDER MUST COMPLETE THE FOLLOWING

By signing this Contractual Agreement Form, the bidder guarantees compliance with the provisions stated in this solicitation ~~and agrees to the terms and conditions~~ unless otherwise indicated in writing, and certifies that bidder is not owned by the Chinese Communist Party. **See Proposal Section 10**

Per Nebraska’s Transparency in Government Procurement Act, Neb. Rev Stat § 73-603, DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Vendors. This information is for statistical purposes only and will not be considered for contract award purposes.

____ NEBRASKA VENDOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Vendor. “Nebraska Vendor” shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this Solicitation. All vendors who are not a Nebraska Vendor are considered Foreign Vendors under Neb. Rev Stat § 73-603 (c).

____ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

____ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. § 71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED MANUALLY IN INK OR BY DOCUSIGN

BIDDER:	One Diversified, LLC
COMPLETE ADDRESS:	3275 Edward Ave. Santa Clara, CA 95054
TELEPHONE NUMBER:	818.726.6711 (AE Ken Clark Cell)
FAX NUMBER:	
EMAIL ADDRESS:	kenclark@onediversified.co
DATE:	10/11/24
SIGNATURE:	
TYPED NAME & TITLE OF SIGNER:	Michael Jones, Director, M&E PreSales



3 Company Information

Our Mission

Diversified is enabling our digital future — connecting people, technology and experiences, where and when it matters most. Our global technology solutions are experienced by millions every day. Energizing crowds at the largest stadiums. Broadcasting the latest news. Connecting global enterprise teams. Inspiring retail shoppers, Supporting crises management. There isn't a problem too big, too small or too complicated for our teams to solve.

When done right, communications technology empowers human connection. Removing distance. Delivering a message. Powering business. Celebrating fandom. Even saving lives. There is a lot at stake. People simply expect the technology to work, yet the requirements for facilities, operations, marketing and IT are bigger and more complex than ever.

We understand your need to demonstrate the value of next gen technology to key business stakeholders, which drives our future-thinking solutions in collaboration with today's best in class hardware and software partners. Whatever the vision and specs, we can deliver.

30
YEARS IN BUSINESS

2,400+
ASSOCIATES

20k
INTEGRATIONS/YEAR

\$1B
ANNUAL REVENUE

Our People

Founded in 1993, we have 2,400+ associates worldwide, a global organization serving local needs. Even with more than 20,000 successful projects a year, we proudly maintain a 94% satisfaction rate. We believe in harnessing human imagination to drive digital innovation. We know that technology can bring us closer together, move faster, and go deeper. Diversified connects people, technology and experiences, where and when it matters most. To help streamline what can easily become a daunting undertaking, we stand with you as your trusted partner, providing best-in-class technology and strategic advisory services to transform your business.

Our Values

Values are essential for a healthy workplace. These foundational values guide our team and provide strong purpose that both resonates with our global workforce and is reflected in our work.



Inspired by Challenge



Driven by Imagination



Passionate for Success



Diverse and United



Our Clients

We structure everything around our client's needs for both today and tomorrow. It's a partnership approach. In a competitive marketplace where other companies compete for our clients, we see client satisfaction as a key differentiator, and it is a key element of our business strategy.

Our work is all about helping our clients reach their goals; providing a suite of services that truly fulfills a dream scenario. This partnership approach means we build strong, long-lasting relationships with our clients based on respect, integrity, and performance.



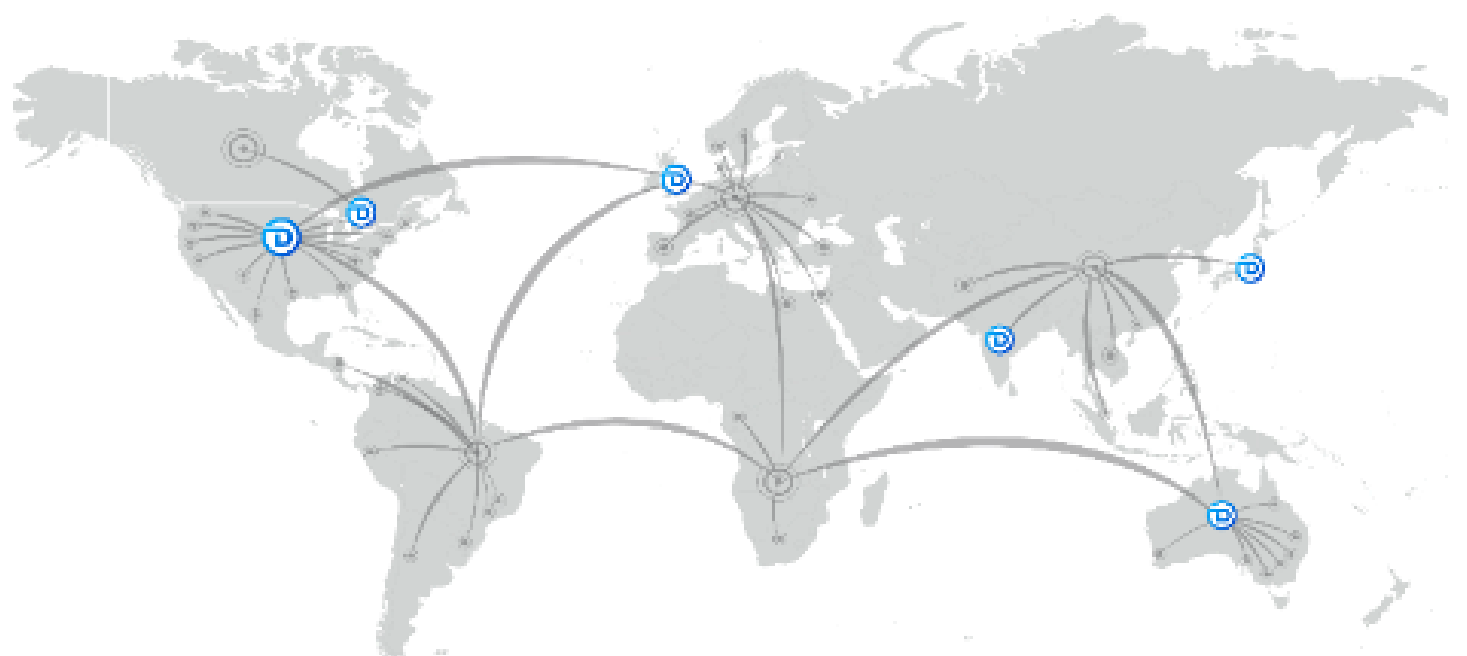
Driving Better Outcomes

To stay relevant in today's competitive marketplace, organizations are leveraging technology more than ever before to meet evolving needs. Diversified understands your unique business challenges, desired outcomes and emerging trends. Our goal is to meet your core technology requirements and enhance operational and functional experiences across your organization.



Delivering Wherever You Are

Diversified integrates and maintains technology solutions across the U.S. and around the globe. Multinational clients rely on Diversified to deploy and support enterprise solutions worldwide through our global locations, network operations centers and a network of 200+ PSNI Global Alliance technology partners.



We can deliver to 60+ countries, assuring that you get service delivered the way you want it, in your own language and according to the rules, regulations and requirements of your location.

ISO Certified

ISO is one of the most rigorous and well-regarded standards in the world. Diversified has been certified by SAI Global (and other auditor services providers) and currently maintains a number of ISO certifications for various offices around the globe.

Diversified's ISO Certifications				
Diversified Office	ISO 9001: Quality Management	ISO 14001: Environmental Management	ISO: 45001: Occupational Health and Safety Management	ISO 27001: Information Security Management
Norcross, GA, USA	x		x	
Santa Clara, CA, USA	x		x	
United Kingdom	x			
Australia	x	x	x	x



Leading the Industry

Our service offerings are based on the highest technology credentials, backed by world-class project management skills and fueled by a passion for helping clients.

As an engineering-centric company, we make training and certification priorities to ensure our clients receive the best possible service and support.

Our PMP certification and project management practice ensures a thorough, consistent and fully documented approach across all projects. The optimum outcome is achieved through established processes, careful oversight and clear communication.

Certified For Success



Gold Communications
 Gold Cloud Platform
 Gold Cloud Productivity
 Gold Data Analytics
 Gold Security





3.1 Corporate Profile and Contact Information

Diversified	
Legal Entity Name	Distinct Holdings, Inc.
Type of Organization	Corporation
Business Name	One Diversified, LLC (dba Diversified)
Corporate Headquarters	37 Market Street Kenilworth, NJ 07033 908.245.4833 P 908.245.0011 F
Year Established	1993
Website	www.onediversified.com
Corporate Responsibility	https://onediversified.com/about-diversified/corporate-responsibility/
Diversity, Equality, Inclusion	https://onediversified.com/about-diversified/diversity-equity-inclusion/
Number of Employees	2,800
Federal Tax ID	42-1617340
DUNS	14-414-5443
DUNS Rating	4A2
3 Year Revenue History	2023 \$1,063,279,000 USD 2022 \$1,072,750,000 USD 2021 \$ 930,860,000 USD Note: Diversified can provide audited financial reports, as required, upon completion of Diversified's Financial Confidentiality Agreement
Project Contact Information	Ken Clark Sr. Account Executive 3275 Edward Ave. Santa Clara, CA 95054 818.726.6711 kenclark@onediversified.com



4 Technical Specifications

Diversified has built this Proposal based on the technical requirements set out in your Solicitation's original documents, "6913 OF Attachment C 1.0 IP Router Technical Requirements" and "HD Truck Equipment modified list" issued with Addendum 4. Appendix 1 of this Proposal provides a detailed listing of all equipment (Bill of Materials (BoM)) anticipated to be required in the new mobile unit. NPM has indicated all existing field equipment (cameras, lenses, audio and intercom gear, monitors, cables etc.) will be redeployed from the old to the new truck, hence they are not listed on the BoM. We have carefully studied NPM's list of transfer equipment as well as the photos provided with Addendum 4 and developed the BoM in Appendix 1 of all major equipment required in the new truck.

Major components included in the transfer are the existing GV camera chains, GV production switcher, EVS XT-VIA replay servers, Studer audio console and RTS ADAM intercom systems. The Diversified BoM shows the quantities of equipment expected to be transferred from the existing truck in the column labelled "CFE Old Qty" and highlighted with orange backgrounds. New equipment expected to be provided by NPM is shown in the column labelled "CFE New Qty" and highlighted with light purple backgrounds. And finally, quantities for all NEW equipment supplied by Diversified is shown in the column labelled "New Purchase Qty."

In summary, the Diversified total truck BoM shown in Appendix 1 has been assembled based on:

1. List of gear to re-deployed from your current truck
2. New IP Router Technical Requirements document (EVS MediaInfra Strada)
3. Upgrades to EVS replay systems
4. New equipment Diversified believes will be required for a complete mobile unit
5. Modest guidance from the 1A and 1B conceptual new trailer layouts in addendum 4
6. NPM's existing truck photos

4.1 Gerling 53" Double Expanding Side Mobile Unit

Diversified has worked extensively with Gerling and Associates on new mobile units for our customers for more than 20 years, and we are pleased to include in this Proposal, a new 53' double expando trailer for NPM. The technical equipment and systems included in this Proposal are based on the high level 1A conceptual truck layout provided by NPM in Addendum 4, (shown on the next page). Gerling's trailer pricing to Diversified is based on a "typical" 53' single expando truck plus the additional manual street side, expanding monitor wall and other options.

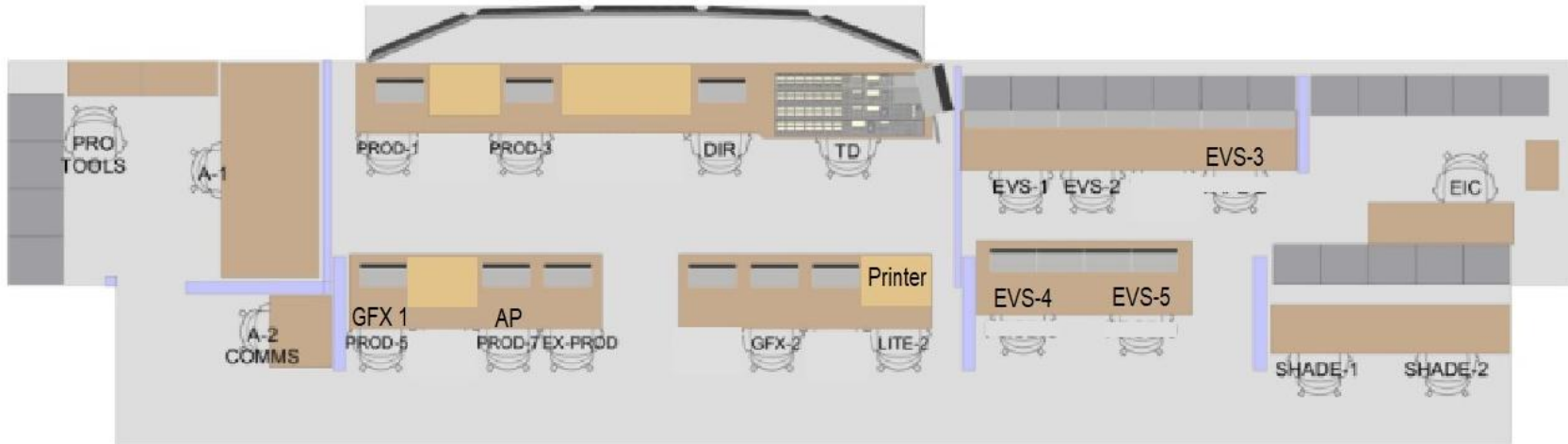
During the Detailed Design phase of this exciting project, Diversified will work with NPM staff and Gerling to finalize the operational layout of the new NPM truck. The following two pages show the NPM 1A and 1B conceptual trailer layouts plus an example floorplan of a typical 53' single expando trailer from Gerling. Note there are differences in these layouts. The new NPM layout and operational facilities (power, HVAC, consoles, etc) will be finalized during the Detailed Design phase of the project, (which may change the final price of the trailer).

We've added a new Avaya digital telephone system with provision for 16 inbound POTS lines, 20 digital internal extensions, 20 digital phones, 12 analog extensions (hybrids, ringdowns, intercom interfaces etc.), plus 12 outside digital extensions.

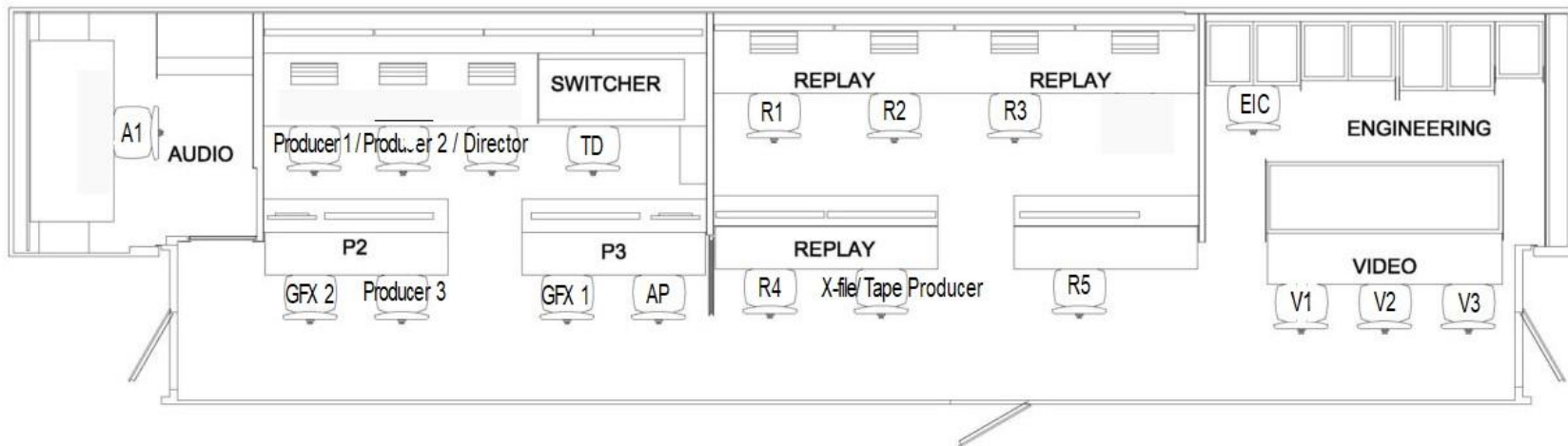
We also noted the transfer of the Meraki Wifi system from your existing truck into the new mobile unit.



4.1.1 NPM 1A Conceptual New Trailer Layout

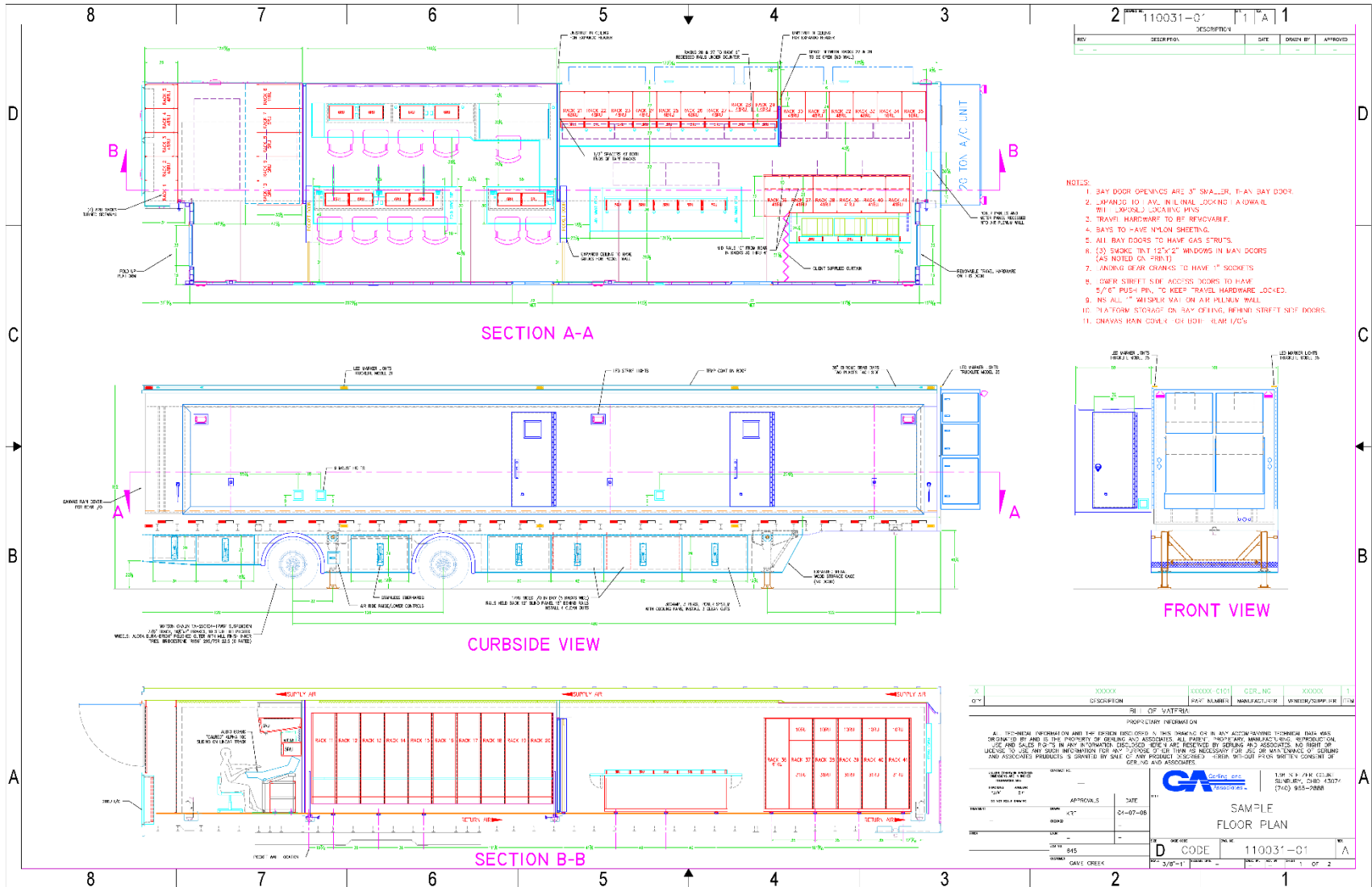


4.1.2 NPM 1B Conceptual New Trailer Layout





4.1.3 Gerling Typical 53' Single Expanding Side Trailer





4.2 New IP Routing Platform

Diversified is extremely pleased to recommend and include the EVS MediaInfra Strada routing platform for the new mobile unit's IP routing system. The EVS MediaInfra Strada has been specifically designed for hybrid IP/SDI video systems, which precisely aligns to NPM's new truck requirements!

The core of MediaInfra is EVS' renown Cerebrum Broadcast Control and Orchestration system, flanked by programmable and highly flexible EVS Neuron real-time media processors. Neurons are especially ideal for dynamic production system infrastructures as they can be programmed and re-programmed in the field to provide a wide range of functions as may be required over time. For the initial roll out of the new NPM truck, EVS Neurons will be used for SDI<->2110 Encap/Decap conversion, audio channel shuffling in the 2110 domain, multiviewer processing and up/down/cross conversion with inherent video processing, frame sync, and color correction functionality as well as HDR/SDR management, etc. Although not initially deployed for this project, Neurons can also provide a wide range of video compression tools, bi-directional IP firewall and failover switch protection, along with a growing list of new applications emerging from EVS. Incorporating Neuron media processors in the new truck's systems, means that as technical and production requirements change over the new truck's lifetime, the Neurons can be reprogrammed for new and different and new functions as may be required. A key example is their initial use for SDI<->2110 Encap/Decap functionality. As time moves forward, more and more equipment will offer native 2110 interfaces, reducing the requirement of SDI / IP conversions. Neurons programmed with this Bridge encap/decap functionality at the new truck's initial roll out, can be reprogrammed in the future for other operational purposes as needs change. This is one of the key reasons Diversified has recommended and based this Proposal's new IP Routing Platform on the EVS MediaInfra Strada platform.

Additionally, EVS has proven to be a very reliable and faithful manufacturer. Diversified has deployed many EVS Cerebrum based systems, with good success and happy customers due to EVS' outstanding product and customer support. One of Diversified recent and most complex projects with EVS Cerebrum was the design and buildout of the large, Jewel flypack system for Fox Sports initially used for the 2023 FIFA tournament. The Jewel flypack is in many ways, similar to a new mobile unit. It is a large, complex routing platform like the new NPM truck, that is turned on and off routinely, demonstrating this critical element's inherent stability and reliability required for mobile unit use. Trucks are hard on equipment, having to endure lots of power cycles, temperature swings and often less than ideal handling. The EVS Cerebrum and Neuron platform has performed extremely well in the Fox Jewel flypack system and many others, which is why we have recommended its inclusion for the new NPM mobile unit project. More information about MediaInfra Strada, Cerebrum, Control Panels and Neurons can be found at the links below.

EVS MediaInfra Strada – IP & SDI Routing Solution

<https://evs.com/solutions/mediainfra/strada>

EVS Cerebrum - Broadcast Routing Control, Monitoring & Orchestration

<https://evs.com/products/control-monitoring-routing-orchestration/cerebrum>

<https://evs.com/products/control-monitoring-routing-orchestration/cerebrum/control-panels>

EVS Neuron – Real-time Media Processing Appliance

<https://evs.com/products/real-time-media-processing/neuron>



As detailed in our BoM in Appendix 1, the new IP Routing Platform proposed by Diversified meets all requirements set out in your Solicitation documents. It is primarily made up of 2 major components – the EVS MediaInfra Strada and a high performance, IP switching core from Arista, for routing video, audio and metadata flows as prescribed by SMPTE ST-2110, in a full SMPTE 2022-7 Seamless Protection Switching (red/blue) network. Below are additional details on the system proposed.

