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January 9, 2019

Mr. Fred Abadi, P.E.  
Director of Public Works  
City of Waukesha  
City Hall Annex  
130 Delafield Street  
Waukesha, Wisconsin 53188

Re: A/V and Security Optional Design Services – City of Waukesha City Hall

Dear Fred:

Thank you for the opportunity to help the City of Waukesha with the audio/visual (A/V) and security design for the City Hall project. This proposal expands on the information included in our Prime Agreement dated October 4, 2018 regarding Optional Services – If Authorized by the City.

BWBR's proposal to meet your needs is as follows:

## SCOPE OF SERVICES

### PROJECT APPROACH

Please see the attached scope of services descriptions from our A/V and Security consultant, Shen Milsom & Wilke (SMW) for a detailed listing of the proposed services. These have been reviewed and discussed with Katie Jelacic and Chris Pofahl.

#### Audio/Visual (AV) Design including:

- AV space planning and infrastructure design
  - The budget for the A/V systems and equipment has been set at \$700,000, excluding the TV25 systems.
  - Design and coordination of the relocation the existing systems, and a limited amount of new equipment, for TV25. These systems have an approximate value of over \$300,000.
- Two (2) Design Development and one (1) Construction Documents phase meetings.
- Floor plan layouts, video flow, audio flow, control flow and AV equipment lists, infrastructure requirements including cable and termination specifications, and estimated AV budget.
- Drawings and specifications for all aspects of the AV systems suitable for competitive bidding.
- Developing a separate bid package for the AV equipment. This bid package will be issued during the Construction phase as part of the General Contractor contract.
- One (1) Construction Administration phase site visit.

#### Security Systems Design including:

- Design of security systems: electrified door hardware, access control systems, video surveillance and intrusion detection systems.

- Two (2) Design Development and one (1) Construction Documents phase meetings.
- Includes building core and shell, interior spaces, site perimeter and grounds.
- Coordinate security design and systems with City of Waukesha's selected Security Vendor. The security work will be part of the General Contractor's contract.
- One (1) Construction Administration phase site visit.

### SCHEDULE

Please refer to the most recent Project Schedule dated 12.10.18.

### DELIVERABLES

Please refer to the attached SMW scope of services descriptions and the Prime Agreement.

### ASSUMPTIONS AND EXCLUSIONS

The following assumptions were made in defining the scope of BWBR's services:

- The City will provide listing of the existing TV25 systems and equipment

### COMPENSATION FOR OPTIONAL A/V AND SECURITY DESIGN SERVICES

BWBR proposes to provide these services for a lump sum fee of:

Audio/Visual (A/V) Design: Ninety Three Thousand Six Hundred Ninety Seven Dollars (\$93,697).

Security Design: Fifty One Thousand Dollars (\$51,000).

Please see the Prime Agreement for reimbursable expenses.

### OTHER TERMS

Please see the Prime Agreement for additional terms.

If this proposal is acceptable, please notify BWBR in writing (email is acceptable) as authorization to proceed. We will then submit a formal Project Specific Amendment for the City's signature.

Respectfully submitted,

**BWBR ARCHITECTS, INC.**



Thomas M. Hanley, AIA  
Principal

RG/rg

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c: Rick Gabriel, BWBR

Attachments: Shen Milsom & Wilke scope of services – A/V and Security

# Integrated Communications Technology Scope of Services

## ASSUMPTIONS

The following assumptions are provided for the purposes of clarifying the proposed scope of work to define the spaces and systems in which SM&W will provide design and the systems that are covered:

- SM&W assumes that the Telecommunications Low Voltage Cabling and Infrastructure Consultant shall indicate the Category cabling requirements for the various IP-enabled devices serving Audiovisual and Security devices.
- ICT Systems and Services to include spaces noted in the RFP and in our *project understanding*.
- We assume we will issue documentation at 50%, 90% and 100% only.
- All deliverables will be electronic.
- CATV scope and coordination have been removed from SM&W scope and fees as requested.
- Room Scheduling systems and associated coordination have been removed from SM&W scope and fees as requested.
- Development, review and submittal of Final Record documents have been removed from base scope for each discipline and have been identified as a separate additional service and fee as requested.

