Quad Cities Cable Communications Commission

Anoka City Hall - Council Chambers

January 18, 2018, 11:00 AM

Agenda

- 1. Call to Order
- 2. Roll Call
- 3. Approval of Agenda
- 4. Administrative Reports
 - 4.1. Secretary
 - 4.1.1. Approval of the November 16, 2017, commission minutes.
 - 4.2. Treasurer
 - 4.2.1. Financial Reports
 - 4.3. Executive Director
 - 4.4. Commission Organization
- 5. General Business
 - 5.1. Designate Depository
 - 5.2. Budget Carryover Requests Equipment and Studio Set
 - 5.3. Comcast Franchise Renewal Standstill Agreement
 - 5.4. City Council Chambers Upgrade Report and Bid Information
- 6. Adjourn

MINUTES OF THE REGULAR MEETING OF NOVEMBER 16, 2017

CALL TO ORDER - 1

Chair Heitkamp called the meeting to order at 11:00 a.m. at the Anoka City Hall.

ROLL CALL-2

Commissioners present were: Carl Anderson, Anoka; Greg Lee, Anoka; John LeTourneau, Ramsey; Kurt Ulrich, Ramsey; Jim Dickinson, Andover (arrived at 11:17 a.m.); Jim Goodrich, Andover; Jessica Tesdall, Champlin; and Bret Heitkamp, Champlin.

Commissioners absent and excused: None.

Others present included Karen George, Executive Director; Bob Vose, Commission Attorney; and Karly Werner, Director of Government Affairs.

APPROVAL OF AGENDA – 3

Chair Heitkamp noted that the Treasurer's Report will be moved to be considered as Item 5.5 on the agenda to allows for Commissioner Dickinson to arrive.

Motion was made by LeTourneau and seconded by Ulrich to approve the agenda as amended.

7 ayes – 0 nays. Motion carried.

ADMINISTRATIVE REPORTS – 4

4.1 Secretary

4.1.1. Approval of meeting minutes from September 21, 2017

Motion was made by LeTourneau and seconded by Lee to approve the September 21, 2017 minutes as presented.

7 ayes – 0 nays. Motion carried.

4.2 Treasurer

4.2.1. August and September Financial Reports (moved to item 5.5)

4.3 Executive Director

Ms. George highlighted the recent awards received by QCTV and the members of its staff. She stated that there are various updates on projects within the staff report. She stated that there was a meeting with Comcast this week regarding the franchise renewal and noted that there will be an update later in the meeting. She highlighted some of the new programing, including *Ramsey Matters*, which recently featured information on the Resilient Communities program and previously featured information on parks programming. She encouraged other member cities to look at those opportunities. She highlighted a recent compliment received on the sports coverage QCTV provides.

Chair Heitkamp referenced the sports award and asked when the event took place.

Ms. George replied that the sports event took place the previous year.

Chair Heitkamp congratulated the organization, noting that the awards reflect the great work that Ms. George and her staff continue to do.

GENERAL BUSINESS – 5

5.1 Comcast Presentation

Karly Werner provided an update on the customer experience initiative journey, with the goal of improving the customer experience. She stated that this week the real time assist initiative was launched. She explained that Comcast wants to meet customers where they are, to reduce the time a customer is waiting and enhance the experience. She stated that customers can choose how they want to be notified of updates confirming tech appointments, and real-time updates on equipment deliveries and service outages. She stated that the GIG service is being rolled out and hoped that all the member cities of QCTV would be eligible by the end of the year, or the end of the first quarter of 2018. She explained that the service would simply require the change of the modem to become GIG capable.

Mr. Vose stated that staff met with Comcast earlier this week. He stated that he described the franchise renewal process at the previous Commission work

session, providing an overview of the two options a renewal can take. He stated that Comcast confirmed that they would prefer to follow the information renewal, which is also the route the organization would prefer and noted that Comcast is willing to put that into writing. He stated that staff also wanted to get a sense of the reason that Comcast is requesting to change the date of the renewal, noting that his sense is that this is a pretty manageable package of issues that will be discussed.

Ms. Werner concurred with the summary provided by Mr. Vose. She stated that it is not their intention to start from scratch. She stated that they appreciate the partnership with QCTV and the member cities and this is working well. She stated that there are a few provisions that seem outdated and they would like to discuss removing those to remain relevant in the market place as the competition today is very different than it was 20 years ago.

Chair Heitkamp stated that the organization looks forward to continuing the amicable negotiations that they have had in the past.

5.2 Comcast Late Fee

Ms. George stated that Mr. Vose is present to describe the proposed late fee change from Comcast.

Mr. Vose noted that this last came forward to the Commission in 2013/2014. He stated that Comcast charges a late fee when customers choose to pay late. He stated that in the prior contract there was a provision that required any changes in the late fee to be approved by the Commission. He stated that most of the company's rates are not regulated by the Commission. He stated that the amount of revenue generated by the late fees were excluded from the company's calculations of their revenue for use in determining the franchise fees and therefore the Commission required any change in the fee to come before the Commission as a reminder of the fees that are being generated. He stated that Comcast is willing to comply with the regulation to come before the Board, but noted that that Comcast considers the regulation pre-emptive because of the federal law regulations. He stated that he is not aware of a reason not to approve the increase.

Chair Heitkamp asked it the typical late fee gross revenue has been for Comcast in past years.

Mr. Vose stated that while he does not know that amount, it can be found out.

Ms. Werner stated that with the request to approve the late fee, a study was included that demonstrates the cost of late payment for the company. She stated that the 2016 late fees collected were included, as well as the costs of the

collection activities. She stated that customers that do pay on time should not have to subsidize the costs for customers that do not pay on time.

Ms. George confirmed that she would share the results of the study with the Commission.

Commissioner Ulrich asked, and received confirmation, that staff concurs that the \$10 late fee would be standard for this industry.

Mr. Vose stated that based upon his experience this is not out of step with other operators. He stated that the operators in Minnesota, other than Comcast, have consistent late fees.

Motion was made by Ulrich and seconded by Tesdall to approve Comcast request for late fee rate adjustment.

8 ayes – 0 nays. Motion carried.

5.3 Consideration of Amendments to Bylaws

Ms. George stated that this item requests consideration of amendments to the bylaws. She stated that the amendments were reviewed by Attorney Lepak and his review is included in the Commission packet. She provided a brief review of the proposed bylaws.

Commissioner Goodrich referenced the bylaw amendment changing the meeting date to every other month and asked the intention.

Ms. George noted that as written, the bylaws specify that there will be monthly meetings. She stated that when the review of the auditor was done, the cancelation rate was noted, and the suggestion was made to amend the meeting schedule to every other month. She confirmed that the intention would be to meet every other month.

Commissioner Dickinson noted that this would not preclude the Commission from meeting on off months, if needed or desired.

Motion was made by Dickinson and seconded by Goodrich to approve amended bylaws.

8 ayes - 0 nays. Motion carried.

5.4 Proposed 2018 Operating Budget and 5-Year Capital Plan

Ms. George stated that enclosed in the packet is the proposed 2018 operating budget and five-year capital plan. She reviewed the four actions that are recommended. She thanked staff for their work in creating the budget and for the Budget Committee for their thorough review.

Commissioner Dickinson noted that the Budget Committee did a thorough, line by line, review of the proposed budget. He provided a summary of the items of note included in the proposed budget.

Chair Heitkamp asked where the organization expects to end 2017.

Ms. George noted that the August year to date information was included in the packet. She advised that the organization is on track, or below the budgets amount, and expects the organization to remain under the budgeted amount at the end of the year.

Commissioner Dickinson noted that the funds above the cash flow needs could be used in the future year's budget or could be used to fulfill the needs identified in the capital plan. He stated that there is a good forecast to fulfill the capital needs plan without using a bonding component.

Chair Heitkamp asked if the fund balance carried is typically at the 25 percent range.

Commissioner Dickinson stated that the base is set at 25 percent. He stated that if there were collection problems with Comcast, the organization may want to go higher but he does not foresee that being an issue.

Motion was made by LeTourneau and seconded by Ulrich to approve the 2018 Operating Budget, operational reserve of \$398,745, capital funds distribution in the amount of \$20,000 per member and authorize staff to execute payment in the first quarter of 2018, and the 5-year Capital Equipment Spending Plan.

8 ayes - 0 nays. Motion carried.

5.5 Treasurer

5.5.1. August and September Financial Reports (previously item 4.2)

Commissioner Dickinson stated that the revenues are exceeding the expenditures at this time. He stated that he does not see any red flags and the organization is positioning itself to fulfil the first year of the capital plan commitments.

Chair Heitkamp thanked Commission Dickinson and the Andover staff for their great work on the financials and human resources assistance they provide.

Motion was made by Goodrich and seconded by Tesdall to accept the August and September Financial Reports.

8 ayes - 0 nays. Motion carried.

ADJOURN - 6

Motion was made by Dickinson and seconded by Ulrich to adjourn the meeting at 11:35 a.m.

8 ayes - 0 nays. Motion carried.

Respectfully submitted,	Reviewed for approval,
Amanda Staple	Karen George
Recording Secretary	Executive Director
TimeSaver Off Site Secretarial, Inc.	

Quad Cities Communications Commission Balance Sheet Summary

As of October 31, 2017

		Total
ASSETS		
Current Assets		
Bank Accounts - QCTV		1,125,632.70
- PayPay acct		555.80
- US Bank Reserve		5,000.00
- Petty Cash		250.00
- Investments		1,247,818.50
Accounts Receivable		0.00
Other current assets		0.00
Total Current Assets	\$	2,379,257.00
Fixed Assets		0.00
TOTAL ASSETS	\$ 	2,379,257.00
LIABILITIES AND EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable		11,203.39
Other Current Liabilities		-3.44
Total Current Liabilities	\$	11,199.95
Familie		2 200 057 25
Equity TOTAL LIABILITIES AND EQUITY	\$	2,368,057.05
TOTAL LIABILITIES AND EQUITY	3	2,379,257.00

January - December 2017

Oct 2017	YTD
----------	-----

	Actual	Budget	over Budget	% of Budget		Actual	Actual Budget	Actual Budget over Budget
ncome	-				_	-	- 	
Ouplication Revenue	202.30	125.00	77.30	161.84%		2,045.15	2,045.15 1,500.00	2,045.15 1,500.00 545.19
Equipment Grant		4,748.00	(4,748.00)	0.00%		56,428.75	56,428.75 56,980.00	56,428.75 56,980.00 (551.25
ranchise Fees		72,854.00	(72,854.00)	0.00%	550,3	39.01	39.01 874,248.00	39.01 874,248.00 (323,908.99
terest Income	1,162.34	8.00	1,154.34	14529.25%	12,378.44		100.00	100.00 12,278.44
scellaneous Income	3,000.00		3,000.00		5,709.49		0.00	0.00 5,709.49
G Fee		36,427.00	(36,427.00)	0.00%	325,772.82		437,125.00	437,125.00 (111,352.18
Income	4,364.64	114,162.00	(109,797.36)	3.82%	952,673.66		1,369,953.00	1,369,953.00 (417,279.34
ses								
RA Expense	3,054.97	3,443.00	(388.03)	88.73%	32,062.11		41,320.00	41,320.00 (9,257.89
S/Medicare Expense	3,308.61	3,952.00	(643.39)	83.72%	33,246.47	4	7,432.00	7,432.00 (14,185.53
ages - Full-time	37,240.20	41,075.00	(3,834.80)	90.66%	388,556.55	492,90	00.00	00.00 (104,343.45
ges - Part-time	6,972.45	9,993.00	(3,020.55)	69.77%	54,950.58	119,922.0	00	00 (64,971.42
ounting / HR Services	1,383.65	1,275.00	108.65	108.52%	12,137.21	15,300.00)	(3,162.79
Promos/Sponsorships	415.00	916.00	(501.00)	45.31%	6,493.36	11,000.00		(4,506.64
ver Capital Equipment		416.00	(416.00)	0.00%	693.53	5,000.00		(4,306.47
ıncers Fees	2,850.00	1,250.00	1,600.00	228.00%	9,896.77	15,000.00		(5,103.23
ca Capital Equipment		416.00	(416.00)	0.00%	2,060.36	5,000.00		(2,939.64
t		1,166.00	(1,166.00)	0.00%	14,150.00	14,000.00		150.00
k Fees / CC Fees		41.00	(41.00)	0.00%	0.00	500.00		(500.00
nd Apparel		208.00	(208.00)	0.00%	1,849.00	2,500.00		(651.00
ding - Cleaning	547.33	583.00	(35.67)	93.88%	5,082.96	7,000.00		(1,917.04
ding - Insurance		208.00	(208.00)	0.00%	4,240.00	2,500.00		1,740.00
ding - Maintenance	105.00	833.00	(728.00)	12.61%	9,196.80	10,000.00		(803.20
ding - Supplies		208.00	(208.00)	0.00%	729.00	2,500.00		(1,771.00
Allowance	250.00	250.00	0.00	100.00%	2,500.00	3,000.00		(500.00
l Phone - Allowance		578.00	(578.00)	0.00%	1,250.00	6,940.00		(5,690.00
amplin Capital Equipment		416.00	(416.00)	0.00%	1,385.50	5,000.00		(3,614.50
ty Sewer & Water	424.41	216.00	208.41	196.49%	2,489.69	2,600.00		(110.31

January - December 2017

Oct 2017 YTD

	Actual	Budget	over Budget	% of Budget	Actual	Budget	over Budget	% of Budget
Commission Expense	600.00	600.00	0.00	100.00%	1,771.64	7,200.00	(5,428.36)	24.61%
Consulting Services	1,035.00	6,250.00	(5,215.00)	16.56%	14,788.75	75,000.00	(60,211.25)	19.72%
Contingency Fund		2,551.00	(2,551.00)	0.00%	0.00	30,622.00	(30,622.00)	0.00%
Duplication Expenses		83.00	(83.00)	0.00%	61.54	1,000.00	(938.46)	6.15%
Electric Service	983.75	1,596.00	(612.25)	61.64%	11,916.10	19,152.00	(7,235.90)	62.22%
Emp / Comm Appreciation		208.00	(208.00)	0.00%	0.00	2,500.00	(2,500.00)	0.00%
Equip/Repair/Supply/Software	347.32	3,817.00	(3,469.68)	9.10%	23,280.25	45,812.00	(22,531.75)	50.82%
Federal Unempl Expense		70.00	(70.00)	0.00%	0.00	850.00	(850.00)	0.00%
Health Insurance	6,058.24	6,221.00	(162.76)	97.38%	56,263.84	74,652.00	(18,388.16)	75.37%
Insurance - Deductibles		41.00	(41.00)	0.00%	0.00	500.00	(500.00)	0.00%
Insurance - Liability / Bonds		541.00	(541.00)	0.00%	8,291.00	6,500.00	1,791.00	127.55%
Lawn Service	720.00	458.00	262.00	157.21%	4,170.00	5,500.00	(1,330.00)	75.82%
Legal Fees	960.50	1,250.00	(289.50)	76.84%	6,779.75	15,000.00	(8,220.25)	45.20%
Licenses and Permits		83.00	(83.00)	0.00%	625.00	1,000.00	(375.00)	62.50%
Meals		83.00	(83.00)	0.00%	353.85	1,000.00	(646.15)	35.39%
Memberships - NATOA / Others		666.00	(666.00)	0.00%	4,855.00	8,000.00	(3,145.00)	60.69%
Mileage	543.38	600.00	(56.62)	90.56%	6,829.34	7,200.00	(370.66)	94.85%
Miscellaneous Expenses		83.00	(83.00)	0.00%	0.00	1,000.00	(1,000.00)	0.00%
Natural Gas	99.74	333.00	(233.26)	29.95%	2,853.73	4,000.00	(1,146.27)	71.34%
Office Supplies / Equipment		500.00	(500.00)	0.00%	2,938.57	6,000.00	(3,061.43)	48.98%
Parking Lot Maintenance		266.00	(266.00)	0.00%	0.00	3,200.00	(3,200.00)	0.00%
Payroll Expenses	73.20		73.20		144.90	0.00	144.90	
Payroll Expenses (ADP/HSA)		491.00	(491.00)	0.00%	1,502.10	5,900.00	(4,397.90)	25.46%
Postage	16.10	83.00	(66.90)	19.40%	814.27	1,000.00	(185.73)	81.43%
Printing / Copy Services		83.00	(83.00)	0.00%	59.90	1,000.00	(940.10)	5.99%
Professional Development	446.04	1,500.00	(1,053.96)	29.74%	13,407.82	18,000.00	(4,592.18)	74.49%
Publications		41.00	(41.00)	0.00%	64.00	500.00	(436.00)	12.80%
Ramsey Capital Equipment	20.43	416.00	(395.57)	4.91%	1,843.86	5,000.00	(3,156.14)	36.88%
Sales Tax		41.00	(41.00)	0.00%	125.00	500.00	(375.00)	25.00%
Secretary Services		249.00	(249.00)	0.00%	936.00	2,992.00	(2,056.00)	31.28%

January - December 2017

	Oct 2017					YTE)	
	Actual	Budget	over Budget	% of Budget	Actual	Budget	over Budget	% of Budget
Snow Plowing Service	-	375.00	(375.00)	0.00%	1,483.75	4,500.00	(3,016.25)	32.97%
State Unemploy Exp		208.00	(208.00)	0.00%	0.00	2,500.00	(2,500.00)	0.00%
STD / LTD / Life Insurance	544.38	666.00	(121.62)	81.74%	5,468.70	8,000.00	(2,531.30)	68.36%
Studio Sets		833.00	(833.00)	0.00%	1,175.00	10,000.00	(8,825.00)	11.75%
Subscription Services	130.00	1,666.00	(1,536.00)	7.80%	15,107.31	20,000.00	(4,892.69)	75.54%
Temp Staff Services		208.00	(208.00)	0.00%	0.00	2,500.00	(2,500.00)	0.00%
Vehicle - Equipment / Repair		1,041.00	(1,041.00)	0.00%	11,588.26	12,500.00	(911.74)	92.71%
Vehicle - Insurance		333.00	(333.00)	0.00%	6,341.00	4,000.00	2,341.00	158.53%
Vehicle - Maintenance / Gas	159.89	500.00	(340.11)	31.98%	5,021.80	6,000.00	(978.20)	83.70%
Waste Removal	91.12	100.00	(8.88)	91.12%	1,171.36	1,200.00	(28.64)	97.61%
Web / VOD / Int / CaTV / Phone	2,295.68	1,833.00	462.68	125.24%	17,124.17	22,000.00	(4,875.83)	77.84%
Work Comp Insurance		191.00	(191.00)	0.00%	1,277.00	2,300.00	(1,023.00)	55.52%
Total Expenses	71,676.39	104,601.00	(32,924.61)	68.52%	813,404.45	1,255,494.00	(442,089.55)	64.79%
Net Income	(67,311.75)	9,561.00	(76,872.75)	-704.02%	139,269.21	114,459.00	24,810.21	121.68%
ZCIP - Andover					41,327.44			
ZCIP - Anoka					41,327.44			
ZCIP - Champlin					41,327.44			
ZCIP - Network Servers					6,231.72			
ZCIP - Ramsey					41,327.44			
					171,541.48			

QCTV Bank Reconciliation October 2017

Difference:	\$0.00
Adjusted Book Balance	1,127,864.57
Book Balance	1,127,864.57
Bank Balance	\$1,127,864.57
Plus: Bank Deposits/Credits	3,562,50
Plus: 4M Fund Interest	582.60
Less: Cleared Checks/Withdrawals	(101,565.57)
Beginning Balance - 4M Statement	1,225,285.04

Completed by: MK

Quad Cities Communications Commission

BILL PAYMENT LIST

October 2017

DATE	NUM	VENDOR	AMOUNT
Quad Cities Commis	ssion		
10/06/2017	11937	ACE Solid Waste, Inc.	-91.12
10/06/2017	11938	City of Andover	-1,360.45
10/06/2017	11939	Comcast Cable	-351.76
10/06/2017	11940	David A. Billehus	-60.00
10/06/2017	11941	Huebsch	-31.08
10/06/2017	11942	Joe G. Ruhland	-600.00
10/06/2017	11943	League of MN Cities Insurance Trust	-12,398.00
10/06/2017	11944	Peter J. Turok	-60.00
10/06/2017	11945	Timesavers	-173.00
10/06/2017	11946	Vividly Clean Inc.	-500.00
10/13/2017	11947	Associated Bank	-50.00
10/13/2017	11948	City of Champlin	-446.99
10/13/2017	11949	Comcast 2	-464.88
10/13/2017	11950	Comcast Cable	-185.94
10/13/2017	11951	G & B Environmental, Inc.	-116.74
10/13/2017	11952	Greenery Enterprises, Inc.	-425.00
10/13/2017	11953	HealthEquity Inc.	-85.00
10/13/2017	11954	LiveU Inc.	-500.00
10/13/2017	11955	Monarch Pest Control	-105.00
10/13/2017	11956	U.S. Bank Corporate	-3,388.02
10/13/2017	11957	Xcel Energy	-1,460.92
10/13/2017	W/D	Minnesota State Retirement System	-649.91
10/13/2017	W/D	PERA	-2,896.13
10/27/2017	11959	Amazon	-82.68
10/27/2017	11960	Anoka Area Chamber of Commerce	-20.00
10/27/2017	11961	Associated Bank	-50.00
10/27/2017	11962	Barna, Guzy & Steffen, LTD	-65.00
10/27/2017	11963	CenterPoint Energy	-99.74
10/27/2017	11964	ECM Publisher	-395.00
10/27/2017	11965	HealthEquity Inc.	-292.90
10/27/2017	11966	Kennedy & Graven, Chartered	-622.50
10/27/2017	11967	Preferred One Insurance Co.	-6,543.20
10/27/2017	11968	The Lincoln National Life Ins. Co.	-544.38
10/27/2017	W/D	Minnesota State Retirement System	-642.21
10/27/2017	W/D	PERA	-2,806.49
Total for Quad Cities	s Commission		\$ -38,564.04

Quad Cities Communications Commission Balance Sheet Summary

As of November 30, 2017

	Total
ASSETS	
Current Assets	
Bank Accounts - QCTV	1,480,889.60
- PayPay acct	679.27
- US Bank Reserve	5,000.00
- Petty Cash	250.00
- Investments	1,248,417.46
Accounts Receivable	0.00
Other current assets	0.00
Total Current Assets	\$ 2,735,236.33
Fixed Assets	 0.00
TOTAL ASSETS	\$ 2,735,236.33
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	4,315.31
Other Current Liabilities	-3.44
Total Current Liabilities	\$ 4,311.87
Equity	 2,730,924.46
TOTAL LIABILITIES AND EQUITY	\$ 2,735,236.33