4.2.1 EVS MediaInfra Strada

- ✓ Cerebrum Strada redundant control system, up to 1024 I/Os with licenses for:
 - Multilevel control – audio embedding/de-embedding, local shuffling, proc amp and offset delay
 - Audio automated shuffling (8192 channels, 128 2110-30 streams)
 - Salvos for the execution of stacked system commands and system profile snapshots
 - System tally (for cameras, multiviewers and other peripherals)
 - Broad range of routing control panels
 - <https://evs.com/products/control-monitoring-routing-orchestration/cerebrum/control-panels>
 - 9x CCP-1601-D
 - 18x CCP-4200-C
 - 1x CCP-8002-C
 - 4x CTP-2003-Web (touchscreen w/rotaries)
- ✓ Neuron Bridge - SDI Gateway – 2110 Encap / Decap
 - Up to 448 SDI/2110/SDI conversions in any combination of encap and decap.
 - Exceeds Solicitation's requirements for 320x128 IPG
 - <https://evs.com/products/real-time-media-processing/neuron-bridge>
- ✓ Neuron Shuffle - Audio Channel Shuffling
 - 8192 mono channels within 128, 2110-30 streams
 - <https://evs.com/products/real-time-media-processing/neuron-shuffle>
- ✓ Neuron Convert - UDX 2110 Up / Down / Cross Converter w/Color Correction
 - 32 channels in either direction .
 - Embedding, de-embedding, Frame Sync and IP I/O
 - LUT based HDR↔SDR and HDR↔HDR conversion
 - Proc-amp and RGB color correction (CC control panels in Shading)
 - <https://evs.com/products/real-time-media-processing/neuron-convert>
- ✓ Neuron View – Low Latency Multiviewer Processing
 - 12 Neurons capable of flexible multiviewer mosaic generation
 - Process up to 32 unique PiPs (plus an additional 32 scalers per Neuron)
 - Deliver up to 8 1080 MV mosaics (or 2 UHD MV mosaics) each
 - Multiple tallies, UMDs and up to 256 channels of audio meters
 - 32 digital clocks and up/down timers
 - Exceeds Solicitation's 322 PiPs by 41 MV Heads (mosaics)
 - MV mosaics delivered on SDI for easy monitor connections
 - <https://evs.com/products/real-time-media-processing/neuron-view>



4.2.2 2110 IP Core Switching

This Proposal includes an Arista IP switching core, designed using the Spine/Leaf architecture specified in your Solicitation and deployed as a SMPTE ST 2022-7 Seamless Protection Switching network. The red and blue networks will be built using one Arista CD-7280CRA3A-72F spine switch providing 72 SFP 100g ports and one Arista DCS-7010TX-48CF providing 48 1G RJ45 ports. We have carefully studied the most cost-effective way to deploy these four switches and will leverage twinax QSFP cables (instead of fiber SFPs) to reduce project cost and increase reliability across the new truck's wide range of environmental temperatures.

4.3 Additional Core System Components in Eng'g Racks

4.3.1 Master Sync Gens & Distribution

- ✓ Upgrades to 2 existing Tek SPG800a master reference generators to provide PTP timing with GPS reference. **NOTE:** We have included Option 1 at the bottom of the project BoM that replaces the upgrades to the existing SPG8000As with brand new SPG9000 master reference generators. The SPG9000 are Tek's latest master sync gens, which were explicitly designed for SMPTE 2110 IP media networks. Given the relatively modest increase in cost for the new generators, Diversified recommends NPM strongly consider choosing the new SPG9000s shown in Option 1.

We have also included an estimate of new baseband reference signal distribution DAs using the Ross OpenGear platform. Although it is certainly possible to re-use the existing Evertz 500 series DAs from your existing truck, we believe migrating to the Ross OpenGear platform provides a much wider modular gear ecosystem with a broad range of distribution and processing modules, all with the additional benefit of much smaller rack space requirements.

4.3.2 Video & Fiber Patching

- ✓ 20 New Canare 12G, normalled, terminating 1ru midsize coax patchbays. (Estimate)
- ✓ Commscope fiber patching

4.3.3 Production Gear

- ✓ 1 EXISTING Grass Valley Karrera / K-Frame Production Switcher (64x16 SDI)
 - Diversified understands NPM may choose to purchase a new GV, 2110 production switcher. The IP core and switch ports have been sized to accommodate a future IP production switcher.
- ✓ 1 EXISTING Chyron Hyper X Character Generator 2ch (SDI)
- ✓ 1 EXISTING Vizrt OneBox Character Generator 2ch (SDI)
- ✓ 1 EXISTING Vizrt FoxBox 1 ch (SDI)
- ✓ 1 EXISTING Scorebox 1ch (SDI)
- ✓ 1 EXISTING For-A Telestrator 1ch (SDI)
- ✓ 2 EXISTING Adtec Encoders (SDI)
- ✓ 1 EXISTING Tandberg Encoder (SDI)
- ✓ 1 EXISTING Dish Network DTH Receiver

- ✓ 1 New Masterclock 2ru Clock with LTC reader
- ✓ 2 New Rack mounted utility PCs

4.3.4 EIC QC Station



- ✓ 2 New EVS BPS routing control panel
- ✓ 1 New EVS 2ru Touchscreen control panel with 3 rotary controls
- ✓ 1 EXISTING RTS KP5032 Intercom panel
- ✓ 1 EXISTING Sony 4K QC monitor
- ✓ 1 EXISTING Wohler 2ru Audio monitor
- ✓ 1 EXISTING Wohler 1ru Audio monitor
- ✓ 1 New Tek MPD-300 2110 Scope
- ✓ 2 New Wohler 17" LCD video monitors, (Multiviewers displays)
- ✓ 1 EXISTING Davicom 360 Cortex system monitor

4.4 Video Control

Your Solicitation indicated NPM will re-deploy your existing GV, SDI based, camera chains but may elect to purchase new camera chains with 2110 interface. The IP core and switch ports have been sized to accommodate new 2110 camera base stations.

- ✓ 8 EXISTING GV, SDI based camera base stations
- ✓ New, OpenGear SDI baseband reference, returns and prompter distribution DAs. These DAs and frame may not be necessary if NPM purchases new cameras with 2110 interfaces by the time the truck is built.
- ✓ Shading Room
 - 1 EXISTING TV Logic Pgm monitor
 - 2 EXISTING Marshall triple LCD monitors
 - 1 New EVS Routing control panel
 - 1 New Marshall digital audio monitor
 - 1 New Masterclock 2ru Clock with LTC reader
 - 2 EXISTING Marshall triple LCD monitor rack
- ✓ 3 Video Shading Positions
 - 1 New Sony QC Monitor
 - 2 EXISTING Sony QC monitors
 - 3 New Tek MPD-200 Scopes
 - 3 New EVS BPS Routing panels
 - 3 New EVS CTP-2003-Web 2ru Touchscreen routing panels with 3 rotary controls (CC ops)
 - 3 EXISTING RTS KP-4016 Intercom panels



4.5 Recording & Replay

Diversified will closely work with the NPM operations and engineering team to optimize and finalize the design and layout of this production space. For the purposes of this Proposal, we have included 5 EVS operating positions plus 1 “replay producer” position all outfitted with a similar complement of gear. During the Detailed Design phase of this project, this room’s layout and equipment complement will be determined, with adjustment made as needed.

We have additionally gathered discussed upgrading your existing 3 XT-VIA (of 2 different vintages per EVS) to native 2110 I/O. EVS has advised that the XT must go back to the EVS shop in New Jersey for upgrade and have also recommended the addition of an X-HUB to consolidate the IP I/O from the XTs to 100G interfaces. As such we’ve included a new X-Hub in this Proposal.

- ✓ Recording & Replay Room
 - 2 New Wohler 17” Pgm monitors
 - 2 New EVS Routing control panel
 - 1 New Pair of Genelec 8320APM speakers
 - 1 New Masterclock 2ru Clock with LTC reader
 - 6 EXISTING – (up to) 6 Black Magic DUO rack mounted LCD displays (repeats)
- ✓ 5 Replay Operator + 1 Replay Production Positions (Each position)
 - 2 New Wohler dual 10” rack mounted LCD monitors (x6)
 - 2 New 17” Wohler 17” LCD monitors (SDI and HDMI) (x6)
 - 1 New KP-4016 Intercom panel w/ headset (x6)
 - 2 New EVS Routing control panels (x6)
 - 1 EXISTING Wohler analog stereo audio monitor (x6)
 - 1 EXISTING EVS Replay controller (3 + 2 rentals)
- ✓ 3 EVS XT-VIAs Replay Servers (2+1)
 - 3 EXISTING EVS Replay servers
 - 2 RENTAL EVS Replay servers
 - 1 New EVS X-HUB VUA
 - 2 EXISTING Legacy VCRs



4.6 Production Control Room

The 1A and 1B conceptual trailer layout drawings anticipate a monitor wall with 2 rows of 5 displays for a total of 10 displays fed from the new Neuron multiviewers. Surround sound monitoring is provided and digital clock, (which may be supplanted by clock/timer displays in the multiviewer). We have included a separate MasterClock 6 digit LTC display in this Proposal, that can be driven from the Masterclock Dual Timer nominally located at the AD position in the PCR.

4.6.1 Front Bench

The front bench is configured for 3 positions – TD, Director and AD, followed by 6 fairly similarly configured operating positions at the P2 and P3 rear consoles.

- ✓ TD Position
 - 1 EXISTING Karrera production switcher control panel plus Aux panel
 - 1 EXISTING Lance Design TDC-100 controller
 - 1 New KP-5032 Intercom panel with headset
 - 4 New EVS Routing control panels
- ✓ Director Position
 - 1 New KP-5032 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 1 new Wohler 4ch analog audio monitor (Prelistens)
 - 1 New Behringer Ctl rm speaker volume control
- ✓ AD Position
 - 1 New KP-5032 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 2 New Wohler 4ch analog audio monitor (Prelistens)
 - 1 New Masterclock Dual production timer

4.6.2 P2 Rear Bench

- ✓ GFX Position
 - 1 New KP-4016 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 1 New Sony 22" Monitor (SDI & HDMI) for CG
 - 1 New Wohler dual 7" rack mounted monitors (SDI)
 - 1 New AVP Utility connector panel (TBD)
- ✓ FoxBox Position
 - 1 New KP-4016 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 1 New Sony 22" Monitor (SDI & HDMI) for CG
 - 1 New Wohler dual 7" rack mounted monitors (SDI)
 - 1 New AVP Utility connector panel (TBD)



- ✓ Producer 1 Position
 - 1 New KP-4016 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 1 New Wohler 4ch analog audio monitor (Prelistens)
 - 1 New Wohler dual 7" rack mounted monitors (SDI)
 - 1 New AVP Utility connector panel (TBD)

4.6.3 P3 Rear Bench

- ✓ Producer 2 Position
 - 1 New KP-4016 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 1 New Wohler dual 7" rack mounted monitors (SDI)
 - 1 New AVP Utility connector panel (TBD)
- ✓ Producer 3 Position
 - 1 New KP-4016 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 1 New Wohler dual 7" rack mounted monitors (SDI)
 - 1 New AVP Utility connector panel (TBD)
- ✓ Producer 4 Position
 - 1 New KP-4016 Intercom panel with headset
 - 1 New EVS Routing control panel (Pgm PiP and Ctl rm speakers)
 - 1 New Wohler dual 7" rack mounted monitors (SDI)
 - 1 New AVP Utility connector panel (TBD)



4.7 Audio Control

The majority of the audio mixing systems in the existing truck will be transferred to the new mobile unit. The existing Studio X52 console and peripherals, playback devices, processors and video monitors.

4.7.1 Desk & Overbridge

- ✓ 1 EXISTING Studer X-52 digital mixing console surface
- ✓ 1 EXISTING Digicart E w/remote control panel
- ✓ 1 EXISTING Marantz Media Player
- ✓ 1 EXISTING Drawmer 6-pack surround processor
- ✓ 3 New (TBD) replacement for TC electronics processors
- ✓ 1 EXISTING Behringer 8 channel camera mixer

- ✓ 1 new Genelec Triple SAM powered speaker set (2x 8330APM + 1x 7350A subwoofer (placeholder))
- ✓ 2 new Genelec 8320APM powered rear speakers (placeholder)
- ✓ 2 New replacement speakers for KR V4 (PROVIDED BY NPM)
- ✓ 2 New replacement speakers for KRK v6 (PROVIDED BY NPM)
- ✓ 2 EXISTING Wohler analog stereo audio monitors
- ✓ 1 New Masterclock 6 digit clock w/LTC reader

- ✓ 2 New EVS Routing control panels
- ✓ 1 EXISTING RTS KP5032 Intercom panel w/gooseneck mic
- ✓ 5 EXISTING Feelworld video monitors (approx. 12" ea)

4.7.2 Support Racks

- ✓ 2 EXISTING Studer Compact Core 600
- ✓ 1 EXISTING Studer D21m modular I/O frame
- ✓ 3 EXISTING Studer D23m modular I/O frames
- ✓ 1 EXISTING Studer Compact Stagebox

- ✓ 1 New RME M-32AD 32 channel Analog to digital converter
- ✓ 1 New RME M-32DA 32 channel digital to analog converter
- ✓ 1 New RME ADI642 8 channel MADI/AES format converter
- ✓ 1 EXISTING Lot of ass't storage drawers
- ✓ 1 EXISTING Enco Hotshot 2 clip player w/remote control panel
- ✓ 1 EXISTING set of 10 Audio iso transformers
- ✓ 2 EXISTING Motu 112D MADI/AES boxes

- ✓ 14 New AVP Bantam audio patch panels (per NPM specs)
- ✓ 1 New Ross OpenGear frame with distribution DAs as required



4.7.3 Intercom

- ✓ 1 EXISTING RTS ADAM-M 64 port digital intercom
- ✓ 3 EXISTING + 1 New RTS TIF-2000 telephone interfaces
- ✓ 1 EXISTING RTS IFB828 IFB Wetter
- ✓ 3 EXISTING RTS SSA-424 4w/2w hybrid interfaces
- ✓ 3 New RTS PS-20 TW power supplies
- ✓ 1 EXISTING RTS SAP1626 TW source assign panel
- ✓ 1 EXISTING Telos Link Hybrid

4.8 Option 1 – Upgrade to Tek SPG9000 Sync Gens

We have included an Option for replacing your existing SPG8000A master sync generators with 2 new Tek SPG9000s, which were developed specifically for IP media networks, such as will be installed in the new NPM mobile unit. PTP upgrades (with GPS reference) for the SPG8000As are provided as requested, however, the modest increase in cost for 2 new SPG9000s in comparison we believe presents good value for NPM and wanted to be sure you were aware of this possible optional choice.

4.9 Diversified Professional Services

This Proposal has been assembled as the foundation for significant collaboration with NPM's engineering and operations teams, to develop and finalize the new mobile unit's layout, technical equipment and functional capabilities. Every truck Diversified builds has unique features and functions that are tailored to our customer's specific requirements. Although there are many similarities amongst modern television mobile units, there are also a similar number of unique facilities that deliver the production tools each production team requires.

The new NPM mobile unit is especially unique as you intend to re-deploy a great deal of equipment from your existing truck. That certainly helps drive down project cost, when valuable equipment can continue to provide serviceable life.

We believe the professional services provided in this Proposal are quite suitable for most new mobile unit builds. If changes are needed however, we will work with the NPM team to ensure they are cost effectively implemented.

4.9.1 Services Included

- ✓ Consultation on the trailer's operational layout with design and guidance provided by Gerling for weight and balance recommendations.
- ✓ Design services for all television productions systems within the new truck
- ✓ Shop cable fabrication and equipment staging
- ✓ New equipment procurement and supply
- ✓ Decommissioning of equipment from your existing truck that will be re-deployed in the new mobile unit
- ✓ Installation of all new and redeployed equipment in the new mobile unit
- ✓ Development of 2110 network IP schema
- ✓ Programming of all new equipment
- ✓ Commissioning of the new mobile unit's newly assembled systems



- ✓ Thorough testing of the new production systems
- ✓ EVS training on the new routing platform operations
- ✓ Complete set of As-Built document for the new production systems
- ✓ Onsite support for the truck's first two events

4.10 Scope Exclusions

- ✓ Removal of any equipment from the existing truck that will not be redeployed on the new mobile unit
- ✓ Removal of any abandon cabling or any other decommissioning in the existing truck
- ✓ Permits of any kind

4.11 Deliverables

- ✓ Design, installation, commissioning, testing and training service for the new mobile unit
- ✓ Delivery of the new truck from Gerling in Ohio to Diversified's shop in Santa Clara, CA
- ✓ Production and delivery of complete As Built documentation of the new production systems. All As Built documents will be delivered as electronic files, in their native programs and formats.

4.12 Acceptance

Diversified will make delivery of the completed new mobile unit to Nebraska Public Media, State of Nebraska, at Diversified's shop in Santa Clara, CA. All acceptance testing and signoff must take place at Diversified's shop. Upon acceptance, sign off and production of an acceptable NPM insurance certificate, Diversified will release the new mobile unit to NPM's representative. NPM is responsible for the movement of the new and old NPM mobile units from Diversified's Santa Clara shop.

4.13 Change Management

1. Diversified's goal is to capture NPM's requirements during the Needs Analysis phase of the Design process and to complete projects with a minimal amount of Change Orders. However, Change Orders may be required due to several reasons and each party has the option to request changes to the agreed Scope of Work. (Schedule changes, accelerated schedule requests and expansion or revision of Diversified's Scope are examples of cause for Change Orders).
2. Any changes to the Project's Scope, Exclusions, Pricing, Schedule, General Conditions and Notes, must be approved by Diversified and NPM contact authorized to sign off on project deliverables following the prescribed Change Management process and the ramifications communicated.

Change Order Process

1. Diversified receives change condition data from NPM and considers impact to the current project design solution set.
2. If warranted, Diversified generates a Change Order, providing associated costs and scope narrative to address the Change Condition, General Conditions, Schedule, or additional Professional Services Labor.
3. Diversified submits the Change Order with an updated timeline to NPM for review and acceptance. (No work related to the Change Order will begin until a Change Order is provided/authorized by NPM).



4. NPM authorizes the Change Proposal and returns a signed Change Order or Purchase Order to Diversified.
5. Diversified proceeds with ordering any additional materials and/or completes the work listed.
6. Diversified updates the contract scope of work, deliverables, and/or system drawings, as necessary.
7. In some circumstances, Diversified will perform additional Scope to maintain the Project Schedule, prior to creation of a Change Order. Diversified will document the cost impact for any additional labor, hardware and miscellaneous materials and create a follow-up Change Order for costs incurred. NPM will be responsible for these additional costs.
8. Proposed changes to this Proposal document or additional labor charges resulting from changes to the Scope, responsibilities, schedules and equipment selections are subject to a Change Order according to this prescribed Change Management process and may result in additional charges.

4.14 Scope Notes

1. All Client furnished CAD drawings or building plans provided to Diversified are assumed to be accurate. Additional costs may be incurred if electronic copies of the CAD floorplan drawings are not available for use in the development of submittal documents. Diversified is not responsible for costs associated with the procurement of Client furnished CAD files. Diversified will turn over final As-Built drawings as part of its Project Closeout Package. Additional CAD work beyond As-Built drawings is not included in Diversified's quote.
2. Existing wire and/or equipment intended to be utilized and/or reused under this Scope of Work will be tested for proper functionality during installation. Should existing wire or equipment be found inoperable, incompatible or otherwise unfit for use, Diversified will develop and provide a Proposal for its replacement. Such replacements may be required before installation can be finalized and project turnover can occur. Neither Diversified, nor its subcontractors, will assume accountability or absorb costs associated with delays that are the result of failing Client Furnished Equipment (CFE) or its replacement.
3. Diversified is not a high voltage contractor and as such cannot undertake high voltage installation work in the fulfillment of this project.
4. Appropriate Client representatives will be available during the course of the project and any scheduled training sessions.



5 Experience & Qualifications

Diversified is very proud of our highly successful 31-year history of serving the television production, post production and broadcast industries for many of its most demanding projects. Our customers include every large scale broadcast and cable network, and major streaming services in the US, along with many of the most prominent production companies creating exciting and innovative content for viewers around the world.

One of Diversified's specialties is the design and build out of new, leading edge mobile production facilities...and we've been delivering those trucks for more than 2 decades! We've built trucks focused on a wide variety of events including nearly all professional sports, live news, cultural events, music recording and demo facilities for corporate industry. In fact, the two largest mobile production companies in the US (NEP and Game Creek) have also contracted Diversified to build mobile units for their fleets. We enjoy a very strong reputation within the mobile production community with demand for trucks is continuing to grow each year.

Diversified's mobile facility experience is also not limited to trucks alone! This past year, Fox Sports contracted Diversified to design and build their Jewel Flypack System, a large scale, modular production system able to be easily loaded on to aircraft and flown to any sporting event around the world. It's initial event was the 2023 FIFA World Cup and we're pleased to tell you, it was a tremendous success!

Diversified's Santa Clara shop is our home for building new mobile units, stocked with all of the right tools and facilities required for modern mobile unit outfitting. More importantly, it's home base for our team members with the deepest experience for building trucks in system integration business. And we're excited to build NPM's new truck in our Santa Clara shop.

We believe it's fair to say that Diversified has built the largest number of IP production systems in the world. Beginning in 2016, Diversified started building IP based media production systems with both early, manufacturer proprietary IP technology and early SMPTE 2022-6 systems. SDI. Since that time, much has changed. The broadcast industry has adopted SMPTE ST-2110 as the new standard for building scalable, IP based media systems and Diversified has actively been involved, from its initial testing and plugfests to wide scale system deployments for our customers. The following page shows a listing of Diversified's recent 2110 projects, from CNN's largest production facility at Hudson Yards in New York to Sofi Stadium and the NFL Network in Los Angles to the Fox Sports Jewel Flypack....and demand continues to accelerate!