### Audiovisual Assumptions

1. Fee assumes an AV budget that does not exceed \$700,000.
2. Existing Television connectivity and equipment/systems is anticipated to remain intact and not within scope
3. Our scope of work is anticipated to commence with Design Development, using materials, scope and budgets previously developed during Concept and Schematic design
4. We will assist with vetting technology concepts previously generated, as we proceed into design development
5. Electronic Signage such as video walls or large-scale display design is not anticipated in scope or fees.
6. Existing spaces and systems testing, and survey is not anticipated in scope or fees. Spaces identified are anticipated to be new systems, not utilizing current systems.
7. We expect the facility to include audiovisual technology commensurate with modern government/public facility capabilities.
8. Each room type is anticipated to be designed as “typical” of identified type of room, thus reducing design efforts within similar spaces.
9. Spaces above and beyond those listed earlier in this proposal shall be excluded from the design. While there can certainly be some juxtaposition between space types and counts that can occur, major space type and count changes must be revisited.

## DESIGN DEVELOPMENT

This phase will validate space requirements and define the requirements for the AV infrastructure, systems, and technology. Our team will conduct an interview and research any existing client standards to understand the technology goals and requirements for the project. We will translate these requirements into a report that will provide the baseline by which the design will be compared for accuracy and completeness of implementation throughout the remaining project phases. We will formalize the AV system designs inclusive of facilities and infrastructure. This will provide information for other members of the design team to include and fully coordinate AV design. Additionally, SM&W will develop all plans, details, and a specification in support of the implementation of all systems.

### Tasks

1. Analyze available project documents and develop a report of space requirements, physical space needs, and pathways and infrastructure necessary to support the technology and systems required.
2. Submit device data sheets for architecturally significant components being used as the basis of design. These devices may change due to the nature of the electronics industry, and they will be used to demonstrate the design intent through the design process.
3. Provide recommendations and schematic design guidelines based on typical industry standards conforming to user requirements.
4. Identify systems and applications currently in use.

5. Assess specialty application software requirements as they relate to integration with systems and the requirements for networking.
6. Validate the operational requirements and system interface requirements to establish system and device locations that best complement those needs and to provide better overall efficiency in existing and planned operations.
7. Estimate power and heat loads.
8. Review and comment on the electrical contract drawings after inclusion of our input to ensure the complete and accurate transfer of information.
9. Prepare and develop plans that indicate room location(s), pathways, and typical device locations.
10. Continue coordination of spaces and MEP requirements with the project team.
11. Provide infrastructure plans for the establishment of required connectivity for systems.
12. Confirm interfaces with other systems, to provide coordinated design information to the project team for implementation.
13. Prepare draft specifications.

#### **Deliverables**

- Draft and Final Design Report and Budget Estimate
- Draft and final Design Development Drawing Package
- Draft and final Design Development Specifications

## **CONSTRUCTION DOCUMENTS**

SM&W will complete all AV design documents to produce a package that can be released for tender. The final details for technical installation, methodology, placement, and mounting to ensure that the infrastructure and systems are installed as required to meet the established criteria.

#### **Tasks**

1. Develop general specifications that detail:
  - a. Scope of work
  - b. System performance requirements
  - c. Installation and integration requirements
  - d. User training requirements
  - e. System acceptance testing.
2. Develop detailed specifications that outline the functional requirements for each system.
  - a. Create single component line item equipment lists that detail each piece of equipment by manufacturer and model number.
  - b. Identify software and application requirements as required to support the proposed systems.
  - c. Provide signal flow diagrams showing the design intent among components.
3. Coordinate system requirements to ensure cabinet/rack space, electrical and HVAC and telecommunications cabling requirements are being addressed.
4. Discuss a schedule for implementation that includes procurement, installation, testing, and training.
5. Finalize installation detail drawings that show infrastructure risers/backbone diagrams, device installation details, and outlet quantities and locations.
6. Review architectural, electrical, and mechanical drawings to ensure that all requirements are incorporated.
7. Finalize all device locations, types, and system controls in the form of a device schedule that will be incorporated into a drawing package.
8. Develop a list of installation contractors to ensure that qualified, licensed and certified vendors are selected.
9. For AV design specifications only, we will Issue documents to the design team for bid in coordination with the project team.
10. For AV bid responses only, we will review, level and evaluate bid responses for each system to provide the project team with further under-standing of any responses.

#### **Deliverables**

- Draft and Final Construction Document Drawing Package for Tender
- Draft and Final System Specifications for Tender
- List of Qualified Contractors (AV Tender documents only)

## BID & AWARD

During this phase, we will work with BWBR Architects and Waukesha City Hall to ensure all documentation is provided as required, information is reviewed in a fair and equitable manner and the best combination of contractor, solution and price is selected.