January - December 2017

	Nov 2017				_		YTE)	
	Actual	Budget	over Budget	% of Budget		Actual	Budget	over Budget	% of Budget
Income					_				
Duplication Revenue	218.22	125.00	93.22	174.58%		2,263.37	1,500.00	763.37	150.89%
Equipment Grant		4,748.00	(4,748.00)	0.00%		56,428.75	56,980.00	(551.25)	99.03%
Franchise Fees	289,022.54	72,854.00	216,168.54	396.71%		839,361.55	874,248.00	(34,886.45)	96.01%
Interest Income	1,418.53	8.00	1,410.53	17731.63%		13,796.97	100.00	13,696.97	13796.97%
Miscellaneous Income	37.64		37.64			5,747.13	0.00	5,747.13	
PEG Fee	154,735.04	36,427.00	118,308.04	424.78%		480,507.86	437,125.00	43,382.86	109.92%
Total Income	445,431.97	114,162.00	331,269.97	390.18%	_	1,398,105.63	1,369,953.00	28,152.63	102.06%
Expenses									
A-PERA Expense	3,049.37	3,443.00	(393.63)	88.57%		35,111.48	41,320.00	(6,208.52)	84.97%
A-SS/Medicare Expense	3,223.85	3,952.00	(728.15)	81.58%		36,470.32	47,432.00	(10,961.68)	76.89%
A-Wages - Full-time	37,240.20	41,075.00	(3,834.80)	90.66%		425,796.75	492,900.00	(67,103.25)	86.39%
A-Wages - Part-time	5,984.30	9,993.00	(4,008.70)	59.88%		60,934.88	119,922.00	(58,987.12)	50.81%
Accounting / HR Services	1,366.06	1,275.00	91.06	107.14%		13,503.27	15,300.00	(1,796.73)	88.26%
Ads/Promos/Sponsorships		916.00	(916.00)	0.00%		6,493.36	11,000.00	(4,506.64)	59.03%
Andover Capital Equipment		416.00	(416.00)	0.00%		693.53	5,000.00	(4,306.47)	13.87%
Announcers Fees	821.73	1,250.00	(428.27)	65.74%		10,718.50	15,000.00	(4,281.50)	71.46%
Anoka Capital Equipment	283.73	416.00	(132.27)	68.20%		2,344.09	5,000.00	(2,655.91)	46.88%
Audit		1,166.00	(1,166.00)	0.00%		14,150.00	14,000.00	150.00	101.07%
Bank Fees / CC Fees		41.00	(41.00)	0.00%		0.00	500.00	(500.00)	0.00%
Brand Apparel		208.00	(208.00)	0.00%		1,849.00	2,500.00	(651.00)	73.96%
Building - Cleaning	500.00	583.00	(83.00)	85.76%		5,582.96	7,000.00	(1,417.04)	79.76%
Building - Insurance		208.00	(208.00)	0.00%		4,240.00	2,500.00	1,740.00	169.60%
Building - Maintenance	396.27	833.00	(436.73)	47.57%		9,781.07	10,000.00	(218.93)	97.81%
Building - Supplies	47.33	208.00	(160.67)	22.75%		776.33	2,500.00	(1,723.67)	31.05%
Car Allowance	250.00	250.00	0.00	100.00%		2,750.00	3,000.00	(250.00)	91.67%
Cell Phone - Allowance		578.00	(578.00)	0.00%		1,250.00	6,940.00	(5,690.00)	18.01%
Champlin Capital Equipment	84.90	416.00	(331.10)	20.41%		1,470.40	5,000.00	(3,529.60)	29.41%
City Sewer & Water	102.52	216.00	(113.48)	47.46%		2,592.21	2,600.00	(7.79)	99.70%
Commission Expense		600.00	(600.00)	0.00%		1,771.64	7,200.00	(5,428.36)	24.61%

January - December 2017

Nov 2017 YTD

	Actual	Budget	over Budget	% of Budget		Actual	Budget	over Budget	% of Budget
Consulting Services		6,250.00	(6,250.00)	0.00%	_	14,788.75	75,000.00	(60,211.25)	19.72%
Contingency Fund		2,551.00	(2,551.00)	0.00%		0.00	30,622.00	(30,622.00)	0.00%
Duplication Expenses		83.00	(83.00)	0.00%		61.54	1,000.00	(938.46)	6.15%
Electric Service	946.40	1,596.00	(649.60)	59.30%		12,862.50	19,152.00	(6,289.50)	67.16%
Emp / Comm Appreciation	20.00	208.00	(188.00)	9.62%		20.00	2,500.00	(2,480.00)	0.80%
Equip/Repair/Supply/Software	15,720.45	3,817.00	11,903.45	411.85%		39,000.70	45,812.00	(6,811.30)	85.13%
Federal Unempl Expense		70.00	(70.00)	0.00%		0.00	850.00	(850.00)	0.00%
Health Insurance	6,365.23	6,221.00	144.23	102.32%		62,629.07	74,652.00	(12,022.93)	83.89%
Insurance - Deductibles		41.00	(41.00)	0.00%		0.00	500.00	(500.00)	0.00%
Insurance - Liability / Bonds		541.00	(541.00)	0.00%		8,291.00	6,500.00	1,791.00	127.55%
Lawn Service	425.00	458.00	(33.00)	92.79%		4,595.00	5,500.00	(905.00)	83.55%
Legal Fees	510.00	1,250.00	(740.00)	40.80%		7,289.75	15,000.00	(7,710.25)	48.60%
Licenses and Permits	400.00	83.00	317.00	481.93%		1,025.00	1,000.00	25.00	102.50%
Meals		83.00	(83.00)	0.00%		353.85	1,000.00	(646.15)	35.39%
Memberships - NATOA / Others		666.00	(666.00)	0.00%		4,855.00	8,000.00	(3,145.00)	60.69%
Mileage	763.35	600.00	163.35	127.23%		7,592.69	7,200.00	392.69	105.45%
Miscellaneous Expenses		83.00	(83.00)	0.00%		0.00	1,000.00	(1,000.00)	0.00%
Natural Gas	196.44	333.00	(136.56)	58.99%		3,050.17	4,000.00	(949.83)	76.25%
Office Supplies / Equipment	321.57	500.00	(178.43)	64.31%		3,260.14	6,000.00	(2,739.86)	54.34%
Parking Lot Maintenance		266.00	(266.00)	0.00%		0.00	3,200.00	(3,200.00)	0.00%
Payroll Expenses	73.20		73.20			218.10	0.00	218.10	
Payroll Expenses (ADP/HSA)	(353.70)	491.00	(844.70)	-72.04%		1,148.40	5,900.00	(4,751.60)	19.46%
Postage	13.80	83.00	(69.20)	16.63%		828.07	1,000.00	(171.93)	82.81%
Printing / Copy Services		83.00	(83.00)	0.00%		59.90	1,000.00	(940.10)	5.99%
Professional Development		1,500.00	(1,500.00)	0.00%		13,407.82	18,000.00	(4,592.18)	74.49%
Publications		41.00	(41.00)	0.00%		64.00	500.00	(436.00)	12.80%
Ramsey Capital Equipment	150.15	416.00	(265.85)	36.09%		1,994.01	5,000.00	(3,005.99)	39.88%
Sales Tax		41.00	(41.00)	0.00%		125.00	500.00	(375.00)	25.00%
Secretary Services	139.00	249.00	(110.00)	55.82%		1,075.00	2,992.00	(1,917.00)	35.93%
Snow Plowing Service		375.00	(375.00)	0.00%		1,483.75	4,500.00	(3,016.25)	32.97%
State Unemploy Exp		208.00	(208.00)	0.00%		0.00	2,500.00	(2,500.00)	0.00%

January - December 2017

	Nov 2017				_		YTE)	
	Actual	Budget	over Budget	% of Budget		Actual	Budget	over Budget	% of Budget
STD / LTD / Life Insurance	544.38	666.00	(121.62)	81.74%	_	6,013.08	8,000.00	(1,986.92)	75.16%
Studio Sets		833.00	(833.00)	0.00%		1,175.00	10,000.00	(8,825.00)	11.75%
Subscription Services	130.00	1,666.00	(1,536.00)	7.80%		15,237.31	20,000.00	(4,762.69)	76.19%
Temp Staff Services		208.00	(208.00)	0.00%		0.00	2,500.00	(2,500.00)	0.00%
Vehicle - Equipment / Repair	15.39	1,041.00	(1,025.61)	1.48%		11,603.65	12,500.00	(896.35)	92.83%
Vehicle - Insurance		333.00	(333.00)	0.00%		6,341.00	4,000.00	2,341.00	158.53%
Vehicle - Maintenance / Gas	569.00	500.00	69.00	113.80%		5,590.80	6,000.00	(409.20)	93.18%
Waste Removal	91.12	100.00	(8.88)	91.12%		1,262.48	1,200.00	62.48	105.21%
Web / VOD / Int / CaTV / Phone	1,985.52	1,833.00	152.52	108.32%		19,109.69	22,000.00	(2,890.31)	86.86%
Work Comp Insurance		191.00	(191.00)	0.00%		1,277.00	2,300.00	(1,023.00)	55.52%
Total Expenses	82,376.56	104,601.00	(22,224.44)	78.75%	_	895,969.01	1,255,494.00	(359,524.99)	71.36%
Net Income	363,055.41	9,561.00	353,494.41	3797.25%	=	502,136.62	114,459.00	387,677.62	438.70%
ZCIP - Andover						41,327.44			
ZCIP - Anoka						41,327.44			
ZCIP - Champlin						41,327.44			
ZCIP - Network Servers						6,231.72			
ZCIP - Ramsey					_	41,327.44			
					_	171,541.48			

Wednesday, Dec 20, 2017 01:38:09 PM GMT-8 - Accrual Basis

QCTV Bank Reconciliation November 2017

Beginning Balance - 4M Statement	1,127,864.57		
Less: Cleared Checks/Withdrawals	(65,628.45)		
Plus: 4M Fund Interest	819.57		
Plus: Bank Deposits/Credits	444,243.67		
Bank Balance	\$1,507,299.36		
Book Balance	1,507,299.36		
Adjusted Book Balance	1,507,299.36		
·	Transport in the rest in the manner of the commence of the com		

Completed by: MK

Difference:

\$0.00

Quad Cities Communications Commission

BILL PAYMENT LIST

November 2017

DATE	NUM	VENDOR	AMOUNT
Quad Cities Commis	sion		
11/03/2017	11970	Bert Nijssen	-960.00
11/03/2017	11971	Bret Heitkamp	-40.00
11/03/2017	11972	Carl E. Anderson	-80.00
11/03/2017	11973	Comcast Cable	-20.43
11/03/2017	11974	Greenery Enterprises, Inc.	-295.00
11/03/2017	11975	Holiday Station	-159.89
11/03/2017	11976	James Dickinson	-120.00
11/03/2017	11977	James Goodrich	-120.00
11/03/2017	11978	James R. Erickson	-240.00
11/03/2017	11979	Jessica Tesdali	-80.00
11/03/2017	11980	John Letourneau	-40.00
11/03/2017	11981	Kurtis G. Ulrich	-120.00
11/03/2017	11982	Verizon Wireless	-70.08
11/08/2017	11983	ACE Solid Waste, Inc.	-91.12
11/08/2017	11984	CenterPoint Energy	-196.44
11/08/2017	11985	City of Andover	-1,329.86
11/08/2017	11986	City of Champlin	-424.41
11/08/2017	11987	Clark Wire & Cable	-630.60
11/08/2017	11988	Gerald S. Thomson	-180.00
11/08/2017	11989	Greenery Enterprises, Inc.	-425.00
11/08/2017	11990	Huebsch	-47.33
11/08/2017	11991	James Childs	-300.00
11/08/2017	11992	Joe G. Ruhland	-690.00
11/08/2017	11993	LiveU Inc.	-500.00
11/08/2017	11994	Maza Technologies, LLC	-2,673.75
11/08/2017	11995	MSHSL - Region 5AA	-400.00
11/08/2017	11996	Pete C. Andersen	-540.00
11/08/2017	11997	TransAlarm, Inc	-396.27
11/08/2017	11998	U.S. Bank Corporate	-730.15
11/08/2017	11999	Xcel Energy	-983.75
11/10/2017	12000	Associated Bank	-50.00
11/10/2017	12001	HealthEquity Inc.	-285.00
11/10/2017	W/D	Minnesota State Retirement System	-640.80
11/10/2017	W/D	PERA	-2,930.49
11/17/2017	12002	Barna, Guzy & Steffen, LTD	-338.00
11/17/2017	12003	BizzyWeb, LLC	-1,000.00
11/17/2017	12004	ECM Publisher	-56.00
11/17/2017	12005	HealthEquity Inc.	-7.90
11/24/2017	12006	Associated Bank	-50.00
11/24/2017	12007	HealthEquity Inc.	-285.00
11/24/2017	W/D	Minnesota State Retirement System	-644.81
11/24/2017	W/D	PERA	-2,761.70
11/30/2017	12008	Amazon	-80.62

AMOUNT	VENDOR	NUM	DATE		
-506.94	Comcast Cable	12009	11/30/2017		
-405.81	Holiday Station	12010	11/30/2017		
-47.33	Huebsch	12011	11/30/2017		
-188.00	Kahuna Window Cleaning	12012	11/30/2017		
-510.00	Kennedy & Graven, Chartered	12013	11/30/2017		
-1,250.00	LiveU Inc.	12014	11/30/2017		
-6,770.23	Preferred One Insurance Co.	12015	11/30/2017		
-544.38	The Lincoln National Life Ins. Co.	12016	11/30/2017		
-70.08	Verizon Wireless	12017	11/30/2017		
-500.00	Vividly Clean Inc.	12018	11/30/2017		
-946.40	Xcel Energy	12019	11/30/2017		
-13,602.40	Z Systems	12020	11/30/2017		
\$ -47,355.97	Total for Quad Cities Commission				

4.3 Executive Director's Report

January 3, 2018

To: Commissioners

From: Karen George, Executive Director

Subject: Executive Director's Report

Presentation of Awards Received

Impact Services

QCTV was honored with the Partner Award from Impact Services on October 6 at the Dessert First fundraiser event. Impact Services strives to be the premier resource in Anoka County to fulfill the needs of the aging community by providing nutritious meals the enable people to live independently. QCTV helps to tell these stories of success and impart information on aging through the program *Answers to Aging*.

City Council HD Upgrade Project

The HD upgrade to city council chambers is on the January agenda for action. Alpha Video and QCTV staff meet with each member city staff to review final proposal and solicit final feedback in November and the report/bid specs were finalized in December.

Commission Meetings Move to 6 per year

The commission bylaws have been updated and the regular commission meetings will be held every-other-month. See attached proposed schedule in item 4.4.

Comcast Franchise Renewal

Comcast has provided formal notice of intent to renew the franchise agreement pursuant to Section 626 of the Cable Act. Comcast proposes informal franchise renewal negotiations. Legal counsel Bob Vose and sent an acknowledgement letter to Comcast informing company representative Karly Werner that the commission will engage in such negotiation, if necessary. In 2015, the parties amended and extended the franchise (set to expire in 2016) to the end of 2024 unless Comcast requested renewal negotiations, in which case the franchise expires on August 31, 2020. The Standstill Agreement to begin informal negotiations in schedule for commission action at the January 18 meeting.

2017 Audit Process Begins

Staff has met with Redpath and Company to begin the 2017 audit process.

Operating and Capital Budgets Finalized

Completed budget planning for both the operational budget and the 5-Year Capital Plan. Held Budget Committee meeting. Held investment review meeting for 2018 planning.

Live Signal Switch – New Procedures

In the final quarter of 2017, QCTV experienced an increase in live signal feed interruptions. Staff reviewed the issues and analyzed the options given our current staffing structure and switch capabilities. It was determined that the Raspberry Pi web switch, although it has served well for a few years, is not working as well as we need it to. The Tightrope Cablecast system does have a platform for making live switches and can handle multiple switches at the same time – something we need with multiple government meetings starting at the same time. Staff comprised a plan to reallocate staff functions to have a master control operator on-site during live signal switches to monitor and correct at QCTV rather than rely on the remote log-in for correcting live signal interruptions. This has worked well since implemented in early December. Moving forward to make this standard operating procedure. There is some multi-viewer displays required and that can be purchased using operation funds. See agenda item 5.2 for carry forward fund request.

Staff/Commission Event

This annual event was held December 20 and included a strategic plan review and look forward to 2018 objectives.

Champlin 169 Construction

Please note that there is a major road construction project planned for the Highway 169 corridor through Champlin. This will affect travel time to attend shoots at QCTV.

Customer Comments

Live and Local - Public Safety

"Lisa, I received the DVD's, thank you! That was very fancy how you even had them printed for me!!" – Brad Bluml, Police Captain, City of Ramsey

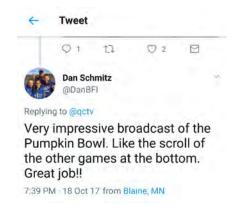
Anoka Girls Basketball

Tweet that QCTV was tagged in:



Anoka Football

Tweet that QCTV was tagged in:



Action Requested: None.

QCCCC Agenda Item

4.3.1 Operations Report

December 1, 2017

To: Karen George, Executive Director

From: Katherine Lenaburg, Operations Manager

Subject: Operations Update

QCTV produced live coverage of 16 government meetings in October. We produced our monthly show "News and Views" which featured elected and city staff members as well as stories on what is happening on our 4 member cities.

We are wrapped up our fall sports season and started our winter season, which includes hockey and basketball. We produced live coverage of 8 games this month. We are working on our "At the Half" show to playback between half time of the games.

We produced a show called "Andover Preserves" that features the open spaces in Andover. Staff met commissioners on site at Dalske Woodlands, Mapleview, Northwoods Preserve, and Martin's Meadow.

On Veteran's Day, we carried a program produced by our sister station, Town Square Television, called "The Official State of MN Veteran's Day Event." It included speakers from around the state.

We produced an episode of "Let's Go To The Library' that focused on early literacy.

We produced an episode of "District Court" that featured Anoka County Attorney Tony Palumbo.

We procured a program called "We Need to Talk" that is all about the stigma of mental health. He first episode focused on addiction. There was a nice writeup of the show in the local newspaper mentioning that QCTV is carrying the show.

We produced an episode of "The Chamber Report" that features area businesses.

We produced a PSA called "Dressember" which is about fighting and bringing awareness to human trafficking.

We produced a piece called "React" where we ask people to react to various videos, some are optical illusions, etc. We may continue this with children in the future.

A piece on Net Neutrality we produced a few months ago was shared with a national audience and our sister stations across the country are playing it on their stations.

We responded to a request from Champlin to make some changes to their website so we are working to add some programming to their page. This is an experiment and if all 4 cities would like us to do the same, we will. It will debut January 1st. We will add a PSA the City of Champlin produced, "The Chamber Show", as well as a feature called "Around Town" which features photos and info on city hall matters.

QCCCC Agenda Item

4.3.1 Operations Report

December 28, 2017

To: Karen George, Executive Director

From: Katherine Lenaburg, Operations Manager

Subject: Operations Update

QCTV produced live coverage of 15 government meetings in December. We produced our monthly show "News and Views" which featured elected and city staff members as well as stories on what is happening on our 4 member cities.

Our winter sports season continued and we produce live coverage of 9 games in December. We also procured live coverage by one of our sister stations (Town Square Television) of a game featuring an Andover team- Legacy Christian at South St, Paul Boys Basketball team. We had a live game of our own that night so we put the live coverage on Channel 19.

We produced a live show called "Live and Local: Emergency Responders". This show was live from the Anoka Fire Station and featured Fire Chiefs Matt Kohner, Jerry Streich, and Charlie Thompson. Our guests were Anoka County Sheriff James Stuart, Anoka Police Chief Eric Peterson, Ramsey Public Works Supervisor Grant Reimer, and Connexus Safety Manager Chuck Jensen. We also pre-produced stories on Active Shooter Training, EMT/ Paramedics, Anoka County Dispatch, Home Security, what to do if you see a fire truck behind you, and training demos on Dollhouse and Denver Drill trainings.

We produced an episode of "District Court" that featured Anoka County Attorney Tony Palumbo.

We procured a program called "We Need to Talk" that is all about the stigma of mental health. He first episode focused on addiction. There was a nice writeup of the show in the local newspaper mentioning that QCTV is carrying the show.

We produced an episode of "The Chamber Report" that features area businesses. We produced an episode of "The Sheriff's Show" with Anoka County Sheriff James Stuart. "It's Your History" was completed this month and the topic was the Eagles Healing Nest project in Anoka.

We produced a PSA called "Dressember" which is about fighting and bringing awareness to human trafficking.

We produced a piece called "React" where we ask people to react to various videos, some are optical illusions, etc. We may continue this with children and seniors in the future.

A piece on Net Neutrality we produced a few months ago was shared with a national audience and our sister stations across the country are playing it on their stations.

We responded to a request from Champlin to make some changes to their website so we are working to add some programming to their page. This is an experiment and if all 4 cities would like us to do the same, we will do so. It will debut January 1st. We will add a PSA the City of Champlin produced, "The Chamber Show", as well as a feature called "Around Town" which features photos and info on city hall matters.

We produced a show called "Antique Appraisals with Mark F. Moran". Mr. Moran is a national expert on antiques and he did a session at one of the Anoka County libraries where people bring in their antiques and estimates what the value of the item is.

We produced "What's New at the Q" which features our current programs. We also produced 3 "Slow TV's" on holiday lights around town.

4.3.2 Technology Report

January 18, 2018

To: Karen George, Executive Director

From: John Sommer, Technology Manager

Subject: November and December 2017 Technology Report

Equipment Issues:

QCTV Equipment

Nothing out of the ordinary to report.

City Equipment

Working with Rushworks support to clear up some recurring problems at Anoka. Video issue with camera three at Anoka may require a new BNC cable. It does not appear to be a problem with the camera.

Comcast Equipment

December

Anoka live feed had audio problems and video hum bars rolling horizontally through the picture. I contacted Comcast and a maintenance crew found a faulty amplifier on a pole. Comcast repaired the amplifier the week of December 11th and the picture quality returned to where it had been earlier. The audio was still noisy, especially with bright video signals. I contacted our headend tech from Comcast and he and I tested the modulator at city hall and the demodulator at QCTV. The problem was with the demodulator, which he repaired Thursday January 4th.

CenturyLink Equipment

No issues reported for this period.

Current Projects:

City Hall HD Updates

Preparing to release the bid if approved January 18th.

Live Meeting Quality Control

November

We wanted to stop relying on the Raspberry Pi web switch for changing from the automated playback schedule to a live city hall feed. Our updated Tightrope's Cablecast software would allow producers at the live city meetings to make the switch from scheduled programing to live meetings. The software is web based and

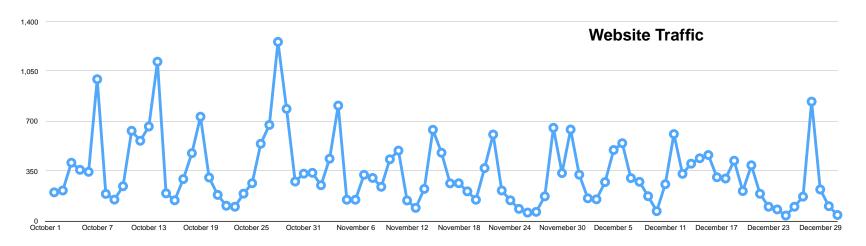
designed to have multiple users logged in at the same time. Our first meeting we did this for was Champlin November 27^{th} . It went very smoothly.

December

As a further improvement to live signal delivery, QCTV staff abandoned the Raspberry Pi web switch for city meetings. In addition to the producer at each of the meetings, we now have a master control operator (MCO) at QCTV. We began by having the MCO present at the start of all of the meetings and if the live switch went well they would be done at 7:30 pm. All city meetings in December were switched live without incident. We are making changes to our procedures and will extend the MCO's time in January to be present at QCTV for the duration of the meetings.

Action Requested: None.

Quarter 4 2017 actv.org Website Statistics



How did people find us and what page did they go to most?