5.1 References

1. NEP – Ryan Lowe – rlope@nepgroup.com
2. Fox Sports – Kevin Callahan – kevin.callahan@fox.com
3. KQED - David Hansen – dave.hansen@kqed.org
4. NFL Network - Dave Shaw – dave.shaw@nfl.com



5.2 2110 Project Experience

Customer	Purpose	Technology
A&E New York	Network Playout Ctr	ST-2110
Amazon WAS 17	Event Center	ST-2110
Atlanta Falcons	Sports Replay	ST-2110
Berkley College of Music	University	ST-2110-4K
Bloomberg	News Broadcast Ops	ST-2110
CBS News	News Operations	ST-2110
CBS Washington	News Production	ST-2110
Chase Center	Sports Replay	ST-2110
Chicago Cubs (RSN)	Marquee Sports	ST-2110
Citizens Bank Park	Sports Replay	ST-2110
CNN Atlanta Master Ctl	News Broadcast Ops	ST-2110
CNN Atlanta Newsroom	News Production	ST-2110
CNN Atlanta PCR's (8)	News Production	ST-2110
CNN Atlanta Studios H & G	News Production	ST-2110
CNN Hudson Yards	News Production	ST-2110
CNN Washington DC	News Production	ST-2110
Discovery NYC	Sports Replay	ST-2110
Fox News Channel	Broadcast Operations	ST-2110
Fox Sports Jewel (Mobile IBC)	Mobile Broadcast Ctr (Flypack)	ST-2110
Fox WTTG Washington DC	Broadcast Operations	ST-2110
Golden State Warriors	Stadium Broadcast	ST-2110
HBO Hudson Yards	Network Playout Ctr	ST-2110
HBO, Turner	Post Production	ST-2110
Intelsat	Broadcast Distribution	ST-2110
LA Stadium	Sports Replay	ST-2110

Customer	Purpose	Technology
Marquee Sports	Venue Media	ST-2110
Microsoft Prod Studios	Media Production	ST-2110
Middle East Broadcasting	Broadcast Operations	ST-2110
NBC Boston	Media Operations	ST-2110
NBC WRC-TV	TV Station	ST-2110
NBC/Telemundo Stations	Production Cloud	ST-2110
NFL Media	Media Operations	ST-2110
NFL Network LA	Media Operations Ctr	ST-2110
Oath	Media Operations Ctr	ST-2110
PBS WTTG-Maryland	TV Station	ST-2110
PBS KQED	TV Station	ST-2110
Philadelphia Phillies	Sports Replay	ST-2110
QVC Japan (4K)	24/7 Live Production	ST-2110-4K
QVC US MCR	Media Operations Ctl	ST-2110
Rogers Media Canada	Regional Sports Ne	ST-2110
SoFi Stadium	Sports Replay	ST-2110
Tampa Bay Rays (RSN)	Regional Sports Net	ST-2110
Tennis Channel	Broadcast Operations	ST-2111
Texas Rangers	Stadium Broadcast	ST-2110
UBS Arena	Sports Replay	ST-2110
WBD Cloud Ingest	News	ST-2110
WBD Techwood Build	News	ST-2110
Wells Fargo Center	Sports Replay	ST-2110
WWE World Wrestling Ent.	Post Systems	ST-2110
Yahoo (Verizon Media)	Event Center	ST-2110



5.3 Case Study – SOFI Stadium



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diversified
Create the unforgettable



SoFi Stadium
Los Angeles, CA

CONFIDENTIAL PROPOSAL USE ONLY

Delivering a New and Enhanced Fan Experience, for Both the Fans in the Stadium and at Home

There's no doubt the belle of the ball for the NFL's 2020-21 season was SoFi Stadium and Hollywood Park—the \$5 billion venue that is now home to the LA Rams and Chargers. From "The Oculus"—a 70,000 sq. ft., double-sided, LED videoboard—to the ST 2110 IP infrastructure and state-of-the-art control room that brings The Oculus to life with 4K HDR content, the stadium promises a fan experience unlike anything else in the world. Diversified was brought in to help design, integrate and manage the control room system that would make this promise a reality.

After meeting with key stakeholders from venue ownership to consultants, Diversified had a clear understanding of the vision. Together, the team built a stadium filled with technology that in many cases is the first of its kind. Delivering 4K HDR content—from dozens of Sony cameras throughout—to a structure such as The Oculus is not an easy task. What's more, the team had to ensure the process was seamless for not just one NFL team, but two, in addition to the venue production staff that would host concerts and other live events.

Diversified engaged long-time partners Evertz and Ross Video to tackle the tall order and help ensure all systems—even third party—talk to each other. The team decided on an Evertz 2110-based routing backbone and Dreamcatcher replay solution as well as two Ross Acuity production switchers to lead the charge in live production. These systems were paired with Ross Xpression Tessera and Carbonite Mosaic systems as well as an integrated Inception Social server—a solution not entirely new to sports venues but a game changer amid a socially distanced world, connecting the teams to fans via Facebook, Instagram, Twitter and more. Finally, a unique, custom panel of tools was built to control the entire environment. Not only does the system cover the distinct looks for each team so they have full creative control but also remotely controls that content with scheduling and playlist features. Furthermore, control of other parts of the building are integrated to include third-party devices such as lighting, display or graphics.

Despite difficulties posed by its inaugural NFL season, SoFi Stadium is positioned to top the ultimate fan experience leaderboard for years to come.




"Learning that Diversified would be part of [this project] gave me real peace of mind. Knowing the great talent at Diversified, I knew we would be pushing technology to the edge."

Jason Cothorn
VP, Broadcast & Operations
SoFi Stadium and Hollywood Park

 **SOLUTIONS**
Emerging Technology
Media Production



5.4 Case Study – NFL West Coast



NFL Los Angeles

Hollywood Park, CA

New West Coast HQ Designed to Improve Workflow for Modern Workplace Experience

onediversified.com

Located at Hollywood Park, the NFL's 450,000 sq ft Los Angeles headquarters delivers 214,000 sq ft of office space and an expansive nearly 75,000 sq feet of studio and studio support space to serve as the home for NFL Network, NFL.com, NFL RedZone, the NFL app and other departments involved in the league's media and business operations.

The new West Coast hub was designed to increase productivity and improve workflows for its many media operations. The state-of-the-art IP-based, 4K- and HDR-capable production facility took nearly four years to conceive, design, build and integrate based on SMPTE ST 2110 standards for media-over-IP production. NFL Media leveraged Diversified's comprehensive breadth of technology solutions and services, including media and entertainment, AV, digital media and IT to fulfill its modern technology needs throughout the facility.

"Since the launch of NFL Network in 2003, the NFL and its media operations have become a go-to source for news, entertainment and engagement for millions of football fans around the globe," said David Jurenka, senior vice president of NFL Media and general manager, Los Angeles. "We are thrilled to relocate our operations into a space that puts us closer to the game than ever before and places the NFL at the center of what will be the next great global entertainment destination with the amazing SoFi Stadium in our backyard."

Completed spaces include collaboration and conference rooms, huddle spaces, cafe, multipurpose room, screening room, IT NOC, innovation lab, five production and one podcast studio, six NFL production and audio control rooms and three portable remote packages with four camera systems, eighteen edit rooms, two audio sweetening and 90 desktop editors and a massive curved videowall in the lobby to welcome all! A whopping 738 displays and 1400 strands of fiber connect it all. And, with more than 258 miles of Cat6A ethernet and Cat5E cabling, NFL Media is currently producing 1080p60 broadcasts with Dolby 5.1 audio but is capable of scaling to any format in the future, including HDR or 8K, thanks to its robust IP infrastructure.



"We are thrilled to relocate our operations into a space that puts us closer to the game than ever before..."

David Jurenka

SVP NFL Media
 GM, Los Angeles



SOLUTIONS

Audio Visual
 Digital Signage
 Media Production



SERVICES

Consulting
 Managed Services

diversified
 Create the unforgettable



6 Quality Assurance & Testing

Diversified is deeply committed to producing and delivering the highest quality products and services to our customers throughout our global enterprise. For more than 30 years, Diversified has expanded through long term organic growth and acquisition of the highest caliber system integration companies and team members in the world. We're relentlessly learning, growing and improving, and have gained tremendously from our collective knowledge, skills and experience. We call it our "best of breed" process. Many of our most significant advances have come through the application of strategic knowledge and experience from our new corporate colleagues. Perhaps no better evidence of this ever-rising benefit is the application of best practices assembled from around the globe.

Since our founding in 1993, Diversified has been a recognized leader throughout the broadcast system integration industry. Through continuous refinement of our project processes, Diversified has developed a strong and well documented process foundation on which we carry out our customer's projects, from small and simple deployments, to large scale projects for many of the world's most demanding organizations. Key to our success, has been a commitment to radical transparency with our customers. We strongly believe developing a clear project process with as much direct, ongoing customer involvement as possible, creates a business relationship that is mutually beneficial and well understood by all parties involved.

Diversified's Quality Management System is an evolving set of tools and best practices, building on both organic experience and the wisdom and knowledge of new organizations joining our Company.

6.1 Project Monitoring

Diversified's Project Portal is a highly accessible tool for accessing real time data on the status of projects with hierarchical granularity down to individual system component serial numbers, configuration files and status of the most recent tests. Accessed with individual logins, tailored with appropriate permissions for the tasks





needed, the Project Portal is rapidly advancing and migrating the model of shared checklist documents to real time web accessible pages that capture and aggregate data for unique reporting and continuous analysis. We look forward to demonstrating this powerful tool for you, as a key component of driving enhanced Quality of our products and services on a continuous basis. Project management also sends out weekly job status update reports to project stakeholders.

6.2 Quality Control Plan

1. All work will be performed in accordance with the contract requirements. Diversified will maintain an inspection system which assures compliance with the contract requirements. Any indication of system deficiencies whether discovered as a result of the Government's or Diversified checks and tests, will result in addressing these deficiencies.
2. Diversified's QCP does not endeavor to repeat or summarize contract requirements. It describes the process which Diversified will use to assure compliance with those requirements. Necessary details dealing with minor items that may be overlooked in this plan will be addressed informally between the NPM and our Project Manager as the work progresses, and will be documented in writing if so requested by the PM. It is understood that the level of QC accountability and control exercised by Diversified on these items will be consistent with the details of this plan.
3. Diversified's Project Manager has overall responsibility for the successful completion of the project work.
4. Our PM is the lead manager of Diversified's quality control program. He will be responsible for overseeing day-to-day construction operations from a QC standpoint. He will ensure that all required tests and documentation are completed, and that the results are furnished to NPM in the time frame required. Our PM is empowered to suspend any operations which he deems to be in noncompliance with the contract, and/or to order corrective measures to assure compliance.
5. As may be required, QC responsibilities will specifically be assigned to Diversified' supervisory personnel specifically responsible for given operations or an assistant or subcontractor to him will be provided. In either case, standards of application of the QCP will be the same. The names, experience and qualifications of any personnel assuming QCP responsibilities will be provided to NPM in advance.
6. Diversified has an experienced and highly professional staff that is used to the responsibility entailed by the QC requirements. We therefore do not anticipate any personnel or training problems in complying with them. If any such problems occur, Diversified will take whatever actions are necessary to correct them including retraining, providing more supervision or removal of poorly functioning personnel.
7. Diversified's Lead Technician will normally be responsible for QC during production. Our PM will make QC spot checks at intervals deemed appropriate for the project, and more often if problems are occurring.

The overall goal of Diversified's quality control program is to conduct consistent and effective processes to complete this project's scope in accordance with any contract requirements. Testing and inspection will be performed and documented for the purpose of evaluating the effectiveness of our work processes, identifying and correcting non-conforming work, and ensuring the quality of the work upon completion.



6.3 Testing

In close collaboration with NPM technical staff, Diversified will develop a comprehensive testing plan for the new mobile unit's production systems, ensuring all envisioned functionality has been implemented and is fully operational. Comprehensive testing is a progressive activity taking place throughout the entire construction project from beginning to completion. From the early stages of a project, testing individual cable assemblies fabricated in our shop, to full system end to end testing, Diversified will work with NPM staff to develop and execute a testing and system proving plan to ensure the initial and long reliability of new production systems will be achieved.



8 Pricing and Cost Sheet

Pricing presented in this Project Proposal is based on the services shown in the Scope of Work section of this document. Any services not specifically identified in the Scope of Work section are not included in Diversified's pricing below.

8.1 Summary of Costs

Summary of Costs v1	
Equipment	\$2,787,227.00
Design/Install/Commissioning Services	\$1,021,470.00
Installation Parts & Materials	\$147,900.00
Vendor Commissioning	\$62,814.00
Vendor Training	\$12,385.00
Vendor Extended Warranties	\$579,382.00
Shipping & Insurance (Est)	\$61,939.00
Expenses (Est)	\$88,671.00
Base Project Total	\$4,761,788.00
Estimated Taxes (excluded & added to Invoices)	\$0.00
Base Project Grand Total	\$4,761,788.00

8.2 Options

Project Options (Add'l)		
1	Option 1-Upgrade to SPG9000s	\$17,072.00
Options Subtotal (Excl. Taxes)		\$17,072.00



8.4 Pricing Exclusions

1. All prices do not include Sales Tax. If taxes are shown, values are based on estimates and will be billed at actual at the time of invoicing. Clients, including government, general contractors and not for profit entities seeking a tax exemption must supply Diversified with a valid exemption certificate, or direct pay permit at the time of Proposal execution, or upon issuance of a Purchase Order.
2. Costs for Permits are not included in Diversified's pricing unless stated otherwise.
3. Costs for Payment and Performance Bonds are not included in Diversified's pricing, unless stated otherwise.
4. Pricing in this Proposal is based on non-union labor. Union labor requirements are the responsibility of the Client.
5. This Proposal was not prepared in accordance with Davis Bacon or other Prevailing Wage Scale. If Diversified is informed that such wage rates are required for this project, Diversified will revise its Proposal accordingly.
6. Unless otherwise noted in this Proposal, labor rates used to calculate this estimate are based on work being performed during regular business hours (M-F 8a-5p). A revised proposal, which includes after-hours, weekends and/or holiday labor rates, will be provided upon request.
7. Pricing in this Proposal does not include Revit BIM work, unless stated explicitly. When Revit BIM services are included, Client will provide Revit environment background and a library of device families for the required Revit BIM work. Diversified will add only those devices specifically identified in the Revit scope of this Proposal. Diversified will provide modeling of such devices to the extent of providing spatial representation in our models for the purposes of de-conflicting trade clashes. Diversified does not include granular visual representation modeling of its proposed products for the purposes of real-life renderings, etc.
8. Pricing in this Proposal is based on the use of non-plenum wire, cable and connector types. It is the responsibility of the Owner and trades to inform Diversified of the locations of plenums and impact on cable conveyances.
9. Returned material must be resalable, unopened in its original packaging. Any material or containers that are opened, defaced, or damaged cannot be returned to Diversified. Restocking fees may apply for returned equipment.
10. Hoists, man-lifts, extra-long ladders, special safety equipment, and the like, shall be provided by others (or by Diversified at additional cost) when required.
11. Unforeseen cost impacts on equipment and materials due to international trade policies (steel, copper, precious metals, and country specific policies) may incur additional cost. Diversified shall attempt to time purchases to minimize the impact of such pricing fluctuations. Any pricing increase beyond 2% from time of Proposal to time of purchase shall be borne by our NPM.
12. This project may be impacted by current challenges within the global supply chain, which may cause unexpected timeline delays and changes in pricing for project equipment and services. Although these matters are outside Diversified's control, Diversified will endeavor to identify supply chain issues as early as possible, keeping our Clients well informed of any supply chain issue and its potential impact and mitigation. In an effort to further reduce supply chain challenges, manufacturers are redesigning products



with new components that are known to be more readily available. This may cause a product's price to change, or a current model to be discontinued (made End of Life) and replaced with a new model. Product substitutions, increased product and/or shipping costs will be identified by the Diversified project team and processed as a Change Order when required.

13. For all new project equipment and materials listed in the Bill of Materials (BoM), whether upon contract execution or following final design and Bill of Materials modification, that is sourced by our Client directly through another supplier, such as an OEM, vendor, etc., Client will provide to Diversified a copy of the vendor quote and resultant Client Purchase Order. This detailed data will be utilized for project logistics, warehousing and insurances against risk of loss and damage. Additionally, Diversified will be entitled to a handling and insurance fee equal to four percent (4%) of the transaction value of the Client Furnished Equipment (CFE) and materials, excluding freight and taxes.

9 Project Conditions

9.1 Schedule

1. All work will be performed during regular business hours (Monday-Friday, 8 AM – 5 PM).
2. The Baseline Project Schedule will be reviewed after receipt of Purchase Order or ratified contract (signed by Client and counter signed by Diversified).
3. Diversified's Project Manager and Client contact (authorized to sign off on project deliverables) will establish the detailed milestones.
4. The ability for Diversified to meet the established milestones within the Project Schedule is dependent on the supporting trades timely completion of their work according to the Project Schedule. The conditions below will impact the Project Schedule and will need to be addressed and submitted as a Change Order.
 - a. Modification(s) to the list of equipment due to additional requirements of any type, from any source including, but not limited to, Addendums not listed in the Scope of Services section, other revisions or editions of documents provided during bid process, interpretation of local fire codes, and changes requested by an Authority Having Jurisdiction (AHJ).
 - b. Schedule and cost impact conditions such as accelerated schedule requests, delays caused by supporting trades (i.e.: Architect, General Contractor, Electrical Contractor, Low Voltage Contractor, IT Services Provider, Furniture Provider, etc.), or the addition of technology systems to Diversified scope. Examples of delays caused by supporting trades include, but are not limited to, incomplete infrastructure rough-in, core network services down, Client owned licensing of devices not procured, and incomplete furniture installation.
 - c. Re-engineering due to unacceptable equipment lead times.
 - d. Costs associated with project delays due to factors beyond Diversified's control (including construction delays discussed in (4) above), will be reviewed for impact to the project costs and timeline as they arise. Diversified 's Project Manager will review the impact on the project's scope and schedule to identify methods to mitigate additional costs wherever possible. Net additional costs may be incurred for extending the project timeline at Diversified's current standard labor rates or by additional hours (regular and overtime rates as required) to maintain the existing timeline.



- e. If project award date or other established milestones are missed, all subsequent milestones will shift accordingly, maintaining current durations for each subsequent task.
- 5. Pricing and schedules in this Proposal are provided with the understanding that Diversified will be able to perform the stated Scope of Work in a single, continuous period of performance. Costs associated with multiple mobilizations/demobilizations may result incur additional cost.

9.2 Client Responsibilities

- 6. Assign a single Client Contract, authorized to sign off on all project deliverables.
- 7. Communicate proposed changes to any scope, assumptions, or schedule as soon as they arise and follow prescribed Change Management process expeditiously.
- 8. Cover costs to resolve equipment damaged from dust or other contaminants during the course of the project.
- 9. Provide relevant architectural changes to the facility to accommodate the integration of equipment supplied by Diversified.
- 10. Identify third-party contractors (i.e., electricians, construction personnel, architects, and designers) and determine the Client coordinator.
- 11. Provide clean and secure installation area during project period. Client assumes risk for loss or damage to equipment in unclean or insecure conditions.

9.3 Diversified Responsibilities

- 12. Produce weekly Project Status Reports.
- 13. Communicate proposed changes in writing as soon as they arise and follow prescribed Change Management process expeditiously.
- 14. Complete the tasks listed in this Proposal's Scope of Work section.
- 15. Provide Training after completion of system installation.

9.4 Entirety of Offer

- 16. This document, including any referenced attachments, represents Diversified and the Client's mutual understanding of the scope, schedule, and functionality for the systems to be designed and installed.

9.5 Closeout

- 17. Final completion and warranty engagement is reached when the items listed on this document are fulfilled. This includes testing, commissioning, and training on fully-operational integrated systems. In large multi-room projects, rooms may be brought online on a pre-determined schedule in order for warranty to remain in sync. This Proposal's Scope of Work provides proprietary information developed by Diversified for the purpose of defining this specific project. This information may not be used by the Client or other contractors without Diversified's written consent.



10 Compliance with Solicitation Terms & Conditions

Diversified has reviewed the Terms and Conditions provided with Solicitation 6913 OF and reserves the right to negotiate all terms with the State's procurement agency.

1. This procurement is for a New 53' Expandable Mobile Television Production Trailer that will incorporate sophisticated electronic systems. This Proposal provides a foundation for discussion with Nebraska Public Media to develop the final requirements and specifications for the new vehicle.
2. This project is a complex procurement, spanning a significant period of time, (approximately 57 weeks). Diversified will work with the State of Nebraska to develop a mutually acceptable payment schedule and terms that meets the requirements of all parties involved. Deposits and progress payments will be necessary.
3. We are prepared to submit a set of redlines of the terms in your Solicitation, developed by our Legal Department for your review.

11 Warranty and Support

11.1 5 Year Warranty & Support on new IP Router Equipment

1. Both the EVS MediaInfra Strada components and Arista IP core switches include 5 year warranty and support as requested in your Solicitation, and shown in Diversified's BoM in Appendix 1.

11.2 Diversified Limited Workmanship Warranty

1. In addition to any other rights you may have, Diversified shall extend a one year (365 calendar days) limited defective equipment and workmanship warranty from the date of substantial or practical completion of the system installation or beneficial use of the system by the Client whichever is first occurring, unless such period has been superseded by the purchase of a Diversified Service Agreement Package. Details describing our Service Agreement options are outlined in a separate document. Diversified's limited warranty shall cover defective equipment and defects in workmanship for installation work relating to but not limited to cabling, connectors, structural elements, mountings, equipment rack wiring and internal adjustments. Under the limited warranty, labor services will be provided at no charge. Defects in third party manufacturer equipment and/or installation or other services provided by the manufacturer are covered under the manufacturer's warranty and will be managed by Diversified during the limited warranty period. Product serial numbers must not be removed.
2. Diversified's limited warranty excludes coverage due to equipment or system abuse, neglect, alteration, lamps and bulbs, misuse including but not limited to: operating outside of environmental, user error, electrical, temperature or humidity specifications, system alterations neither approved nor performed by Diversified or repair by a service facility other than those authorized by the manufacturer. If within the limited warranty period, we are contacted with a support request that falls under this limited warranty exclusion, time, travel and equipment for this and any subsequent visit required will be billed at our current labor Time & Material rates
3. All service support requests made after the expiration date of the limited warranty will be billed at our current labor Time & Material rates.
4. If a warranty in excess of 90 days is required by law in the country, state or local jurisdiction of system installation, Diversified shall extend the minimum warranty term required by applicable law. To the extent permitted by applicable law, any implied warranties, guarantees, terms or conditions, replacement components



last only during the term of the limited warranty. Some local jurisdictions, states or countries may not allow limitations on how long an implied warranty, guarantee, term or condition lasts, so this limitation may not apply.

5. Diversified's limited warranty gives specific legal rights, and you may also have other rights which vary from state to state. You may also have other rights which vary from country to country.
6. If any provision of Diversified's limited warranty is legally invalid, the limited warranty shall endure except for the invalid provision. However, if a court determines that any provision is invalid, the court may limit the provision, delete specific words or phrases, or replace the invalid provision with one that is valid and that comes closest to expressing the intent of the invalid provision.
7. TO THE EXTENT PERMITTED BY APPLICABLE LAW, DIVERSIFIED SHALL NOT BE HELD LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING FROM A BREACH OF WARRANTY. SPECIFICALLY, DIVERSIFIED IS NOT RESPONSIBLE FOR ANY COSTS SUCH AS LOSS OF PROFITS OR REVENUE, LOSS OF DATA, BUSINESS DAMAGE OR OTHERWISE. SOME LOCAL JURISDICTIONS, STATES OR COUNTRIES MAY NOT ALLOW A LIMITATION ON SUCH DAMAGES, SO THIS LIMITATION MAY NOT APPLY.

Service Process

1. All new equipment provided by Diversified includes each manufacturer's full warranty from the date of Client invoice. Diversified shall address all manufacturer warranty requirements as "Depot" (Return-to-Base / RTB) service only. Under Depot service, Client ships equipment to an authorized factory warranty repair center. Diversified will act as liaison between Client and manufacturer and assist with Return Materials Authorization (RMA) logistics support. Labor relating to defective equipment is covered for 365 days under this limited warranty and can be extended through the execution of a Service Level Agreement. All other time, travel and equipment for this and any subsequent visit required will be billed at our current labor Time & Material rates
2. Diversified shall respond to warranty support requests (via phone, email or on-site) during the normal working hours of 8a – 5p local (Client site) time Monday - Friday, except recognized holidays. Service required outside of normal working hours shall be billed at current labor Time & Material rates for overtime work. Diversified will make every effort to address such issues within 72 hours after notification.
3. Upon arrival for warranty support, Diversified will expect access to the system and equipment. To avoid additional charges, please contact us 24 hours in advance if delays in access are to be expected. If our Technician arrives to a scheduled appointment and cannot gain access to the system or equipment to affect a proper diagnosis or repair, we will bill the service call for time, travel and equipment for this and any subsequent visit required at our current Time & Material rates.
4. If it is required that equipment be removed for repair, we will make every attempt to minimize the impact on the system operation while the unit is being repaired. However, it is not possible to guarantee any level of system operation. Loaner equipment is not included in our limited warranty or Service Agreements.