### Tasks

1. Acknowledge permit activities including completion submission, and distribution of all requisite federal, state, and local permits, applications, and approvals
2. Participate in pre-bid meeting attendance and response to bidder's questions.
3. Develop a list of audiovisual installation contractors only, to ensure that qualified, licensed and certified vendors are selected.
4. Issue documents to the owner for bid in coordination with the project team.
5. For audiovisual specifications only, we will review, level and evaluate bid responses for each system to provide the project team with further understanding of any responses.

### Deliverables

- Bid Evaluation Summary and Recommendation for Award (audiovisual only).

## CONSTRUCTION ADMINISTRATION

SM&W will provide services and personnel to assist with project management and to coordinate the installation of the ICT infrastructure and systems. This will ensure that the project is delivered on time and on budget and that it meets all performance requirements. Throughout construction, we will be available to answer questions and RFIs and to coordinate installation as necessary.

### Tasks

1. Review and comment on system-related shop drawings, product specifications and literature pertaining to our tender documents as submitted by the general contractor/construction manager or subcontractor.
2. Provide a final inspection of the facility/system and prepare a final punch list of items to be completed or corrected for each system upon approval of the test results.
  - a. Systems acceptance testing will not be performed until the contractor's system checkout has been completed and the test results have been approved.

### Deliverables

- Request for Information (RFI) Responses
- Review of Shop Drawings and Submittals
- Punch List and Site Inspection Report

## ADDITIONAL SERVICES-INTEGRATED COMMUNICATIONS TECHNOLOGIES

We are providing the following additional services as requested for As-Built Documents. These services are related to final project documentation and close out and are identified as additional services at the owners' request.

### Tasks

1. SM&W will review and coordinate audiovisual and security contractors final record/as-built drawings for this project to verify work has been completed as specified and that documentation is complete and accurate per specifications. As-Built documents will be reviewed by SM&W as submitted by the AV contractor, as a requirement of our specifications that we will develop within our base scope. As per request, we have provided a separate scope and fee for this work for AV discipline.

### Deliverables

- Close out document (Review)
- Review as-built documentation as provided by the contractor for each system to ensure that all required information has been documented as per the project requirements and specifications.

Requested modifications include:

Audiovisual

- Adding the following services:
  - Council Chambers: Include capability to display matrix of multiple sources on simultaneously on multiple video displays
  - TV25: Survey existing TV25 control room for existing technology and required infrastructure to support the function of TV25. City to provide listing of existing equipment. SMW provided project specification to include coordination of packaging and relocation of existing TV25 equipment by the Contractor to the new facility.
  - TV25: Coordinate the city-desired new technologies for TV25 for integration with the existing relocated TV25 equipment.

# Security Scope of Services

## ASSUMPTIONS

The following assumptions are provided for the purposes of clarifying the proposed scope of work to define the spaces and systems in which SM&W will provide design and the systems that are covered:

- City security contractor will be involved in design and will provide device locations, detailed product information and installation.
- Security Systems and Services to include spaces noted in the RFP and in our *project understanding*.
- We assume we will issue documentation at 50% and 100% only.
- All deliverables will be electronic.
- SM&W assumes that the Telecommunications Low Voltage Cabling and Infrastructure Consultant shall indicate the Category cabling requirements for the various IP-enabled devices.
- SM&W shall assume that the converged voice, data, and wireless systems designer shall provide the active network switching/routing requirements.
- SM&W will coordinate electrified door hardware with the architectural hardware schedule. Specification of this hardware is not included in the SM&W scope of work.
- Existing spaces and systems testing, and survey is not anticipated in scope or fees.
- Physical Security Spaces Systems and Services to include building core and shell, interior spaces and site perimeter and grounds for new spaces.
- Systems and Services to include access control system, video surveillance system, intrusion detection system.
- As-Built documents will be reviewed by SM&W as submitted by the Security contractor, as a component of the Security specifications that we will develop within our scope.
- Threat assessment for this facility is not anticipated within scope.
- Scope of work excludes blast and ballistic consulting.

## DESIGN DEVELOPMENT

This phase will provide design criteria, validate space requirements and define the requirements for the ICT infrastructure, systems, and technology. Our team will conduct an interview with City security contractor to document any existing client standards to understand the technology goals and requirements for the project. We will translate these requirements into a report that will provide the baseline by which the design will be compared for accuracy and completeness of implementation throughout the remaining project phases. We will formalize the ICT system designs inclusive of facilities and infrastructure. This will provide information for other members of the design team to include and fully coordinate ICT design. Additionally, SM&W will develop all plans, details, and a specification in support of the implementation of all systems.