		Sessions	New Users		Page	Pageviews	
	Source / Medium	11,664	6,271		Top 12 Pages	11,664	
1	google / organic	4,745	2,318	1	QCTV.org homepage	7,438	
2	(direct) / (none)	3,966	2,322	2	Sports page	4,962	
3	m.facebook.com / referral	766	636	3	Live Community Channel	2,613	
4	ci.anoka.mn.us / referral	399	160	4	Program Guides	2,230	
5	bing / organic	378	155	5	Champlin	1,072	
6	facebook.com / referral	266	167	6	QCTV Programs page	978	
7	t.co / referral	260	131	7	Anoka page	962	
8	I.facebook.com / referral	118	61	8	Andover page	545	
9	ci.ramsey.mn.us / referral	100	43	9	Ramsey page	483	
10	anokaareachamber.com /	93	9	10	Anoka City Council Meetings	384	
	referral			11	Champlin City Council Meetings	352	
11	yahoo / organic	82	37	12	HWY 169 Open House video	305	
12	feedburner / email	63	10	12	Tiwi 103 Open House video	303	
13	cityoframsey.com /	59	19				

22

46

referral

/ referral

champlinparkfootball.com

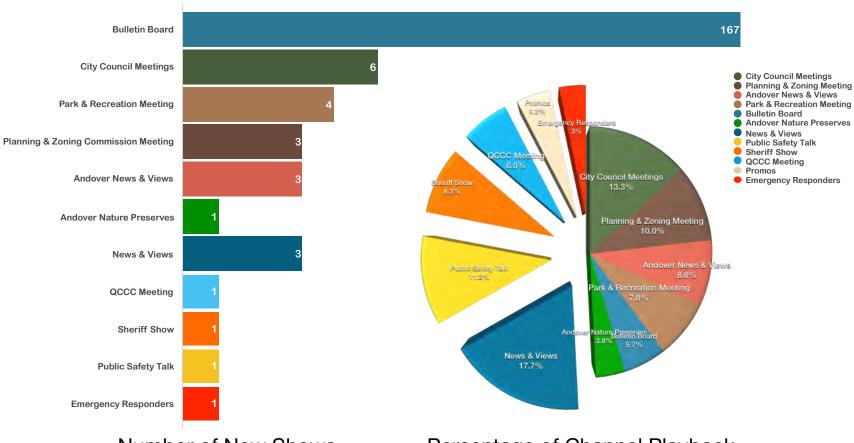


Quarter Four Net Promoter Score Survey Results



DETRACTORS (0-6)	PASSIVES (7-8)	PROMOTERS (9-10)	NET PROMOTER® SCORE	
3%	3%- 2	93% 54	90	

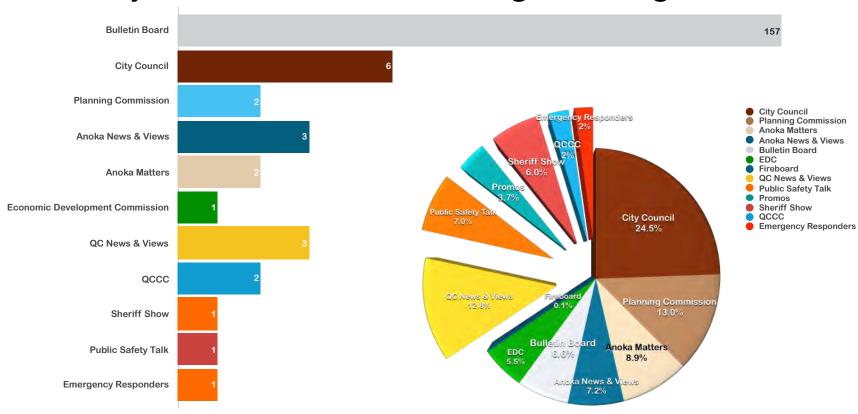
City of Andover Channel Programming Statistics



Number of New Shows

Percentage of Channel Playback

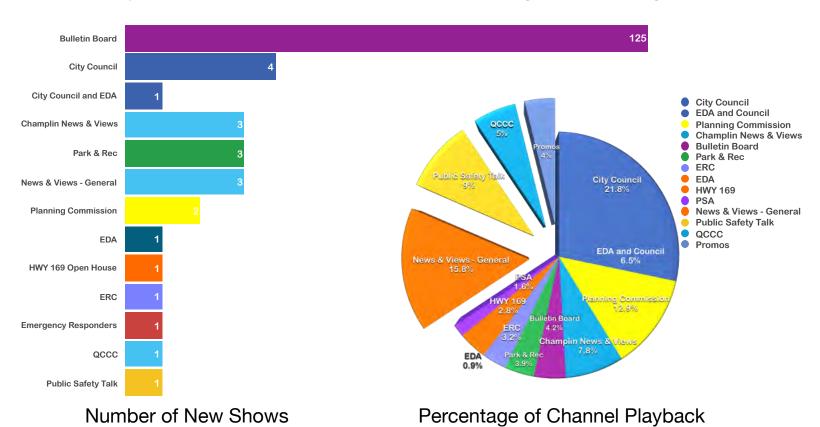
City of Anoka Channel Programming Statistics



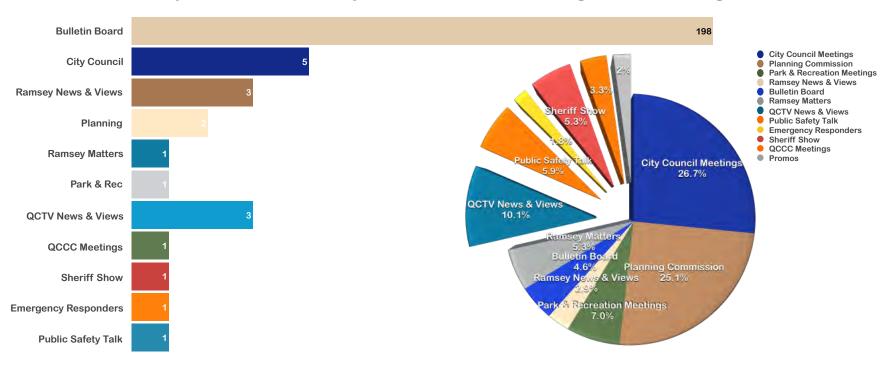
Number of New Shows

Percentage of Channel Playback

City of Champlin Channel Programming Stats



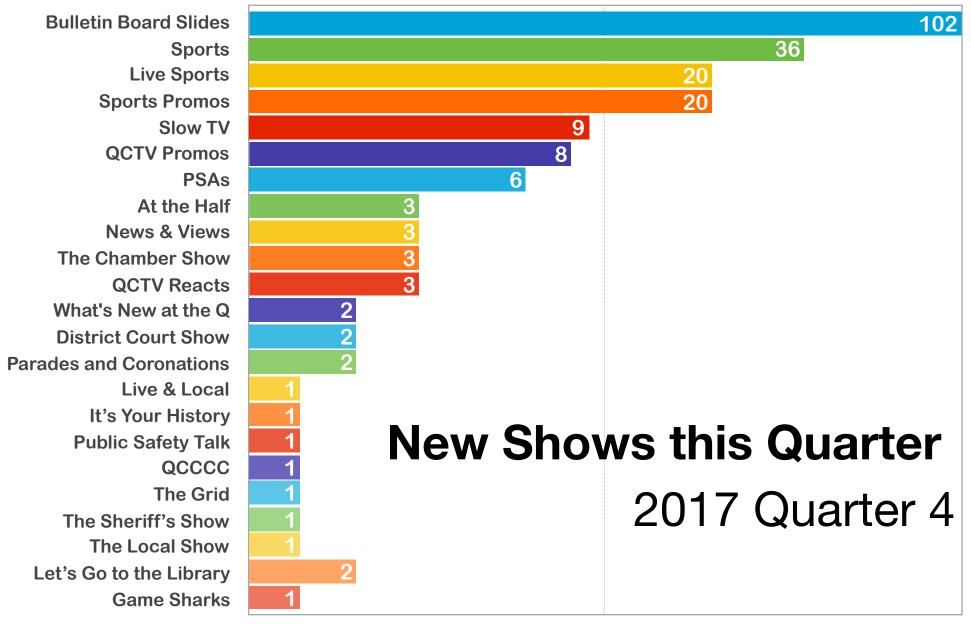
City of Ramsey Channel Programming Statistics



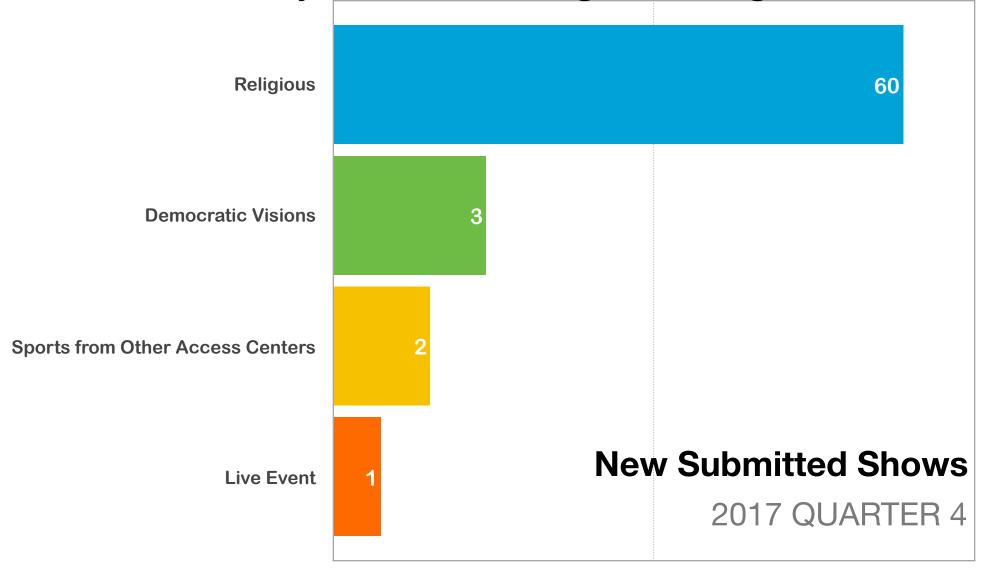
Number of New Shows

Percentage of Programing

HD Community Channel Programming Statistics



HD Community Channel Programming Statistics



QCCCC Agenda Item

4.4 Commission Organization Items

January 5, 2018

To: Commissioners

From: Karen George, Executive Director

Subject: Commission Organization Items

The commission elects officers and appoints committee members the first quarter of each year following a city election. The items below confirm the organizational items for 2018 unless otherwise acted upon by the commission as there was no municipal election.

Meeting date and time

The Quad Cities Cable Communications Commission meets the third Thursday of every-other month at 11 am in the City of Anoka Council Chambers. See attachment.

Commissioner per diem

The commissioners receive per diem payments for attending commission and committee meetings. Commissioners per diem rates for 2017 are: Commission meeting or work session: \$40 per meeting Commission committee meeting (when not combined with regular meeting): \$40.

Commission Officers

Chair – Bret Heitkamp Vice-Chair – Kurt Ulrich Secretary – Carl Anderson Treasurer – Jim Dickinson

Committee appointments

Personnel CommitteeBudget CommitteeJim Goodrich, AndoverJim Dickinson, AndoverCarl Anderson, AnokaGreg Lee, AnokaBret Heitkamp, ChamplinRyan Sabas, ChamplinKurt Ulrich, RamseyJohn LeTourneau, Ramsey

Action Options:

Options Regarding Election and Appointments

- Elect new officers
- Appoint new committee members
- Affirm current officers and committee appointments
- No action, appointments stand as current

Options Regarding Per Diem

- Change per diem rate
- Affirm current per diem rate (\$40 per meeting)
- No action, 2018 per diem rate remains unchanged

Quad Cities Cable Communications Commission 2018 Meeting Plan

January 18

Commission Meeting

February 15

Commission Worksession: Programming

March 15

Commission Meeting

April 19

Personnel Committee: Annual review

May 17

Commission Meeting

June 14

Budget Committee: 2017 Audit Review

July 19

Commission Meeting

August 16

Commission Worksession: Technology

September 20

Commission Meeting

October 18

Budget Committee: 2019 Proposed Budget Review

November 15

Commission Meeting

December 20

Commission/Staff Event

QCCCC Agenda Item

5.1 Designated Depository

January 5, 2018

To: Commissioners

From: Karen George, Executive Director

Subject: Designated Depository

The Minnesota Statues sets forth the procedures for the deposit of public funds which include requiring Quad Cities Cable Communications Commission to annually designate the official depositories for Commission funds and manage the collateral pledged to such funds. Other financial institutions are, from time to time, able to pay the Commission interest rates on deposits that are greater than can be obtained from the official depository.

Staff recommends the commission designate US Bank as the official depository for 2018; that the PMA Financial Network, Inc. (Minnesota Municipal Money Market Fund) be designated as additional depository for 2018 for investment and cash management purposes only; and, that the Commission Board of Directors is hereby designated as the approval authority for the release and acceptance of all collateral to be held by the organization in conjunction with Commission funds on deposit with authorized institutions.

Action Requested: Designate depository

Motion to designate US Bank as the official depository for 2018; that the PMA Financial Network, Inc. (Minnesota Municipal Money Market Fund) be designated as additional depository for 2018 for investment and cash management purposes only; and, that the Commission Board of Directors is hereby designated as the approval authority for the release and acceptance of all collateral to be held by the organization in conjunction with Commission funds on deposit with authorized institutions.

5.2 Budget Carry Forward Request

January 10, 2018

To: Commissioners

From: Karen George, Executive Director

Subject: Budget Carry Forward Request

Staff is requesting carry forward of unexpended funds from the 2017 budget into the 2018 budget or two line items: Studio Sets and Equipment. The request is to use unobligated balances from these two line items to complete an unmet objective for the studio set and an end of year new initiative that could not be implemented before year-end.

Studio Sets Budget Line Item

While staff had planned to purchase set pieces in 2017, this was not accomplished for a few reasons. Sets are very expensive and staff has been researching a way to get a variety of looks for the different shows at an economical price point. (A sister station purchased a permanent set for \$125,000.00 and QCTV is more modest in its use of capital dollars). The set pieces selected is akin to a trade-show pop-up display with a slip-over fabric design. The vendor was on vacation for 30-days an unable to process the order prior to year-end. Studio Sets 2017 budget was \$10,000 with \$8,825 remaining at end of fiscal year. Staff is requesting \$8,800 be carried forward to the same line item in the 2018 budget.

Equipment Budget Line Item

It's always a bit tricky to keep adequate funds into year-end to be used on unplanned equipment purchase and repairs. In the final quarter of 2017, QCTV experienced an increase in live signal feed interruptions. Staff comprised a plan to reallocate staff functions to have a master control operator on-site during live signal switches to monitor and correct at QCTV rather than rely on the remote log-in for correcting live signal interruptions. This has worked well since implemented in early December. Moving forward to make this standard operating procedure, staff has identified the need for a multiviewer system to monitor multiple live feeds at a desktop station. The video displays estimate is approximately \$4,000 with staff completing the wiring and installation. This purchase could not be completed by year-end and therefore the request to carry forward 2017 funds to complete in 2018.

Action requested: Amend the 2018 budget to increase the Studio Set line item by \$8,800 and the Equipment line item by \$6,000.

QCCCC Agenda Item

5.3 Comcast Franchise Renewal

January 10, 2018

To: Commissioners

From: Karen George, Executive Director

Subject: Comcast Franchise Renewal

Comcast has provided notice for beginning the franchise renewal process. Legal counsel and staff have met with Comcast representatives to initiate the negotiations. The Commission and Comcast wish to move forward with informal negotiations. The attached Standstill Agreement which outlines the mutual agreement to proceed with informal, good faith negotiations while preserving the right to formal negotiations.

Action requested:

Approve standstill agreement and direct staff to execute with Comcast.

STANDSTILL AGREEMENT TO PURSUE INFORMAL FRANCHISE RENEWAL

THIS AGREEMENT is made as of the 19th day of January, 2018, by and between the Quad Cities Cable Communications Commission ("Commission"), a municipal joint powers organization, and Comcast of Minnesota, Inc., an indirect, wholly-owned subsidiary of Comcast Corporation ("Comcast"), collectively the "Parties."

RECITALS

WHEREAS, the Commission was established under Minnesota Statutes, Section 471.59 pursuant to a joint powers agreement by and between the cities of Andover, Anoka, Champlin and Ramsey, all Minnesota municipal corporations, and;

WHEREAS, Comcast operates a cable system in the Commission's member cities pursuant to substantively identical cable franchises granted by each city ("Franchises"), and;

WHEREAS, the Franchises have been amended several times by agreement of the Parties, or their predecessors-in-interest, and;

WHEREAS, the Franchises were most recently amended pursuant to a Franchise Settlement Agreement dated February 19, 2015 ("Settlement"), and;

WHEREAS, in the Settlement, the Parties agreed to extend the Franchises, subject to modifications contained therein, through August 31, 2020, provided that the Franchises were to be further extended through December 31, 2024 unless Comcast requested, in writing, renewal of the Franchises on or before March 1, 2018, and;

WHEREAS, by letter dated September 21, 2017, Comcast requested franchise renewal, and;

WHEREAS, the Commission and Comcast now wish to confirm their mutual desire to complete franchise renewal via informal negotiations.

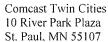
NOW THEREFORE, IN CONSIDERATION of the mutual covenants, terms, conditions and representations contained herein, the Parties agree as follows:

- 1. The Commission and Comcast will proceed in good faith with communications and negotiations in order to reach agreement on appropriate terms and conditions of renewed franchise(s) with the expectation of retaining the current terms and conditions to the extent mutually agreeable.
- 2. The formal procedures and timelines for renewal set out in the federal Cable Act are hereby tolled. The Commission or Comcast may reinstate such formal procedures under the Cable Act upon written notification to the other party.

3.	Except as expressly provided herein, neither party waives any rights including any
	procedural protections established by the federal Cable Act, and nothing herein shall
	waive any claim of a prior, current or future violation or breach of the franchise(s).

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement as of this 19th day of January, 2018.

QUAI	QUAD CITIES CABLE COMMUNICATIONS COMMISSION				
Date: .	January 19, 2018				
Ву: _		_	By:		
It	s: Chair		Its: Executive Director		
СОМ	CAST OF MINNESOTA, INC	•			
Date:	January 19, 2018	Ву:			
			Its:		





September 12, 2017

CERTIFIED MAIL

Karen George Quad Cities Cable 12254 Ensign Avenue North Champlin, MN 55316

Subject: FRANCHISE RENEWAL

Dear Karen:

We at Comcast appreciate the opportunity to serve the citizens of Andover, Anoka, Champlin and Ramsey ("Quad Cities"). It is our credo that we will deliver a superior experience to our customers every day. Our products will be the best and we will offer the most customer-friendly and reliable services in the market. In living our credo, we look forward to providing broadband services to our customers in the Quad Cities for many years to come. Therefore, we are taking this step to ensure the renewal of our franchise with you.

The Cable Communications Policy Act of 1984 ("the 1984 Cable Act") encourages franchisors and cable operators to reach renewal agreements at any time through an informal process of discussion. However, Section 626 of the 1984 Cable Act also provides for commencement of a formal renewal procedure. To preserve our statutory rights to this formal procedure, this letter is our official notice to you invoking that provision.

This letter is not intended to introduce a new formality into our discussions, nor is that the intention of the 1984 Cable Act. In fact, we prefer to reach a mutually satisfactory agreement through informal negotiations, thus making many of the 1984 Cable Act's formal procedures unnecessary.

I will be happy to discuss this matter with you, or provide any additional information that you may require. I look forward to meeting with you in the near future and to continuing a relationship that, we believe, benefits both the community and the residents of the Quad Cities.

Sincerely,

Karly Werner

Senior Director of Government Affairs

cc: Steve White, West Division President

Chris McDonald, West Division Vice President of Government Affairs

Michael Ruger, Senior Director of Government Affairs

QCCCC Agenda Item

5.4 City Council Chamber Upgrade Project

January 10, 2018

To: Commissioners

From: Karen George, Executive Director

Subject: City Council Chamber Upgrade Project

Enclosed is the final report from Alpha Video & Audio for the city council chambers upgrade. The report also includes the detailed bid specifications. The final report has been reviewed by city staff members and, most recently, by the four city administrators. The report is ready for acceptance and release of the bid.

Action requested:

Accept the Alpha Video & Audio Program Report. Direct staff to move forward with project bidding.

Technology Memo

January 18, 2018

To: Karen George, Executive Director

From: John Sommer, Technology Manager

Subject: City Hall Council Chambers HD Upgrades

Overview:

Background

QCTV has sought to upgrade all four city hall council chambers to HD for both the broadcast and presentation systems. QCTV staff are undertaking the broadcast update and recommend hiring a company or companies to provide the equipment and integration for the presentation systems.

Alpha Video & Audio, Inc. was selected to provide a Program Report to QCTV. The report is enclosed for Commission review and action. The process included conducting a needs assessment with each city, creating a comprehensive upgrade plan, wiring diagrams, and bid specifications.

HD Upgrade:

Turnkey Systems in the Council Chambers

The proposed plan calls on specific turnkey platforms, such as the Crestron control system and the BiAmp audio system. There are other platforms in the marketplace but we chose to keep the platforms consistent across the four cities and to use similar systems to those currently in place in the council chambers. This provides efficiencies: producers are trained and knowable with the equipment that is the same in all four cities; and, spare equipment held by QCTV will be usable at any of the four cites.

Specific Models of Equipment

We have called out specific model numbers for the bidding. It will make comparing bid pricing straight forward. Some equipment has been specified particularly because it works with other equipment specified and a generic substitution may not function the same way. There are items that may have options, such as larger or smaller video displays as requested by the cities. These substitutions would require the successful bidder to stand behind.

Selection:

Companies to send the bids to:

- Z-Systems Inc.
- EPA Audio Visual, Inc.
- AVI Systems Inc.
- Alpha Video & Audio Inc.

Criteria used for selection of vendor

- Best Value
- Timeline of delivery
- Timeline for completion
- Warranty
- Integration experience
- Reference check

Action Requested: Accept the Alpha Video and Audio Program Report. Direct staff to release bid.



QCTV PROGRAM REPORT

Council Chambers Presentation Audiovisual Systems

Member Cities: Andover, Anoka, Champlin, and Ramsey



Contents

Executive Summary	Z
Systems Descriptions	2
City of Andover	3
City of Anoka	5
City of Champlin	7
City of Ramsey	9
Infrastructure Considerations - Andover	11
Infrastructure Considerations - Anoka	12
Infrastructure Considerations - Champlin	13
Infrastructure Considerations - Ramsey	14
Special Issues	15
Bring Your Own Device (BYOD)	15
Closed Captioning	15
Wireless Network	15
Video Conferencing	15
Preliminary Audiovisual System Estimates	16
City of Andover	16
City of Anoka	18
City of Champlin	20
City of Ramsey	22
Additional Costs	24
Taxes	24
Markups	24
Contingencies	24
Warranties	24
Operational Staff Expertise Level Required	24
Maintenance Budget Requirements and Life Cycle Expectations	24



Executive Summary

QCTV has retained Alpha Video & Audio, Inc to provide this report and supporting documentation to assist in providing direction for audiovisual system upgrades for its member cities Andover, Anoka, Champlin, and Ramsey council chambers. This is the result of multiple consultations and interviews with representatives from QCTV's production staff and member cities Andover, Anoka, Champlin, and Ramsey. The following are included in this report:

- System description
- Infrastructure Requirements
- Budgetary pricing estimates
- Additional Costs
- Operational Staff Expertise Level
- Maintenance Budget Requirements and Life Cycle Expectations

Additional documentation and drawings will be provided for coordination once the program has been modified and/or approved. In addition, the documentation with the exception of the Program Report can be included in a "Request for Proposal" (RFP) developed and distributed by the member cities that includes all pertinent details for the installation of an operational facility with audiovisual technologies.

Systems Descriptions

System descriptions are split up by each City. However, even though the system descriptions have been split the core functionality remains relatively the same between cities and consistency in the design, operation, and execution should remain relatively the same. Below is a typical list audio visual sources and destinations used when assembling the basis of design.

Video Sources

- Room PC
- User Laptop
- Document Camera
- Wireless Presentation System

Audio Sources

- Dais Microphones
- Room PC
- User Laptop
- Wireless Microphone

Video Destinations

- Broadcast Feed
- Overflow Monitor
- Dais Monitors
- Staff Presentation Table Monitor
- Touch Screens
- Public screens in chambers

Audio Destinations

- Broadcast Feed
- Distributed Audio System
- Local Audio at Dais
- Audio Recorder
- Hearing Assist System

Special focus is put on ensuring the system operates with intuitive interfaces and allows for users to operate the room with minimal training. The audiovisual system should be able to operate independently of the broadcast system but allow for the production staff to assist in the operation of the audiovisual system if needed. The audiovisual system should not be the focus of the spaces, it should help enhance the meeting by providing additional audio and visual support when needed.



City of Andover

The City of Andover utilize their City Council Chambers for a variety of different types of meetings. Some meeting types include: City Council, Park and Recreation, and Planning and Commissioning. While the meetings may be different there are a lot of similarities in the needs of the users for participation, presentation, and distribution of content. This description provides information on the various system components and functionality for Andover.

Video Presentation Displays

The existing projector and screen will be replaced with an 80" interactive display on a fix mount. While this display can be used to present content, the primary purpose is not for the public or council members to rely on it for viewing presentation content instead those individuals will utilize 22" local monitors at the dais or the monitors located on the side walls in the space.