Service Level Agreements - Option

5. As an alternative to our Standard Limited Warranty and Time & Material Service, Diversified offers several types of Service Level Agreement packages. Service Agreement options are typically shown in a separate document and provided for your review upon request.



11.3 Insurance Certificate

ACORD		CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD/YYYY)
		8/10/2025	8/9/2024	
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.				
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).				
PRODUCER Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000 kcasu@lockton.com		CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL: ADDRESS:		
INSURED 1529315 DISTINCT HOLDINGS, INC. ONE DIVERSIFIED, LLC 37 MARKET STREET KENILWORTH NJ 07033		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A : Federal Insurance Company		20281
		INSURER B : Great Northern Insurance Company		20303
		INSURER C : Chubb Insurance Company of New Jersey		41386
		INSURER D : Chubb National Insurance Company		10052
		INSURER E :		
		INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** 20826411 **REVISION NUMBER:** XXXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> CONTRACTUAL LIAB <input checked="" type="checkbox"/> XCU GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input checked="" type="checkbox"/> OTHER: \$0 RETENTION	N	N	3608-6841	8/10/2024	8/10/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/PO/ AGG \$ 2,000,000 \$
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	N	N	73644464	8/10/2024	8/10/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX DEDUCTIBLE \$ 1,000
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000	N	N	5672-34-83	8/10/2024	8/10/2025	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$ XXXXXXXX
D	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	7184-1184 7184-1184	8/10/2024 8/10/2024	8/10/2025 8/10/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 ADDITIONAL INSURED STATUS IS PROVIDED BY BLANKET FORMS, WHEN REQUIRED BY WRITTEN CONTRACT. UMBRELLA POLICY IS FOLLOW FORM.\$0 DEDUCTIBLE FOR WORKERS COMPENSATION

CERTIFICATE HOLDER	CANCELLATION See Attachments
20826411 EVIDENCE OF COVERAGE	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Joseph M. Agnello</i>



Appendix 1 Summary of Costs – Bill of Materials



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
PROJECT EQUIPMENT								
TRAILER								
Chassis								
10			1	Gerling & Associates	Emperor Class 53' Expanding Side Production Trailer	<p style="color: red;">UPDATED for Double Expando Concept Drawings</p> <p>Rack-Ready Trailer includes:</p> <ul style="list-style-type: none"> - 1 ea. G&A 53' production trailer, Scepter Series - 1 ea. Sure Glide Expanding side and frame dimensions T.B.D. - 2:1 Gear Driven Sure Glide side - 1 lot 300 amp expanded power system, split feed - 8 ea. Aluminum wheels - 1 lot LED tail and marker light group - 1 ea. 20-Ton G-Force Air Conditioner with 20kW heat with Vision Thermostat System - Air conditioner cover set - Folding high capacity floor panels - 1 lot Nylon bay liner system - 1 lot Air raise/dump system - 1 lot Internal Sure Glide side latching - Strike light group - 1 lot Gas struts on all bay doors - 1 lot Temp Coat roof system - 1 lot Clam shell service doors - All accessories as detailed pages 2-21 - 4 year chassis warranty - 1 year all-inclusive warranty 	\$ 798,948.00	\$ 798,948.00
20			1	Gerling & Associates	Monitor Wall Expando	Street side monitor wall-Manual push-pull expanding side, no driveline	\$ 93,685.00	\$ 93,685.00
30			1	Gerling & Associates	Delivery to Div Shop	Delivery of completed trailer to Diversified's shop at Santa Clara, CA	\$ 13,422.00	\$ 13,422.00
						Trailer Options (Included in this Proposal)	\$ -	\$ -
40			1	Gerling & Associates	Awning System	22'x9'	\$ 9,964.00	\$ 9,964.00
50			1	Gerling & Associates	Chair rail rope light	Chair rail rope light	\$ 1,314.00	\$ 1,314.00
60			1	Gerling & Associates	Ceiling rope light	Ceiling rope light	\$ 1,314.00	\$ 1,314.00
							\$ -	\$ -
Chassis Sub-Total:								\$ 918,647.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
Phone System & WiFi Access								
						Avaya IP500 v2 Digital	\$ -	\$ -
						(16 POTS lines, 20 Digital Phones, 12 Analog Extensions +16 Add'l Digital Extensions)	\$ -	\$ -
70			1	Avaya	700514867	AVAYA IPO IP500 V2 CONTROL UNIT	\$ 442.00	\$ 442.00
80			1	Avaya	700479710	AVAYA IPO IP500 V2 SYSTEM SD CARD MU-LAW	\$ 42.00	\$ 42.00
90			2	Avaya	700504556	AVAYA IPO IP500 V2 COMBINATION CARD ATM V2	\$ 218.00	\$ 436.00
100			1	Avaya	700514857	DIGITAL 8A EXRENSION CARD	\$ 206.00	\$ 206.00
110			1	Avaya	700417231	PHONE-8 ANALOG EXT MOD	\$ 383.00	\$ 383.00
120			2	Avaya	700503164	ANALOG TRUNK-4	\$ 206.00	\$ 412.00
130			1	Avaya	700511093	DIGITAL-16 EXPANSION MOD	\$ 706.00	\$ 706.00
140			2	Avaya	700289770	US POWER LEAD	\$ 5.00	\$ 10.00
150			2	Avaya	700429202	RACK MOUNT KIT	\$ 42.00	\$ 84.00
160			20	Avaya	700504842	9508 DIGITAL SET	\$ 140.00	\$ 2,800.00
							\$ -	\$ -
						WiFi Access	\$ -	\$ -
170	1			Cisco	Meraki MX68	Internet and VPN	\$ -	\$ -
							\$ -	\$ -
Phone System & WiFi Access Sub-Total:								\$ 5,521.00
XCP								
						Truck Access Panel	\$ -	\$ -
180			1	Various	Various	Custom connector panel for field connections	\$ 7,059.00	\$ 7,059.00
						Final quantity of connectors and types to be developed during Detailed Design phase.	\$ -	\$ -
							\$ -	\$ -
XCP Sub-Total:								\$ 7,059.00
TRAILER SUB-TOTAL:								\$ 931,227.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
CORE SYSTEMS (ENG RKs)								
SPGs & TC								
						Tek SPGs & ECO	\$ -	\$ -
190	2			Telestream	SPG8000A	Master Sync / Master Clock Reference Generator base unit - loop through genlock, 3 analog black burst or HD tri-level sync outputs, 4 LTC Out or 3 LTC Out & 1 LTC In, word clock output, GPI, Web UI, SNMP support; PTP support optional	\$ -	\$ -
200	2			Telestream	SPG8000A A0	North America Power Cord	\$ -	\$ -
210	2			Telestream	SPG8000A RACK	Rackmount slides and rails kit for SPG8000A (1 RU height, standard full depth)	\$ -	\$ -
220	2			Telestream	SPG8000A AG	Add DARS output plus four AES/EBU test signal outputs (eight audio channels)	\$ -	\$ -
230	2			Telestream	SPG8000A DPW	Add a second, hot swappable, redundant (backup) power supply and a second power cord	\$ -	\$ -
240	2			Telestream	SPG8000A SDI	Add two independent sets of 3G/HD/SD SDI test and test/black signal generation outputs (including embedded Dolby E audio test signal)	\$ -	\$ -
250			2	Telestream	SPG800AUP	SPG 8000A Upgrade Kit (Free)	\$ -	\$ -
260			2	Telestream	SPG800AUP PTP	Add PTP (IEEE 1588) support	\$ 3,141.00	\$ 6,282.00
270			2	Telestream	SPG9000-ACC-ANT	GPS rooftop antenna (5.0 VDC, 1575 MHz range signals, F connector) that works with the integrated GPS receiver of the SPG8000 with Option GPS for GPS satellites; also works with the integrated GPS receiver of the GPS7 module of TG8000	\$ 524.00	\$ 1,048.00
280			2	Diversified	Custom	Custom fabricated mounts for GPS antennas on truck roof or HVAC	\$ 236.00	\$ 472.00
290	1			Telestream	ECO8000	Automatic Master SPG changeover unit	\$ -	\$ -
300	2			Telestream	ECO8000-A0	North America Power Cord	\$ -	\$ -
310	1			Telestream	ECO8000-DPW	Redundant power supply for ECO8000	\$ -	\$ -
320	1			Telestream	ECO8000-Rack	Rackmount slides and rails kit for ECO8000 (1 RU height, standard full depth)	\$ -	\$ -
							\$ -	\$ -



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
						Baseband Reference Distribution	\$ -	\$ -
330			2	Ross	OGX-FR-CN	OpenGear OGX Frame with Cooling and Advanced Networking	\$ 1,786.00	\$ 3,572.00
340			2	Ross	PS-OGX	600 Watt Universal Power Supply for OGX Frame	\$ 788.00	\$ 1,576.00
350			2	Ross	FSB-OGX	OGX Frame Rear Support Brackets	\$ 90.00	\$ 180.00
360			4	Ross	VEA-8707A-R2L	1x8 Analog Video Equalizing Amplifier, Clamping and Differential Input with Looping Rear Module, R2L-8707	\$ 528.00	\$ 2,112.00
370			2	Ross	SRA-8901-10-R3	1x10 12G/6G3G/HD/SD SDI, MADI and ASI distribution with Automatic Reclocking and Equalization. Includes R3-8901-10 rear module	\$ 723.00	\$ 1,446.00
380			2	Ross	SRA-8901-4-R3S	1x4 12G/6G3G/HD/SD SDI, MADI and ASI distribution with Automatic Reclocking and Equalization. Includes R3S-8901-4 rear module which accommodates 2 SRA-8901 cards.	\$ 609.00	\$ 1,218.00
390			2	Ross	SRA-8901-4-R3S	1x4 12G/6G3G/HD/SD SDI, MADI and ASI distribution with Automatic Reclocking and Equalization. Requires R3S-8901-4 rear module which accommodates 2 SRA-8901 cards	\$ 609.00	\$ 1,218.00
400			4	Ross	ADA-8402-A-R2A	AES / EBU Reclocking Distribution Amplifier - 75 Ohm w/ Standard Rear Module	\$ 577.00	\$ 2,308.00
410			4	Ross	ADA-8405-C-R2C	Analog Audio and Timecode DA with Remote Gain w/ Rear Module. Dual 1x4 or Single 1x8 Analog audio and LTC DA. 2 x 8. Occupies 2 Slots in an openGear frame	\$ 488.00	\$ 1,952.00
							\$ -	\$ -
SPGs & TC Sub-Total:								\$ 23,384.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
Routing Control								
						Strada 1K up to 1024 I/O	\$ -	\$ -
420			1	EVS	STRADA-CONTROL-R-1K	STRADA control package consisting of: Cerebrum server and Cerebrum licenses to control up to 1024 I/O. It further includes installation and commissioning according to the "Default Configuration" described in the Strada Datasheet. Excluding control panels and integration / control of 3rd party devices.	\$ 45,189.00	\$ 45,189.00
430			1	EVS	STRADA-MULTI-LEVEL	STRADA MULTILEVEL license to add audio embedding and de-embedding, local shuffling, proc amp and offset delay (only valid in case of an STRADA system)	\$ 8,274.00	\$ 8,274.00
440			2	EVS	CRBM-IPAUD-SH128-GO	The CRBM IP Audio Shuffling option adds the ability to control automated audio shuffling, by receiving up to 128 redundant audio streams on appropriate shuffling resources. Requires CRBM IP ROUTING S, M, L, XL or EP and CRBM TL or CRBM TL EP.	\$ 6,803.00	\$ 13,606.00
450			1	EVS	CRBM-SALVOS-GO	This SALVOS option enables the management of "snapshots" for the system's configuration. These salvos can be created, saved and recalled from any of the client user interfaces in the system. Requires CRBM SCL or CRBM SR	\$ 1,932.00	\$ 1,932.00
				EVS			\$ -	\$ -
						System Tally	\$ -	\$ -
460			1	EVS	CRBM-TALLY-GO	The TALLY option adds the ability to configure tally and UMD devices to a Cerebrum system. This option may require a number of Generic Device protocol points to interface to the required infrastructure, such as Production switchers, UMD's or multiviewers. The license applies to a standalone Cerebrum Client software (CRBM SCL) or to a Cerebrum Server software (CRBM SR) in which case it applies to all connected clients. Requires CRBM SCL or CRBM SR	\$ 2,239.00	\$ 2,239.00
470			2	EVS	CGP-4848-A	Cerebrum General Purpose Interface	\$ 2,082.00	\$ 4,164.00
480			2	EVS	CCS-2650-8-2AC	CRBM Serial Device Server (Included)	\$ -	\$ -
490			10	EVS	CRBM-GD-10-POINTS	Cerebrum 10 Generic Device points pack	\$ 811.00	\$ 8,110.00
							\$ -	\$ -
Routing Control Sub-Total:								\$ 83,514.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
IPG-Shuffle-UDX								
						Neuron Bridge 448 IPG Channels - Any Combo EndCap or DeCap Meets requirements for 320x128 IPG	\$ -	\$ -
500			7	EVS	NEU-1U-FR2000-B	1RU Neuron Frame with redundant 90-265VAC power supply. Broadcast Version - Can accept up to 2 x NBASE-BOARD	\$ 2,911.00	\$ 20,377.00
510			14	EVS	NEU-BASE-BOARD	Neuron base processing board. Customer to supply QSFP/SFP. Requires at least one of the base licenses listed below (no mix per board)	\$ 11,956.00	\$ 167,384.00
520			14	EVS	NEU-SDI40-BOARD	Neuron SDI I/O board, with 8 x 12G inputs, 8 x 12G outputs and 24 x FHD bidirectional I/O on HD BNC	\$ 5,762.00	\$ 80,668.00
530			56	EVS	BRIDGE-8-GO	Base License for Bridge for 8x FHD or 2x UHD. Includes embedding, de-embedding, Proc amp, Audio Gain/Phase/Delay/Shuffle, Frame Sync, video delay and IP and SDI I/O. Requires NEU-SDI40-BOARD (SDI activation license is included). Max. 4 of the same base licenses per processing board (no mix of configurations or other base license on one processing board) Default configuration: BSG1616-2Q7 Other configurations possible	\$ 1,819.00	\$ 101,864.00
							\$ -	\$ -
						Neuron Audio Shuffle 2x 8192 mono channels	\$ -	\$ -
540			1	EVS	NEU-1U-FR2000-B	1RU Neuron Frame with redundant 90-265VAC power supply. Broadcast Version - Can accept up to 2 x NBASE-BOARD	\$ 2,911.00	\$ 2,911.00
550			2	EVS	NEU-BASE-BOARD	Neuron base processing board. Customer to supply QSFP/SFP. Requires at least one of the base licenses listed below (no mix per board)	\$ 11,956.00	\$ 23,912.00
560			2	EVS	SAR8192-G)	Base license for Shuffle for 8196 channels audio routing. Max. 1 of these base licenses per processing board Default configuration: SAR8192-2Q7	\$ 7,370.00	\$ 14,740.00
570			2	EVS	SHU-A-PROC-GO	Audio Processing license for Gain/delay. Max. 1 per processing board	\$ 4,130.00	\$ 8,260.00
580			8	EVS	SHU-MADI-GO	Convert MADI I/O license. 64 bi-directional channels. Requires MSA SFP (not included). Max. 4 per processing board	\$ 4,130.00	\$ 33,040.00
							\$ -	\$ -
590			8	Riedel	1990049	MN-Z-SFP-MADI-BNC-125Mbps	\$ 416.00	\$ 3,328.00
600			4	Arista	SFP-25G-SR-P	Promo: 25GBASE-SR SFP25 transceiver up to 70m over OM3 or 100m over OM4 multi-mode fiber	\$ 225.00	\$ 900.00
610			4	FS.COM	QSFP28-SFP28-CVR	Arista Networks Compatible QSFP28 100G to SFP28 25G Adapter Converter Module with DDMI	\$ 93.00	\$ 372.00
							\$ -	\$ -



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
						Neuron Convert UDX / Proc - 2110 Domain 32 channels	\$ -	\$ -
620			1	EVS	NEU-1U-FR2000-B	1RU Neuron Frame with redundant 90-265VAC power supply. Broadcast Version - Can accept up to 2 x NBASE-BOARD	\$ 2,911.00	\$ 2,911.00
630			2	EVS	NEU-BASE-BOARD	Neuron base processing board. Customer to supply QSFP/SFP. Requires at least one of the base licenses listed below (no mix per board)	\$ 11,956.00	\$ 23,912.00
640			6	EVS	CPI2424-8-GO	Convert IP only 8 channel (2x UHD or 8x FHD) - Base license for Convert IP Processing/gateway for 8x FHD or 2x UHD. Includes embedding, de-embedding, Frame Sync and IP I/O. Max. 3 of these base licenses per processing board (no mix with other base licenses on one processing board) Default configuration: CPI2424-2Q7-L Other configurations possible	\$ 2,546.00	\$ 15,276.00
650			6	EVS	CON-V-UDC-GO	Up/down/cross conversion license for 8x FHD or 2x UHD including 8x low latency deinterlacers, Max. 1 per base license (but choose either CON-V-DOWN or CON-V-UDC per base license)	\$ 3,896.00	\$ 23,376.00
660			6	EVS	CON-LUTHDR8-GO	LUT based HDR↔SDR and HDR↔HDR conversion license for 8x FHD or 2x UHD. Max. 1 per base license (but choose either 2x Adaptive or 2x LUT-based HDR per processing board)	\$ 1,962.00	\$ 11,772.00
670			6	EVS	CON-PROC8-GO	Proc-amp and RGB color correction license for 8x FHD or 2x UHD. Max. 1 per base license.	\$ 830.00	\$ 4,980.00
							\$ -	\$ -
IPG-Shuffle-UDX Sub-Total:								\$ 539,983.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
Multiviewers								
				EVS		Multiviewer - 2110 Domain	\$ -	\$ -
						(Exceeds 322 PiPs on 41 MV Mosaics requirement)	\$ -	\$ -
680			6	EVS	NEU-1U-FR2000-B	1RU Neuron Frame with redundant 90-265VAC power supply, Broadcast version (rear side I/O). Can hold up to 2x NEU-BASE-BOARD	\$ 2,911.00	\$ 17,466.00
690			12	EVS	NEU-BASE-BOARD	Neuron base processing board. Customer to supply QSFP/SFP. Requires at least one of the base licenses listed below (no mix per board)	\$ 11,956.00	\$ 143,472.00
700			12	EVS	VMI3208-GO	Base License for View. ST2110 multiviewer with 32 HD or 8 UHD (or a mix) inputs, up to 64 pips, 256 audio bars, 2x UHD or 8x FHD Heads an IP I/O.	\$ 11,809.00	\$ 141,708.00
							\$ -	\$ -
				EVS		Deliver MV Mosaics on SDI	\$ -	\$ -
710			1	EVS	NEU-1U-FR2000-B	1RU Neuron Frame with redundant 90-265VAC power supply, Broadcast version (rear side I/O). Can hold up to 2x NEU-BASE-BOARD	\$ 2,911.00	\$ 2,911.00
720			2	EVS	NEU-BASE-BOARD	Neuron base processing board. Customer to supply QSFP/SFP. Requires at least one of the base licenses listed below (no mix per board)	\$ 11,956.00	\$ 23,912.00
730			8	EVS	BRIDGE-8-GO	Base License for Bridge for 8x FHD or 2x UHD. Includes embedding, de-embedding, Proc amp, Audio Gain/Phase/Delay/Shuffle, Frame Sync, video delay and IP and SDI I/O. Requires NEU-SDI40-BOARD (SDI activation license is included). Max. 4 of the same base licenses per processing board (no mix of configurations or other base license on one processing board) Default configuration: BSG1616-2Q7 Other configurations possible	\$ 1,819.00	\$ 14,552.00
740			2	EVS	NEU-SDI40-BOARD	Neuron SDI I/O board, with 8 x 12G inputs, 8 x 12G outputs and 24 x FHD bidirectional I/O on HD BNC	\$ 5,762.00	\$ 11,524.00
Multiviewers Sub-Total:								\$ 355,545.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
2110 Router Core								
						Red / Blue Core / 72 x 100G	\$ -	\$ -
750			2	Arista	DCS-7280CR3A-72-F	Arista 7280R3A, 72x100GbE QSFP switch router, front to rear air, 2 x AC	\$ 62,553.00	\$ 125,106.00
760			2	Arista	LIC-FIX-4-E	Enhanced L3 License for Arista Group 4 Fixed switches, (BGP, OSPF, ISIS, PIM, NAT)	\$ 7,817.00	\$ 15,634.00
770			2	Arista	LIC-FIX-4-Z	Monitoring & Automation license for Arista Group 4 Fixed switches (ZTP, LANZ, TapAgg, OpenFlow)	\$ 4,168.00	\$ 8,336.00
780			2	Arista	DCS-7010TX-48C-F	Arista 7010TX, 48x 10/100/1000 RJ45 & 4 x 25G SFP (1/10/25GbE) switch, front to rear air, 2xAC	\$ 3,647.00	\$ 7,294.00
790			2	Arista	LIC-FIX-G2-E	Enhanced License for Arista Fixed 1G/mG Group 2 Ethernet Switches (OSPF, ISIS, BGP, PIM)	\$ 591.00	\$ 1,182.00
800			4	Arista	QSFP-100G-SR4-P	Promo: 100GBASE-SR4 QSFP100 transceiver, up to 70m over parallel OM3 or 100m over OM4 multi-mode fiber	\$ 390.00	\$ 1,560.00
810			68	Arista	CAB-Q-Q-100G-5M-P	Promo: 100GbE QSFP to QSFP twinax copper cable, 5M	\$ 225.00	\$ 15,300.00
820			4	Arista	CAB-Q-S-5M	4 x 10GbE QSFP+ to 4 x SFP+ twinax copper cable, 5M	\$ 270.00	\$ 1,080.00
830			4	Arista	SFP-10G-SR-P	Promo: 10GBASE-SR SFP+ (Short Reach)	\$ 81.00	\$ 324.00
840			2	Arista	SFP-25G-SR-P	Promo: 25GBASE-SR SFP25 transceiver up to 70m over OM3 or 100m over OM4 multi-mode fiber	\$ 225.00	\$ 450.00
850			6	Arista	QSFP-100G-SWDM4-P	Promo: 100GBASE-SWDM4 QSFP transceiver, up to 70m over Duplex OM3 or 100m over OM4 multi-mode fiber	\$ 1,151.00	\$ 6,906.00
860			2	Arista	QSFP-40G-SR4-P	Promo: 40GBASE-SR4 QSFP+ transceiver, up to 100m over parallel OM3 or 150m over OM4 multi-mode fiber	\$ 245.00	\$ 490.00
							\$ -	\$ -
2110 Router Core Sub-Total:								\$ 183,662.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
Video Patching & Fiber Infrastructure								
870			20	CANARE	32MCK-ST	Coax Patching 1RU, 12G-SDI, 2x32 normalled, terminated patches (Estimated qty)	\$ - \$ 2,631.00	\$ - \$ 52,620.00
						Coax Patch Cords & Adapters	\$ -	\$ -
	1					Re-use existing midsize patch cords, adapters and wall hanger	\$ -	\$ -
						Fiber Distribution	\$ -	\$ -
880			2	Commscope	760209957 HD-2U	High Density 2U modular cassette sliding Panel, accepts (8) G2 modules or MPO panels, providing up to 96 duplex LC ports or up to 64 MPO ports	\$ 526.00	\$ 1,052.00
890			8	Commscope	760236108 DM08-24LC-LS-ULL	G2 ULL Multimode OM4 MPO-8 Distribution Module, 24LC to 3x8f MPOs unpinned, internal shutters	\$ 852.00	\$ 6,816.00
							\$ -	\$ -
Video Patching & Fiber Infrastructure Sub-Total:								\$ 60,488.00
Production Switcher								
900	1			Grass Valley	Karrera	Karrera Production Switcher Karrera K-Frame S Series Production Switcher (64 x 16 3G SDI)	\$ - \$ -	\$ - \$ -
							\$ -	\$ -
Production Switcher Sub-Total:								\$ -
Graphics								
910	1			Chyron	HyperX3	Character Generator Dual Channel Generator (Existing)	\$ - \$ -	\$ - \$ -
							\$ -	\$ -
920	1			VizRT	OneBox	Vizrt OneBox (2 channel)	\$ - \$ -	\$ - \$ -
							\$ -	\$ -
930	1			VizRT	Graphic Engine	Fox Box FoxBox Device (BUG) (Existing) (1 channel)	\$ - \$ -	\$ - \$ -
							\$ -	\$ -
940	1			TBD	TBD	Scorbox Scorebox device (1 channel)	\$ - \$ -	\$ - \$ -
							\$ -	\$ -
950	1			For A	Telestrator	Telestrator Telestrator (1 channel)	\$ - \$ -	\$ - \$ -
							\$ -	\$ -
Graphics Sub-Total:								\$ -



