

# SOLUTIONZ

## Statement of Work

### North Slope Borough School District

A/V Room Move  
829 Aivik Street  
Barrow, AK 99723  
Estimate #43976

#### *Project Overview*

North Slope Borough School District has asked Solutionz, Inc. to provide a proposal to move the Distance Learning Room that Solutionz installed at the Barrow Highschool to their Residential Learning Center.

This proposal is valid for fourteen (14) days from date of delivery of Statement of Work. This proposal includes installation of Solutionz, Inc. specified equipment and Owner Furnished Equipment (OFE). Solutionz, Inc. will provide equipment identified in the estimates, post-sale engineering support, project management, installation, testing, and orientation of the system once installed.

Solutionz, Inc. assumes all required items not in our scope of work will be completed by the owner, or owner supplied contractor, and in the specified time frame. Any delay, or changes, could increase the time frame to complete the project, and increase the installation cost.

The below Statement of Work assumes all work to be performed by a Solutionz Technician. Any additional need for outside technicians, to include but not limited to, union labor or other 3rd party licensed contractors, could increase the installation cost. Solutionz, Inc.'s normal working hours are from 8am to 5pm, local time. Solutionz, Inc. expects to start basic installs with in two (2) to five (5) weeks and integrations with in six (6) to eight (8) weeks from the order being completely processed by Solutionz, Inc. Any changes to these time frames will need to be approved prior to the start of the project and could increase the installation cost.

### Residential Learning Center Distance Learning Room:

#### AV System Description:

The Distance Learning Studio will feature an 86" UHD interactive touch display on an electric vertical lift mount and 65" UHD display on a pull-out mount. The display will provide the room participants with video content for virtual meetings or presentations.

The video conferencing system will feature a Crestron Flex kit with a dedicated video conferencing compute device, CAT5 to USB 3.0 converter, UC Presentation transmitter, Huddle Cam HD HC20X-SIMPLTRACK2 presenter tracking PTZ camera, Vaddio RoboSHOT 30E PTZ camera, and 10" table mounted touch panel. The Huddle Cam HD HC20X-SIMPLTRACK2 presenter tracking PTZ camera will be mounted on the back wall. The Vaddio RoboSHOT 30E PTZ camera will be mounted about the 86" display. The 10" table mounted touch panel will be located on top of the equipment rack. The video conferencing compute device and touch panel will be configured to native Zoom Room mode. The native Zoom Room graphic user interface (GUI) provides a simple and familiar platform with features such as one-touch join, content sharing, and meeting management.

The audio system will consist of two wall mounted audio bars, two wireless lavalier microphones and two wireless handheld microphones. The audio bar will provide a full audio pick-up of the room and reinforcement for virtual meetings, wireless microphones, and program audio. The wireless microphone audio will be mixed, processed, and routed using a Biamp audio digital signal processor (DSP).

Users will have three options to present content to virtual meetings and/or the displays. The first option is for a user to connect to an HDMI cable at the equipment rack. The second is to connect to the Biamp Modena Hub wireless presentation device. The third option is for users to present content wirelessly to the Zoom Room using the Zoom application on their personal device.

AV control processors will be used to allow users to control the wireless microphone audio, PTZ cameras, video source switching and AV system power. A room control flip page will be created for the user controls.

The main AV head-end equipment will be installed in a new soundproof AV equipment rack located at the front left of the room.

#### Owner furnished Equipment:

This is equipment that the customer will be furnishing to Solutionz, Inc. for the installation. Solutionz will not be responsible for the quality or functionality of OFE. Solutionz Field Technician will troubleshoot the functionality of OFE for a maximum of one hour. If OFE is non-functional after the troubleshooting period, additional time and material charges may be invoiced to the customer.

- Solutionz installed all AV equipment at Barrow High School. See project 2002903 - NSBSD - #16657 in box.

#### System Notes:

- This AV system requires a Zoom Room license purchased and configured by the owner.
- Due to the hard lid ceiling, some of the low voltage cables will need to be installed in wall mounted cable raceways.
- The auto-switching feature will be removed from the existing AV system. It is no longer necessary since Zoom provides a [Multi-Camera mode](#) in Zoom meetings.
- This proposal includes an option for Solutionz Inc. to decommission the existing AV system at Barrow Highschool.
- This proposal included an option for Solutionz Inc. to move the equipment from Barrow Highschool to Residential Learning Center.

## Scope of Work

In Scope – Responsibility of Solutionz, Inc.