Four additional 55" displays mounted on roll-around style carts for portability and flexibility will provide the public with monitors to view presentation content. These roll around carts could be used for meetings outside of the chambers when needed and will have local inputs on them and utilize an IR remote control for power and source selection when not connected to the council chambers system. A single 55" display will be mounted in the lobby of City Hall just outside the chambers for overflow.

All displays within the space associated with the system will be in the HD aspect ratio of 16:9 with a native resolution of 1920x1080. Additional 4K capability may be possible on the displays depending on the equipment selected, however a multi format distribution and switching system is not recommended.

Wireless Presentation

A wireless presentation and collaboration device will allow provide BYOD connectivity within the room without needing to have adaptor cables. It will provide iOS mirroring for MacBooks, iPads, and iPhone, as well as native mirroring for Chromebook, Android, and Windows Phones. The Wireless presentation device may require additional software to be loaded on the end user's device to display content. Software will be available via the manufacturer's website, iTunes, and Google Play store.

Annotation Capability

When located on the staff presentation area, presenters will have additional flexibility of choosing to use an annotation feature that allows for real-time annotation over any material being presented. Annotation will be done using a touch screen monitor located at the staff presentation area. The touch screen monitor will utilize built in software of the wireless presentation system for all annotation features. The 80" interactive display will also provide annotation capability.

Document Camera

A HD document camera ceiling mounted above the staff presentation area will allow the capability to display paper documents such as maps, diagrams, photo's, and other paper documents via the audiovisual system. Zoom and focus controls will be provided at the staff presentation area to ensure clarity of the content.

Video Switching and Distribution

Video distribution will utilize twisted pair cabling reducing the need to run multiple audio, video, and control cabling to each source and destinations within the room. The switching matrix system will a card based frame that will allow various input cards and output cards to be installed. The system will 4k ready and utilize all 4k input and output cards along with 4k input transmitters and receivers. While 4k capable the system will be configured for HD 1920x1080 format but allow full 4k switching in the future.

Video Conferencing Systems

The device providing wireless presentation capabilities will also serve as the rooms video conferencing interface. Soft codecs such as Skype, Bluejeans, WebEx, etc. can be utilized with the system. The soft codecs and the services are not part of the system design but are to be provided by each city if the use of video conferencing is needed. The use of subscription services can also provide bridges to traditional video conference codecs from manufactures like Polycom, Cisco, and Lifesize.

Emerging Technology – Video Conferencing for Public Meetings	



Audio System

A flexible digital signal processing (DSP) system will provide all the audio mixing, routing, and processing needed to support 16 microphones, line inputs, and provide enough outputs for proper zoning and audio distribution to the broadcast feed. The system will have defined presets for typical meetings as well as an audio shutoff to broadcast for when closed sessions need to happen within the space. Basic volume control will be provided for in room use by end users. More in-depth control will be provided to the city's technical staff should the need arise to make larger changes than just volume up and down.

Emerging Technology – AVB & DANTE Networking Protocols

Speech and Program Loudspeakers

70 Volt ceiling speakers will be installed to provide even coverage in the room. Mix minus audio routing will be used to make sure that audio can't feedback. Speakers located near the microphones will provide audio minus the local microphones sound source. This is an industry standard technique to eliminate feedback due to speaker and microphone placement. Each member location at the dais will also receive a small localized speaker to help reinforce the audio. The local speaker will have a limited volume control available to the individual sitting at that position.

Wireless Microphones

A wireless microphone system complying with the latest FCC rules will be provided. The microphone system will have both a body pack transmitter and lavalier microphone and a hand-held microphone. Only one microphone can be used at a time and they will be both configured to the same frequency channel.

Hearing Assist System

The hearing assist system will be FM based and allow for users within the council chambers the ability to have additional personal sound reinforcement when participating and observing meetings. The body packs will have a standard 3.5mm audio connection to allow users to either use city provided headphones, personal headphones, or city provided neck loops. The number of body packs, headphones, and neck loops will comply with ADA regulations based on the occupancy of the council chambers. An FM transmitter antenna will be located within the chambers to provide even coverage.

Emerging Technology – WIFI Hotspot Technology with BYOD & Public WIFI

Audio Recorder

The digital audio recorder will allow for recording directly to a SD card or USB stick. The recorder will have the capability to provide an automatic network file transfer of audio files or manual transfer of audio files to a shared network location. Controls for the audio recording will be extended to a staff position to allow that staff member to manually hit record when needed. A visual indicator on the record button will provide confidence that the recorder is recording.

Control System

A control system with multiple locations of control will allow users to control audiovisual system. A button panel located at the staff presentation area will allow users to switch between the Room PC, Laptop PC, Document Camera, or wireless presentation system as well as zoom in and out for the document camera. All buttons physical button with a visual light indicator letting the users know which source is selected.

An ancillary touch panel at a staff position will give users access to advanced controls provide control for on and off as well as volume control. An additional control panel will be in the broadcast production control room will allow the broadcast production staff the ability to assist with switching of presentation sources within room if needed. Room will have a room only mode for presentation use when not broadcasting.



City of Anoka

The City of Anoka utilize their City Council Chambers for a variety of different types of meetings. Some meeting types include: City Council, Heritage Preservation, Housing & Redevelopment Authority, Planning Commission, Anoka-Champlin Fire Board, and Economic Development Commission. While the meetings may be different there are a lot of similarities in the needs of the users for participation, presentation, and distribution of content. This description provides information on the various system components and functionality for Anoka.

Video Presentation

The existing projector and screen will be removed. Two 55" displays will be installed from the ceiling near the public seating area. These displays will allow the public to view presentation content. The displays will be installed to meet ADA regulations. Dais displays will be replaced with 22" – 24" LCD monitors with speakers. Additional displays will be added for members that currently do not have monitors. A single 55" display will be ceiling mounted in the adjacent conference room for overflow.

All displays within the space associated with the system will be in the HD aspect ratio of 16:9 with a native resolution of 1920x1080. Additional 4K capability may be possible on the displays depending on the equipment selected, however a multi format distribution and switching system is not recommended.

Wireless Presentation

A wireless presentation and collaboration device will allow provide BYOD connectivity within the room without needing to have adaptor cables. It will provide iOS mirroring for MacBooks, iPads, and iPhones, as well as native mirroring for Chromebook, Android, and Windows Phones. The Wireless presentation device may require additional software to be loaded on the end user's device to display content. Software will be available via the manufacturer's website, iTunes, and Google Play store.

Annotation Capability

When located on the staff presentation area, presenters will have additional flexibility of choosing to use an annotation feature that allows for real-time annotation over any material being presented. Annotation will be done using a touch screen monitor located at the staff presentation area. The touch screen monitor will utilize built in software of the wireless presentation system for all annotation features.

Document Camera

A HD document camera ceiling mounted above the staff presentation area will allow the capability to display paper documents such as maps, diagrams, photo's, and other paper documents via the audiovisual system. Zoom and focus controls will be provided at the staff presentation area to ensure clarity of the content.

Video Switching and Distribution

Video distribution will utilize twisted pair cabling reducing the need to run multiple audio, video, and control cabling to each source and destinations within the room. The switching matrix system will a card based frame that will allow various input cards and output cards to be installed. The system will 4k ready and utilize all 4k input and output cards along with 4k input transmitters and receivers. While 4k capable the system will be configured for HD 1920x1080 format but allow full 4k switching in the future.

Video Conferencing Systems

The device providing wireless presentation capabilities will also serve as the rooms video conferencing interface. Soft codecs such as Skype, Bluejeans, Webex, etc. can be utilized with the system. The soft codecs and the services are not part of the system design but are to be provided by each city if the use of video conferencing is needed. The use of subscription services can also provide bridges to traditional video conference codecs from manufactures like Polycom, Cisco, and Lifesize.

Emerging Technology – Video Conferencing for Public Meetings

Audio System

A flexible digital signal processing (DSP) system will provide all the audio mixing, routing, and processing needed to support 19 microphones, line inputs, and provide enough outputs for proper zoning and audio distribution to the broadcast feed. The system will have defined presets for typical meetings as well as an audio shutoff to broadcast for when closed sessions need to happen within the space. Basic volume control will be provided for in room use by end users. More in-depth control will be provided to the cities technical staff should the need arise to make larger changes than just volume up and down.

Emerging Technology – AVB & DANTE Networking Protocols



Speech and Program Loudspeakers

70 Volt ceiling speakers will be installed to provide even coverage in the room. Mix minus audio routing will be used to make sure that audio can't feedback. Speakers located near the microphones will provide audio minus the local microphones sound source. This is an industry standard technique to eliminate feedback due to speaker and microphone placement. Each member location at the dais will also receive a small localized speaker to help reinforce the audio. The local speaker will have a limited volume control available to the individual sitting at that position.

Wireless Microphones

A wireless microphone system complying with the latest FCC rules will be provided. The microphone system will have both a body pack transmitter and lavalier microphone and a hand-held microphone. Only one microphone can be used at a time and they will be both configured to the same frequency channel.

Hearing Assist System

The hearing assist system will be FM based and allow for users within the council chambers the ability to have additional personal sound reinforcement when participating and observing meetings. The body packs will have a standard 3.5mm audio connection to allow users to either use city provided headphones, personal headphones, or city provided neck loops. The number of body packs, headphones, and neck loops will comply with ADA regulations based on the occupancy of the council chambers. An FM transmitter antenna will be located within the chambers to provide even coverage.

Emerging Technology – WIFI Hotspot Technology with BYOD & Public WIFI

Audio Recorder

The digital audio recorder will allow for recording directly to a SD card or USB stick. The recorder will have the capability to provide an automatic network file transfer of audio files or manual transfer of audio files to a shared network location. Controls for the audio recording will be extended to a staff position to allow that staff member to manually hit recorded when needed. A visual indicator on the record button will provide confidence that the recorder is recording.

Control System

A control system with multiple locations of control will allow users to control audiovisual system. A button panel located at the staff presentation area will allow users to switch between the Room PC, Laptop PC, Document Camera, or wireless presentation system as well as zoom in and out for the document camera. All buttons physical button with a visual light indicator letting the users know which source is selected.

An ancillary touch panel will give users access to advanced controls provide control for on and off as well as volume control. An additional control panel will be in the broadcast production control room will allow the broadcast production staff the ability to assist with switching of presentation sources within room if needed.



City of Champlin

The City of Champlin utilize their City Council Chambers for a variety of different types of meetings. Some meeting types include: City Council, Park and Recreation, Planning Commission, Economic Development Authority, Environmental Resources Commission, and Anoka-Champlin Fire Board Meeting. While the meetings may be different there are a lot of similarities in the needs of the users for participation, presentation, and distribution of content. This description provides information on the various system components and functionality for Champlin.

Video Presentation

The existing projector and screen will be removed and replaced with a 65" display mounted from the ceiling. The existing ceiling mounted TV will also be replaced with a matching 65" display. Screens will be installed to meet ADA regulations. All the dais monitors will be replaced with new 22" – 24" LCD monitors with speakers.

All displays within the space associated with the system will be in the HD aspect ratio of 16:9 with a native resolution of 1920x1080. Additional 4K capability may be possible on the displays depending on the equipment selected, however a multi format distribution and switching system is not recommended.

Wireless Presentation

A wireless presentation and collaboration device will allow provide BYOD connectivity within the room without needing to have adaptor cables. It will provide iOS mirroring for Macbooks, iPads, and iPhones, as well as native mirroring for Chromebook, Android, and Windows Phones. The Wireless presentation device may require additional software to be loaded on the end user's device to display content. Software will be available via the manufacturer's website, iTunes, and Google Play store.

Annotation Capability

When located on the staff presentation area, presenters will have additional flexibility of choosing to use an annotation feature that allows for real-time annotation over any material being presented. Annotation will be done using a touch screen monitor located at the staff presentation area. The touch screen monitor will utilize built in software of the wireless presentation system for all annotation features.

Document Camera

A HD document camera ceiling mounted above the staff presentation area will allow the capability to display paper documents such as maps, diagrams, photo's, and other paper documents via the audiovisual system. Zoom and focus controls will be provided at the staff presentation area to ensure clarity of the content.

Video Switching and Distribution

Video distribution will utilize twisted pair cabling reducing the need to run multiple audio, video, and control cabling to each source and destinations within the room. The switching matrix system will a card based frame that will allow various input cards and output cards to be installed. The system will 4k ready and utilize all 4k input and output cards along with 4k input transmitters and receivers. While 4k capable the system will be configured for HD 1920x1080 format but allow full 4k switching in the future.

Video Conferencing Systems

The device providing wireless presentation capabilities will also serve as the rooms video conferencing interface. Soft codecs such as Skype, Bluejeans, Webex, etc. can be utilized with the system. The soft codecs and the services are not part of the system design but are to be provided by each city if the use of video conferencing is needed. The use of subscription services can also provide bridges to traditional video conference codecs from manufactures like Polycom, Cisco, and Lifesize.

Emerging Technology – Video Conferencing for Public Meetings

Audio System

A flexible digital signal processing (DSP) system will provide all the audio mixing, routing, and processing needed to support 13 of microphones, line inputs, and provide enough outputs for proper zoning and audio distribution to the broadcast feed. The system will have defined presets for typical meetings as well as an audio shutoff to broadcast for when closed sessions need to happen within the space. Basic volume control will be provided for in room use by end users. More in-depth control will be provided to the cities technical staff should the need arise to make larger changes than just volume up and down. Existing microphones and mute switches will remain in place and be re-integrated with the new system.

Emerging Technology – AVB & DANTE Networking Protocols



Speech and Program Loudspeakers

70 Volt ceiling speakers will be installed to provide even coverage in the room. Mix minus audio routing will be used to make sure that audio can't feedback. Speakers located near the microphones will provide audio minus the local microphones sound source. This is an industry standard technique to eliminate feedback due to speaker and microphone placement. Each member location at the dais will also receive a small localized speaker to help reinforce the audio. The local speaker will have a limited volume control available to the individual sitting at that position.

Wireless Microphones

A wireless microphone system complying with the latest FCC rules will be provided. The microphone system will have both a body pack transmitter and lavalier microphone and a hand-held microphone. Only one microphone can be used at a time and they will be both configured to the same frequency channel.

Hearing Assist System

The hearing assist system will be FM based and allow for users within the council chambers the ability to have additional personal sound reinforcement when participating and observing meetings. The body packs will have a standard 3.5mm audio connection to allow users to either use city provided headphones, personal headphones, or city provided neck loops. The number of body packs, headphones, and neck loops will comply with ADA regulations based on the occupancy of the council chambers. An FM transmitter antenna will be located within the chambers to provide even coverage.

Emerging Technology - WIFI Hotspot Technology with BYOD & Public WIFI

Audio Recorder

The digital audio recorder will allow for recording directly to a SD card or USB stick. The recorder will have the capability to provide an automatic network file transfer of audio files or manual transfer of audio files to a shared network location. Controls for the audio recording will be extended to a staff position to allow that staff member to manually hit recorded when needed. A visual indicator on the record button will provide confidence that the recorder is recording.

Control System

A control system with multiple locations of control will allow users to control audiovisual system. A button panel located at the staff presentation area will allow users to switch between the Room PC, Laptop PC, Document Camera, or wireless presentation system as well as zoom in and out for the document camera. All buttons physical button with a visual light indicator letting the users know which source is selected.

An ancillary touch panel will give users access to advanced controls provide control for on and off as well as volume control. An additional control panel will be in the broadcast production control room will allow the broadcast production staff the ability to assist with switching of presentation sources within room if needed.



City of Ramsey

The City of Ramsey utilize their City Council Chambers for a variety of different types of meetings. Some meeting types include: City Council, Planning Commission, and Park and Recreation. While the meetings may be different there are a lot of similarities in the needs of the users for participation, presentation, and distribution of content. This description provides information on the various system components and functionality for Ramsey.

Video Presentation

The existing projector and screen will be replaced with new HD 16x9 screen and projector. The projector and screen's main purpose is to provide the public the ability to view presentation content. A second HD 16x9 screen and projector will mirror the original to provide better viewable angles for the public. All the dais monitors will be replaced with new 22" – 24" LCD monitors with speakers.

All displays within the space associated with the system will be in the HD aspect ratio of 16:9 with a native resolution of 1920x1080. Additional 4K capability may be possible on the displays depending on the equipment selected, however a multi format distribution and switching system is not recommended.

Wireless Presentation

A wireless presentation and collaboration device will allow provide BYOD connectivity within the room without needing to have adaptor cables. It will provide iOS mirroring for Macbooks, iPad's, and Iphones, as well as native mirroring for Chromebook, Android, and Windows Phones. The Wireless presentation device may require additional software to be loaded on the end user's device to display content. Software will be available via the manufacturer's website, iTunes, and Google Play store.

Annotation Capability

When located on the staff presentation area, presenters will have additional flexibility of choosing to use an annotation feature that allows for real-time annotation over any material being presented. Annotation will be done using a touch screen monitor located at the staff presentation area. The touch screen monitor will utilize built in software of the wireless presentation system for all annotation features.

Document Camera

A HD document camera ceiling mounted above the staff presentation area will allow the capability to display paper documents such as maps, diagrams, photo's, and other paper documents via the audiovisual system. Zoom and focus controls will be provided at the staff presentation area to ensure clarity of the content.

Video Switching and Distribution

Video distribution will utilize twisted pair cabling reducing the need to run multiple audio, video, and control cabling to each source and destinations within the room. The switching matrix system will a card based frame that will allow various input cards and output cards to be installed. The system will 4k ready and utilize all 4k input and output cards along with 4k input transmitters and receivers. While 4k capable the system will be configured for HD 1920x1080 format but allow full 4k switching in the future.

Video Conferencing Systems

The device providing wireless presentation capabilities will also serve as the rooms video conferencing interface. Soft codecs such as Skype, Bluejeans, WebEx, etc. can be utilized with the system. The soft codecs and the services are not part of the system design but are to be provided by each city if the use of video conferencing is needed. The use of subscription services can also provide bridges to traditional video conference codecs from manufactures like Polycom, Cisco, and Lifesize.

Emerging Technology – Video Conferencing for Public Meetings

Audio System

A flexible digital signal processing (DSP) system will provide all the audio mixing, routing, and processing needed to support 16 microphones, line inputs, and provide enough outputs for proper zoning and audio distribution to the broadcast feed. The system will have defined presets for typical meetings as well as an audio shutoff to broadcast for when closed sessions need to happen within the space. Basic volume control will be provided for in room use by end users. More in-depth control will be provided to the cities technical staff should the need arise to make larger changes than just volume up and down. All existing Audio-Technica microphones and shock mounts will be re-integrated with the new system.

Emerging Technology – AVB & DANTE Networking Protocols



Speech and Program Loudspeakers

The existing line array system will stay in place. Mix minus audio routing will be used to make sure that audio can't feedback. Speakers located near the microphones will provide audio minus the local microphones sound source. This is an industry standard technique to eliminate feedback due to speaker and microphone placement. Each member location at the dais will also receive a small localized speaker to help reinforce the audio. The local speaker will have a limited volume control available to the individual sitting at that position. Two additional speakers will be installed outside the chambers providing overflow audio into the lobby of City Hall.

Wireless Microphones

A wireless microphone system complying with the latest FCC rules will be provided. The microphone system will have both a body pack transmitter and lavalier microphone and a hand-held microphone. Only one microphone can be used at a time and they will be both configured to the same frequency channel.

Hearing Assist System

The hearing assist system will be FM based and allow for users within the council chambers the ability to have additional personal sound reinforcement when participating and observing meetings. The body packs will have a standard 3.5mm audio connection to allow users to either use city provided headphones, personal headphones, or city provided neck loops. The number of body packs, headphones, and neck loops will comply with ADA regulations based on the occupancy of the council chambers. An FM transmitter antenna will be located within the chambers to provide even coverage.

Emerging Technology – WIFI Hotspot Technology with BYOD & Public WIFI

Audio Recorder

The digital audio recorder will allow for recording directly to a SD card or USB stick. The recorder will have the capability to provide an automatic network file transfer of audio files or manual transfer of audio files to a shared network location. Controls for the audio recording will be extended to a staff position to allow that staff member to manually hit recorded when needed. A visual indicator on the record button will provide confidence that the recorder is recording.

Control System

A control system with multiple locations of control will allow users to control audiovisual system. A button panel located at the staff presentation area will allow users to switch between the Room PC, Laptop PC, Document Camera, or wireless presentation system as well as zoom in and out for the document camera. All buttons physical button with a visual light indicator letting the users know which source is selected.

An ancillary touch panel located near the clerk will give users access to advanced controls provide control for on and off as well as volume control. An additional control panel will be in the broadcast production control room will allow the broadcast production staff the ability to assist with switching of presentation sources within room if needed.



Infrastructure Considerations - Andover

Existing power circuits should be able to be reused for equipment located in the control rooms. Additional circuits and outlet locations will be needed for the portable monitor carts to ensure that long extension cords are not needed. Additional outlets also may be needed under the dais for monitors and distribution equipment.

Estimated power consumption for audiovisual equipment:

Control Room Equipment: 1500 Watts

Portable carts: 852 Watts

Council Chambers Equipment: 1250 Watts

Estimated heat load for the audiovisual equipment:

Control Room Equipment: 5118 BTU/hr.

Portable carts: 726 BTU/hr.

■ Council Chambers Equipment: 4265 BTU/hr.

Broadcast Lighting

Broadcast and video conferencing applications require special lighting which should include even illumination on meeting participants. Lighting level should be 70 ft. candles, vertical, with a color temperature of 4000 degrees Kelvin. There should be minimum contrast between all and furniture colors. Matte colors are recommended. Busy patterns, weaves, and wood-grains should not be used. Lighting should be controlled by the Control Room operator during televised and recorded meetings.

Chambers Acoustics

The City of Andover had the most acoustical challenges out of all the member cities. While upgraded audio processing, amplification, and microphones and improve audio within the spaces, special consideration needs to be taken for acoustically treating the spaces. A Noise Criteria rating of between NC-30 and NC-40 is recommended for typical council chamber spaces. Its recommended the City of Andover retain an Acoustical consultant to help address specific issues with the council chambers space.

Control Room

Aesthetics such as paint should be refreshed within the space and separate HVAC should be considered for the room. Separate HVAC should be provided to ensure equipment is maintained at a consistent temperature to ensure temperature doesn't contribute to shortening the equipment lifespan. Room temperature should range from 70 to 72 degrees Fahrenheit, with a relative humidity from 40 to 65 percent. Air movement should not exceed 4 to 6 inches per second.

Additionally, the city should look at the placement of the current control room and look to move it closer to the chambers. The current distance presents challenges when dealing with technical issues as they arise during preparation of the broadcast and during the actual broadcast. It's recommended that the conference room adjacent to the chambers be repurposed for a control room.

Miscellaneous Items



Infrastructure Considerations - Anoka

Existing power circuits should be able to be reused for equipment located in the control room. Additional circuits and outlet locations will be needed for the ceiling mounted displays. Additional outlets also may be needed under the dais for monitors and distribution equipment.

Estimated power consumption for audiovisual equipment:

Control Room Equipment: 1500 Watts

Ceiling Displays: 330 Watts

Council Chambers Equipment: 1250 Watts

Estimated heat load for the audiovisual equipment:

Control Room Equipment: 5118 BTU/hr.

Ceiling Displays: 1126 BTU/hr.

Council Chambers Equipment: 4265 BTU/hr.

Broadcast Lighting

Broadcast and video conferencing applications require special lighting which should include even illumination on meeting participants. Lighting level should be 70 ft. candles, vertical, with a color temperature of 4000 degrees Kelvin. There should be minimum contrast between all and furniture colors. Matte colors are recommended. Busy patterns, weaves, and wood-grains should not be used. Lighting should be controlled by the Control Room operator during televised and recorded meetings.

Control Room

Aesthetics such as paint should be refreshed within the space and separate HVAC should be considered for the room. Separate HVAC should be provided to ensure equipment is maintained at a consistent temperature to ensure temperature doesn't contribute to shortening the equipment lifespan. Room temperature should range from 70 to 72 degrees Fahrenheit, with a relative humidity from 40 to 65 percent. Air movement should not exceed 4 to 6 inches per second.