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
Clocks & Timers								
						Clock TCR	\$ -	\$ -
960			1	Masterclock	LUX26	6 digit time code reader/clock 2 ru	\$ 758.00	\$ 758.00
970			1	Masterclock	LUX-TC	Adds Time Code Input to LUX26 - supports IRIG B, SMPTE 12M, 309M, 24/25/30 ND fps - 29.97 Drop Frame	\$ 134.00	\$ 134.00
							\$ -	\$ -
Clocks & Timers Sub-Total:								\$ 892.00
Transmission Gear								
						Encoders	\$ -	\$ -
980	2			Adtec	EN-210	Encoders (Existing)	\$ -	\$ -
990	1			Tandberg	TBD	Encoder (Existing)	\$ -	\$ -
							\$ -	\$ -
						DTTH Sat Receiver	\$ -	\$ -
1000	1			Dish	TBD	Dish Network satellite receiver	\$ -	\$ -
							\$ -	\$ -
Transmission Gear Sub-Total:								\$ -
Utility PCs								
						ENG PCs	\$ -	\$ -
1010			2	OnLogic	MK150B-53	1RU PC - Corei5-9500TE, 16GB DDR4, 2x256GB SSD, 1TB SSD M.2, 16x PCIe Slot	\$ 2,004.00	\$ 4,008.00
							\$ -	\$ -
						Local Computer Display, KB, KVM	\$ -	\$ -
1020			1	Middle Atlantic	RM-KB-LCD17KVMHD	Rack Mounted, foldup 17" LCD monitor with integrated keyboard, trackpad and 8 port KVM switch.	\$ 2,810.00	\$ 2,810.00
							\$ -	\$ -
Utility PCs Sub-Total:								\$ 6,818.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
EIC QC								
						Routing Control Panels	\$ -	\$ -
1030			2	EVS	CCP-4200-C	Routing control panel (in rack) 42 button	\$ 4,704.00	\$ 9,408.00
1040			1	EVS	CTP-2003-WEB	Cerebrum Control 2U Touchscreen with rich Web user interfaces including a Web License (Color Corrector Control)	\$ 2,960.00	\$ 2,960.00
						Intercom Panel	\$ -	\$ -
1050	1			RTS	KP5032	32 key LCD intercom panel w/gooseneck mic - EIC (1 of 3)	\$ -	\$ -
						QC Monitor	\$ -	\$ -
1060	1			Sony	TBD	Reuse existing Sony QC monitor	\$ -	\$ -
1070	1			Wohler	TBD	2ru Stereo audio monitor	\$ -	\$ -
1080	1			Wohler	TBD	1ru Stereo audio monitor (analog)	\$ -	\$ -
						Eng Scope	\$ -	\$ -
1090			1	Telestream	MPD-300	PRISM, MPD-300; 3RU full rack, short depth, SDI and IP Waveform Monitor with SDI EYE base unit with dual integrated touchscreens	\$ 19,631.00	\$ 19,631.00
1100			1	Telestream	MPSDP-AUD	License; PRISM, MPS and MPD Models, Add Software license for enhanced Audio feature sets: includes Phase, Session, Correlation, Loudness, Dolby E and D Meta data display.	\$ 1,019.00	\$ 1,019.00
1110			1	Telestream	MPSDP-SRND	License; PRISM, MPS, MPD and MPP Models, Add software license for Audio Surround Sound Displays (Requires Option MPDSP-AUD)	\$ 1,019.00	\$ 1,019.00
1120			1	Telestream	MPSDP-25GE	License; PRISM, MPS and MPD Models, Add Software license for 25GE support	\$ 5,063.00	\$ 5,063.00
1130			1	Telestream	MPSDP-FMT-4K	License; PRISM, MPS and MPD Models, Add Software license for 4K formats and enable 6G/12G-SDI.	\$ 3,037.00	\$ 3,037.00
1140			1	Telestream	MPSDP-ENG-QC	License; PRISM, MPS and MPD Models, Add Software license for Engineering and QC feature sets : includes Datalist, CC / Tele Text decode, ANC Session.	\$ 2,536.00	\$ 2,536.00
1150			1	Telestream	MPSDP-IP-MEAS	License; PRISM, MPS and MPD Models, Add Software license for IP Measurement feature sets: includes IP/PTP Graph, IP/PTP Session, PIT Histogram, Timing, Stream Timing and Stream capture applications.	\$ 7,590.00	\$ 7,590.00
1160			1	Telestream	MPSDP-GEN	License; PRISM, MPS and MPD Models, Add Software license for SDI/IP signal generator; includes IP/SDI Generator application.	\$ 2,027.00	\$ 2,027.00
1170			1	Telestream	PWR-CORD-NA S15	North America Power Cord, Straight 15A	\$ -	\$ -
1180			2	Arista	SFP-25G-MR-SR	10/25GBASE-SR SFP transceiver, up to 70/100m at 25G, and 300/400m at 10G over duplex OM3/OM4 MMF	\$ 320.00	\$ 640.00
						Multiviewer Displays	\$ -	\$ -
1190			2	WOHLER	RMTF-170-3G	17" LCD video monitor, 3G/HD/HDMI 6ru	\$ 1,314.00	\$ 2,628.00
						Clock TCR	\$ -	\$ -
1200			1	Masterclock	LUX26	6 digit time code reader/clock 2 ru	\$ 803.00	\$ 803.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
1210			1	Masterclock	LUX-TC	Adds Time Code Input to LUX26 - supports IRIG B, SMPTE 12M, 309M, 24/25/30 ND fps - 29.97 Drop Frame	\$ 134.00	\$ 134.00
						Environmental Monitoring	\$ -	\$ -
1220	1			Davicom	360 Cortex	System monitoring	\$ -	\$ -
							\$ -	\$ -
EIC QC Sub-Total:								\$ 58,495.00

CORE SYSTEMS (ENG RKs) SUB-TOTAL: \$ 1,312,781.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
VIDEO CONTROL								
Cameras & Shading								
						Legacy Cameras	\$ -	\$ -
1230				NPM	Field Cameras	(Re-use Existing Cameras)	\$ -	\$ -
1240				NPM	Field Lenses	(Re-use Existing Lenses)	\$ -	\$ -
1250				NPM	Field Panheads	(Re-use Existing Panheads)	\$ -	\$ -
1260				NPM	Field Tripods	(Re-use Existing Tripods)	\$ -	\$ -
1270				NPM	Field Wheels	(Re-use Existing Wheelsets)	\$ -	\$ -
							\$ -	\$ -
						Legacy Base Stations (CCUs)	\$ -	\$ -
1280	2			GV	LDK 3000	BASE STATIONS (LDK 3000 CAM)	\$ -	\$ -
1290	4			GV	XCU ELITE TWIN	BASE STATIONS (LDX 80'S ?)	\$ -	\$ -
1300	2			GV	XCU UNIVERSE XF	BASE STATION (LDX 86N)	\$ -	\$ -
							\$ -	\$ -
						Baseband DAs for Legacy CCUs	\$ -	\$ -
1310			1	Ross	OGX-FR-CN	OpenGear OGX Frame with Cooling and Advanced Networking	\$ 1,786.00	\$ 1,786.00
1320			1	Ross	PS-OGX	600 Watt Universal Power Supply for OGX Frame	\$ 788.00	\$ 788.00
1330			1	Ross	FSB-OGX	OGX Frame Rear Support Brackets	\$ 90.00	\$ 90.00
1340			2	Ross	VEA-8707A-R2L	Ref - 1x8 Analog Video Equalizing Amplifier,Clamping and Differential Input with Looping Rear Module, R2L-8707	\$ 528.00	\$ 1,056.00
1350			2	Ross	SRA-8901-10-R3	Return-1 - 1x10 12G/6G3G/HD/SD SDI, MADl and ASI distribution with Automatic Reclocking and Equalization. Includes R3-8901-10 rear module	\$ 723.00	\$ 1,446.00
1360			2	Ross	SRA-8901-10-R3	Return-2 - 1x10 12G/6G3G/HD/SD SDI, MADl and ASI distribution with Automatic Reclocking and Equalization. Includes R3-8901-10 rear module	\$ 723.00	\$ 1,446.00
1370			2	Ross	VEA-8707A-R2L	Prompter - 1x8 Analog Video Equalizing Amplifier,Clamping and Differential Input with Looping Rear Module, R2L-8707	\$ 528.00	\$ 1,056.00
							\$ -	\$ -
						Shading Room	\$ -	\$ -
1380	1			TV Logic	TBD	Rack mounted monitor (Pgm) (re-use existing)	\$ -	\$ -
1390	2			Marshall	TBD	Rack mounted triple monitors	\$ -	\$ -
1400			1	EVS	CCP-4200-C	Routing control panel (in rack) 42 button	\$ 4,704.00	\$ 4,704.00
1410			1	Marshall Electronics	AR-DM51-B	Digital Audio Monitor with LCD	\$ 839.00	\$ 839.00
							\$ -	\$ -
						Clock TCR	\$ -	\$ -
1420			1	Masterclock	LUX26	6 digit time code reader/clock 2 ru	\$ 803.00	\$ 803.00
1430			1	Masterclock	LUX-TC	Adds Time Code Input to LUX26 - supports IRIG B, SMPTE 12M, 309M, 24/25/30 ND fps - 29.97 Drop Frame	\$ 134.00	\$ 134.00
							\$ -	\$ -
						PTZ Camera Controller	\$ -	\$ -
1440	1			Marshall	CV-RCP	For Marshall POV cam controller (Client Pix)	\$ -	\$ -
1450	3			Thor	TBD	Receivers (Rx1, Rx2, Rx3) for POV PTZ TX's	\$ -	\$ -
							\$ -	\$ -



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BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
						V1		
1460			1	Sony	PVM-X1800	Professional Picture Monitor - VC match mon	\$ 8,995.00	\$ 8,995.00
1470			1	Telestream	MPD-200	PRISM, MPD-200; 3RU full rack, short depth, SDI and IP Waveform Monitor base unit with dual integrated touchscreens	\$ 16,065.00	\$ 16,065.00
1480			1	Telestream	MPSDP-PROD	License; PRISM, MPS, MPD and MPP Models, Add Software license for Production feature sets: includes Stop display, Light meter, HDR/WCG Conversion, CIE chart, False color and HDR measurement	\$ 4,054.00	\$ 4,054.00
1490			1	Telestream	MPSDP-MULTI	License; PRISM, MPS, MPD and MPP Models, Add software license for multi-channel input and Camera Alignment Monitoring.	\$ 909.00	\$ 909.00
1500			1	Telestream	MPD-200 Rack Standard	PRISM MPD model, Rack Mounting ears provided as standard with the instrument.	\$ -	\$ -
1510			2	Arista	SFP-25G-MR-SR	10/25GBASE-SR SFP transceiver, up to 70/100m at 25G, and 300/400m at 10G over duplex OM3/OM4 MMF	\$ 320.00	\$ 640.00
1520			1	EVS	CCP-1601-D	Routing control panel (in console pww) 16 button - V1	\$ 2,039.00	\$ 2,039.00
1530			1	EVS	CTP-2003-WEB	Cerebrum Control 2U Touchscreen with rich Web user interfaces including a Web License (Color Corrector Control)	\$ 2,960.00	\$ 2,960.00
1540	1			RTS	KP5032	32 key LCD intercom panel w/gooseneck mic - V1 (2 of 3)	\$ -	\$ -
							\$ -	\$ -
						V2		
1550	1			Sony	TBD	Match monitor - Rack mounted, SDI (Re-use existing)	\$ -	\$ -
1560			1	Telestream	MPD-200	PRISM, MPD-200; 3RU full rack, short depth, SDI and IP Waveform Monitor base unit with dual integrated touchscreens	\$ 16,065.00	\$ 16,065.00
1570			1	Telestream	MPSDP-PROD	License; PRISM, MPS, MPD and MPP Models, Add Software license for Production feature sets: includes Stop display, Light meter, HDR/WCG Conversion, CIE chart, False color and HDR measurement	\$ 4,054.00	\$ 4,054.00
1580			1	Telestream	MPSDP-MULTI	License; PRISM, MPS, MPD and MPP Models, Add software license for multi-channel input and Camera Alignment Monitoring.	\$ 909.00	\$ 909.00
1590			1	Telestream	MPD-200 Rack Standard	PRISM MPD model, Rack Mounting ears provided as standard with the instrument.	\$ -	\$ -
1600			2	Arista	SFP-25G-MR-SR	10/25GBASE-SR SFP transceiver, up to 70/100m at 25G, and 300/400m at 10G over duplex OM3/OM4 MMF	\$ 320.00	\$ 640.00
1610			1	EVS	CCP-1601-D	Routing control panel (in console pww) 16 button - V2	\$ 2,039.00	\$ 2,039.00
1620			1	EVS	CTP-2003-WEB	Cerebrum Control 2U Touchscreen with rich Web user interfaces including a Web License (Color Corrector Control)	\$ 2,960.00	\$ 2,960.00
1630	1			RTS	KP4016	16 key intercom control panels w/gooseneck mic (1 of 3)	\$ -	\$ -
							\$ -	\$ -