Out of Scope – Responsibility of owner or other trade contractor

Existing – Existing item that is required for the project but does not need to be delivered by any party

- All documentation will be provided in PDF, Excel, or Word format

<b>AV Installation</b>				
<b>Item</b>	<b>Description</b>	<b>In Scope</b>	<b>Out of Scope</b>	<b>Existing/ Not Applicable</b>
Installation	Provide a complete installation of the AV equipment provided by the owner and in the bill of materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Project Manager	Provide an audiovisual project manager for the duration of the project to coordinate audiovisual work with the owner and other trades.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engineer	Provide an audiovisual industry certified engineer.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping	Coordinate materials delivery.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demolition	Removal of any existing equipment and/or wire. – All removed equipment and material will be returned to the owner. Any material that does not need to be recycled will be disposed of on-site at the owner's request.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment Removal	Remove all decommissioned audiovisual equipment from the site. – Typically, equipment will be returned to the owner.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Permits and Inspections	Obtain and pay for permits and inspections required for the work.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Warehousing	Receive, obtain, test, and protect any devices, wiring, etc. in a Solutionz, Inc. facility then deliver or ship to the installation site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Low Voltage Cable Pulls	Furnish, Install, Label, Terminate and Test all AV low voltage cable that are run through floors, walls, ceilings, riser spaces, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pre-fabrication - racks	Assemble project equipment racks. Install, configure, and test rack equipment before delivering to installation site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pre-fabrication - furniture	Assemble project cabinets, credenzas, lecterns, AV carts or other AV furniture. Install, configure, and test furniture equipment before delivering to installation site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pre-fabrication - plates	Fabrication, labeling and installation of any connection plates to be installed in the field including wall and floor plates before delivering to installation site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Site cleaning	Clean any dust, debris and rubbish created by audiovisual installation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>AV Engineering</b>				
<b>Item</b>	<b>Description</b>	<b>In Scope</b>	<b>Out of Scope</b>	<b>Existing/ Not Applicable</b>
Map drawings	Provide engineered technical drawing(s) showing the location of all rooms on a floor plan.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Infrastructure drawings	Provide engineered technical drawing(s) most often detailing conduit, rough-in, blocking, etc. requirements for the project for use by other trades in coordination with the system(s). – Requires an architecture AutoCAD drawing from the owner.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floor plan drawings	Provide engineered technical drawing(s) detailing the locations of AV devices on an architecture floor plan. – Requires an architecture AutoCAD drawing from the owner.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Reflected Ceiling plan drawings	Provide engineered technical drawing(s) detailing the locations of AV devices on an architecture reflected ceiling plan. – Requires an architecture AutoCAD drawing from the owner.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Riser drawings	Provide engineered technical drawing(s) detailing low voltage cabling in the system(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elevation drawings	Provide engineered technical drawing(s) detailing the elevation and location of all devices on the wall(s).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flow schematic drawings	Provide engineered technical drawing(s) showing the schematic design of the system including device connections, signal types, and equipment parts, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rack drawings	Provide engineered technical drawing(s) detailing the layout of any equipment racks, cabinets, lecterns, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I/O Plate drawings	Provide engineered technical drawing(s) detailing any connection plates for the project to be installed in the field or on any equipment rack, including specific plate labeling.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Detail drawings	Provide engineered technical drawing(s) detailing any custom or specialty work, including but not limited to custom mounts, rigging, console design, lectern layout, furniture, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
System Commissioning	Configure and setup system for proper operation as coordinated with customer and/or specifications.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wireless configuration	Setup and configuration of wireless presentation gateway devices enabling connection of sources using Wi-Fi or other wireless technology.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisioning, registration, and back-end management	Provide any provisioning, registration and back-end management for Unified Communication, Video Codecs or VoIP services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IP Schedule	Provide IP schedule with a list of fixed or static IP addresses, ISDN numbers and telephone numbers used for audiovisual equipment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frequency Schedule	Provide a list of frequencies and/or channels used for wireless microphone and assistive listening systems.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Infrastructure requirement document	Provide an infrastructure requirement document	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Install support documents	Provide installation support documents - Cable pull schedules, wall weight calculations, rack power calculations, rack heat dissipation calculations, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>AV Control Programming</b>				
Item	Description	In Scope	Out of Scope	Existing/ Not Applicable
Programming	Develop and test any custom system programming for proper operation as coordinated with customer and/or specifications	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Programming preview documents	Provide a preliminary layout of all remote-control devices (touch panels, remote controls, etc.), submitted electronically.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pre-programming review	Review of user interface with the owner to ensure proper control functions.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>System Testing and Verification</b>
--