Window Treatments

Separating the Council Chambers and a conference room is a large window wall. Its recommended to install window treatments that can be drawn when meetings are taking place in each of the rooms. The shades can remain open when only a single meeting is taking place. Manual shades are cost effective and are easy to install and require no additional electrical infrastructure.

Miscellaneous Items



Infrastructure Considerations - Champlin

Existing power circuits should be able to be reused for equipment located in the control room. Additional circuits and outlet locations will be needed for the ceiling mounted displays. Additional outlets also may be needed under the dais for monitors and distribution equipment.

Estimated power consumption for audiovisual equipment:

Control Room Equipment: 1500 Watts

Ceiling Displays: 330 Watts

Council Chambers Equipment: 1250 Watts

Estimated heat load for the audiovisual equipment:

Control Room Equipment: 5118 BTU/hr.

Ceiling Displays: 1126 BTU/hr.

Council Chambers Equipment: 4265 BTU/hr.

Broadcast Lighting

Broadcast and video conferencing applications require special lighting which should include even illumination on meeting participants. Lighting level should be 70 ft. candles, vertical, with a color temperature of 4000 degrees Kelvin. There should be minimum contrast between all and furniture colors. Matte colors are recommended. Busy patterns, weaves, and wood-grains should not be used. Lighting should be controlled by the Control Room operator during televised and recorded meetings.

Control Room

The control room hasn't been updated in some time. Aesthetics such as paint should be refreshed within the space and separate HVAC should be considered for the room. Separate HVAC should be provided to ensure equipment is maintained at a consistent temperature to ensure temperature doesn't contribute to shortening the equipment lifespan. Room temperature should range from 70 to 72 degrees Fahrenheit, with a relative humidity from 40 to 65 percent. Air movement should not exceed 4 to 6 inches per second.

Sound Treatment

With the control room directly adjacent to the council chambers sound from the chambers or control room travels through to the other space easily. Sound from the control room can disrupt the meeting and control room operators must wear headphones while operating the equipment during a televised or recorded meeting. The use of headphones is not ideal in a production environment. Noise levels in control room should meet or exceed the Noise Criterion level of NC-25.

Council Chambers Ambient Noise

Above the public area in the chambers near the movable wall is a mechanical unit that is causing significant issues meeting speech intelligibility requirements of the public space. Ambient noise levels within the chambers should meet or exceed the Noise Criterion level of NC-25. Its recommended that a mechanical engineer provide options for moving or reducing the noise of the unit.

Miscellaneous Items



Infrastructure Considerations - Ramsey

Existing power circuits should be able to be reused for equipment located in the control room. Additional circuits and outlet locations will be needed for the additional projector. Additional outlets also may be needed under the dais for monitors and distribution equipment.

Estimated power consumption for audiovisual equipment:

Control Room Equipment: 1500 Watts

Projectors: 1700 Watts

Council Chambers Equipment: 1250 Watts

Estimated heat load for the audiovisual equipment:

Control Room Equipment: 5118 BTU/hr.

Projectors: 5797 BTU/hr.

Council Chambers Equipment: 4265 BTU/hr.

Control Room

The control room shares a space with storage and an IDF serving a portion of the building. Its recommended that the control room portion of the room be partitioned off for security and comfort within the space. The control room should noise criteria level should meet or exceed NC-25. Room temperature should range from 70 to 72 degrees Fahrenheit, with a relative humidity from 40 to 65 percent. Air movement should not exceed 4 to 6 inches per second.

Miscellaneous Items



Special Issues

Topics included in the section should require further review and attention by QCTV and its member cities when moving forward with the audiovisual project. Items pertain to quality of service, accessibility, and policy with various items proposed for the use and operation of the audiovisual systems.

Bring Your Own Device (BYOD)

Wireless presentation systems allow the use of bring your own devices (BYOD); however, since the devices are not provided by the City it becomes difficult to guarantee the level of service quality. Different operating systems, wireless chipsets, security features, all contribute to the overall performance of the device and the system it interacts with.

Closed Captioning

Closed Captioning is not a requirement for city council meetings typically, however providing this service would provide enhanced accessibility to content for its city residence. Currently QCTV falls under the FCC's Self-Implementing exemption rules because it produces revenues of under \$3,000,000. Closed captioning requires the purchase of a close caption encoder and the use of a 3rd party service for live captioning. Each system design has a VOIP card for the DSP unit providing remote connectivity and clear audio monitoring for the captioning service.

Wireless Network

The wireless presentation system depends on the Cities' wireless network infrastructure, routing, and policies. The wireless access points within the council chambers spaces should be IEEE 802.11ac compliant to provide sufficient bandwidth to the devices. All devices connecting to the access points and utilize the wireless presentation system solution should also be IEEE 802.11ac compliant. WIFI should be provided by each city within the chambers spaces.

Video Conferencing

The system provides the options for video conferencing but there are policies and laws that are individual to each city and local that need to be referred to before the technology can used for meetings. This report does not create or modify policy and is provided at the discretion of each City.



Preliminary Audiovisual System Estimates

City of Andover

Item	Estimated Unit Cost	Estimated Quantity	Estimated Total Cost		
Video Presentation Displays					
80" Interactive Display	\$15,000.00	1	\$15,000.00		
Mounting Hardware	\$300.00	1	\$300.00		
55" Monitor	\$2,400.00	5	\$12,000.00		
Roll Around Cart	\$1,200.00	4	\$4,800.00		
22" – 24" LCD Monitors	\$400.00	14	\$5,600.00		
Mounting Hardware	\$450.00	14	\$6,300.00		
Wireless Presentation System					
Wireless Presentation System	\$5,000.00	1	\$5,000.00		
Annotation System					
24" Touch Screen Display	\$400.00	1	\$400.00		
Document Camera					
HD Document Camera	\$5,000.00	1	\$5,000.00		
Mounting Hardware	\$250.00	1	\$250.00		
Video Switching & Distribution					
Video Transmitters	\$2,000.00	4	\$8,000.00		
Video Receivers & Scalers	\$2,200.00	4	\$8,000.00		
Switching Matrix w/ IO Cards	\$11,200.00	1	\$11,200.00		
HDMI Distribution Amplifier	\$1,000.00	2	\$2,000.00		
Video Conferencing System					
Soft Codecs Not Included	N/A	N/A	N/A		



Audio System			
Audio DSP Card Frame	\$7,350.00	1	\$7,350.00
Audio DSP Dante Card	\$1,500.00	1	\$1,500.00
Audio VOIP Card	\$650.00	1	\$650.00
Audio DSP Input Card	\$750.00	6	\$4,500.00
Audio DSP Output Card	\$750.00	4	\$3,000.00
Speech & Program Loudspeakers			
70-Volt Ceiling Loudspeakers	\$350.00	8	\$2,800.00
70-Volt Amplifier	\$4,100.00	1	\$4,100.00
Wireless Microphones			
Wireless Microphone System	\$2,500.00	1	\$2,500.00
Hearing Assist System			
FM Assisted Listening System	\$1,900.00	1	\$1,900.00
Audio Recorder			
Network SD/USB Audio Recorder	\$900.00	1	\$900.00
Control System			
Control System Processor	\$1,950.00	1	\$1,950.00
Touch Panel	\$1,950.00	2	\$3,900.00
Custom Button Interface	\$250.00	1	\$250.00
Integration Costs			
Installation Materials	\$8,000.00	1	\$8,000.00
Installation Labor	\$25,000.00	1	\$25,000.00
Estimated Total			\$152,950.00



City of Anoka

Item	Estimated Unit Cost	Estimated Quantity	Estimated Total Cost
Video Presentation Displays			
55" Monitor	\$2,400.00	3	\$7,200.00
Mounting Hardware	\$500.00	3	\$1,500.00
22" – 24" LCD Monitors	\$400.00	11	\$4,400.00
Mounting Hardware	\$300.00	11	\$3,300.00
Wireless Presentation System			
Wireless Presentation System	\$5,000.00	1	\$5,000.00
Annotation System			
24" Touch Screen Display	\$400.00	1	\$400.00
Document Camera			
HD Document Camera	\$5,000.00	1	\$5,000.00
Mounting Hardware	\$250.00	1	\$250.00
Video Switching & Distribution			
Video Transmitters	\$2,000.00	2	\$4,000.00
Video Receivers & Scalers	\$2,200.00	5	\$11,000.00
Switching Matrix w/ IO Cards	\$11,200.00	1	\$11,200.00
HDMI Distribution Amplifier	\$1,000.00	2	\$2,000.00
Video Conferencing System			
Soft Codecs Not Included	N/A	N/A	N/A



Audio System			
Audio DSP Card Frame	\$7,350.00	1	\$7,350.00
Audio DSP Dante Card	\$1,500.00	1	\$1,500.00
Audio VOIP Card	\$650.00	1	\$650.00
Audio DSP Input Card	\$750.00	6	\$4,500.00
Audio DSP Output Card	\$750.00	4	\$3,000.00
Speech & Program Loudspeakers			
70-Volt Ceiling Speakers	\$250.00	8	\$2,000.00
70-Volt Amplifier	\$4,100.00	1	\$4,100.00
Wireless Microphones			
Wireless Microphone System	\$2,500.00	1	\$2,500.00
Hearing Assist System			
FM Assisted Listening System	\$1,900.00	1	\$1,900.00
Audio Recorder			
Network SD/USB Audio Recorder	\$900.00	1	\$900.00
Control System			
Control System Processor	\$1,950.00	1	\$1,950.00
Touch Panel	\$1,950.00	2	\$3,900.00
Custom Button Interface	\$250.00	1	\$250.00
Integration Costs			
Installation Materials	\$8,000.00	1	\$8,000.00
Installation Labor	\$25,000.00	1	\$25,000.00
Estimated Total			\$122,750.00



City of Champlin

Item	Estimated Unit Cost	Estimated Quantity	Estimated Total Cost
Video Presentation Displays			
65" Monitor	\$3,400	2	\$6,800.00
Mounting Hardware	\$500.00	2	\$1,000.00
22" – 24" LCD Monitors	\$400.00	12	\$4,800.00
Mounting Hardware	\$300.00	12	\$3,600.00
Wireless Presentation System			
Wireless Presentation System	\$5,000.00	1	\$5,000.00
Annotation System			
24" Touch Screen Display	\$400.00	1	\$400.00
Document Camera			
HD Document Camera	\$5,000.00	1	\$5,000.00
Mounting Hardware	\$250.00	1	\$250.00
Video Switching & Distribution			
Video Transmitters	\$2,000.00	3	\$6,000.00
Video Receivers & Scalers	\$2,200.00	5	\$11,000.00
Switching Matrix w/ IO Cards	\$11,200.00	1	\$11,200.00
HDMI Distribution Amplifier	\$1,000.00	2	\$2,000.00
Video Conferencing System			
Soft Codecs Not Included	N/A	N/A	N/A



Audio System			
Audio DSP Card Frame	\$7,350.00	1	\$7,350.00
Audio DSP Dante Card	\$1,500.00	1	\$1,500.00
Audio VOIP Card	\$650.00	1	\$650.00
Audio DSP Input Card	\$750.00	5	\$3,750.00
Audio DSP Output Card	\$750.00	4	\$3,000.00
Speech & Program Loudspeakers			
70-Volt Ceiling Speakers	\$250.00	6	\$1,500.00
70-Volt Amplifier	\$4,100.00	1	\$4,100.00
Wireless Microphones			
Wireless Microphone System	\$2,500.00	1	\$2,500.00
Hearing Assist System			
FM Assisted Listening System	\$1,900.00	1	\$1,900.00
Audio Recorder			
Network SD/USB Audio Recorder	\$900.00	1	\$900.00
Control System			
Control System Processor	\$1,950.00	1	\$1,950.00
Touch Panel	\$1,950.00	2	\$3,900.00
Custom Button Interface	\$250.00	1	\$250.00
Integration Costs			
Installation Materials	\$8,000.00	1	\$8,000.00
Installation Labor	\$23,000.00	1	\$23,000.00
Estimated Total			\$121,300.00



City of Ramsey

Item	Estimated Unit Cost	Estimated Quantity	Estimated Total Cost
Video Presentation Displays			
HD Projector 10K w/ Lens	\$15,000.00	2	\$30,000.00
Mounting Hardware	\$500.00	1	\$500.00
Projection Screen Glass	\$4,000.00	2	\$8,000.00
22" – 24" LCD Monitors	\$400.00	13	\$5,200.00
Mounting Hardware	\$300.00	13	\$3,900.00
Wireless Presentation System			
Wireless Presentation System	\$5,000.00	1	\$5,000.00
Annotation System			
24" Touch Screen Display	\$400.00	1	\$400.00
Document Camera			
HD Document Camera	\$5,000.00	1	\$5,000.00
Mounting Hardware	\$250.00	1	\$250.00
Video Switching & Distribution			
Video Transmitters	\$2,000.00	3	\$6,000.00
Video Receivers & Scalers	\$2,200.00	5	\$11,000.00
Switching Matrix w/ IO Cards	\$11,200.00	1	\$11,200.00
HDMI Distribution Amplifier	\$1,000.00	2	\$2,000.00
Video Conferencing System			
Soft Codecs Not Included	N/A	N/A	N/A



Audio System			
Audio DSP Card Frame	\$7,350.00	1	\$7350.00
Audio DSP Dante Card	\$1,500.00	1	\$1,500.00
Audio VOIP Card	\$650.00	1	\$650.00
Audio DSP Input Card	\$750.00	5	\$3,750.00
Audio DSP Output Card	\$750.00	5	\$3,750.00
Speech & Program Loudspeakers			
Speech & Program Loudspeakers	\$450.00	2	\$900.00
70-Volt Amplifier	\$4,100.00	1	\$4,100.00
Wireless Microphones			
Wireless Microphone System	\$2,500.00	1	\$2,500.00
Hearing Assist System			
FM Assisted Listening System	\$1,900.00	1	\$1,900.00
Audio Recorder			
Network SD/USB Audio Recorder	\$900.00	1	\$900.00
Control System			
Control System Processor	\$,1950.00	1	\$1,950.00
Touch Panel	\$1,950.00	2	\$3,900.00
Custom Button Interface	\$250.00	1	\$250.00
Integration Costs			
Installation Materials	\$8,000.00	1	\$8,000.00
Installation Labor	\$25,000.00	1	\$25,000.00
Estimated Total		<u>-</u>	\$154,850.00



Additional Costs

The following additional costs have not been included in the Audiovisual budgets but should be included for consideration for their inclusion as part of the project.

Taxes

Additional costs will need to be added if the QCTV member cities are not exempt from sales tax on both equipment and labor purchases.

Markups

Markup costs are typically between 5% and 10% may have to be included if QCTV's member cities decided to contract the work out to a General Contractor. This is typical if additional construction is to be done at the same time as the audiovisual system upgrades.

Contingencies

While not common practice in the AV industry at this time, Alpha Video recommends that contingency budget of 5% be established to cover unanticipated overages. In addition, contingencies can be keep aside for purchasing spare displays and microphones for maintenance purposes after warranties have expired.

Warranties

Typical Audiovisual installations include a one-year warranty. Additional consideration should be made to include second and third year warranties. Additional warranties are recommended due to consumer equipment installed in the system and limited warranties being offered in commercial environments.

Operational Staff Expertise Level Required

Operational training on the systems should be provided to two groups. The end users using the system during daily meetings such as a City Clerk or Administrator and those that are responsible for the operation and maintenance of the systems such as QCTV staff. A minimum of one hour of training for each group with no more than three users per group is recommended. The individuals trained should provide first line support for operational issues within the organization.

Maintenance Budget Requirements and Life Cycle Expectations

Equipment proposed has non-consumable parts like projector lamps there for maintenance budgeting should be minimal. It's recommended that at least once a year a technician evaluates the system and performance basic general preventative maintenance. Such items include, screen cleaning, evaluation and repair of gooseneck microphones, ensuring correct operation of mute or cough switches, and cleaning of fans if the equipment has them.

END OF AUDIOVISUAL PROGRAM REPORT

City of Andover Council Chambers AV Presentation System - Bid Form Base Bid

ound	cil Chambers - Base System Propo	osai					
D#	Model Number	ID	Manufacturer/Description	Qty		Unit	Extended
ction	n 1 - Video Distribution						
-	DM-MD8x8		Crestron 8x8 DigitalMedia Switcher	1	\$	-	\$.
-	DMC-4K-C-DSP-HDCP2		Crestron HDBaseT Certifid 4K DigitalMedia 8G+ Input Card w/ DSP	4	\$	-	\$.
-	DMC-4K-HD-SDP-HDCP2		Crestron 4K HDMI Input Card w/ DSP	1	\$	-	\$.
-	DMC-SDI		Crestron 3G-SDI Input Card	1	Ś		\$
-	DMC-4K-CO-HD-HDCP2		Crestron 2-Channel HDBasetT Certified 4K DigitalMedia 8G+ Output Card	3	\$	-	\$.
	DMC-HDO		Crestron 2-Channel HDMI Output Card	1	\$		\$
			·				·
-	DM-TX-4K-302-C		Crestron 4K DigitalMedia 8G+ Transmitter 302	4	\$	-	\$
-	DM-RMC-4K-SCALER-C-DSP		Crestron 4K DigitalMedia 8G+ Receiver & Room Controler w/ Scaling & DSP	5	\$	-	\$
-	HD-DA4-4K-E		Crestron 1-to-4 4K HDMI Distribution Amplifier	2	\$	-	\$
-	HD-DA8-4K-E		Crestron 1-to-8 4K HDMI Distribution Amplifier	1	\$	-	\$.
-	HD-SCALER-HD-E		Crestron High-Definition Video Scaler HDMI In, HDMI Out	2	\$	-	\$.
-	DM-PSU-8		Crestron 8-Port PoDM Power Supply for DM 8G+ I/O Cards	1	\$	-	\$.
-	AT-UHD-CAT-4ED		Atlona 4-Output HDMI to HDBaseT Extended Distance DA	1	\$	-	\$.
-	AT-UHD-EX-100CE-RX		Atlona HDBaseT RX w/ Ethernet, Control, and POE	4	\$	-	\$.
					\$		
-	SP-HD-1x4		Covid HDMI 1:4 Splitter	2		-	·
-	HA5-PLUS		AJA HDMI to HD/SD Converter	1	\$	-	\$.
			Section 1 - Video Distribution Sub-Total				\$
ctio	1 2 - Cable Cubby & USB Transmitters						
-	HAS 400	<u></u>	Extron HAS 400 Cable Cubby	2	\$	-	\$.
-	AAP SuperPlate 100		Extron AAP SuperPlate 100 (HDMI, VGA, Audio, USB - BLACK)	1	\$	-	\$
-	AAP HDMI		Extron HDMI Plate w/ 10" Pigtail	1	\$	-	\$
-	AAP VGA & Audio		Extron VGA w/ 6" Pigtail & 3.5mm Mini Jack	1	\$		\$
			-				
-	IC402A-R2		Blackbox CATx USB 2.0 Extender 2-Port	2	\$	-	\$
			Section 2 - Cable Cubby & USB TX-RX Sub-Total				\$
ctior	n 3 - Dais Video & Audio System						
-	P2217H		Dell 22" 1920x1080 Monitor	14	\$	-	\$
-	S2240T		Dell 21.5" 1920x1080 Touch Screen LED Lit Monitor	1	\$	-	\$
			Dell USB SoundBar	15	\$		\$
-	ΔC511						Y
	AC511						ċ
-	Allowance		Chief Monitor Mount (TBD - Dais & Podium)	15	\$	-	\$.
			Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo				\$.
-	Allowance		Chief Monitor Mount (TBD - Dais & Podium)	15	\$		
-	Allowance TX-A2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo	15	\$		\$.
-	Allowance		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo	15	\$		\$.
-	Allowance TX-A2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo	15	\$		\$.
-	Allowance TX-A2 14 - Audio Processing & Amplification		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total	15 15	\$	-	\$
- ction	Allowance TX-A2 1 4 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card	15 15 1 1	\$ \$	-	\$ - S - S - S - S - S
ction	Allowance TX-A2 1 4 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card	15 15 1 1 1 1	\$ \$ \$ \$ \$ \$		\$ \$ \$ \$
ction	Allowance TX-A2 1 4 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card	15 15 1 1 1 1 1 6	\$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 1 4 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card	15 15 1 1 1 1 6 4	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$
- ction - - -	Allowance TX-A2 1 4 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card	15 15 1 1 1 1 1 6	\$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$
- - - - -	Allowance TX-A2 1 4 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card	15 15 1 1 1 1 6 4	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$
- - - - - -	Allowance TX-A2 1 4 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier	15 15 1 1 1 1 6 4 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav	15 15 1 1 1 1 6 4 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-10 AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker	15 15 1 1 1 1 6 4 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
- - - - - -	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav	15 15 1 1 1 1 6 4 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker	15 15 1 1 1 1 6 4 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VolP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-84100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total	15 15 1 1 1 1 6 4 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System	15 15 1 1 1 1 6 4 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VolP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-84100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total	15 15 1 1 1 1 6 4 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System	15 15 1 1 1 1 6 4 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total	15 15 1 1 1 1 6 4 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System	15 15 1 1 1 1 6 4 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total	15 15 1 1 1 1 1 6 4 1 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total	15 15 11 1 1 1 6 4 1 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	15 15 1 1 1 1 1 1 6 4 1 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VolP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp 5 Channel Mic/Line Output Card Biamp 64x64 Dante Interface Card Biamp 5 Channel Mic/Line Output Card Biamp 6 Channel Mic/Line Output Card Biamp 64x64 Dante Index Output Card Biamp 7 Esira AMP-4300R CV Amplifier Audio 7 Echnica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention	15 15 1 1 1 1 1 1 6 4 1 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	15 15 1 1 1 1 1 1 6 4 1 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp 56x64 Dante Interface Card Biamp 5 Channel Mic/Line Output Card Biamp 6 Channel Mic/Line Output Card Biamp 7 Esira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total	15 15 1 1 1 1 1 1 1 8 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	15 15 1 1 1 1 1 1 6 4 1 1 1 1 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp 56x64 Dante Interface Card Biamp 5 Channel Mic/Line Output Card Biamp 6 Channel Mic/Line Output Card Biamp 7 Esira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total	15 15 1 1 1 1 1 1 1 8 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total	15 15 1 1 1 1 1 1 1 8 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N TSW-1060 TSW-1060TTK		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp 7 Esira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron Tabletop Kit for TSW-1060 (Black) Crestron Tabletop Kit for TSW-1060 (Black)	15 15 1 1 1 1 1 6 4 1 1 1 1 8 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N TSW-1060		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp 5 Channel Mic/Line Output Card Biamp 64x64 Dante Interface Card Biamp 64x64 Dante Interface Card Biamp 7 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 64x64 Dante Mel'Line Output Card Biamp 7 Channel Mic/Line Output Card Biamp 7 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 9 Channel Mic/Line Output Card Biamp 9 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 9 Channel Mic/Line Output Card Biamp 64x64 Dante Interface / Box Crestron 10.1" Touch Screen (Black) Custom Button Interface / Box	15 15 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N TSW-1060 TSW-1060TTK		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp 7 Esira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron Tabletop Kit for TSW-1060 (Black) Crestron Tabletop Kit for TSW-1060 (Black)	15 15 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp 5 Channel Mic/Line Output Card Biamp 64x64 Dante Interface Card Biamp 64x64 Dante Interface Card Biamp 7 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 64x64 Dante Mel'Line Output Card Biamp 7 Channel Mic/Line Output Card Biamp 7 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 9 Channel Mic/Line Output Card Biamp 9 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 8 Channel Mic/Line Output Card Biamp 9 Channel Mic/Line Output Card Biamp 64x64 Dante Interface / Box Crestron 10.1" Touch Screen (Black) Custom Button Interface / Box	15 15 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron Tabletop Kit for TSW-1060 (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	15 15 1 1 1 1 1 1 1 1 8 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart CustomPart CustomPart CustomPart CustomPart CustomPart		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	15 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Allowance TX-A2 14 - Audio Processing & Amplification Tesira Server-IO AVB DAN-1 SVC-2 SEC-4 SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 15 - Hearing Assist PPA 457 NET D PRO 16 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 17 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart		Chief Monitor Mount (TBD - Dais & Podium) RDL Audio Converter - Balanced Mono to Unbalanced Stereo Section 3 - Dais Video & Audio System Sub-Total Biamp Tesira Server-IO w/ AVB Biamp 64x64 Dante Interface Card Biamp 2 Line VoIP Card Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron Tabletop Kit for TSW-1060 (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	15 15 1 1 1 1 1 1 1 1 8 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Section 9	9 - Document Camera					
-	EYE-14	Wolfvision EYE-14 Ceiling Visualizer Camera	1	\$	-	\$ -
-	EYE-KIT	Wolfvision EYE-KIT Ceiling Mount	1	\$	-	\$ -
		Section 9 - Document Camera Sub-Total				\$ -
Section 1	10 - Network Switches					
-	HP 1920-24G-POE+	HP 1920-24G-POE+ 24 Port Layer 3 Managed Switch	1	\$	-	\$
-	NG GS724T AVB V4	Biamp Supplied Netgear GS724T AVB Complient Switch	1	\$	-	\$ -
		Section 10 - Network Switches Sub-Total				\$ -
Section 1	11 - Touch Screen Monitor					
-	PN-L803C	Sharp 80" Whiteboard Display 10 Point Capacitive Touch	1	\$	-	\$ -
-	XSM1U	Chief X-Lare Fusion Micro-Adjustable Fixed Wall Display Mount	1	\$	-	\$
•		Section 11 - Touch Screen Monitor Sub-Total				\$ -
Section 1	12 - Public Monitors					
-	QM55H	Samsung QM55H 55" Commercial UHD Display	4	\$	-	\$ -
-	MPAUB	Chief Medium Fusion Manual Hight Adjustable Mobile AV Cart	4	\$	-	\$
		Section 12 - Public Monitors Sub-Total				\$ -
Section 1	13 - Overflow Monitor					
Jection 1	QM55H	Samsung QM55H 55" Commercial UHD Display	1	\$	-	\$ -
-	LCM1U	Chief Fusion Large Flat Panel Ceiling Mount	1	\$		\$
-	CMA372	Chief Unitstrut Ceiling Mount Adapter	1	\$	-	\$
-	CMS0305	Chief Adjustable Extension Column	1	\$	-	\$
	emoses	Section 13 - Overflow Monitor	_	Ÿ		\$ -
Section 1	14 - Installation					
-	LABOR - ONSITE	Installation & Commissioning Labor	1	N/A	A	\$ -
-	EXPENSES	Installation Materials	1	N/A	A	\$ -
		Section 14 - Installation Sub-Total				\$ -
	em Summary					
	- Video Distribbution					\$ -
	- Cable Cubby & USB Transmitters					\$ -
	- Dais Video & Audio System					\$
	- Audio Processing & Amplification					\$ -
	- Hearing Assist					\$ -
	- Network SD and USB Recorder					\$ -
	- Control System					\$ -
	- Wireless Presentation System					\$ -
	- Document Camera					\$ -
	0 - Network Switches					\$ -
	1 - Touch Screen Monitor Sub Total					\$ -
	2 - Public Monitors Subtotal					\$ -
	3 - Overflow Monitor					\$ -
Section 14	4 - Installation Subtotal					\$ -