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
						V3		
1640	1			Sony	TBD	Match monitor - Rack mounted, SDI (Re-use existing)	\$ -	\$ -
1650			1	Telestream	MPD-200	PRISM, MPD-200; 3RU full rack, short depth, SDI and IP Waveform Monitor base unit with dual integrated touchscreens	\$ 16,065.00	\$ 16,065.00
1660			1	Telestream	MPSDP-PROD	License; PRISM, MPS, MPD and MPP Models, Add Software license for Production feature sets: includes Stop display, Light meter, HDR/WCG Conversion, CIE chart, False color and HDR measurement	\$ 4,054.00	\$ 4,054.00
1670			1	Telestream	MPSDP-MULTI	License; PRISM, MPS, MPD and MPP Models, Add software license for multi-channel input and Camera Alignment Monitoring.	\$ 909.00	\$ 909.00
1680			1	Telestream	MPD-200 Rack Standard	PRISM MPD model, Rack Mounting ears provided as standard with the instrument.	\$ -	\$ -
1690			2	Arista	SFP-25G-MR-SR	10/25GBASE-SR SFP transceiver, up to 70/100m at 25G, and 300/400m at 10G over duplex OM3/OM4 MMF	\$ 320.00	\$ 640.00
1700			1	EVS	CCP-1601-D	Routing control panel (in console pvw) 16 button - V3	\$ 2,039.00	\$ 2,039.00
1710			1	EVS	CTP-2003-WEB	Cerebrum Control 2U Touchscreen with rich Web user interfaces including a Web License (Color Corrector Control)	\$ 2,960.00	\$ 2,960.00
1720			1	RTS	KP4016	16 key intercom control panels w/gooseneck mic (2 of 3)	\$ 3,583.00	\$ 3,583.00
							\$ -	\$ -
VIDEO CONTROL SUB-TOTAL:								\$ 106,727.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
						Rear bench	\$ -	\$ -
						EVS 4 Op	\$ -	\$ -
			2	WOHLER	RM-4210WS-3G2	Dual 10" rack mount LCD monitors	\$ 3,290.00	\$ 6,580.00
			2	WOHLER	RMTF-170-3G	17" LCD video monitor, 3G/HD/HDMI 6ru	\$ 1,314.00	\$ 2,628.00
			2	TBD	TBD	Monitor Arms for 17" displays	\$ -	\$ -
			1	RTS	KP-4016	Intercom control panels - EVS	\$ 3,583.00	\$ 3,583.00
			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
			2	EVS	CCP-4200-C	Routing control panels - EVS	\$ 4,704.00	\$ 9,408.00
	1		1	WOHLER	TBD	Stereo audio monitor, Rk Mtd (Existing)	\$ -	\$ -
	1		1	EVS	TBD	Replay Controller (rental)	\$ -	\$ -
							\$ -	\$ -
						Replay Producer	\$ -	\$ -
			2	WOHLER	RM-4210WS-3G2	Dual 10" rack mount LCD monitors	\$ 3,290.00	\$ 6,580.00
			2	WOHLER	RMTF-170-3G	17" LCD video monitor, 3G/HD/HDMI 6ru	\$ 1,314.00	\$ 2,628.00
			2	TBD	TBD	Monitor Arms for 17" displays	\$ -	\$ -
			1	RTS	KP-4016	Intercom control panels - EVS	\$ 3,583.00	\$ 3,583.00
			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
			2	EVS	CCP-4200-C	Routing control panels - EVS	\$ 4,704.00	\$ 9,408.00
	1		1	WOHLER	TBD	Stereo audio monitor, Rk Mtd (Existing)	\$ -	\$ -
	1		1	EVS	TBD	Replay Controller (rental)	\$ -	\$ -
							\$ -	\$ -
						EVS 5 Op	\$ -	\$ -
			2	WOHLER	RM-4210WS-3G2	Dual 10" rack mount LCD monitors	\$ 3,290.00	\$ 6,580.00
			2	WOHLER	RMTF-170-3G	17" LCD video monitor, 3G/HD/HDMI 6ru	\$ 1,314.00	\$ 2,628.00
			2	TBD	TBD	Monitor Arms for 17" displays	\$ -	\$ -
			1	RTS	KP-4016	Intercom control panels - EVS	\$ 3,583.00	\$ 3,583.00
			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
			2	EVS	CCP-4200-C	Routing control panels - EVS	\$ 4,704.00	\$ 9,408.00
	1		1	WOHLER	TBD	Stereo audio monitor, Rk Mtd (Existing)	\$ -	\$ -
	1		1	EVS	TBD	Replay Controller (Rental)	\$ -	\$ -
							\$ -	\$ -
Replay Operations Sub-Total:								\$ 143,349.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
Replay Servers & Recorders								
				EVS		EVS XT-VIAs	\$ -	\$ -
	3			EVS	XTVIA-FHD12	12ch video servers (SDI) w/Controllers	\$ -	\$ -
	1			EVS	XTVIA-XIP	Network Hub for EVS Servers	\$ -	\$ -
	1			EVS	XHUB-VIA	Connected archive and transcoding with removal drives	\$ -	\$ -
	1			EVS	X-File	Connected archive and transcoding with removal drives	\$ -	\$ -
	1			EVS	LOT	All EVS Controllers and accessories (LOT)	\$ -	\$ -
						Rental EVS XT-VIAs	\$ -	\$ -
		2		EVS	Rentals	2 rental EVS XT-VIAs (4in / 4 out) Typically SDI with Controllers	\$ -	\$ -
				EVS		XT-VIA 2110 Upgrades	\$ -	\$ -
			2	EVS	XT-VIA	Upgrade SDI to 2110 IP I/O (EVS 2-6X SSMO) <i>XT-VIAs must go back to EVS for retrofit and upgrade (2 weeks onsite)</i>	\$ 12,534.00	\$ 25,068.00
			1	EVS	XS-VIA	Upgrade SDI to 2110 IP I/O (TD SpotBox) <i>XT-VIAs must go back to EVS for retrofit and upgrade (2 weeks onsite)</i>	\$ 12,534.00	\$ 12,534.00
			15	EVS	RSRV	Repair & Support Service (1 man-hour)	\$ 111.00	\$ 1,665.00
				EVS		XHUB-VIA	\$ -	\$ -
			3	EVS	XHUB-VIA-IP-MODE	The Initial configuration of the Xhub-VIA at production is the 100G IP mode. This does not prevent to change the XHUB-VIA mode later. <i>XHUB must go back to EVS for restrofit and upgrade (2 weeks onsite)</i>	\$ 13,490.00	\$ 40,470.00
			42	EVS	CAB-10GESS-1M	10Gb Ethernet SFP+ twinax copper cables (10GBASE-CR) cable, 1m	\$ 180.00	\$ 7,560.00
			6	Arista	QSFP-100G-SWDM4-P	Promo: 100GBASE-SWDM4 QSFP transceiver, up to 70m over Duplex OM3 or 100m over OM4 multi-mode fiber	\$ 1,151.00	\$ 6,906.00
						Recorders	\$ -	\$ -
	1			Sony	XDCAM EX	"VCR 11" (reuse existing)	\$ -	\$ -
	1			Sony	XDCAM HD	"VCR 7" (ruse existing)	\$ -	\$ -
							\$ -	\$ -
Replay Servers & Recorders Sub-Total:							\$	94,203.00
RECORDING & REPLAY SUB-TOTAL:							\$	237,552.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
PCR								
Monitor Wall & Speakers								
						Monitor Wall	\$ -	\$ -
1730			10	NEC	M431-2	43" LCD displays	\$ 1,052.00	\$ 10,520.00
1740			10	NEC	SDM-12GSDI	Intel® Smart Display Module (SDM). 12G SDI SDM interface card with full 4K/60Hz support. Compatible with ME, M, MA and Pxx5 Series.	\$ 1,379.00	\$ 13,790.00
1750			10	Legrand/Chief	MTM1U	Medium Fusion® Micro-Adjustable Tilt Wall Mount	\$ 125.00	\$ 1,250.00
							\$ -	\$ -
						Audio Monitoring	\$ -	\$ -
1760			1	Genelec	8330.LSE Triple SAM	Front - 2x 8330APM + 1x 7350A Subwoofer (Placeholder)	\$ 3,132.00	\$ 3,132.00
1770			2	Genelec	8320APM	Rear - 2x 8320APM (Placeholder)	\$ 608.00	\$ 1,216.00
1780			6	Genelec	8000-402B	Speaker mounts	\$ 97.00	\$ 582.00
1790			2	Genelec	9310BM	Volume Control(s)	\$ 97.00	\$ 194.00
							\$ -	\$ -
						Clock TCR	\$ -	\$ -
1800			1	Masterclock	LUX26	6 digit time code reader/clock 2 ru	\$ 803.00	\$ 803.00
1810			1	Masterclock	LUX-TC	Adds Time Code Input to LUX26 - supports IRIG B, SMPTE 12M, 309M, 24/25/30 ND fps - 29.97 Drop Frame	\$ 134.00	\$ 134.00
							\$ -	\$ -
Monitor Wall & Speakers Sub-Total:								\$ 31,621.00
Front Console								
						Seat 1 - TD	\$ -	\$ -
1820	1			Grass Valley	Karrera Swr Ctl Panel	Legacy production switcher control panel	\$ -	\$ -
1830	1			Grass Valley	Karrera Aux Ctl Panel	Legacy production switcher Aux panel	\$ -	\$ -
1840	1			Lance Design	TDC-100	Video server controller, interfaces via Pbus	\$ -	\$ -
1850			1	RTS	KP-5032	Intercom panel -TD	\$ -	\$ -
1860			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
1870			4	EVS	CCP-4200-C	Cerebrum Control Panel 1U 42 LCD buttons - TD	\$ 4,704.00	\$ 18,816.00
							\$ -	\$ -
						Seat 2 - Director	\$ -	\$ -
1880			1	RTS	KP-5032	Intercom panel - Dir	\$ 4,895.00	\$ 4,895.00
1890			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
1900			1	EVS	CCP-1601-D	Routing control panel - Dir (Pgm PiP in MV & Ctl Rm Spkrs)	\$ 2,039.00	\$ 2,039.00
1910			1	Wohler	VMQ-4	4 channel, analog audio monitor, 1ru	\$ 1,067.00	\$ 1,067.00
1920			1	Behringer	Studio M	Behringer Studio M Passive Studio Controller	\$ 53.00	\$ 53.00
							\$ -	\$ -
						Seat 3 - Ass't Director	\$ -	\$ -
1930			1	RTS	KP-5032	Intercom panel - AD	\$ 4,895.00	\$ 4,895.00
1940			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
1950			2	Wohler	VMQ-4	4 channel, analog audio monitor, 1ru	\$ 1,067.00	\$ 2,134.00
1960			1	Masterclock	RC1000	Dual Production Timer	\$ 5,488.00	\$ 5,488.00
							\$ -	\$ -
Front Console Sub-Total:								\$ 39,954.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
P2 Console								
						Seat 4 - Gfx Op		
1970			1	RTS	KP-4016	Intercom panel - Gfx	\$ 3,583.00	\$ 3,583.00
1980			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
1990			1	EVS	CCP-4200-C	Cerebrum Control Panel 1U 42 LCD buttons - Gfx	\$ 4,704.00	\$ 4,704.00
2000			1	SONY	LMD-A220	22" computer monitor for VizRT Gfx device	\$ 3,177.00	\$ 3,177.00
2010			1	WOHLER	VMON-3280W-3G	Dual 7" rack mount LCD monitors	\$ 2,055.00	\$ 2,055.00
2020			1	AVP	TBD	Utility connector panel (2x XLR, 4xRJ45, 2xBNC (Est))	\$ 442.00	\$ 442.00
							\$ -	\$ -
						Seat 5 - FoxBox Op		
2030			1	RTS	KP-4016	Intercom panel - FoxBox / Scorebox Op	\$ 3,583.00	\$ 3,583.00
2040			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
2050			1	EVS	CCP-1601-D	Routing control panel - FoxBox	\$ 2,039.00	\$ 2,039.00
2060			1	SONY	LMD-A220	22" computer monitor for FoxBox ops ?	\$ 3,177.00	\$ 3,177.00
2070			1	SONY	MB-L22	Mounting bracket for LMD-A220	\$ 243.00	\$ 243.00
2080			1	WOHLER	VMON-3280W-3G	Dual 7" rack mount LCD monitors	\$ 2,055.00	\$ 2,055.00
2090			1	AVP	TBD	Utility connector panel (2x XLR, 4xRJ45, 2xBNC (Est))	\$ 442.00	\$ 442.00
							\$ -	\$ -
						Seat 6 - Prod 1		
2100			1	RTS	KP-4016	Intercom panel - Prod 1	\$ 3,583.00	\$ 3,583.00
2110			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
2120			1	EVS	CCP-1601-D	Routing control panel - Prod 1	\$ 2,039.00	\$ 2,039.00
2130			1	Wohler	VMQ-4	4 channel, analog audio monitor, 1ru	\$ 1,067.00	\$ 1,067.00
2140			1	WOHLER	VMON-3280W-3G	Dual 7" rack mount LCD monitors	\$ 2,055.00	\$ 2,055.00
2150			1	AVP	TBD	Utility connector panel (2x XLR, 4xRJ45, 2xBNC (Est))	\$ 442.00	\$ 442.00
							\$ -	\$ -
							\$ -	\$ -
P2 Console Sub-Total:								\$ 35,253.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
P2 Console								
						Seat 7 - Prod 2		
						Intercom panel - Prod 2	\$ -	\$ -
2160			1	RTS	KP-4016	Intercom panel - Prod 2	\$ 3,583.00	\$ 3,583.00
2170			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
2180			1	EVS	CCP-1601-D	Routing control panel - Prod 2	\$ 2,039.00	\$ 2,039.00
2190			1	WOHLER	VMON-3280W-3G	Dual 7" rack mount LCD monitors	\$ 2,055.00	\$ 2,055.00
2200			1	AVP	TBD	Utility connector panel (2x XLR, 4xRJ45, 2xBNC (Est))	\$ 442.00	\$ 442.00
							\$ -	\$ -
						Seat 8 - Prod 3	\$ -	\$ -
						Intercom panel - Prod 3	\$ 3,583.00	\$ 3,583.00
2210			1	RTS	KP-4016	Intercom panel - Prod 3	\$ 3,583.00	\$ 3,583.00
2220			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
2230			1	EVS	CCP-1601-D	Routing control panel - Prod 3	\$ 2,039.00	\$ 2,039.00
2240			1	WOHLER	VMON-3280W-3G	Dual 7" rack mount LCD monitors	\$ 2,055.00	\$ 2,055.00
2250			1	AVP	TBD	Utility connector panel (2x XLR, 4xRJ45, 2xBNC (Est))	\$ 442.00	\$ 442.00
							\$ -	\$ -
						Seat 9 - Prod 4	\$ -	\$ -
						Intercom panel - Prod 4	\$ 3,583.00	\$ 3,583.00
2260			1	RTS	KP-4016	Intercom panel - Prod 4	\$ 3,583.00	\$ 3,583.00
2270			1	RTS	PH-88-A5M	Single side headset 5 pin Male	\$ 189.00	\$ 189.00
2280			1	EVS	CCP-1601-D	Routing control panel - Prod 4	\$ 2,039.00	\$ 2,039.00
2290			1	WOHLER	VMON-3280W-3G	Dual 7" rack mount LCD monitors	\$ 2,055.00	\$ 2,055.00
2300			1	AVP	TBD	Utility connector panel (2x XLR, 4xRJ45, 2xBNC (Est))	\$ 442.00	\$ 442.00
							\$ -	\$ -
							\$ -	\$ -
P2 Console Sub-Total:								\$ 24,924.00
PCR SUB-TOTAL:								\$ 131,752.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
AUDIO CONTROL								
Mixing Position								
						Mixing Console	\$ -	\$ -
2310	1			Studer	Vista X-52	Digital audio mixing console, 52 fader with meter bridge	\$ -	\$ -
							\$ -	\$ -
Mixing Position Sub-Total:								\$ -
ACR Overhead Bridge								
						Audio Peripherals	\$ -	\$ -
2320	1			360 Systems	Digitcart E	Audio clip layer w/remote control panel and keyboard	\$ -	\$ -
2330	1			360 Systems	RC-320	Remote panel kybd	\$ -	\$ -
2340	1			Marantz	PMD 526C	Media Player	\$ -	\$ -
2350			1	RME	M-32 AD Pro	High-end 32-Channel 192 kHz A/D	\$ 4,503.00	\$ 4,503.00
2360			1	RME	M-32 DA Pro	High-end 32-Channel 192 kHz D/A	\$ 4,503.00	\$ 4,503.00
2370			1	RME	ADI 642	8-Channel MADI/AES Format Converter & Matrix Interface	\$ 2,764.00	\$ 2,764.00
							\$ -	\$ -
2380	1			Behringer	UltraLink MX882	Mixer splitter	\$ -	\$ -
2390	1			Telos	HX2	Digital hybrids	\$ -	\$ -
2400	1			Wohler	VM-2A	Audio rack mon (overhead)	\$ -	\$ -
2410	1			Wohler	VM-2A	Audio rack mon (in rack behind A1)	\$ -	\$ -
							\$ -	\$ -
						Processors	\$ -	\$ -
2420	1			Drawmer	6-Pack	Surround sound processor	\$ -	\$ -
2430			1	TC Electronics	DbMax	Replacement for TC Electroncis Db Max (Tx)	\$ 706.00	\$ 706.00
2440			1	TC Electronics	DbMax	Replacement for TC Electroncis Db Max (SFX)	\$ 706.00	\$ 706.00
2450			1	TC Electronics	Gold Channel	Replacement for TC Electroncis Gold Channel Preamps	\$ 942.00	\$ 942.00
							\$ -	\$ -
						Camera Pgm Mixer	\$ -	\$ -
2460	1			Behringer	Ultralink MX882	Camera PGM Mixer	\$ -	\$ -
							\$ -	\$ -
						Speakers	\$ -	\$ -
2470			1	Genelec	8330.LSE Triple SAM	Front - 2x 8330APM + 1x 7350A Subwoofer (Placeholder)	\$ 3,132.00	\$ 3,132.00
2480			2	Genelec	8320APM	Rear - 2x 8320APM (Placeholder)	\$ 608.00	\$ 1,216.00
2490		1		KRK	V4	Near Field monitors - Replacement for KRK v4 pair	\$ -	\$ -
2500		1		KRK	V6	PFL Speakers - Replacement for KRK v6 pair	\$ -	\$ -
2510	2			Wohler	VM-2A	2 channel audio rack speaker (TB / Dir Hot Mic)	\$ -	\$ -
							\$ -	\$ -
						Clock TCR	\$ -	\$ -
2520			1	Masterclock	LUX26	6 digit time code reader/clock 2 ru	\$ 803.00	\$ 803.00
2530			1	Masterclock	LUX-TC	Adds Time Code Input to LUX26 - supports IRIG B, SMPTE 12M, 309M, 24/25/30 ND fps - 29.97 Drop Frame	\$ 134.00	\$ 134.00
							\$ -	\$ -



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
						Routing Panels		
2540			1	EVS	CCP-8002-C	Routing control panel (xy) 80 button	\$ -	\$ -
2550			1	EVS	CCP-4200-C	Routing control panel (bps ISO Mon) 42 button	\$ 7,830.00	\$ 7,830.00
							\$ -	\$ -
						Intercom Panel	\$ -	\$ -
2560	1			RTS	KP5032	32 key LCD intercom panel w/gooseneck mic - Audio Op (3 of 3)	\$ -	\$ -
							\$ -	\$ -
						Video Monitors	\$ -	\$ -
2570	5			Feelworld	TBD	12" (ish) LCD monitors 1x MV-EVS, 1x MV-Cams, 1x Pgm, 1x Routable Monitor 40, 1xTBD	\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
						ACR Overhead Bridge Sub-Total:		\$ 31,943.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
ACR Rear Racks								
						Studer Console Cores & I/O	\$ -	\$ -
2580	2			Studer	Compact Core 600	Main and Redundant processing cores with 1 ru Cable Duct	\$ -	\$ -
2590	1			Studer	D23m	Modular I/O Frame-1 1x Alink card 4x AES I/O card 2x Dante card 1x GPIO card 1x ru deflector unit 1x 1ru fan unit	\$ -	\$ -
2600	1			Studer	D23m	Modular I/O Frame-2 1x Alink card 6x mic input card 2x AES I/O card 1x quad MADI card 1x ru deflector unit 1x 1ru fan unit 1x AES Breakout Panel	\$ -	\$ -
2610	1			Studer	D23m	Modular I/O Frame-3 1x Alink card 2x analog input card 2x analog output card 2x quad MADI card 1x ru deflector unit 1x 1ru fan unit	\$ -	\$ -
2620	1			Studer	D21m	Modular I/O Frame 6x mic input card 3x analog line input card 3x analog line output card 1x rur deflector unit 1x 1ru fan unit	\$ -	\$ -
2630	1			Studer	Compact Stagebox	32 Mic/Line input, 16 line out (May not be mounted in truck)	\$ -	\$ -
2640	1			NPM	Audio Storage Misc	Lot Rk mt drawers, storage bins, etc.	\$ -	\$ -
						Peripherals	\$ -	\$ -
2650	1			Enco	Hotshot 2	Digital Clip Player	\$ -	\$ -
2660	1			NPM	Audio Iso Xfrmrs	Panel with 10x audio isolation transformers	\$ -	\$ -
2670	2			Motu	112D	MADI and AES Boxes	\$ -	\$ -
							\$ -	\$ -



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
						Bantam Patching	\$ -	\$ -
2680			1	AVP	906773	#1-AM-B248E1-L-FNSG-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Full Normals Modules, Switching Ground Modules. Switching Grounds , Includes Mating Connector Kit	\$ 2,162.00	\$ 2,162.00
2690			1	AVP	903013	#2-AM-B248E1-L-NN-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 No Normal Modules. Isolated Grounds , Includes Mating Connector Kit	\$ 1,568.00	\$ 1,568.00
2700			1	AVP	904793	#3-AM-B248E1-L-HF-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Half Normal Modules, Isolated Grounds , Includes Mating Connector Kit	\$ 1,568.00	\$ 1,568.00
2710			1	AVP	904793	#4-AM-B248E1-L-HF-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Half Normal Modules, Isolated Grounds , Includes Mating Connector Kit	\$ 1,568.00	\$ 1,568.00
2720			1	AVP	903013	#5-AM-B248E1-L-NN-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 No Normal Modules. Isolated Grounds , Includes Mating Connector Kit	\$ 1,568.00	\$ 1,568.00
2730			1	AVP	904793	#6-AM-B248E1-L-HF-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Half Normal Modules, Isolated Grounds , Includes Mating Connector Kit	\$ 1,568.00	\$ 1,568.00
2740			1	AVP	904793	#7-AM-B248E1-L-HF-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Half Normal Modules, Isolated Grounds , Includes Mating Connector Kit	\$ 1,568.00	\$ 1,568.00
2750			1	AVP	906773	#8-Intercom & Tielines -AM-B248E1-L-FNSG-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Full Normals Modules, Switching Ground Modules. Switching Grounds , Includes Mating Connector Kit	\$ 2,162.00	\$ 2,162.00
2760			1	AVP	900617	#9A Custom-Intercom & Tielines-AM-B248E1-Z1RU, 2x48 Bantam Audio Jackfield, Frame (only)/ Empty, Even (mono). Customer to include layout instructions at time of PO.	\$ 336.00	\$ 336.00
2770			1	AVP	TBD	#9B AM-Build - Bantam Build, Install 1 to 48 modules in a frame.	\$ 39.00	\$ 39.00
2780			16	AVP	903149	#9C AM-B-FNSG-E03 Dual Bantam, 3 Pin EDAC, Full Normal(Red), Switching Grounds	\$ 40.00	\$ 640.00
2790			32	AVP	911207	#9D AM-B-NN-E03 Dual Bantam, 3 Pin EDAC, No Normal (Green) Isolated Grounds	\$ 29.00	\$ 928.00
2800			1	AVP	903209	#9E MK248P-E03CEDAC 3Pin Primaries Kit for 2x48 PatchBay, Crimp	\$ 157.00	\$ 157.00
2810			1	AVP	900617	#10A Custom-AES -AM-B248E1-Z1RU, 2x48 Bantam Audio Jackfield, Frame (only)/ Empty, Even (mono). Customer to include layout instructions at time of PO.	\$ 336.00	\$ 336.00
2820			1	AVP	TBD	#10B AM-Build - Bantam Build, Install 1 to 48 modules in a frame.	\$ 39.00	\$ 39.00
2830			32	AVP	903149	#10C AM-B-FNSG-E03 Dual Bantam, 3 Pin EDAC, Full Normal(Red), Switching Grounds	\$ 40.00	\$ 1,280.00
2840			16	AVP	911207	#10D AM-B-NN-E03 Dual Bantam, 3 Pin EDAC, No Normal (Green)	\$ 29.00	\$ 464.00
2850			1	AVP	903209	#10E MK248P-E03CEDAC 3Pin Primaries Kit for 2x48 PatchBay, Crimp	\$ 157.00	\$ 157.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
2860			1	AVP	906773	#11-AES-AM-B248E1-L-FNSG-E03 - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Full Normals Modules, Switching Ground Modules. Switching Grounds , Includes Mating Connector Kit	\$ 2,162.00	\$ 2,162.00
2870			3	AVP	TBD	Spare-AM-B248E1-L-HN-E03-SGVM - 1RU, 2x48 Bantam Audio Jackfield, Even (mono), 48 Half-Normal Modules. Vertically Strapped, Isolated Grounds.vertical ground jumpers installed in 48 modules,Includes Mating Kit.	\$ 1,628.00	\$ 4,884.00
						Patch Cords & Adapters	\$ -	\$ -
2880	1			BPM	TBD	Re-use existing bantam patch cordsm adapters and wall hanger	\$ -	\$ -
						Baseband Reference Distribution	\$ -	\$ -
2890			1	Ross	OGX-FR-CN	OpenGear OGX Frame with Cooling and Advanced Networking	\$ 1,786.00	\$ 1,786.00
2900			1	Ross	PS-OGX	600 Watt Universal Power Supply for OGX Frame	\$ 788.00	\$ 788.00
2910			1	Ross	FSB-OGX	OGX Frame Rear Support Brackets	\$ 90.00	\$ 90.00
2920			2	Ross	WDA-8409-R2L	1x8 Word Clock Distribution Amp	\$ 552.00	\$ 1,104.00
							\$ -	\$ -
ACR Rear Racks Sub-Total:								\$ 28,922.00
Intercom								
						ADAM-M Matrix	\$ -	\$ -
2930	1			RTS	ADAM-M	64 port ADAM digital intercom matrix	\$ -	\$ -
2940	3			RTS	TIFF 2000	Telephone interface	\$ -	\$ -
2950			1	RTS	TIFF 2000	Telephone interface	\$ 2,000.00	\$ 2,000.00
2960	1			RTS	IFB828	8ch IFB Wetter	\$ -	\$ -
2970	1			RTS	AZEDIT	ADAM-M configuration software	\$ -	\$ -
2980			1	TBD	ADAM Cfg Laptop	Laptop to run Azedit software / DANTE / Digcart E etc (Estimate)	\$ 1,059.00	\$ 1,059.00
							\$ -	\$ -
2990	4			RTS	SSA-424/DSI-2008	Dual 2w to 4w Digital Hybrid Interfaces	\$ -	\$ -
3000			4	RTS	F.01U.391.553	3ch TW PL power supply	\$ 816.00	\$ 3,264.00
3010	1			RTS	SAP1626	TW PL Source Assign Panel	\$ -	\$ -
3020	1			Telos	The Link	2-wire interface	\$ -	\$ -
							\$ -	\$ -
Intercom Sub-Total:								\$ 6,323.00
AUDIO CONTROL SUB-TOTAL:								\$ 67,188.00
PROJECT EQUIPMENT SUB-TOTAL:								\$ 2,787,227.00

Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended	
VENDOR SERVICES									
Vendor Commissioning									
30000						EVS Professional Services	\$ -	\$ -	
30010			7	EVS	PS-PJM	Project Managemnt Man days General mission : Project lead, follow up, document, meeting, organisation, coordination, planning, risk management... Man-days are limited to a maximum of 8 hours.	\$ 2,065.00	\$ 14,455.00	
30020			7	EVS	PS-RC	Remote Consultancy for specific works Man-days are limited to a maximum of 8 hours.	\$ 2,065.00	\$ 14,455.00	
30030			3	EVS	PS-SAT	On-site Acceptance Test roll out with main customers' representatives in order to assess good behaviour of supplied EVS system. Travel costs and expenses excluded. Man-days are limited to a maximum of 8 hours.	\$ 2,065.00	\$ 6,195.00	
30040			10	EVS	PS-COM-MI	Commissioning for MI equipment. Travel costs and expenses excluded. Man-days are limited to a maximum of 8 hours.	\$ 2,065.00	\$ 20,650.00	
30050			3	EVS	TVLEXP	Travel Expenses	\$ 2,353.00	\$ 7,059.00	
							\$ -	\$ -	
Vendor Commissioning Sub-Total:								\$	62,814.00
Vendor Training									
31000						EVS	\$ -	\$ -	
31010			5	EVS	STR	Operational & Technical Training (on site) - per day	\$ 2,477.00	\$ 12,385.00	
							\$ -	\$ -	
Vendor Training Sub-Total:								\$	12,385.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
Vendor Warranties & SLAs								
32000						EVS (5 Years)	\$ -	\$ -
32010			1	EVS	SLA-Advanced-5Y	SLA Advanced (5 Years) -24/7 telephone support -Remote System Health Check -Onsite Technical Intervention -Access to software updates -Access to software upgrades -Software Updates/upgrades assistance -Advanced Exchange of parts -Free replacement parts	\$ 509,902.00	\$ 509,902.00
							\$ -	\$ -
						Arista (5 Years)	\$ -	\$ -
32020			120	Arista	SVC-7280CR3A-72-1M-NB	1 Month A-Care Software & NBD Hardware Replacement/Same Day Ship for 7280CR3A-72 [60 mos for 2 systems] 5 year plan	\$ 557.00	\$ 66,840.00
32030			120	Arista	SVC-7010TX-48C-1M-NB	1 Month A-Care Software & NBD Hardware Replacement/Same Day Ship for 7010TX-48C [60 mos for 2 systems] 5 year plan	\$ 22.00	\$ 2,640.00
							\$ -	\$ -
Vendor Warranties & SLAs Sub-Total:								\$ 579,382.00
VENDOR SERVICES SUB-TOTAL:								\$ 654,581.00
PARTS & MATERIALS								
33000			1	Diversified	TBD Material	Lot, Installation Materials - Cable, Connectors, Blank Panels, Misc.	\$ 147,900.00	\$ 147,900.00
PARTS & MATERIALS SUB-TOTAL:								\$ 147,900.00
DIVERSIFIED SERVICES								
System Integration Services								
42000			1	Diversified	Professional Services	Project Mgmt & Admin	\$ 206,416.00	\$ 206,416.00
42010			1	Diversified	Professional Services	System Design	\$ 216,582.00	\$ 216,582.00
42020			1	Diversified	Professional Services	Offsite Prebuild & Cable Fab	\$ 123,680.00	\$ 123,680.00
42030			1	Diversified	Professional Services	Onsite System Build	\$ 291,360.00	\$ 291,360.00
42040			1	Diversified	Professional Services	Commissioning & Punchlist	\$ 167,168.00	\$ 167,168.00
42060			1	Diversified	Professional Services	As Built & Closeout	\$ 16,264.00	\$ 16,264.00
System Integration Services Sub-Total:								\$ 1,021,470.00
DIVERSIFIED SERVICES SUB-TOTAL:								\$ 1,021,470.00