Item	Description	In Scope	Out of Scope	Existing/ Not Applicable
System Testing	Verification of system functionality and completeness of system configurations including software version verification operational accuracy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Testing documentation	Provide documentation of testing results.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Training				
Item	Description	In Scope	Out of Scope	Existing/ Not Applicable
On-site Training – key customer personnel	Provide on-site training with key customer personnel as specified and required by the project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On-site Training – End-users	Provide on-site training with key end-users as specified and required by the project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Remote Training	Provide online training, either self-paced or instructor guided as specified and required by the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
User documentation	Provide comprehensive user training materials, typically in electronic (PDF) format, as specified and required by the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Project Closeout				
Item	Description	In Scope	Out of Scope	Existing/ Not Applicable
Engineering support	Post-sale engineering support	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drawing Set	Provide a complete set of all engineered drawings reflecting the complete system as installed, which may have varied from the originally engineered set of drawings based on unique changes/adds/deletions during the installation period.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment data/cut sheets	Provide a complete set of data/cut sheets for all primary/major pieces of equipment being supplied for the project showing brand/make & model along with the detailed technical specifications submitted prior to project deployment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Equipment numbers	Equipment list for each room with manufacturer, model number, serial number, client tracking number (if applicable), and other unique equipment numbers for installed equipment in spreadsheet format.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operation guides	A complete set of manufacturer's operations and/or owner's manuals for all primary/major pieces of equipment submitted during the closeout period of the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Replacement parts	A list of necessary and recommended replacement parts for a normal maintenance period of one year.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Warranty	Include the terms of the warranty and the appropriate contact phone numbers for service.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Software and configuration files	Software files for graphical user interface, source code, DSP, and equipment settings on non-volatile electronic media. Provide electronic copies of compiled and un-compiled programming files	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

General Contractor Work				
Item	Description	In Scope	Out of Scope	Existing/ Not Applicable

Millwork	Any millwork modifications for credenza and/or table to install components or cabling.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lift and scaffolding	If necessary, provide a lift and/or scaffolding capable of safely reaching and lifting required personnel and equipment to correct mounting/wiring positions.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blocking	Provide appropriate blocking and/or structural support for wall mounted equipment cabinets and/or specialty field devices like large format displays, large format speakers, projectors, etc. as specified and required by the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rough-in	Cutting, patching, and painting of walls and/or ceilings, including ceiling tiles and grid.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conduit	Install cable conduit.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Structure above ceiling	Installation of any structure attached to the deck above finished ceiling, including but not limited to channel, threaded rod, and other hardware as required to support projectors, lifts, projection screens, and ceiling speakers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Repair after installation	Repair any ceiling support structure that is required to be modified by Solutionz to install any in-ceiling component such as loudspeakers, projector and display mounts, and projection screens.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Electrical Work				
Item	Description	In Scope	Out of Scope	Existing/ Not Applicable
Power outlets	Provide power as specified at all required locations including equipment racks and field devices.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Backboxes	Backboxes as specified at all locations as required for the project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wall boxes	Wall boxes as specified at all locations as required by the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mud rings	Mud rings as specified at all locations as required by the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floor boxes	Floor boxes as specified at all locations as required by the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Telecom Work				
Item	Description	In Scope	Out of Scope	Existing/ Not Applicable
Data outlets	Provide local and/or broadband network circuits and connections	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Network administration	Provide a network admin to work with the Solutionz technician on any network issues that may arise, i.e., Codec NAT, VoIP card registration, etc. Note: Solutionz cannot make changes to the owners' network infrastructure.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Owners Responsibilities				
Item	Description	In Scope	Out of Scope	
Working hours	Provide adequate access to the install location during working hours.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

PoC (Point of Contact)	Provide a PoC (Point of Contact) to be available and able to answer any questions that the Solutionz technician has during the installation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Public internet	Provide access to the public internet for the download of firmware or control system program and/or drivers if required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Local assistance	Provide a capable assistant to assist the Solutionz technician with mounting any displays or other heavy objects.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Disposal area	Provide access to refuse disposal area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Provisioning, registration, and back-end management	Provide any provisioning, registration and back-end management for Unified Communication, Video Codecs or VoIP services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
End user orientation	End users will be on-site and available and orientation, to be performed at the end of the install.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sign-off on system acceptance	An owner's representative will be on-site and available to sign-off on system acceptance upon the completion of orientation/demonstration.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**Statement of Work written by:**

**Ray Leporati | Audio-Visual Engineer**

Solutionz, Inc.

(234) 200-8462 | rleporati@solutionzinc.com

**Terence Migas | Audio-Visual Engineer**

Solutionz, Inc.

(425) 985-9120 | tmigas@solutionzinc.com

**Acknowledgements:**

I confirm that I have read, understand, and agree to comply with the above Statement of Work.

**Customer Acceptance:**

  
Signature

  
Date