Base Bid Subtotal

City of Andover Council Chambers AV Presentation System - Bid Form Bid Options

Counc	il Chambers - Options					
ID#	Model Number	ID	Manufacturer/Description	Qty	Unit	Extended
Option	1 - Microphones					
-	ES915C18		Audio Technica Mini Condenser Gooseneck Microphone - Cardioid 18"	16	\$ -	\$ -
-	LABOR - ONSITE		Installation & Commissioning Labor	1	N/A	\$ -
-	EXPENSES		Installation Materials	1	N/A	\$ -
			Option 1 - Microphones			\$ -

Option	2 - Microphone Logic				
-	Tesira EX-LOGIC	Biamp Tesira EX-Logic Expander 16 Logic Connections	2	\$ -	\$ -
-	Tesira RMK-2	Biamp Two Unit Rack Mount Kit	1	\$ -	\$ -
	Custom	Momentary SPDT Buttons w/ LED Light	16	\$ -	\$ -
-	LABOR - ONSITE	Installation & Commissioning Labor	1	N/A	\$ -
-	EXPENSES	Installation Materials	1	N/A	\$ -
		Option 2 - Microphone Logic			\$ -

Options Summary	
Option 1 - Microphones	\$ -
Option 2 - Microphone Logic	\$ -
Base Bid Subtotal	\$ -

City of Anoka Council Chambers AV Presentation System - Bid Form Base Bid

Times 1. Times Destroy Des		l Chambers - Base System Propo						
DMA-MORSE Coreron & St. Openhalect & Soricher 1 5 5 5 5 5 5 5 5 5	D#		ID	Manufacturer/Description	Qty		Unit	Extended
DINC-44C-COPH-IDCV2	ction		1			1		
DMC-601-03-09-010022	-						-	
DMC-SQD	-	DMC-4K-C-DSP-HDCP2		Crestron HDBaseT Certifid 4K DigitalMedia 8G+ Input Card w/ DSP	2		-	
DMC-44X COL HD HCPC Crestion 2 Cannel Holisest Contribute All Epitholephale and G-Output Card 1 5 5 5 5 5 5 5 5 5	-	DMC-4K-HD-SDP-HDCP2		Crestron 4K HDMI Input Card w/ DSP	3	\$	-	\$
DMC-HOO	-	DMC-SDI		Crestron 3G-SDI Input Card	1	\$	-	\$
DM-174-4-6102-C	-	DMC-4K-CO-HD-HDCP2		Crestron 2-Channel HDBasetT Certified 4K DigitalMedia 8G+ Output Card	3	\$	-	\$
DM-8MC-46-CADEP	-	DMC-HDO		Crestron 2-Channel HDMI Output Card	1	\$	-	\$
DM-8MC-46-CADEP	-	DM-TX-4K-302-C		Crestron 4K DigitalMedia 8G+ Transmitter 302	2	Ś	-	Ś
HO DAM-44E	- 1						_	
PHO DASI-ACE	-							•
I-D-SCALES-H-D-E								
DM-893-8				·				
SP-NtO-144	-							
Section 1 - Video Distribution Sub-Total 1 5 5	-	DM-PSU-8		Crestron 8-Port PoDM Power Supply for DM 8G+ I/O Cards			-	
Section 3 - Video Distribution Sub-Total S S	-	SP-HD-1x4		Covid HDMI 1:4 Splitter	2		-	
Hon 2 - Cable Cubby & USB Transmitters	-	HA5-PLUS		AJA HDMI to HD/SD Converter	1	\$	-	\$
HAS 800				Section 1 - Video Distribution Sub-Total				\$
HAS 800								
AAP SuperPiets 100	ction	2 - Cable Cubby & USB Transmitters						
AAP PROMI	-	HAS 400		Extron HAS 400 Cable Cubby	2	\$	-	\$
AAP PROMI	-	AAP SuperPlate 100		·	1			
AAP WGA & Audio	-	•				-		
Section 2 - Cable Cubby & USB TX-RX Sub-Total 5 5	-							
Section 2 - Cable Cubby & USB TX-RX Sub-Total S S								
P227PH	-	IC402A-R2			1	Ş	-	
P2217H				Section 2 - Cable Cubby & USB TX-RX Sub-Total				\$
P2217H								
S2240T	ction	3 - Dais Video & Audio System						
AC511	-	P2217H		Dell 22" 1920x1080 Monitor	11	\$	-	\$
Allowance	-	S2240T		Dell 21.5" 1920x1080 Touch Screen LED Lit Monitor	1	\$	-	\$
Allowance	-	AC511		Dell USB SoundBar	12	\$	-	
TX-A2	-	Allowance		Chief Monitor Mount (TRD - Dais & Podium)	12	_	_	
Section 3 - Dais Video & Audio System Sub-Total S S	-							
Ston 4 - Audio Processing & Amplification		IA-A2			12	Y	_	
Tesira Server-IO AVB				Section 3 - Dais Video & Addio System Sub-Total				7
Tesira Server-IO AVB	-41	A Andia Danassian C Assalitivation						
DAN-1		<u> </u>	1			1.		\$
SVC-2	-							
SEC-4	-	DAN-1		Biamp 64x64 Dante Interface Card	1		-	
SOC-4	-	SVC-2		Biamp 2 Line VoIP Card	1	\$	-	\$
Tesira AMP-4300R CV	-	SEC-4		Biamp 4 Channel Mic/Line Input Card	6	\$	-	\$
AEW-4313a	-	SOC-4		Biamp 4 Channel Mic/Line Output Card	4	\$	-	\$
AEW-4313a	-	Tesira AMP-4300R CV		Biamp Tesira AMP-4300R CV Amplifier	1	Ś	-	Ś
AT831R	-				1		_	
Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker	-						_	
Section 4 - Audio Processing & Amplification Sub-Total S								
Section 5 - Hearing Assist Section 5 - Hearing Assist Sub-Total S - S	- 1	EVID C8.2	l.		4	Ş	-	
PPA 457 NET D PRO				Section 4 - Audio Processing & Amplification Sub-Total				\$
PPA 457 NET D PRO								
Section 5 - Hearing Assist Sub-Total S S	ction		ı			1	•	
Denon DN-700R Denon DN-700R Network SD and USB Recorder 1	-	PPA 457 NET D PRO		Williams Sound Personal PA Pro FM Assistave Listening System	1	\$		
DN-700R				Section 5 - Hearing Assist Sub-Total				\$
DN-700R								
- CustomPart Custom I/O Part # for record and USB extention 1	ction	6 - Network SD and USB Recorder						
- CustomPart Custom I/O Part # for record and USB extention 1	-	DN-700R		Denon DN-700R Network SD and USB Recorder	1	\$	-	\$
Blackbox CATX USB 2.0 Extender 2-Port	-		1				-	
Section 6 - Network SD and USB Recorder Sub-Total \$	-			,			_	
- CP3N Crestron 3-Series Control System w/ Network 1 \$ - \$ - TSW-1060 Crestron 10.1" Touch Screen (Black) 2 \$ - \$ - TSW-1060TTK Crestron Tabletop Kit for TSW-1060 (Black) 2 \$ - \$ - CustomPart Custom Button Interface / Box 1 \$ - \$		TO TOLK INC	1		_	Ÿ		
- CP3N				Section 6 - Network 30 and 030 Recorder 300-10tal				*
- CP3N		7 Combinal Systems						
- TSW-1060	ction	<u> </u>				1		
- TSW-1060TTK Crestron Tabletop Kit for TSW-1060 (Black) 2 \$ - \$ - CustomPart Custom Button Interface / Box 1 \$ - \$ Section 7 - Control System Sub-Total \$ Section 8 - Wireless Presentation System - VIA-COLLAGE Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution 1 \$ - \$ RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$	-		ļ	, ,			-	
CustomPart Custom Button Interface / Box 1 \$ - \$ Section 7 - Control System Sub-Total \$ Section 8 - Wireless Presentation System VIA-COLLAGE Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution 1 \$ - \$ RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$	-			Crestron 10.1" Touch Screen (Black)	2		-	
Section 7 - Control System Sub-Total \$ Stion 8 - Wireless Presentation System - VIA-COLLAGE Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution 1 \$ - \$ - RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$	-	TSW-1060TTK		Crestron Tabletop Kit for TSW-1060 (Black)	2	\$	T	\$
Section 7 - Control System Sub-Total \$ Stion 8 - Wireless Presentation System - VIA-COLLAGE Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution 1 \$ - \$ - RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$	-	CustomPart		Custom Button Interface / Box	1	\$	-	\$
ttion 8 - Wireless Presentation System - VIA-COLLAGE Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution 1 \$ - \$ - RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$				Section 7 - Control System Sub-Total				
- VIA-COLLAGE Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution 1 \$ - \$ - RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$								
- VIA-COLLAGE Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution 1 \$ - \$ - RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$	ction	8 - Wireless Presentation System						
- RK-COLLAGE Kramer 19" Rack Adapter-VIA Collage 1 \$ - \$	SHOIT			Kramer VIA Collage AK Wireless Presentation 9, Collaboration Collaboration	1	¢		Ċ
	-		 				-	
Section 8 - Wireless Presentation Sub-Total \$	-	RK-COLLAGE	1		1	\$	-	
				Section 8 - Wireless Presentation Sub-Total				\$
	tion	9 - Document Camera						

Wolfvision EYE-14 Ceiling Visualizer Camera

1 \$

EYE-14

-	EYE-KIT	Wolfvision EYE-KIT Ceiling Mount	1	\$ -	\$
		Section 9 - Document Camera Sub-Total			\$
ection 10	- Network Switches				
-	HP 1920-24G-POE+	HP 1920-24G-POE+ 24 Port Layer 3 Managed Switch	1	\$ -	\$
-	NG GS724T AVB V4	Biamp Supplied Netgear GS724T AVB Complient Switch	1	\$ -	\$
		Section 10 - Network Switches Sub-Total			\$
ection 11	- Public Monitors		,	,	
-	QM55H	Samsung QM55H 55" Commercial UHD Display	2	\$ -	\$
-	LCM1U	Chief Fusion Large Flat Panel Ceiling Mount	2	\$ -	\$
-	CMA372	Chief Unitstrut Ceiling Mount Adapter	2	\$ -	\$
-	CMS0305	Chief Adjustable Extension Column	2	\$ -	\$
		Section 11 - Public Monitors Sub-Total			\$
ection 14	- Overflow Monitor				
-	QM55H	Samsung QM55H 55" Commercial UHD Display	1	\$ -	\$
-	LCM1U	Chief Fusion Large Flat Panel Ceiling Mount	1	\$ -	\$
-	CMA372	Chief Unitstrut Ceiling Mount Adapter	1	\$ -	\$
-	CMS0305	Chief Adjustable Extension Column	1	\$ -	\$
		Section 12 - Overflow Monitor Sub-Total			\$
ection 13	- Installation			_	
-	LABOR - ONSITE	Installation & Commissioning Labor	1	N/A	\$
-	EXPENSES	Installation Materials	1	N/A	\$
		Section 13 - Installation Sub-Total			\$
ase Syster	n Summary				
ection 1 - \	Video Distribution				\$
ection 2 - 0	Cable Cubby & USB Transmitters				\$
ection 3 - I	Dais Video & Audio System				\$
ection 4 - A	Audio Processing & Amplification				\$
ection 5 - I	Hearing Assist				\$
	Network SD and USB Recorder				\$
ection 7 - 0	Control System				\$
	Wireless Presentation System				\$
	Document Camera				\$
	Network Switches				Ś
	- INCLWOIR SWITCHES				Ť

\$

\$

Section 11 - Public Monitors

Base Bid Subtotal

Section 12 - Overflow Monitor Section 13 - Installation

City of Anoka Council Chambers AV Presentation System - Bid Form Bid Options

Counc	cil Chambers - Options					
ID#	Model Number	ID	Manufacturer/Description	Qty	Unit	Extended
Option	1 - Microphones					
-	ES915C18		Audio Technica Mini Condenser Gooseneck Microphone - Cardioid 18"	19	\$ -	\$ -
-	LABOR - ONSITE		Installation & Commissioning Labor	1	N/A	\$ -
-	EXPENSES		Installation Materials	1	N/A	\$ -
			Option 1 - Mircrophones			\$ -

Option	2 - Microphone Logic					
-	Tesira EX-LOGIC	Biamp	p Tesira EX-Logic Expander 16 Logic Connections	4	\$ -	\$ -
-	Tesira RMK-2	Biamp	p Two Unit Rack Mount Kit	2	\$ -	\$ -
	Custom	Mome	entary SPDT Buttons w/ LED Light	19	\$ -	\$ -
-	LABOR - ONSITE	Instal	lation & Commissioning Labor	1	N/A	\$ -
-	EXPENSES	Instal	lation Materials	1	N/A	\$ -
			Option 2 - Microphone Logic			\$ -

Options Summary	
Option 1 - Microphones	\$ -
Option 2 - Microphone Logic	\$ -
Base Bid Subtotal	\$ -

City of Champlin **Council Chambers AV Presentation System - Bid Form Base Bid**

		osal					
	Model Number	ID	Manufacturer/Description	Qty		Unit	Extended
	n 1 - Video Distribution						1
-	DM-MD8x8		Crestron 8x8 DigitalMedia Switcher	1	\$	-	\$
-	DMC-4K-C-DSP-HDCP2		Crestron HDBaseT Certifid 4K DigitalMedia 8G+ Input Card w/ DSP	3	\$	-	\$
-	DMC-4K-HD-SDP-HDCP2		Crestron 4K HDMI Input Card w/ DSP	2	\$	-	\$
-	DMC-SDI		Crestron 3G-SDI Input Card	1	\$	-	\$
-	DMC-4K-CO-HD-HDCP2		Crestron 2-Channel HDBasetT Certified 4K DigitalMedia 8G+ Output Card	3	\$	-	\$
-	DMC-HDO		Crestron 2-Channel HDMI Output Card	1	\$	-	\$
-	DM-TX-4K-302-C		Crestron 4K DigitalMedia 8G+ Transmitter 302	3	\$	-	\$
-	DM-RMC-4K-SCALER-C-DSP		Crestron 4K DigitalMedia 8G+ Receiver & Room Controler w/ Scaling & DSP	5	\$	-	\$
-	HD-DA4-4K-E		Crestron 1-to-4 4K HDMI Distribution Amplifier	2	\$	-	\$
-	HD-DA8-4K-E		Crestron 1-to-8 4K HDMI Distribution Amplifier	1	\$	-	\$
-	HD-SCALER-HD-E		Crestron High-Definition Video Scaler HDMI In, HDMI Out	2	\$	-	\$
-	DM-PSU-8		Crestron 8-Port PoDM Power Supply for DM 8G+ I/O Cards	1	\$	-	\$
-	SP-HD-1x4		Covid HDMI 1:4 Splitter	2	\$	-	\$
-	HA5-PLUS		AJA HDMI to HD/SD Converter	1	\$	-	\$
			Section 1 - Video Distribution Subtotal				\$
ctio	n 2 - Cable Cubby & USB Transmitters						
-	HAS 400		Extron HAS 400 Cable Cubby	2	\$	-	\$
-	AAP SuperPlate 100		Extron AAP SuperPlate 100 (HDMI, VGA, Audio, USB - BLACK)	1	\$	-	\$
-	AAP HDMI		Extron HDMI Plate w/ 10" Pigtail	1	\$	-	\$
-	AAP VGA & Audio		Extron VGA w/ 6" Pigtail & 3.5mm Mini Jack	1	\$	-	\$
-	IC402A-R2		Blackbox CATx USB 2.0 Extender 2-Port	1	\$	-	\$
	ICTOZA NZ	l .	Section 2 - Cable Cubby & USB TX-RX Sub-Total		Y		\$
			Section 2 State Cubby & OSD IN IN Sub-Total				-
ctio	n 3 - Dais Video & Audio System						
-	P2217H		Dell 22" 1920x1080 Monitor	12	\$		\$
-	S2240T	1	Dell 21.5" 1920x1080 Worldon Dell 21.5" 1920x1080 Touch Screen LED Lit Monitor	1	\$		\$
-	AC511		Dell USB SoundBar	13	\$		\$
_					\$		\$
	Allowance		Chief Monitor Mount (TBD - Dais & Podium)	13		-	\$
-	TX-A2		RDL Audio Converter - Balanced Mono to Unbalanced Stereo	13	\$		
			Section 3 - Dais Video & Audio System Sub-Total				\$
CTIOI	n 4 - Audio Processing & Amplification	ı	D: T : C 10 / AVD		۸		۵
-	Tesira Server-IO AVB		Biamp Tesira Server-IO w/ AVB	1	\$	-	\$
-	DAN-1		Biamp 64x64 Dante Interface Card	1	\$		\$
-	SVC-2		Biamp 2 Line VoIP Card	1	\$	-	\$
-	SEC-4						
-			Biamp 4 Channel Mic/Line Input Card	5	\$	-	\$
	SOC-4		Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card	5 4	\$	-	\$
-	SOC-4 Tesira AMP-4300R CV		•				
			Biamp 4 Channel Mic/Line Output Card	4	\$	-	\$
-	Tesira AMP-4300R CV		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier	4	\$	-	\$
-	Tesira AMP-4300R CV AEW-4313a		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX	4 1 1	\$ \$ \$		\$ \$ \$
-	Tesira AMP-4300R CV AEW-4313a AT831R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav	4 1 1	\$ \$ \$ \$		\$ \$ \$ \$
-	Tesira AMP-4300R CV AEW-4313a AT831R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker	4 1 1	\$ \$ \$ \$		\$ \$ \$ \$ \$
- - -	Tesira AMP-4300R CV AEW-4313a AT831R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker	4 1 1	\$ \$ \$ \$		\$ \$ \$ \$ \$
-	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total	4 1 1	\$ \$ \$ \$		\$ \$ \$ \$ \$
-	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker	4 1 1 1 3	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$
-	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System	4 1 1 1 3	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
- - ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System	4 1 1 1 3	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
- - - -	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total	4 1 1 1 3	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
- - - -	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder	1 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention	1 1 1 1	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	1 1 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention	1 1 1 1	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	1 1 1 1	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total	1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network	1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black)	1 1 1 1 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black)	1 1 1 1 1 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box	1 1 1 1 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black)	1 1 1 1 1 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060 TSW-1060TTK CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box	1 1 1 1 1 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	1 1 1 1 1 1 1 1 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	1 1 1 1 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution Kramer 19" Rack Adapter-VIA Collage	1 1 1 1 1 1 1 1 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ction	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	1 1 1 1 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tion	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart R - Wireless Presentation System VIA-COLLAGE RK-COLLAGE		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution Kramer 19" Rack Adapter-VIA Collage	1 1 1 1 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tion	Tesira AMP-4300R CV AEW-4313a AT831R EVID C8.2 n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch / Electro-Voice EVID C8.2 8" 2-Way Coaxial Speaker Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution Kramer 19" Rack Adapter-VIA Collage	1 1 1 1 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Section	10 - Network Switches					
-	HP 1920-24G-POE+	HP 1920-24G	-POE+ 24 Port Layer 3 Managed Switch	1	\$ -	\$ -
-	NG GS724T AVB V4	Biamp Suppli	ed Netgear GS724T AVB Complient Switch	1	\$ -	\$ -
	_		Section 10 - Network Switches Sub-Total			\$ -

Section	Section 11 - Public Monitors								
-	QM65H		Samsung QM65H 65" Commercial UHD Display	2	\$	-	\$	-	
-	LCM1U		Chief Fusion Large Flat Panel Ceiling Mount	2	\$	-	\$	-	
-	CMA372		Chief Unitstrut Ceiling Mount Adapter	2	\$	-	\$	-	
-	CMS0305		Chief Adjustable Extension Column	2	\$	-	\$	-	
			Section 11 - Public Monitors Sub-Total				\$	-	

Section	Section 12 - Installation									
-	LABOR - ONSITE		Installation & Commissioning Labor	1	N/A	\$	-			
-	EXPENSES		Installation Materials	1	N/A	\$	-			
			Section 12 - Installation Sub-Total	-		\$	-			

Base System Summary		
Section 1 - Video Distribution	\$	-
Section 2 - Cable Cubby & USB Transmitters	\$	-
Section 3 - Dais Video & Audio System	\$	
Section 4 - Audio Processing & Amplification	\$	-
Section 5 - Hearing Assist	\$	-
Section 6 - Network SD and USB Recorder	\$	
Section 7 - Control System	\$	-
Section 8 - Wireless Presentation System	\$	
Section 9 - Document Camera	\$	-
Section 10 - Network Switches	\$	
Section 11 - Public Monitors	\$	-
Section 12 - Installation	\$	-
Base Bid Subtotal	\$	-

City of Champlins Council Chambers AV Presentation System - Bid Form Bid Options

Council Chambers - Options										
ID#	Model Number	ID	Manufacturer/Description	Qty	Unit	Extended				
Option	1 - Microphones									
-	ES915C18		Audio Technica Mini Condenser Gooseneck Microphone - Cardioid 18"	13	\$ -	\$ -				
-	LABOR - ONSITE		Installation & Commissioning Labor	1	N/A	\$ -				
-	EXPENSES		Installation Materials	1	N/A	\$ -				
			Option 1 - Mircrophones			\$ -				