Project Summary of Costs

Bill of Materials

BoM Index ID	CFE Old Qty	CFE New Qty	New Purchase Qty	Manufacturer	Model	Description	Price Unit	Price Extended
EXPENSES & FREIGHT								
45000			1	Diversified	Div Expenses	Travel and Living Expenses	\$ 88,671.00	\$ 88,671.00
			1	Diversified	Div Freight	Shipping and Freight	\$ 61,939.00	\$ 61,939.00
EXPENSES & FREIGHT SUB-TOTAL:								\$ 150,610.00
BASE PROJECT TOTAL:								\$ 4,761,788.00
TAXES								
51000			0	NETC Exempt	Taxes	Estimated Taxes	\$ -	\$ -
TAXES SUB-TOTAL:								\$ -
BASE PROJECT GRAND TOTAL:								\$ 4,806,760.44
OPTIONS (Excl. taxes, freight, etc)								
Option 1-Upgrade to SPG9000s								
61000						Remove SPG 8000 Parts from BoM	\$ -	\$ -
61010			-2	Telestream	SPG800AUP	SPG 8000A Upgrade Kit (Free)	\$ -	\$ -
61020			-2	Telestream	SPG800AUP PTP	Add PTP (IEEE 1588) support	\$ 3,141.00	\$ (6,282.00)
61030			-2	Telestream	SPG9000-ACC-ANT	GPS rooftop antenna (5.0 VDC, 1575 MHz range signals, F connector) that works with the integrated GPS receiver of the SPG8000 with Option GPS for GPS satellites; also works with the integrated GPS receiver of the GPS7 module of TG8000	\$ 524.00	\$ (1,048.00)
						Add SPG9000 Sync Gens - Recommended	\$ -	\$ -
61040			2	Telestream	SPG9000	SPG9000 timing and reference generator; includes loop-through genlock input, 6 analog black/tri-level outputs, 4 LTC outputs, word clock output, DARS output, general-purpose interface, and management LAN interface	\$ 7,199.00	\$ 14,398.00
61050			2	Telestream	SPG9000-GNSS	License; SPG9000, Enable internal GNSS receiver and time synchronization features	\$ 1,451.00	\$ 2,902.00
61060			2	Telestream	SPG9000-PTP	License; SPG9000, Enable PTP (IEEE 1588) support on two ports	\$ 2,161.00	\$ 4,322.00
61070			2	Telestream	SPG9000-DPW	Includes two hot-swappable power supply modules for a redundant (primary + backup) pair	\$ 465.00	\$ 930.00
61080			2	Telestream	PWR-CORD-NA-S15	NA Powr Cord	\$ -	\$ -
61090			2	Telestream	SPGM9000-ACC-ANT	Multi-GNSS (GPS, GLONASS, Galileo, BeiDou) dual-band (L1 & L5) rooftop antenna that works with the integrated GNSS receiver of the SPG9000 with option SPG9000-GNSS. Includes mounting bracket. Coaxial cable with type-N connector required.	\$ 524.00	\$ 1,048.00
61100			2	Telestream	SPG9000-RACK	Rk kit for SPG9000	\$ 401.00	\$ 802.00
61110			0		Labor & Expenses	Diversified Labor and Expenses for Option 1	\$ -	\$ -
Option 1-Upgrade to SPG9000s Sub-Total:								\$ 17,072.00



Appendix 2 Gerling Expanding Trailer Proposal



Customized Emperor Class Expanding Side Television Production Trailer

**Submitted By:
Fred Gerling
Gerling & Associates, Inc.
Sunbury, Ohio USA
(740) 965-2888**



October 8, 2024

Gerling 53' Emperor Class Expanding Side Remote Television Production Trailer Summary Sheet

THIS PROPOSAL INCLUDES:

- 1 ea. G&A 53' production trailer, Scepter Series
- 1 ea. Sure Glide Expanding side and frame dimensions T.B.D.
- 2:1 Gear Driven Sure Glide side
- 1 lot 300 amp expanded power system, split feed
- 8 ea. Aluminum wheels
- 1 lot LED tail and marker light group
- 1 ea. 20-Ton G-Force Air Conditioner with 20kW heat with Vision Thermostat System
- Air conditioner cover set
- Folding high capacity floor panels
- 1 lot Nylon bay liner system
- 1 lot Air raise/dump system
- 1 lot Internal Sure Glide side latching
- Strike light group
- 1 lot Gas struts on all bay doors
- 1 lot Temp Coat roof system
- 1 lot Clam shell service doors
- All accessories as detailed pages 2-21
- 4 year chassis warranty
- 1 year all-inclusive warranty

Proposal for Custom Design and Construction of G&A 53' Expanding Side Remote Television Production Emperor Class, Scepter Series

Rack Ready Trailer Point by Point Description

1.0 Overall Scale: Chassis and Operations Enclosure

1.1 Vehicle Dimensions (see dimensional data on enclosed drawing; subject to change upon Engineering with Client):

- 13'6" High x 53' Length
- Total length including rear bumper and air-conditioning units not to exceed 55'.
- Spread tandem axles 40' (approximately) from Kingpin.
- Clearance 12" kingpin to tandem axles; 18" to rear bumper
- Empty Shell Interior Dimensions: 100" Wide x 110" High.
- Sure Glide section dimensions, to be determined- up to 51' x 60"

These **dimensions do not exceed the legal limitations** of any jurisdiction in North America.

1.2 Trailer Chassis Specifications

- Model #UC 53/102
- Sure Glide Expansion System
- Dual stage side drive



2.0 Chassis Weight and Axle Loading

Body and chassis shall be in compliance with legal weight limits and transportation regulations on all public highways in North America. Commercial Driver's License shall be required. No special permits shall be required for travel on any public highway in North America.

Vehicle body design and **axle placement** shall be developed according to Client specifications of all equipment, accessories, and all appointments through use of **Gerling's exclusive CAD-based Weight & Balance logarithmic software.**

This software is the only weight and balance program in the industry to have the capacity to compute the distribution of weight, using weights of each piece of television production equipment normally used in Mobile Facilities. As this information (rack elevations) is made available to Gerling, final design and axle placement is determined using this software.

Approximate weight of fully constructed rack-ready trailer meeting Client specifications shall be **38,000#**, allowing the Client to add approximately 42,000# in equipment and accessories.



3.0 Body Construction: Methods and Materials

General Statements and Descriptions

The mechanical design and construction of the unit shall be such that the Client, with proper maintenance, can expect at least 15 years of use.

All aluminum-to-steel joints are insulated with High Molecular Density Polymer to prevent corrosion due to galvanic electrolysis.

Aluminum skin shall be .090 at bulkheads and sides.

Fabrication and Construction practices shall utilize proprietary methods of MIG Welding and chemical bonding. Lord 500 Series Acrylic Adhesive shall provide extremely high impact rating and extreme resistance to thermal and chemical stress.

Frame Description

Trailer shall be of aluminum and steel Frameless Monocoque Structure.

This is a proven design that allows for stress to be distributed evenly throughout the entire structure; Neither extreme conditions during travel nor lever-action physics due to the Sure Glide side shall compromise the structural integrity.

- Framed structures will not concentrate the stress at one singular point
- No distortion or twisting will take place; especially regarding the Upper Coupler Plate where the kingpin is located



This structure was developed for the US Military through computer stress-analysis model design by SDRC, San Diego, CA.

The Universal Composite Trailer Chassis meets the following Industrial, US Government, and US Military standards:

AWS D1.1	Structural Welding Code for Steel.
AWS D1.2	Structural Welding Code for Aluminum
CF Title 49	Transportation, US Federal Highways
FED-STD-595	Federal Standards for Paint
MIL-STD-810E	US Military Standards Environmental & Engineering Guidelines
MIL-STD-454	US Military Standards Workmanship
MIL-STD-1472	US Military Standards Human Factor Engineering

Body Filler products shall not be utilized in any weight or stress-bearing component of the aluminum body.

Proprietary Methods and Materials

3.1 Floor Frame shall incorporate:

- Formed and steel hat sections into Monocoque design.
- 90ksi min. high tensile steel 4" I-Beams
- 90ksi min. high tensile steel 5" I-Beams at leveling legs & bogie frame
- .032" 3003 aluminum sheeting
- additional Gerling proprietary methods and materials

3.2 Wall and Bulkhead Construction shall incorporate:

- 12 ga. Galvanneal seal around door jamb and openings
- 1 ½" extruded aluminum hat channel extruded wall studs
- Sections on 16" centers, 1 ½ hat sections as required
- .063 " T-5454 Aluminum Sheeting for exterior surface
 - Aluminum skins shall be .090 on expanding side end walls & .090 at bulkheads
- To be seamless and rivet-less, smooth auto type look
- Extruded aluminum top rail sections
- Extruded aluminum bottom rail sections.
- Crucial support on the expanding section side shall be gained through use of 6" by 16" and by 4" by 12" steel tubing.
- additional Gerling proprietary methods and materials



3.4 Roof Construction shall incorporate:

- 1 ½" extruded aluminum hat sections on 24" centers
- Extruded aluminum top rail

- One-piece .032 aluminum skin
 - Pre-tensioned before application to ensure smoothness
 - Shall only be riveted around the perimeter of the trailer.
 - Shall be attached to roof bow by means of industrial adhesive.
 - Shall prevent loosening and subsequent “canning” (bubbling) due to contraction and expansion, as will occur if rivets are used to fasten roof skin to roof bows.
- Additional Gerling proprietary methods and materials

3.5 **Exterior Finish:**

- Scepter Series- Smooth Seamless Rivet-less Automotive Look

- Full preparation to consist of all caulking, trimming, sanding, etching (zinc chromate chemical etching agent) and all necessary steps to ensure overall aesthetic “as-new” quality for functional life of vehicle with proper on-going maintenance.



- All steel attach points will be treated with anti-corrosion agent and isolated from all aluminum surfaces
- 2 coats primer and 1 coat white Aircraft-Grade Acrylic Polyurethane DuPont Imron paint
- All bay door systems will be finish inside as described above.
- Body to be undercoated with anti-corrosion agent

3.6 **Axles and Suspension**

3.6.1 **Axle Configuration**

- Shall incorporate Watson Chalin TA-250-16 Series Tandem axles
- Configuration (subject to change upon Engineering with Client)
- Shall be provided with **Watson Chalin Air Ride System**, TA-250-16 with ABS, and rigid axle configuration
- 16” air bags, capacity of 22,500 lb. per single axle.

3.6.2 **Wheels and Tires**

- Provide and install eight (8) Alcoa Polished aluminum wheels, four (4) polished Durabrite
- Provide Trailer with eight (8) Bridgestone R-280

3.7 Proprietary Expanding Side Mechanism

3.7.1 Method of Operation

Manual Crank design shall be constructed such that ease of operation allows one person to fully extend section with one hand; 9 turns, in no more that 20 seconds.

- Proprietary construction shall operate by means of a manual crank, located at the rear bulkhead of the trailer.
- The crank shall turn a tubular shaft that extends from the rear bulkhead to the center of the expanding side drive shaft
- 2:1 gear reduction via chain drive fro crank shaft to drive shaft.
- The tube shall be connected to four (4) bearings; with two (2) linear bearings at each end of the expanding section.
- **This connection shall be rack & pinion, to ensure that each end of the expanding section travels in a parallel fashion;**
 - **Expanding section shall remain square upon opening and closing.**
- Large, Internal Security hardware, operating on a cam-style lever principle, shall aid in sealing the Sure Glide section tight to trailer for travel



3.7.2 Expanding Mechanism Floor Description

- Shall be comprised of six (6) folding panels by Plascore.
- Panels shall store folded against the interior wall of the expanding section.
- Each panel will be held in place by a large, tempered knobbed bolt, which shall thread into a receiver securely fastened into the expanding section wall

Multiple panels (as opposed to one or two heavy, large panels), shall enable the easy set up and strike of the expanding section floor manually.

3.7.3 Expanding Section Anti-Icing Measures

- Expanding Section roof shall be constructed with 2" slope from trailer outward
- A system of heating strips shall be employed to keep expanding section roof free of ice and snow when extended.
 - low-wattage strips shall maintain the roof skin of the expanding section within a temperature range of 45 to 75 degrees Fahrenheit

(fluctuation due to proximity of any given space on roof to location of heat strip.)

- Shall prevent snow/ice accumulation, in conditions ranging from freezing rain to 6"/hour snowfall.

4.0 Undercarriage Storage Bays (Belly Bays)

General:

Shall be integrated into the skirting around the perimeter of the vehicle, beneath the chassis frame, such that the body is streamlined.

Quantity 5 to 7 Storage Bays shall be provided for each side of vehicle, dependent upon Client needs in terms of size of each Storage Bay.



- Ground Clearance shall be 12” between Kingpin and Tandem axles
- Ground Clearance shall be 15-18” aft of rear axle

4.1 Special Design Features

- **Bay floors** shall be of “sweep-out” construction, with no raised edges to pool water or obstruct loading.
- **Bay interior** to be obstruction-free with the exception of 1” steel tube supports, which shall be in line with the exterior dividers between the bay doors
- **To include GERLING EXCLUSIVE 3/8” x 4” “Rub Rail” guards that extend 1/2” laterally beyond the bay doors for protection in cornering situations.**
- **To include GERLING EXCLUSIVE 3/8” x 3” x 4” Skid Rail for thorough protection in bottom-out situations.**

4.2 Material

- 10-gauge T-6061 Aluminum
- 2” x 4” aluminum c-channel construction
- Bay interior to be constructed of .090 Aluminum to prevent load shifting, and enhancing appearance when bay doors are open
- Aluminum structural integrity exceeds demands of Remote Television Operations
- 800 lbs. lighter than similar Storage Bays constructed of Stainless Steel.

4.3 Weatherproofing/Security

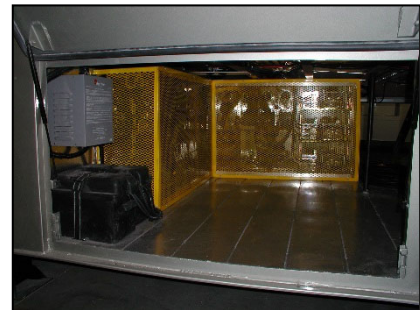
- **Furgocar 14” integral locking handles** operating by a locking cam-style lever mechanism.
- **Perimeter of each bay door shall seat on 90 degree exterior surface and trimmed in crushable gasket, rendering the bay waterproof.**
- Doors shall be held in the “open” position by means of **gas charged struts**; the geometrical positioning of which shall aid in both opening and closing.
- Hinges to be stainless steel, continuous piano hinges.
- Lighting to be 100 LED aluminum fixture tube lights.



4.4 Equipment to be permanently stored in Storage Bays shall include:

Isolation Transformers, which shall surrounded by an expanded metal screen, painted safety yellow.

Gerling Custom Designed Aluminum Power Frame, which shall contain all power entry panels, tap switches, analog meters, and all other elements of Main Power Control Panel. Rear of frame shall be protected by means of an expanded metal screen painted safety yellow.



Extreme care in engineering shall be in place to ensure a minimal power system foot print.

5.0 Exterior Doors

- Quantity two (2) 32" wide personnel door
- Quantity two (2) Gerling Custom I-O/Breakout Panel Enclosure



5.1 Personnel Doors, Entrance Stairs Construction shall incorporate:

- 2" x 2" x .125" T-6061 Aluminum Alloy square tubing
- .125 T-6061 Aluminum Alloy skin
- Door frame- Galvaneel Steel
- Reinforcement to prevent bowing shall be gained through use of 5" aluminum hat channel
- Shall be supplied with Yale panic-bar exit devices and LCN single-action track door closers (with no protruding "elbow" extending into operations interior).
- Stainless steel plates shall be mounted beneath (hand wear) exit device and at bottom of door (kick wear) to guard against wear upon repeated exits.
- Custom manufacture 10-gauge aluminum "Grip Strut" safety grating expanded metal **stairs; stairs shall be full width (36")**
- Personnel Stairs shall be height adjustable by means of knurled knob which shall fix sliding feet. No spring mechanism, which is subject to corrosion, shall be employed.
- Two (2) handrails shall be custom manufactured and provided for each set of stairs; to be constructed of extruded T-6061 Brushed Aluminum Alloy round tubing, .125" wall thickness.
- All rails, stairs shall be inter-changeable with respect to mounting tabs utilized to fasten stairs to Vehicle.
- Provide three (3) stair platforms, two (2) fold-up on expansion side ends, one (1) free standing
 - Provide two (2) sets of handrails
 - Provide and install one (1) LED porch light at each platform

5.2 I/O Panel/Breakout Panel Door

- Fabricate and install lighted **enclosures for audio and video cable bulkheads** seated in vehicle exterior.
- Doors shall be constructed of .125 T-6061 Aluminum Alloy
- Shall consist of dual door construction:
 - The upper $\frac{3}{4}$ shall consist of a lockable, upward hinged door for access to entire panel
 - The bottom $\frac{1}{4}$ shall consist of a downward hinging door such that it shall be capable of being left open for cable access; though the panel itself is inaccessible should the top $\frac{3}{4}$ door be locked. This enables the panel to be secured, yet allows all exterior cabling to remain connected.
- Shall for closure employ a Stainless Steel locking cam-style lever mechanism
- Shall employ gas-charged struts that will keep the door in an open position, and shall be configured geometrically such that these struts will aid in both opening and closing
- Interior hold-back latch shall be installed to allow partial opening of door for cable access and limited panel access
- Perimeter of enclosure shall be a recessed flange, with crushable gasket to ensure environmental security
- Bottom of enclosure between rails and exterior shall be sloped downward to prevent any accumulation of rain or snow when open.
- Provide and install EIA **standard-width rack rails** that shall be recessed for environmental protection
- Provide and install LED 12V tube light; shall automatically shut off when door is closed



5.3 Rear Rack Access Door, Exterior “Clam Shell Doors”

- Provide two sets each, 2 up, 2 down, clam shell rack access doors
- Frames, galvaneel steel
- Lower doors chain supported
- Upper doors pneumatic supported
- Wedge locking and seal system
- Three (3) OSHA tie off rings



6.0 Exterior Functional

6.1 Leveling System:

- Provide and install Jost **Manual leveling jacks**
 - Capacity 55,000 lbs.
 - 18" throw
 - 84 sq. in. foot pad
 - Bubble levels at each corner of vehicle
 - Two-speed gear mechanism

6.2 Exterior Lighting

6.2.1 Clearance Lighting shall be provided and installed

- All clearance lights as required by DOT Regulation shall be supplied and installed
- Any required reflective strips shall be supplied
- Brake Lights, Tail lights, shall be provided and installed
- All tail lights, reverse lights, brake lights shall be recessed
- Includes high mounted LED tail lights
- All lights to be LED

6.2.2 Exterior Operations Lighting

- **Strike Lighting**
 - Provide and install eight (8) 12V LED recessed strike lights
 - Locate one (1) at rear of trailer, four (4) curbside, three (3) street side
 - Provide two (2) LED tractor lights above air conditioning system
 - Provide two (2) blue LED air conditioner corner lights



7.0 Interior Construction: Methods and Materials

General:

Layouts included in this proposal will be designed to the clients required need

Final layout and determination of production area to be designed by Client and Gerling & Associates upon engineering meetings to ensure that Client specifications and particular needs are met

7.1 Interior Frame Construction

- **All interior construction shall be fastened to .125" T-6061 Aluminum Alloy joists and interior members**
- Floor to be constructed of 3/4" Lite plywood
- Ceiling to be constructed of 3/8" Lite plywood
- Interior Sidewalls and Bulkheads to be constructed of 1/4" Space Age Carbon Fiber Polymer and feather plywood
- All freestanding interior walls to be constructed of 3/8" feather grade plywood



7.2 Equipment Racks

7.2.1 Rack Construction

All EIA Standard equipment racks in vehicle shall be custom manufactured by Gerling, utilizing the below specified method. This provides infinite flexibility in terms of rack dimensions and placement.

- Supply and install the quantity agreeing with the design.
- Rack rails shall be constructed of .125" aluminum
 - Thicker gauge provides firmer and longer threaded surface for rack screws to prevent cross-threading
 - Racks shall be tapped front and rear for industry-standard #10-32 rack screws
- Rack rails to be securely anchored to floor and ceiling and stabilized laterally by means of welds to 3mm flat bar aluminum.



- Racks shall be stabilized vertically by means of being fastened to the interior sidewalls
- Racks shall be stabilized linearly by means of 10 gauge aluminum plates from front rail to back rail in each rack
- Supply and install AC distribution strips in racks; shall be on individual circuits to include one (1) HD strip per rack
- Supply and install two (2) HD strips in up to 10 rack systems
- Racks to be enclosed at rear; **rear access** by matching carpet panels
 - These panels shall be full height and shall require no tools for removal
 - Panels shall be held in place by aluminum slots top and bottom and fitted with two stainless steel recessed handles each
 - Shall be easily removed by lifting vertically and pulling outward.

7.2.2 Moveable Equipment Racks

- Shall be secured in the Sure Glide section for production
- Shall be constructed of above described rack rails fastened to 1" x 2" rectangular steel tubing structure
- Total width will be as agreed
- Structure shall rest on THK bearing system
- For travel, moveable racks shall lock down by means locking lever devices.

7.3 Operations Area Construction

7.3.1 Production Operations Area

- Supply and install custom specified racks
- Custom manufacture main operations desk surface console; with flat mount for video switcher and custom mounting area for Graphics
- Includes all appointments as represented by enclosed layout proposals, with final layout and configuration to be determined in engineering meetings with Client
- Custom manufacture and install all required enclosures and mounts for all equipment associated with Mobile Field Operations- Full video wall
- Custom manufacture and install Oak cabinetry and storage space
- Custom Production Console
- Custom P-2 Console



- Custom P-3 Console/Graphics Area

7.3.2 **Audio Operations Area**

- Supply and appoint custom **Audio Control room**
- Console to be constructed of 3/4" feather light plywood with exposed surfaces covered with 1/16" horizontal grade Formica.
- To include one (1) over bridge system



7.3.3 **Video Tape Operations Area**

- Appointed with specified racks, with custom-built multi-operator console.
- Separate console for Isolation Camera Operator shall be installed behind Server Operator positions, utilizing space afforded by Sure Glide side.

7.3.4 **Replay Area**

- Supply and appoint custom Replay System Area
- Two (2) consoles with Parker Extrusion monitor mounts

7.3.5 **Camera Control/Engineering Area**

- Console supported on THK Linear bearing system
- Specified racks for CCU and Video Control equipment along with all main Production Control equipment i.e. jackfields, switcher, router etc.; custom consoles shall accommodate CCU panels.

7.3.6 **Server Room**

- Supply and install custom cabinet group for Server Room
- Server Room to be isolated
- To include two (2) equipment racks

7.4 **Interior Lighting**

- All lighting for operations shall consist of dimmable, recessed, amiable- LED
 - Each bank of LED lights shall be on an individual, dimmable circuit
 - Lighting shall operate on either DC via provided inverter, or shore AC.
 - Provide and install additional fluorescent lighting for rack maintenance



- LED lighting shall be provided for setup purposes (12v DC), yet shall be available during operations

7.5 **Fit and Finish**

- **All Custom Manufactured Furnishing to be oak, custom milled, prepared, and finished**
- Floors covering shall be Dura Step .125" rubber panels, pattern and color to be determined by Client
- All exposed tabletops and console surfaces covered with 3mm horizontal-grade Formica, color to be determined by Client
- Front edge of all consoles shall be fitted with edging consisting of rounded oak ("bull nosing")
- All walls shall be supplied with oak chair rail at chair height (29")
- Walls shall be covered with Beulieu Mills "AutoTough" Auto/Marine carpeting
 - Rubber-backed AutoTough carpet provides R1 increase in wall insulation
 - AutoTough carpet will not "unravel" in the manner of tightloop carpet
 - Two Tone Scheme shall incorporate Client-selected colors that shall be separated top and bottom by light oak chair rail at 29" height
- Ceiling shall be **Sonex Pyramid Acoustic Foam**
 - **Sonex Tiles shall reside in custom Light Oak Ceiling Grid**
- Flooring to be from G&A custom sample list either Endura Type or Carpet Type
- Access floor panels to match to include aluminum extrusion.