### Tasks

1. Analyze available project documents and develop a report of space requirements, physical space needs, and pathways and infrastructure necessary to support the technology and systems required.
2. Provide recommendations and design guidelines based on typical industry standards conforming to user requirements and identified risks.
  - a. City security contractor to submit device data sheets for system components being used as the basis of design.
  - b. City security contractor to identify systems and applications currently in use.
  - c. Budgeting will be by City security contractor.
3. Validate the operational requirements and system interface requirements to establish system and device locations that best complement those needs and to provide better overall efficiency in existing and planned operations.
4. Estimate power and heat loads.
5. Review and comment on the electrical contract drawings after inclusion of our input to ensure the complete and accurate transfer of information.
6. Prepare and develop plans that indicate room location(s), pathways, and typical device locations.
  - a. City security contractor to provide device location markups and cabling requirements.
7. Coordinate spaces and MEP requirements with the project team.
8. Provide infrastructure plans for the establishment of required connectivity for systems.

9. Confirm interfaces with other systems, to provide coordinated design information to the project team for implementation.
10. Prepare draft specifications.

#### **Deliverables**

- Draft and Final Design Report
- Draft and final Design Development Drawing Package
- Draft and final Design Development Specifications

### **CONSTRUCTION DOCUMENTS**

SM&W will complete all ICT design documents to produce a package that can be priced by City security contractor. The final details for technical installation, methodology, placement, and mounting to ensure that the infrastructure and systems are installed as required to meet the established criteria.

#### **Tasks**

1. Develop general specifications that detail:
  - a. Scope of work
  - b. System performance requirements
  - c. Installation and integration requirements
  - d. User training requirements
  - e. System acceptance testing.
  - f. Create single component line item equipment lists that detail each piece of equipment by manufacturer and model number.
  - g. Identify software and application requirements as required to support the proposed systems.
  - h. Provide signal flow diagrams showing the design intent among components.
2. Coordinate system requirements to ensure cabinet/rack space, electrical and HVAC and telecommunications cabling requirements are being addressed.
3. Discuss a schedule for implementation that includes procurement, installation, testing, and training.
4. Finalize installation detail drawings that show infrastructure risers/backbone diagrams, device installation details, and outlet quantities and locations.
5. Review architectural, electrical, and mechanical drawings to ensure that all requirements are incorporated.
6. Finalize all device locations, types, and system controls in the form of a device schedule that will be incorporated into a drawing package.

#### **Deliverables**

- Draft and Final Construction Document Drawing Package
- Draft and Final System Specifications
- List of Qualified Contractors

### **BID & AWARD**

Not in scope. City's security contractor to provide pricing.

### **CONSTRUCTION ADMINISTRATION**

SM&W will provide services and personnel to assist with project management and to coordinate the installation of the ICT infrastructure and systems. This will ensure that the project is delivered on time and on budget and that it meets all performance requirements. Throughout construction, we will be available to answer questions and RFIs and to coordinate installation as necessary.

#### **Tasks**

1. Review and comment on system-related shop drawings, product specifications and literature pertaining to our design documents as submitted by the general contractor/construction manager or subcontractor.
2. Provide a final inspection of the facility/system and prepare a final punch list of items to be completed or corrected for each system upon approval of the test results.
  - a. Systems acceptance testing will not be performed until the contractor's system checkout has been completed and the test results have been approved.



3. Review as-built documentation as provided by the contractor for each system to ensure that all required information has been documented as per the project requirements and specifications.
4. Ensure all knowledge transfer and closeout activities are completed to the client's satisfaction.

**Deliverables**

- Request for Information (RFI) Responses
- Review of Shop Drawings and Submittals
- Punch List and Site Inspection Report

**ADDITIONAL SERVICES-INTEGRATED COMMUNICATIONS TECHNOLOGIES**

We are providing the following additional services as requested for As-Built Documents. These services are related to final project documentation and close out and are identified as additional services at the owners' request.

**Tasks**

1. SM&W will review and coordinate security contractors final record/as-built drawings for this project to verify work has been completed as specified and that documentation is complete and accurate per specifications. As-Built documents will be reviewed by SM&W as submitted by the contractor, as a requirement of our specifications that we will develop within our base scope. As per request, we have provided a separate scope and fee for this work for security discipline.

**Deliverables**

- Close out document (Review)