Option	ption 2 - Microphone Logic									
-	Tesira EX-LOGIC		Biamp Tesira EX-Logic Expander 16 Logic Connections	2	\$ -	\$	-			
-	Tesira RMK-2		Biamp Two Unit Rack Mount Kit	1	\$ -	\$	-			
	Custom		Momentary SPDT Buttons w/ LED Light	13	\$ -	\$	-			
-	LABOR - ONSITE		Installation & Commissioning Labor	1	N/A	\$	-			
-	EXPENSES		Installation Materials	1	N/A	\$	-			
		·	Option 2 - Microphone Logic			\$				

Option	Option 3 - 70" Displays									
-	QM65H		Samsung QM65H 65" Commercial UHD Display	-2	\$ -	\$	-			
-	QB75H		Samsung QB75H 75" Commercial UHD Display	2	\$ -	\$	-			
			Option 3 - 70" Displays			\$	-			

Options Summary	
Option 1 - Microphones	\$ -
Option 2 - Microphone Logic	\$ -
Option 3 - 70" Displays	\$ -
Base Bid Subtotal	\$ -

City of Ramsey Council Chambers AV Presentation System - Bid Form Base Bid

ID# ectio	Madel Number	osal	Manufachused Description	0	т —	1 halfs	Extended
ectio	Model Number n 1 - Video Distribution	ID	Manufacturer/Description	Qty		Unit	Extended
	DM-MD8x8		Crestron 8x8 DigitalMedia Switcher	1	Ś	-	\$
-	DMC-4K-C-DSP-HDCP2			3	\$		\$
-			Crestron HDBaseT Certifid 4K DigitalMedia 8G+ Input Card w/ DSP	_			
-	DMC-4K-HD-SDP-HDCP2		Crestron 4K HDMI Input Card w/ DSP	1	\$		\$
-	DMC-SDI		Crestron 3G-SDI Input Card	1	\$	-	\$
-	DMC-4K-CO-HD-HDCP2		Crestron 2-Channel HDBasetT Certified 4K DigitalMedia 8G+ Output Card	3	\$	-	\$
-	DMC-HDO		Crestron 2-Channel HDMI Output Card	1	\$	-	\$
-	DM-TX-4K-302-C		Crestron 4K DigitalMedia 8G+ Transmitter 302	3	\$	-	\$
-	DM-RMC-4K-SCALER-C-DSP		Crestron 4K DigitalMedia 8G+ Receiver & Room Controler w/ Scaling & DSP	5	\$	-	\$
-	HD-DA4-4K-E		Crestron 1-to-4 4K HDMI Distribution Amplifier	2	\$	-	\$
-	HD-DA8-4K-E		Crestron 1-to-8 4K HDMI Distribution Amplifier	1	\$	-	\$
-	HD-SCALER-HD-E		Crestron High-Definition Video Scaler HDMI In, HDMI Out	2	\$	-	\$
-	DM-PSU-8		Crestron 8-Port PoDM Power Supply for DM 8G+ I/O Cards	1	\$		\$

-	SP-HD-1x4		Covid HDMI 1:4 Splitter	2	\$		\$
-	HA5-PLUS		AJA HDMI to HD/SD Converter	1	\$	-	\$
			Section 1 - Video Distribution Subtotal				\$
tio	n 2 - Cable Cubby & USB Transmitters						
-	HAS 400		Extron HAS 400 Cable Cubby	2	\$	-	\$
-	AAP SuperPlate 100		Extron AAP SuperPlate 100 (HDMI, VGA, Audio, USB - BLACK)	1	\$	-	\$
-	AAP HDMI		Extron HDMI Plate w/ 10" Pigtail	1	\$	-	\$
-	AAP VGA & Audio	1	Extron VGA w/ 6" Pigtail & 3.5mm Mini Jack	1	\$		\$
-	IC402A-R2	 	Blackbox CATx USB 2.0 Extender 2-Port	1	\$		\$
_	IC402A-R2			1	\$		
			Section 2 - Cable Cubby & USB TX-RX Sub-Total				\$
tio	n 3 - Dais Video & Audio System						
-	P2217H		Dell 22" 1920x1080 Monitor	13	\$	-	\$
-	S2240T		Dell 21.5" 1920x1080 Touch Screen LED Lit Monitor	1	\$	-	\$
-	AC511		Dell USB SoundBar	14	\$	-	\$
	Allowance		Chief Monitor Mount (TBD - Dais & Podium)	14	\$	-	\$
_	TX-A2		RDL Audio Converter - Balanced Mono to Unbalanced Stereo	14	\$		\$
_	TA-AZ			14	Ş		\$
			Section 3 - Dais Video & Audio System Sub-Total				3
-41-	. A Audia Danassian O Amelification						
-	n 4 - Audio Processing & Amplification	1	Disease Tasine Comuse IO/ AVD	1	Ċ		ć
	Tesira Server-IO AVB		Biamp Tesira Server-IO w/ AVB	1	\$		\$
-	DAN-1		Biamp 64x64 Dante Interface Card	1	\$	-	\$
-	SVC-2		Biamp 2 Line VoIP Card	1	\$	-	\$
_							
-	SEC-4		Biamp 4 Channel Mic/Line Input Card	5	\$	-	\$
	SEC-4 SOC-4		Biamp 4 Channel Mic/Line Input Card Biamp 4 Channel Mic/Line Output Card	5	\$	-	\$
-	SOC-4		Biamp 4 Channel Mic/Line Output Card	5	\$	-	\$
-	SOC-4 Tesira AMP-4300R CV		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier	5 1	\$		\$
-	SOC-4 Tesira AMP-4300R CV AEW-4313a		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX	5 1 1	\$ \$ \$	-	\$ \$ \$
-	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav	5 1 1	\$ \$ \$ \$	-	\$ \$ \$ \$
-	SOC-4 Tesira AMP-4300R CV AEW-4313a		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW)	5 1 1	\$ \$ \$	-	\$ \$ \$ \$ \$
- - -	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav	5 1 1	\$ \$ \$ \$	-	\$ \$ \$ \$
- - -	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW)	5 1 1	\$ \$ \$ \$	-	\$ \$ \$ \$ \$
-	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW)	5 1 1	\$ \$ \$ \$	-	\$ \$ \$ \$ \$
-	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-58.2T		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW)	5 1 1	\$ \$ \$ \$	-	\$ \$ \$ \$ \$
-	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total	5 1 1 1 2	\$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
-	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System	5 1 1 1 2	\$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System	5 1 1 1 2	\$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total	5 1 1 1 2	\$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total	5 1 1 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention	5 1 1 1 2 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	5 1 1 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
- - - - ctio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention	5 1 1 1 2 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
- - - - -	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	5 1 1 1 2 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	5 1 1 1 2 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port	5 1 1 1 2 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total	5 1 1 1 2 2 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black)	1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black)	1 1 1 2 1 1 1 1 1 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ctio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box	1 1 1 1 1 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ctio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black)	1 1 1 2 1 1 1 1 1 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box	1 1 1 2 1 1 1 1 1 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TK CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	1 1 1 2 1 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box	1 1 1 2 1 1 1 1 1 2 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TK CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	1 1 1 2 1 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total	1 1 1 2 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution Kramer 19" Rack Adapter-VIA Collage	1 1 1 2 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
tio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart CUstomPart CP3N TSW-1060TTK CustomPart N 8 - Wireless Presentation System VIA-COLLAGE RK-COLLAGE		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution Kramer 19" Rack Adapter-VIA Collage	1 1 1 2 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
ctio	SOC-4 Tesira AMP-4300R CV AEW-4313a AT831R EVID-S8.2T n 5 - Hearing Assist PPA 457 NET D PRO n 6 - Network SD and USB Recorder DN-700R CustomPart IC402A-R2 n 7 - Control System CP3N TSW-1060 TSW-1060TTK CustomPart CustomPart CustomPart CustomPart		Biamp 4 Channel Mic/Line Output Card Biamp Tesira AMP-4300R CV Amplifier Audio Technica AEW-R4100 RX, AEW-T1000A Unipack TX, AEW-T330A TX Audio Technica Omnidirectional Condensor Lav Bosch EV 8" Surface Mount Speaker (OVERFLOW) Section 4 - Audio Processing & Amplification Sub-Total Williams Sound Personal PA Pro FM Assistave Listening System Section 5 - Hearing Assist Sub-Total Denon DN-700R Network SD and USB Recorder Custom I/O Part # for record and USB extention Blackbox CATx USB 2.0 Extender 2-Port Section 6 - Network SD and USB Recorder Sub-Total Crestron 3-Series Control System w/ Network Crestron 10.1" Touch Screen (Black) Crestron Tabletop Kit for TSW-1060 (Black) Custom Button Interface / Box Section 7 - Control System Sub-Total Kramer VIA Collage 4K Wireless Presentation & Collaboration Solution Kramer 19" Rack Adapter-VIA Collage	1 1 1 2 1 1 1 1 2 2 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

-			Section Q. Document Camera Sub Total			
	-	EYE-KIT	Wolfvision EYE-KIT Ceiling Mount	1	\$ -	\$ -

Section	Section 10 - Network Switches							
-	HP 1920-24G-POE+	HP 1920-24G-POE+ 24 Port Layer 3 Managed Switch	1	\$	-	\$	-	
-	NG GS724T AVB V4	Biamp Supplied Netgear GS724T AVB Complient Switch	1	\$	-	\$	-	
		Section 10 - Network Switches Sub-Tota				\$	-	

Section	Section 11 - Projectors & Screens									
-	DHD850-GS		Christie Digital 1-DLP Solid State 7200lm 1920x1080 Projector	2	\$	-	\$	-		
-	1.52-2.89		Christie Digital Lens 1.52-2.89 Zoom G/GS	2	\$	-	\$	-		
-	HoloScreen		Da-Lite Holo Screen 92" Diagnal 16:9	2	\$	-	\$	-		
			Section 11 - Projectors & Screens Sub-Total				\$	-		

Section	Section 12 - Installation						
-	LABOR - ONSITE		Installation & Commissioning Labor	1	N/A	\$	-
-	EXPENSES		Installation Materials	1	N/A	\$	-
			Section 13 - Installation Sub-Total			\$	

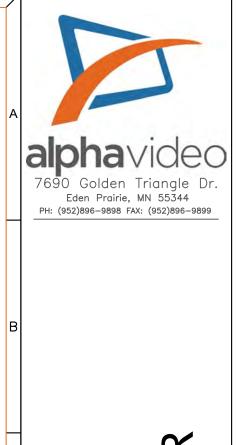
Base System Summary	
Section 1 - Video Distribution	\$ -
Section 2 - Cable Cubby & USB Transmitters	\$ -
Section 3 - Dais Video & Audio System	\$ -
Section 4 - Audio Processing & Amplification	\$ -
Section 5 - Hearing Assist	\$ -
Section 6 - Network SD and USB Recorder	\$ -
Section 7 - Control System	\$ -
Section 8 - Wireless Presentation System	\$ -
Section 9 - Document Camera	\$ -
Section 10 - Network Switches	\$ -
Section 11 - Projectors & Screens	\$ -
Section 12 - Installation	\$ -
Base Bid Subtotal	\$ -

City of Ramsey Council Chambers AV Presentation System - Bid Form Bid Options

Council Chambers - Options						
ID#	Model Number	ID	Manufacturer/Description	Qty	Unit	Extended
Option	1 - Microphones					
-	ES915C18		Audio Technica Mini Condenser Gooseneck Microphone - Cardioid 18"	16	\$ -	\$ -
-	LABOR - ONSITE		Installation & Commissioning Labor	1	N/A	\$ -
-	EXPENSES		Installation Materials	1	N/A	\$ -
			Option 1 - Mircrophones			\$ -

Option	2 - Microphone Logic				
-	Tesira EX-LOGIC	Biamp Tesira EX-Logic Expander 16 Logic Connections	2	\$ -	\$ -
-	Tesira RMK-2	Biamp Two Unit Rack Mount Kit	1	\$ -	\$ -
	Custom	Momentary SPDT Buttons w/ LED Light	16	\$ -	\$ -
-	LABOR - ONSITE	Installation & Commissioning Labor	1	N/A	\$ -
-	EXPENSES	Installation Materials	1	N/A	\$ -
		Option 2 - Microphone Logic			\$ -

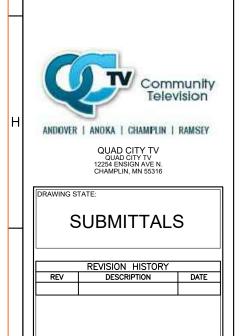
Options Summary	
Option 1 - Microphones	\$ -
Option 2 - Microphone Logic	\$ -
Base Bid Subtotal	\$ -





QUAD CITY TV AV PRESENTATION SYSTEMS-ANDOVER SUBMITTALS

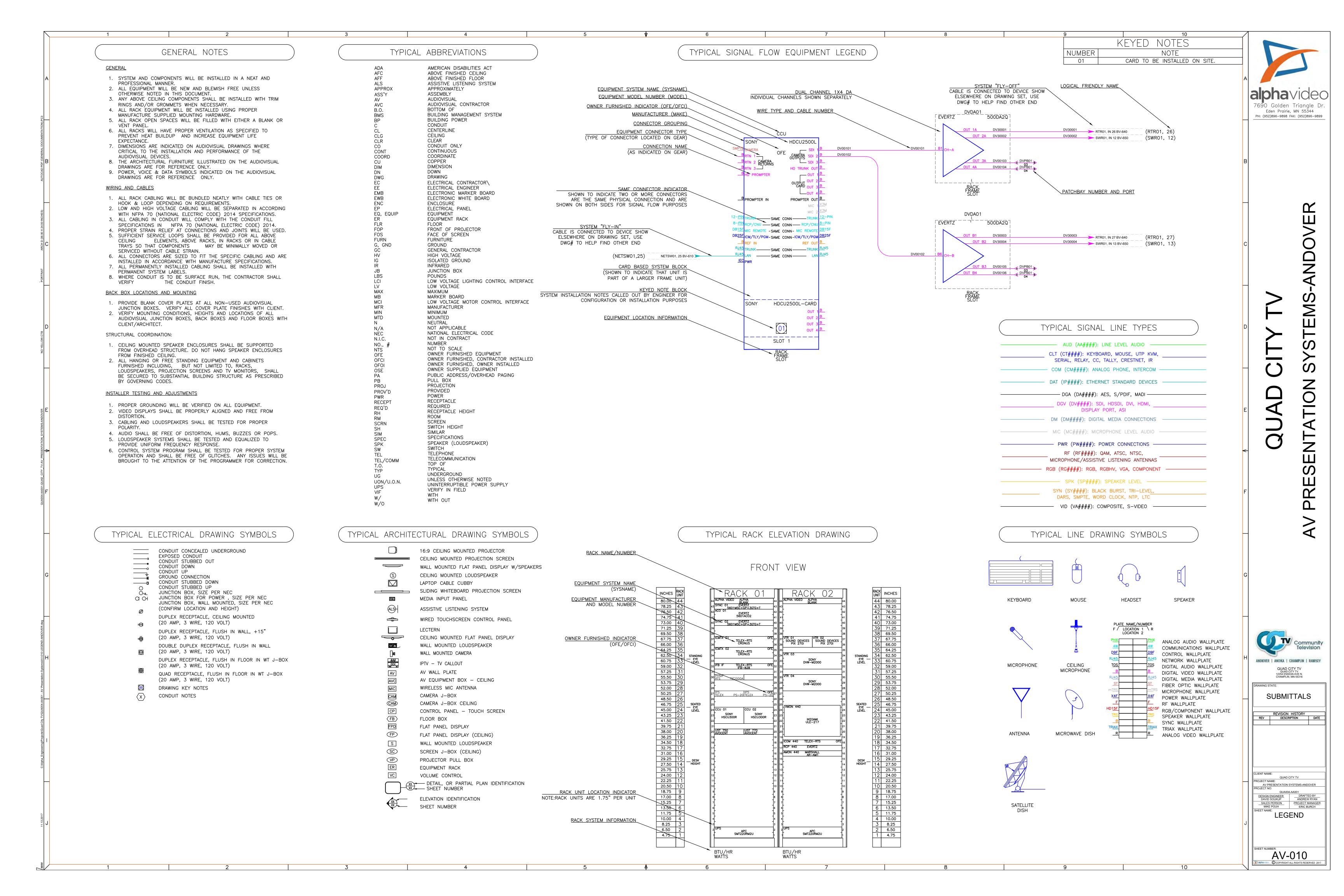
LIST TABLE
COVER
LEGEND
FLOOR PLAN
RCP
CUSTOM PANELS
FRAME LAYOUTS
VIDEO SOURCES
VIDEO MATRIX
DISPLAYS
MICROPHONES
AUDIO
CONTROL

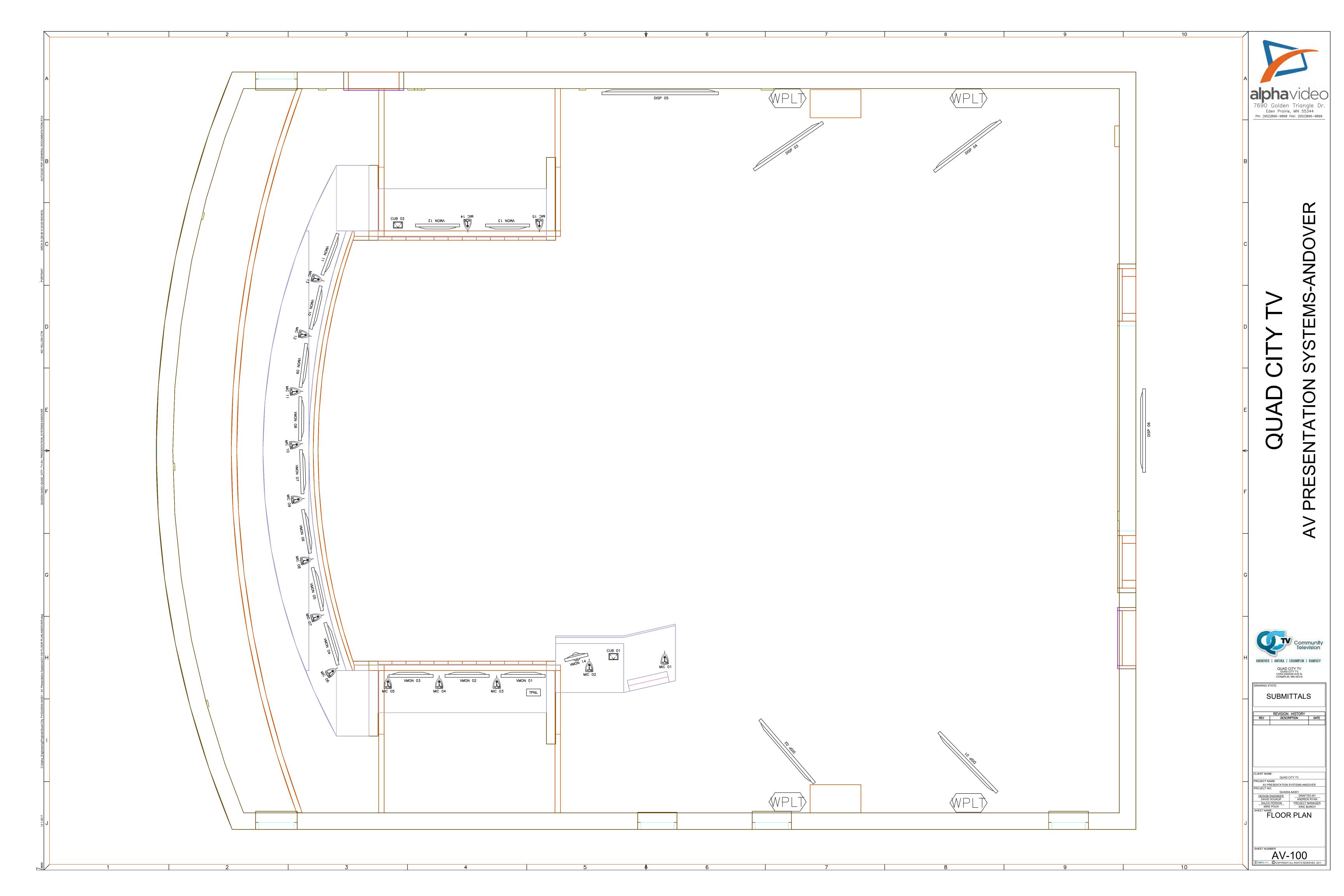


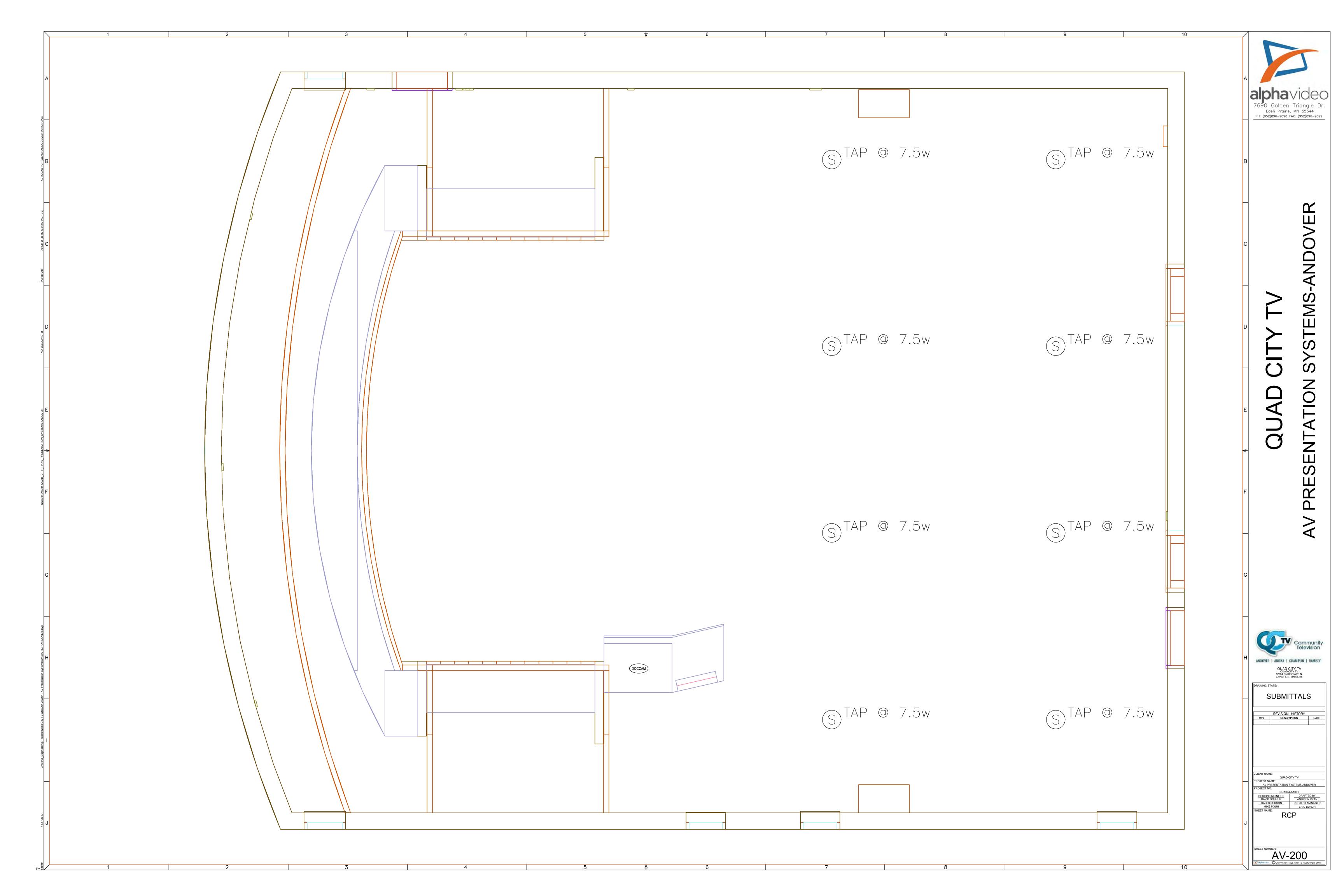
CLIENT NAME:
QUAD CITY TV
PROJECT NAME:
AV PRESENTATION SYSTEMS-ANDOVER
PROJECT NO:
QUA004-AA001