8.0 Environmental Control

8.1 Insulation

- Insulation factor on walls of R14 in concert with forced-air Air-Conditioning system shall provide environmentally secure environment
- Provide and install full thermal insulation on outer walls, floor, doors and ceiling
 - Insulation to be Blue Dow 2" Owen Corning Polystyrene
 - Includes continuous vapor seal
 - PolySeal foam to ensure vapor-tight insular seal
- Insulation factors as follows: **R14 walls, R14 ceiling, R14 floors, R9 doors, and R2 door seals**

8.2 Air Conditioning

- **Gerling Mobile Air Conditioning System, with fresh air quietly ducted directly into the equipment racks and personnel space. Fresh air shall be supplied to personnel areas and racks via plenum in ceiling, return shall be via sub-floor to ensure circulation directly through equipment racks, such that environmental demands of HPA Equipment will be accommodated. Air plenums shall be designed and installed to provide redundancy should an air conditioning unit fail.**

- **Supply and install two (2) three phase operation Northern Air 10-Ton Wall mount air conditioning units**
- **Total 240,000 BTU**
- **To include Winter Opps system with variable speed motors and compressor to – 10°F.**
- **To include accumulator system to eliminate high head pressure**



- Shall be mounted on front bulkhead of Vehicle
- Separate control panels will be located inside the trailer, with both fan and thermostat operation Visions System.
- Ample access for maintenance will be provided by means of side door panels on the units themselves.
- Full digital read diagnostic system thermostat
- Refrigerant to be environmentally friendly R-410
- **Visions Thermostat System with multiple temp sensor and digital system**

8.3 Heat

- Units shall include integral 10,000 Watt heating units

8.5 Air Out

- Equipment racks, aluminum elongated
- Personnel, personal controlled aircraft style



9.0 Electrical System

9.1 Gerling Power System

9.1.1 Power Source: Split Environmental & Technical

The Vehicle shall be powered by means of a **300A power source, split 3 phase**. Shall be capable of being powered by means of:

- **System shall provide two completely separate legs of AC;**
 - **Technical shall power all baseband, broadcast, RF equipment, and specified receptacles**
 - **Environmental, which shall power all lighting, air conditioning, and specified receptacles.**
 - **To include three (3) power meters in bay system, analog and digital.**
 - **One (1) C313A22-600E Kraus Neimer Switch for split or combined power**
- **Two (2) Hevi-Duty SOLA Isolation Transformers shall be provided and integrated**
 - **One (1) 45kVA for Technical loads**
 - **125A circuit breakers integrated**
 - **One (1) 45kVA for Environmental loads**
 - **150A circuit breaker integrated**
- **Each Transformer shall be provided with tap selects**
 - **Voltage taps shall step through positions of 190, 200, 210, 220, 240, and 270 Volts.**
 - **Voltage tap shall be selectable by means of Kraus & Naimer Tap Select switches**



Voltage Tap Selects shall provide maximum flexibility for powering Trailer from most available on-site power sources.

9.1.2 Power Entrance and Monitoring

- **Analog meters by Yokogawa shall be provided and installed *adjacent to the input connectors*, monitoring:**
 - **Amperage**
 - **Voltage**
 - **Cycle**
- **Analog meters by Yokogawa shall be provided and installed on *panel in vehicle interior*, allowing monitoring during operations of:**

- **Amperage**
- **Voltage**
- **Cycle**

NOTE: Gerling provides and recommends analog meters, as digital meters may not function at extreme temperatures

- Supply and install six (6) 50' shore power cables
 - Entertainment rated 200A 600V
 - Provide four (4) "pig-tail"s
 - Supply and install Cam-lok power input connectors and panel, adjacent to monitoring panel

9.1.3 Transmission and Termination

- **All Electrical wiring to utilize THHN insulated stranded copper wire**
 - **All Electrical wiring to be numbered ends and length in strict accordance to "as-built" drawings which shall be provided to the Client**
 - **All Electrical wiring shall be dressed in accordance with highest industry standards**
 - **All wire runs shall be routed through EMT and flexible conduit.**
- Provide and install Hubbell **wall receptacles in Operations Interior**
 - Receptacles powered by the Technical leg shall be white in color, and complete with grounding to technical ground system
 - Receptacles powered by the Environmental leg shall be ivory in color
 - **These outlets shall be located in areas specified by the Client in Engineering meetings with Gerling and Associates such that specific Client needs are met**
- **Provide and install Hubbell GFI protected weatherproof duplex outlets, location and number to be determined by the Client.**

9.1.4 Grounding

- **Grounding** of the technical equipment within the vehicle shall follow standard grounding practices

9.1.5 Low Voltage System

- A **12V DC system** shall be provided and integrated
 - Power Source for 12v DC shall be two (2) Group 31 deep cycle batteries to be housed in a vented, anti-corrosive enclosure.
 - The DC distribution system will be fully fused and will power:

- Interior lighting, activated by a mechanical timer located at personnel door such that interior DC powered devices will not be unintentionally left running
- The strike or set-up lighting system
- Lighting in Belly Storage Bays
- Audio/Video Bulkhead enclosures



- Provide and integrate **Inverter/Charger**
 - Victron Inverter System
 - Rated 200W at 120VAC
 - 80 Amp DC charge
 - Shall power all selected interior lighting
 - Shall power all selected exterior lighting



Appendix 3

Solicitation Section V – Trailer & Technology Compliance Form

V. TECHNICAL SPECIFICATIONS

A. VENDOR INSTRUCTIONS

Vendor must respond to each of the following statements. Specifications listed are minimum conditions that must be met in order for a Vendor to qualify for the award.

“YES” response means the Vendor guarantees they can meet this condition.

“NO” response means the Vendor cannot meet this condition and will not be considered.

“NO & PROVIDE ALTERNATIVE” responses should be used only with a narrative response in the NOTES/COMMENTS section explaining in detail any deviation from the Vendor’s ability to meet the condition, and an explanation of how this would be determined to be an acceptable alternative to meeting the condition. Alternatives must be detailed in such a way that allows such deviations to be fully evaluated. The State shall determine at its sole discretion whether or not the Vendor’s alternative is an acceptable alternative.

B. NON-COMPLIANCE STATEMENT

Read these specifications carefully. Any and all exceptions to these specifications must be written on or attached to solicitation response. Any noncompliance may void your solicitation response. Non-compliance to any single specification can void your solicitation response.

It is the responsibility of Vendors to obtain information and clarifications as provided below. The State is not responsible for any erroneous or incomplete understandings or wrongful interpretations of this solicitation by any Vendor.

C. Rack-Ready Broadcast Production Trailer

YES	NO	NO & PROVIDE ALTERNATIVE	
YES Gerling			a. Trailer requirements: 53’ Double Expanding Side Remote Television Production Trailer. Curbside will be the primary expanding side and street side expando will be for the production monitor wall.
YES Gerling			Vehicle Dimensions: <ul style="list-style-type: none"> ▪ 13’6” High x up to 53’ Length. ▪ Total length including rear bumper and air-conditioning units not to exceed 55’. ▪ Empty Shell Interior Dimensions: 100” Wide x 110” High. ▪ Primary expanding section dimensions, to be determined- up to 51’ x 60”.

<p>YES Gerling</p>			<p>Body and chassis:</p> <ul style="list-style-type: none"> ▪ Shall be in compliance with legal weight limits and transportation regulations on all public highways in North America. Commercial Driver's License shall be required. No special permits shall be required for travel on any public highway in North America. ▪ Approximate weight of fully constructed rack-ready trailer meeting NETC specifications shall be less than 80,000 lbs. ▪ Axle Configuration: Consideration shall be given to the trailer's axle configuration to ensure proper weight distribution and balance. This may involve the placement of multiple axles and the use of suspension systems designed to handle heavy loads. ▪ Load Distribution: The placement of equipment within the trailer shall be optimized to evenly distribute weight and maintain proper balance. This includes securing heavy items low and towards the center of the trailer to minimize sway and instability during transit. ▪ Center of Gravity: Calculations shall be made to determine the trailer's center of gravity, taking into account the distribution of weight both longitudinally and laterally. This information is crucial for ensuring stability and safe towing. ▪ Tongue Weight: The weight exerted on the trailer hitch, known as tongue weight, shall be within recommended limits to prevent overloading the towing vehicle's rear suspension and ensure proper handling.
<p>YES Gerling</p>			<p>Body Construction: Methods and Materials</p> <ul style="list-style-type: none"> ▪ The mechanical design and construction of the unit shall be such that NETC, with proper maintenance, can expect at least 15 years of use. ▪ All aluminum-to-steel joints are insulated to prevent corrosion due to galvanic electrolysis. ▪ Aluminum skin shall be at least .090 at bulkheads and sides. ▪ Fabrication and Construction practices shall utilize industry standards to provide extremely high impact rating and extreme resistance to thermal and chemical stress.
<p>YES Gerling</p>			<p>Floor frame, wall, roof and bulkhead construction shall be conducive to industry standards. All aluminum sheeting and steel thickness must be approved by NETC.</p>
<p>YES Gerling</p>			<p>Exterior Finish:</p> <ul style="list-style-type: none"> ▪ Smooth seamless rivet-less automotive look. ▪ Full preparation to consist of all caulking, trimming, sanding, etching (zinc chromate chemical etching agent) and all necessary steps to ensure overall aesthetic "as-new" quality for functional life of vehicle with proper on-going maintenance. ▪ All steel attach points will be treated with anti-corrosion agent and isolated from all aluminum surface. ▪ 2 coats primer and 1 coat white Aircraft-Grade Acrylic Polyurethane DuPont Imron paint. ▪ Body to be undercoated with anti-corrosion agent.

YES Gerling			<p>Expanding Side Mechanism</p> <ul style="list-style-type: none"> ▪ Manual Crank design shall be constructed such that ease of operation allows one person to fully extend section with one hand. ▪ Construction shall operate by means of a manual crank, located at the rear bulkhead of the trailer. ▪ The crank shall turn a tubular shaft that extends from the rear bulkhead to the center of the expanding side drive shaft. ▪ 2:1 gear reduction via chain drive from crank shaft to drive shaft. ▪ The tube shall be connected to four (4) bearings; with two (2) linear bearings at each end of the expanding section. ▪ This connection shall be rack & pinion, to ensure that each end of the expanding section travels in a parallel fashion; Expanding section shall remain square upon opening and closing. ▪ Expanding sections shall be secured tight to trailer and sealed for travel.
YES Gerling			<p>Expanding Mechanism Floor Description</p> <ul style="list-style-type: none"> ▪ Multiple panels (as opposed to one or two heavy, large panels), shall enable the easy set up and strike of the expanding section floor manually. ▪ Panels shall store folded against the interior wall of the expanding section. ▪ Each panel will be held in place by a large, tempered knobbed bolt, which shall thread into a receiver securely fastened into the expanding section wall.
YES Gerling			<p>Expanding Section Anti-Icing Measures</p> <ul style="list-style-type: none"> ▪ Expanding roof section shall be constructed with 2" slope from trailer outward to prevent snow/ice accumulation. ▪ A system of heating strips can be proposed to keep expanding section roof free of ice and snow when extended.
YES Gerling			<p>Undercarriage Storage Bays (Belly Bays)</p> <ul style="list-style-type: none"> ▪ Shall be integrated into the skirting around the perimeter of the vehicle, beneath the chassis frame, such that the body is streamlined. ▪ Quantity 5 to 7 storage bays shall be provided for each side of vehicle, dependent upon client needs in terms of size of each storage bay. ▪ Bay floors shall be of "sweep-out" construction, with no raised edges to pool water or obstruct loading. ▪ 10-gauge T-6061 Aluminum or better.
YES Gerling			<p>Weatherproofing/Security</p> <ul style="list-style-type: none"> ▪ Integral locking handles operating by a locking cam-style lever mechanism. ▪ Perimeter of each bay door shall seat on 90 degree exterior surface and trimmed in crushable gasket, rendering the bay waterproof. ▪ Doors shall be held in the "open" position by means of gas charged struts; the geometrical positioning of which shall aid in both opening and closing. ▪ Hinges to be stainless steel, continuous piano hinges. ▪ Lighting to be LED.

<p>YES Gerling</p>			<p>Exterior Doors and Entrance Stairs</p> <ul style="list-style-type: none"> ▪ Quantity two (2) to three (3) 32" wide personnel doors. ▪ Quantity one (1) or two (2) I-O/breakout panel enclosures. ▪ Construction shall incorporate industry standards and be approved by NETC. ▪ Reinforcement to prevent bowing. ▪ Personnel stairs shall be height adjustable by means of knurled knob which shall fix sliding feet. No spring mechanism, which is subject to corrosion, shall be employed. ▪ Handrails shall be custom manufactured and provided for each set of stairs. ▪ All rails, stairs shall be inter-changeable with respect to mounting tabs utilized to fasten stairs to vehicle.
<p>YES Gerling</p>			<p>I/O Panel/Breakout Panel Door</p> <ul style="list-style-type: none"> ▪ Fabricate and install lighted enclosures for audio and video cable bulkheads seated in vehicle exterior. ▪ Shall consist of dual door construction: <ul style="list-style-type: none"> a. The upper ¾ shall consist of a lockable, upward hinged door for access to entire panel. b. The bottom ¼ shall consist of a downward hinging door such that it shall be capable of being left open for cable access; though the panel itself is inaccessible should the top ¾ door be locked. This enables the panel to be secured, yet allows all exterior cabling to remain connected. ▪ Shall for closure employ a stainless steel locking cam-style lever mechanism. ▪ Shall employ gas-charged struts that will keep the door in an open position, and shall be configured geometrically such that these struts will aid in both opening and closing. ▪ The design of the doors shall prevent any accumulation of rain or snow when open. ▪ Provide and install EIA standard-width rack rails that shall be recessed for environmental protection. Racks shall be level and rack mount equipment shall line up properly for installation. ▪ Provide and install LED 12V lighting; shall automatically shut off when door is closed.
<p>YES Gerling</p>			<p>Rear Rack Access Doors, Exterior "Clam Shell Doors"</p> <ul style="list-style-type: none"> ▪ Provide rear rack access doors to any racks that align with exterior walls. ▪ Engineering area rack access doors shall be designed as "clam shell doors". ▪ Lower doors shall be chain supported and support weight up to 400lbs. ▪ Upper doors pneumatic supported.
<p>YES Gerling</p>			<p>Leveling System</p> <ul style="list-style-type: none"> ▪ Provide and install manual leveling jacks. ▪ Two-speed gear mechanism. ▪ Bubble levels at each corner of vehicle.

<p>YES Gerling</p>			<p>Clearance Lighting</p> <ul style="list-style-type: none"> ▪ All clearance lights as required by DOT Regulation shall be supplied and installed. ▪ Any required reflective strips shall be supplied. ▪ Brake Lights, Tail lights, shall be provided and installed. ▪ All tail lights, reverse lights, brake lights shall be recessed. ▪ All lights to be LED.
<p>YES Gerling</p>			<p>Exterior Operations Lighting</p> <ul style="list-style-type: none"> ▪ Strike lighting: <ul style="list-style-type: none"> a. Provide and install eight (8) 12V LED recessed strike lights. Locate one (1) at rear of trailer, four (4) curbside, three (3) street side. b. Provide two (2) LED tractor lights above air conditioning system.
<p>YES Gerling</p>			<p>Interior Construction: Methods and Materials</p> <p>Layouts will be designed to NETC's required need.</p> <p>Final layout and determination of production areas to be designed by NETC and contractor upon engineering meetings to ensure that client specifications and particular needs are met. Design to include audio, production, tape, engineering, and video control.</p>
<p>YES Gerling</p>			<p>Interior Frame Construction</p> <ul style="list-style-type: none"> ▪ Winning contractor shall provide list of materials to be used for the interior construction. ▪ All materials shall be approved by NETC.
<p>YES Gerling</p>			<p>Equipment Racks / Rack Construction</p> <ul style="list-style-type: none"> ▪ All EIA Standard equipment racks in vehicle shall be custom manufactured by contractor. ▪ Supply and install the quantity agreeing with the design. ▪ Rack rails shall be constructed of .125" aluminum: <ul style="list-style-type: none"> a. Thicker gauge provides firmer and longer threaded surface for rack screws to prevent cross-threading. b. Racks shall be tapped front and rear for industry-standard #10-32 rack screws. ▪ Rack rails to be securely anchored to floor and ceiling and stabilized laterally. ▪ Racks shall be stabilized vertically by means of being fastened to the interior sidewalls. ▪ Racks shall be stabilized linearly by means of aluminum plates from front rail to back rail in each rack. ▪ Racks shall be level and rack mount equipment shall line up properly for installation. ▪ Supply and install AC distribution strips in racks; shall be on individual circuits to include one (1) or two (2) high density strips per rack, depending on electrical needs. ▪ Racks to be enclosed at rear, these panels shall be full height and shall require no tools for removal. Panels shall be held in place by aluminum slots top and bottom and fitted with two stainless steel recessed handles each. Shall be easily removed by lifting vertically and pulling outward.

YES Gerling			<p>Interior Lighting</p> <ul style="list-style-type: none"> ▪ All lighting for operations shall consist of dimmable, recessed, amiable- LED. Each bank of LED lights shall be on an individual, dimmable circuit. Lighting shall operate on either DC via provided inverter, or shore AC. Provide and install additional LED lighting for rack maintenance.
YES Gerling			<p>Operations Area Construction</p> <ul style="list-style-type: none"> ▪ Meet with NETC to design and determine final layout of Production Operations Area, Audio Operations Area, Video Tape / Replay Area, Camera Control, Engineering and Server Room. ▪ Meet with NETC to design and determine final fit and finish. ▪ Contractors shall provide construction material samples for final fit and finish.
N/A	N/A	N/A	Environmental Control
YES Gerling			<p>Insulation</p> <ul style="list-style-type: none"> ▪ Insulation factor on walls shall be a minimum of R14 in concert with forced-air air-conditioning system shall provide environmentally secure environment. ▪ Provide and install full thermal insulation on outer walls, floor, doors, door seals and ceiling. Material must be approved by NETC Must meet industry standards and be approved by NETC. ▪
YES Gerling			<p>Heating, Ventilation and Air-conditioning (HVAC)</p> <ul style="list-style-type: none"> ▪ HVAC system, with fresh air quietly ducted directly into the equipment racks and personnel space. Fresh air shall be supplied to personnel areas and racks via plenum in ceiling, return shall be via sub-floor to ensure circulation directly through equipment racks, such that environmental demands of HPA Equipment will be accommodated. Air plenums shall be designed and installed to provide redundancy should the system fail. ▪ Supply and install two (2) three phase operation 10-ton wall mount air conditioning units. ▪ System minimum of 240,000 BTU. ▪ Material and components shall be resilient to temperature extremes and fluctuations without compromising performance. Design shall account for seasonal variations and be adaptable to different weather conditions commonly experienced in the Midwest. ▪ Unit shall include integral 10,000 Watt heating units.

<p>YES Gerling</p>			<p>Power Source/Electrical System</p> <ul style="list-style-type: none"> ▪ Power source: split environmental & technical ▪ The Vehicle shall be powered by means of a 300A power source, split 3 phase. <ul style="list-style-type: none"> a. System shall provide two completely separate legs of AC. b. Technical shall power all broadcast and specified receptacles. c. Environmental, which shall power all lighting, HVAC systems and specified receptacles. d. To include power meters in bay system and interior panel, analog and digital. e. One switch for split or combined power. ▪ Two (2) heavy-duty isolation transformers shall be provided and integrated. <ul style="list-style-type: none"> a. One (1) 45kVA for technical load, 125A circuit breakers integrated. b. One (1) 45kVA for environmental load, 150A circuit breaker integrated. ▪ Each Transformer shall be provided with tap selects, voltage taps shall step through positions of 190, 200, 210, 220, 240, and 270 Volts. ▪ Supply and install six (6) 50' shore power cables. Provide four (4) "pig-tails", supply and install Cam-lok power input connectors and panel, adjacent to monitoring panel. ▪ All Electrical wiring to utilize THHN insulated stranded copper wire. ▪ All Electrical wiring to be numbered ends and length in strict accordance to "as-built" drawings which shall be provided to the client. ▪ All Electrical wiring shall be dressed in accordance with highest industry standards. ▪ All wire runs shall be routed through EMT and flexible conduit. ▪ Provide and install GFI protected weatherproof duplex outlets, location and number to be determined by NETC. ▪ Grounding of the technical equipment within the vehicle shall follow standard grounding practices.
<p>YES Gerling</p>			<p>Low Voltage System</p> <ul style="list-style-type: none"> ▪ A 12V DC system shall be provided and integrated. Power source for 12v DC shall be two (2) Group 31 deep cycle batteries to be housed in a vented, anti-corrosive enclosure. ▪ The DC distribution system will be fully fused and will power: <ul style="list-style-type: none"> a. Interior lighting, activated by a mechanical timer located at personnel door such that interior DC powered devices will not be unintentionally left running. b. The strike or set-up lighting system. c. Lighting in belly storage bays. d. Audio/video bulkhead enclosures. ▪ Provide and integrate inverter/charger. ▪ Inverter system shall power all exterior and interior lighting.
<p>NOTES/COMMENTS:</p>			

D. TRAILER DESIGN AND SYSTEM INTEGRATION

YES	NO	NO & PROVIDE ALTERNATIVE	
Diversified Yes			<p>1. Trailer and System Design</p> <p>Engineering to include pre-build meetings with NETC and all documentation for:</p> <ul style="list-style-type: none"> ▪ Video systems ▪ IP router systems* (refer to #3) ▪ Network systems ▪ Multi-viewer systems ▪ Audio systems ▪ Intercom systems ▪ IFB systems ▪ Tally systems <p>To include specifically:</p> <ul style="list-style-type: none"> ▪ Rack placement ▪ Physical layout of interior (floor plan) ▪ Equipment selection and specification in consultation with client ▪ Design and integration of consoles ▪ Audio flow engineering ▪ Video flow engineering ▪ Intercom system engineering ▪ Multi-viewer system engineering ▪ Patch panel design and layout ▪ Power distribution requirements ▪ IO panel layout and placement ▪ CAD drawings for above with electronic copies ▪ Cable run list and wire number list ▪ Materials list
Diversified Yes			<p>2. System Integration</p> <p>Must have successfully installed and integrated IP Router in remote production trailers; references required.</p> <ul style="list-style-type: none"> ▪ The highest level of harnessed and labeled system integration to include wiring for 12 cameras, 5 EVS, 1 EVS Spotbox, Studer audio console, Grass Valley production switcher and IP router. ▪ The removal of equipment from the current customer supplied broadcast trailer. Please refer to attached <i>Retained Equipment List</i>. ▪ Labor to build and install NETC supplied equipment ▪ Contractor shall install all wiring, video/audio and patch panels as required ▪ I/O panels and connectors ▪ Construction labor ▪ Video cable (3G rated or higher) including labels ▪ Audio cable with labels ▪ Video connectors (3G rated or higher) ▪ Fiber cable with labels ▪ Audio connectors ▪ Multi connectors ▪ IP connectivity, networking wire and labels ▪ All miscellaneous hardware ▪ All necessary dressing materials ▪ All roof top antenna system with cable and water intrusion sealant ▪ All to be installed to the highest and current industry standards
Diversified Yes			<p>3. IP Router</p> <ul style="list-style-type: none"> ▪ Contractor shall obtain bids for IP router system and execute purchase after consulting with NETC. IP Router system should include 5 year extended service agreement. ▪ ▪ <i>IP Router Technical Requirements</i> attached.

Diversified Yes			<p>4. System programming and testing (ring out)</p> <ul style="list-style-type: none"> ▪ Assist NETC with programming of all systems ▪ Fully test all systems
Diversified Yes			<p>5. Miscellaneous items</p> <ul style="list-style-type: none"> ▪ Miscellaneous integration supplies (rack screws, tie bars and etc.) ▪ Lot blank panel sets ▪ Handling of customer supplied equipment to include inventorying of equipment, security, insurance and waste management.
<p>NOTES/COMMENTS:</p>			

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