DESIGN ENGINEER
DAVID SOUKUP
ANDREW RYAN
SALES PERSON
MIKE POUH
SHEET NAME:
COVER

AV-001
©COPYRIGHT ALL RIGHTS RESER









AV PRESE

Community

SUBMITTALS

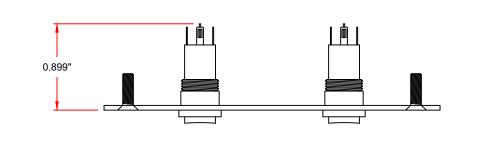
PROJECT NO:

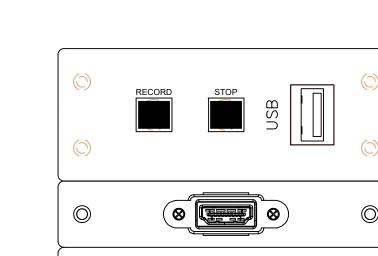
QUA004-AA001

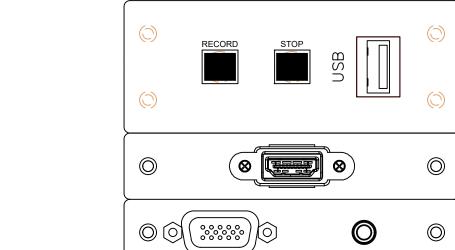
DESIGN ENGINEER
DAVID SOUKUP
SALES PERSON
MIKE POUH
SHEET NAME:

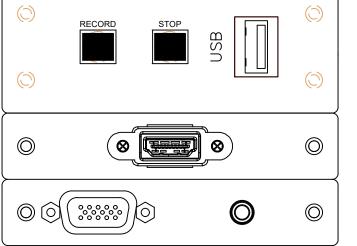
CUSTOM PANELS

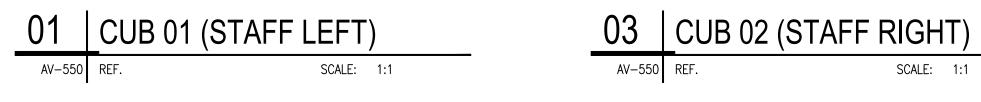
AV-550
©COPYRIGHT ALL RIGHTS RESERVED 2

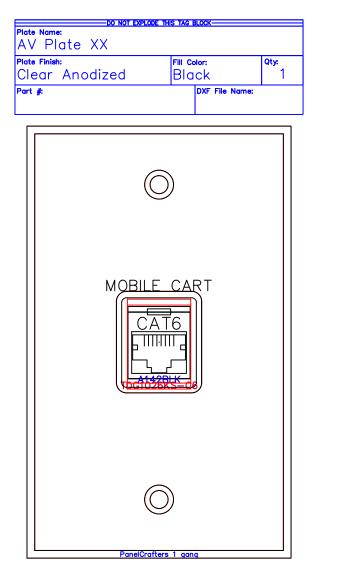












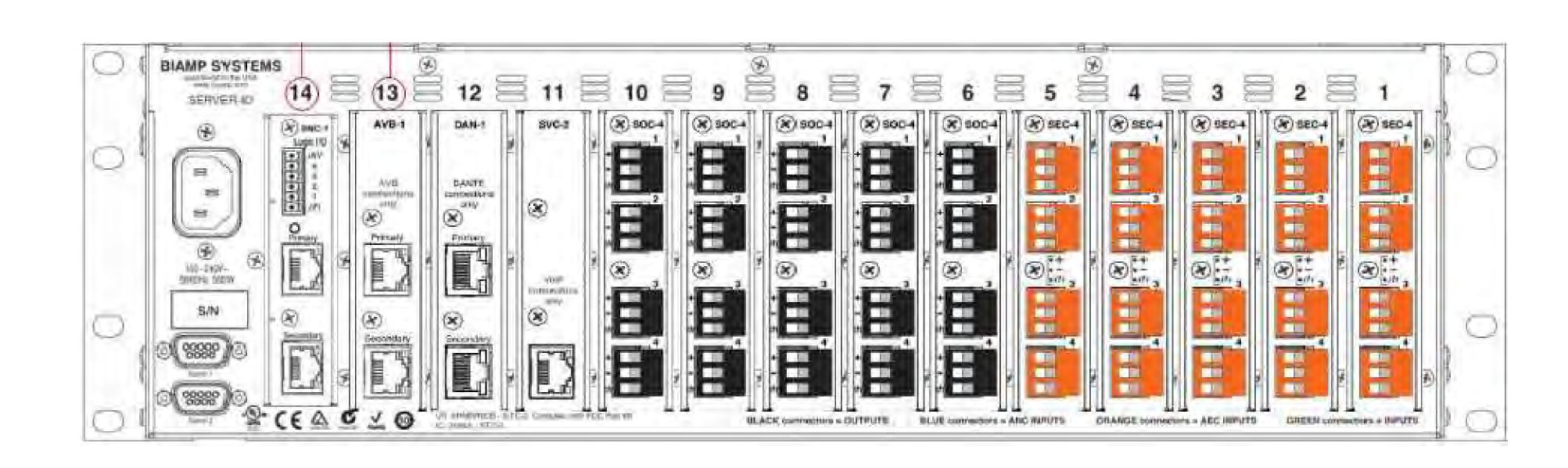


7690 Golden Triangle Dr. Eden Prairie, MN 55344 PH: (952)896-9898 FAX: (952)896-9899

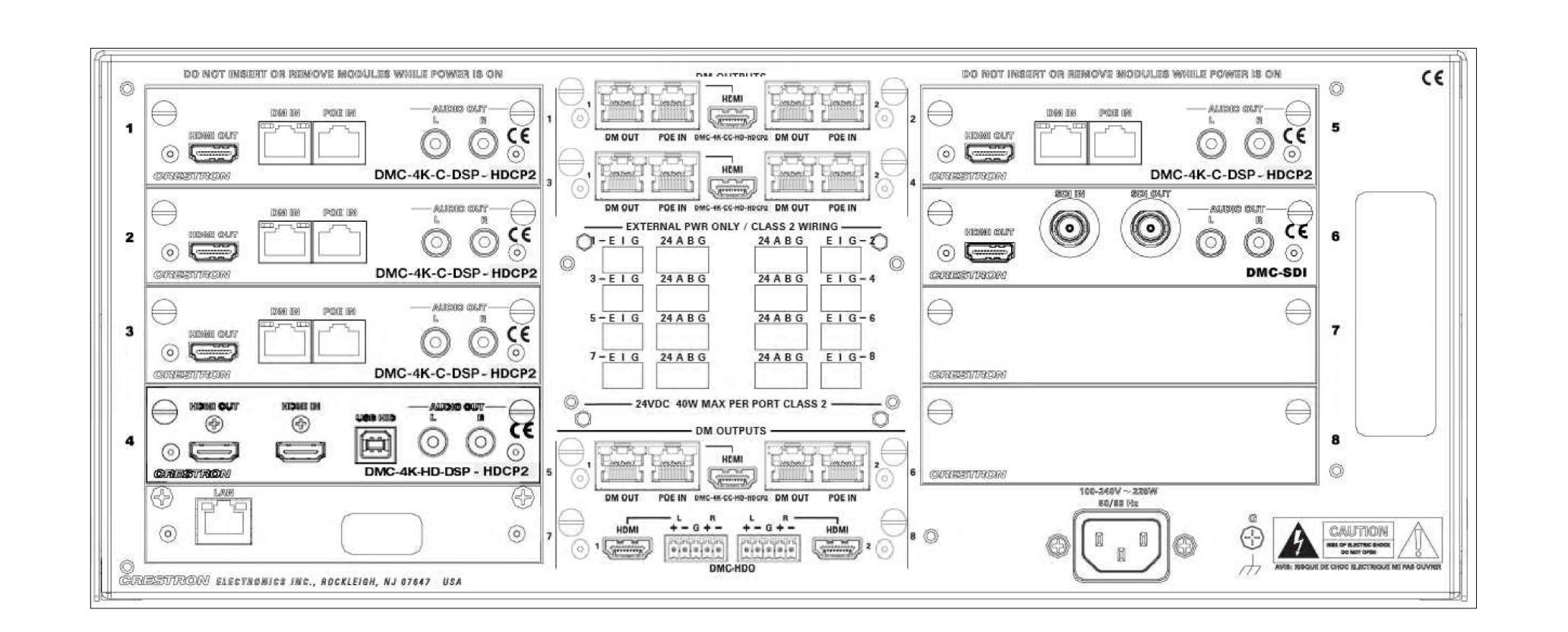
REVISION HISTORY
REV DESCRIPTION

FRAME LAYOUTS

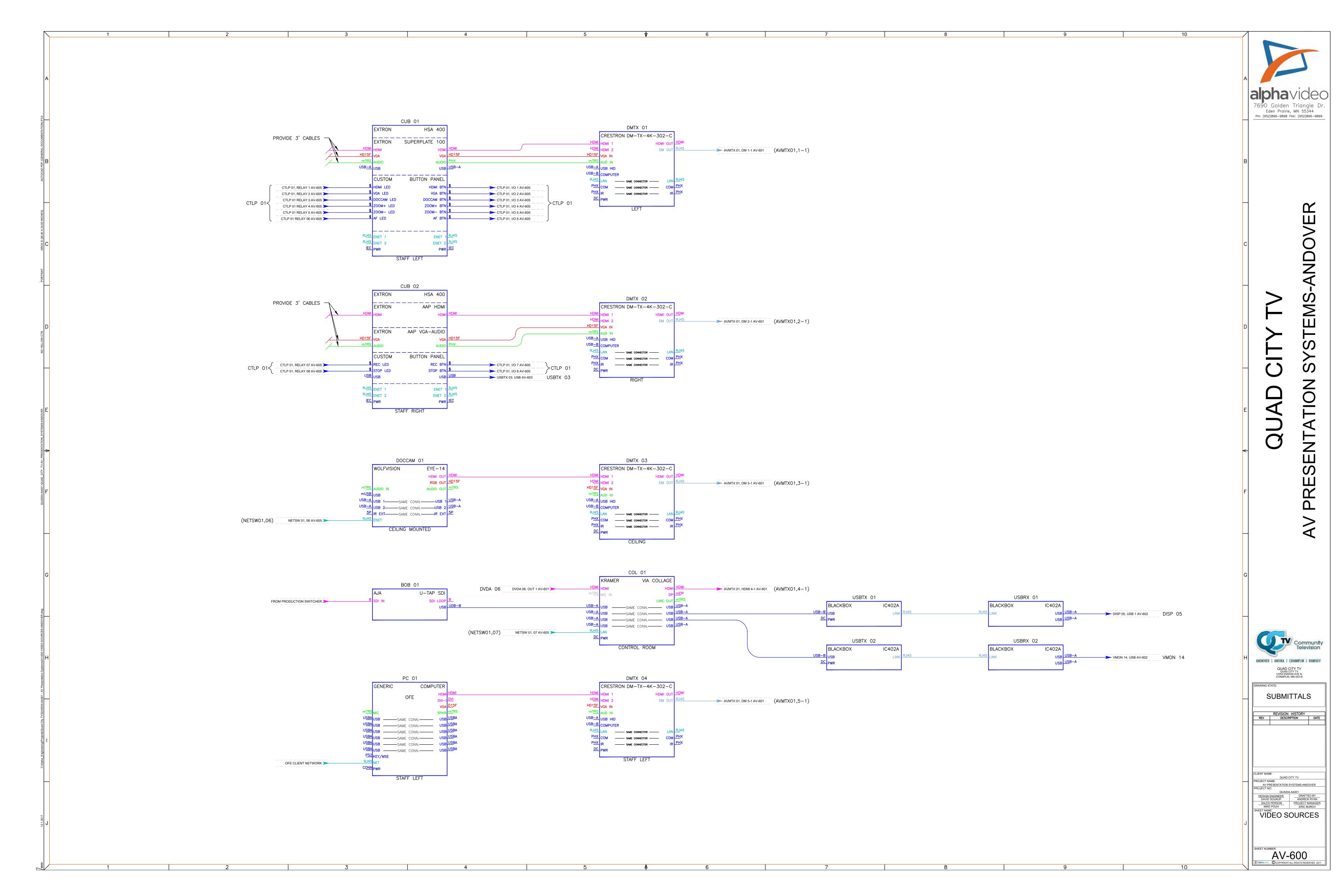
AV-560

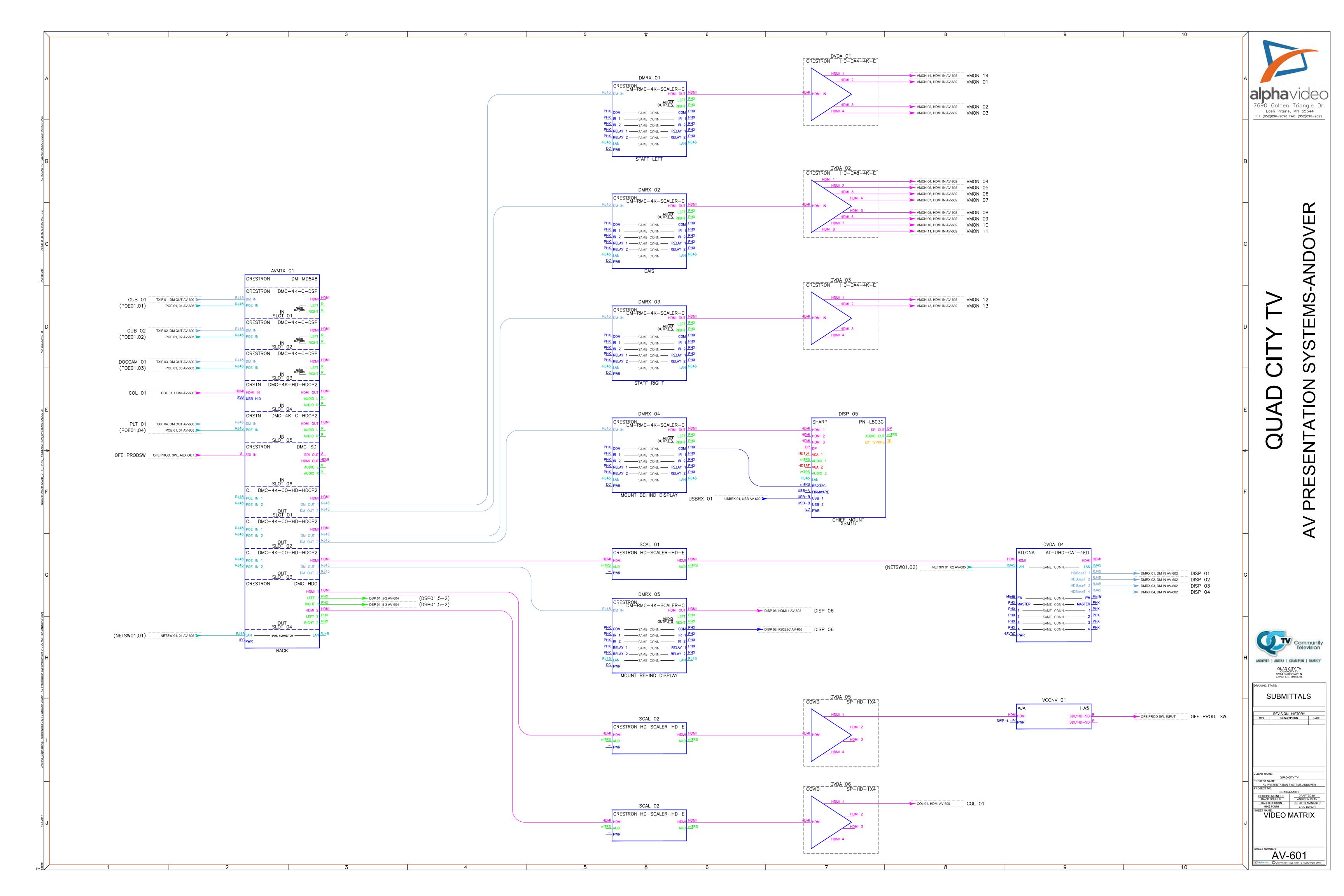


MAKE: BIAMP MODEL: TESIRA SERVER 10 AVB SYSNAME: DSP 01



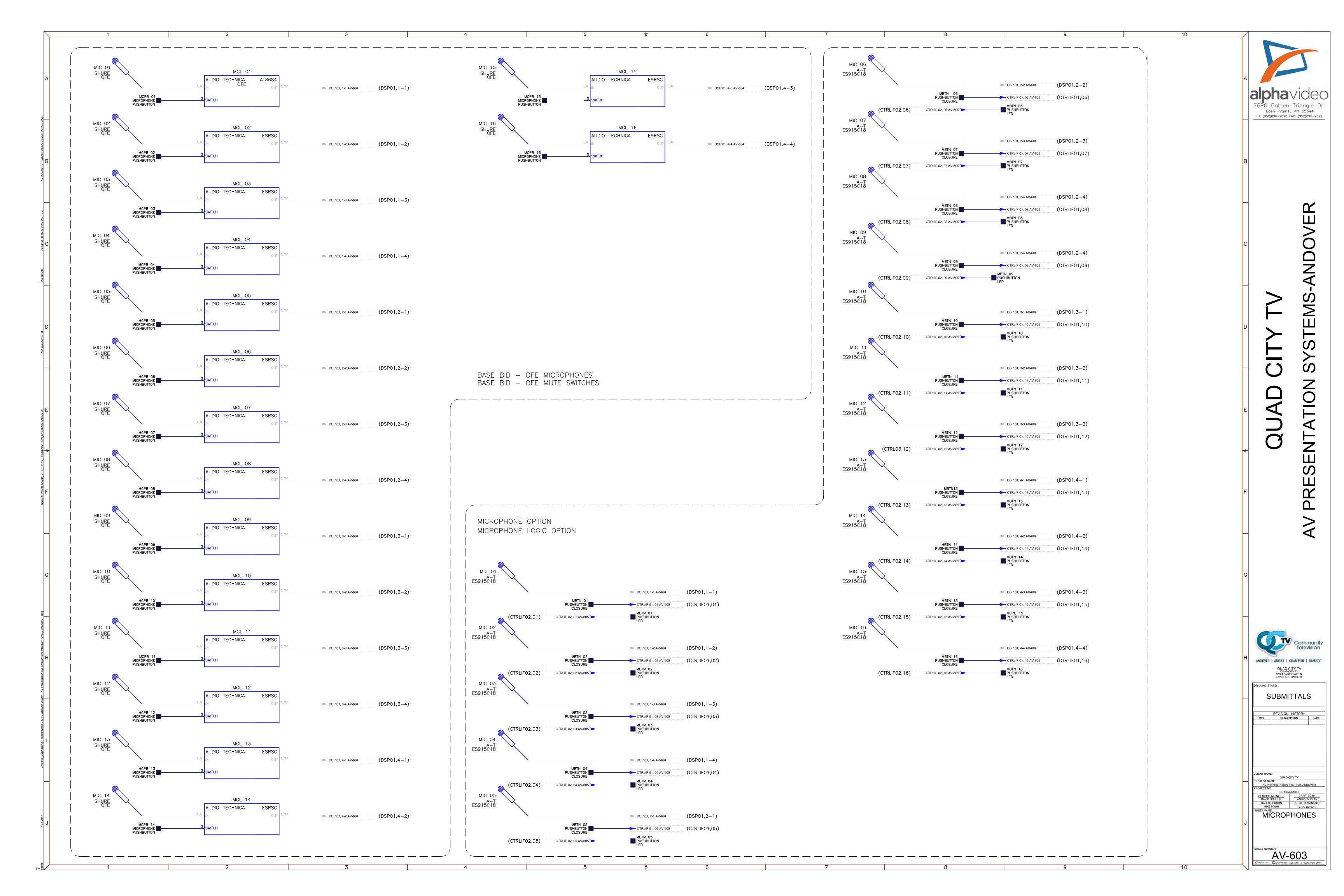
MAKE: CRESTRON MODEL: DM-MD8X8 SYSNAME: AVMTX 01

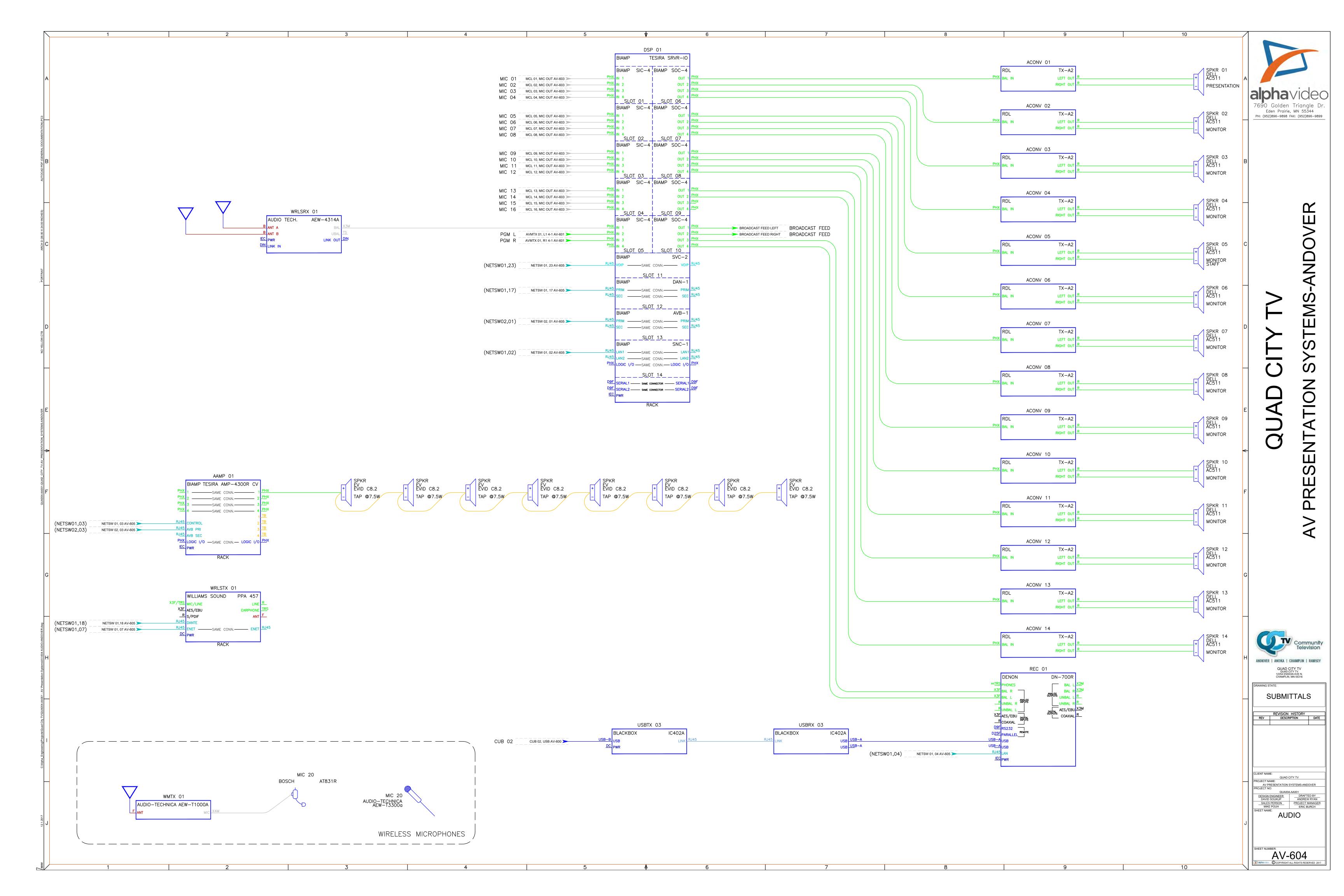


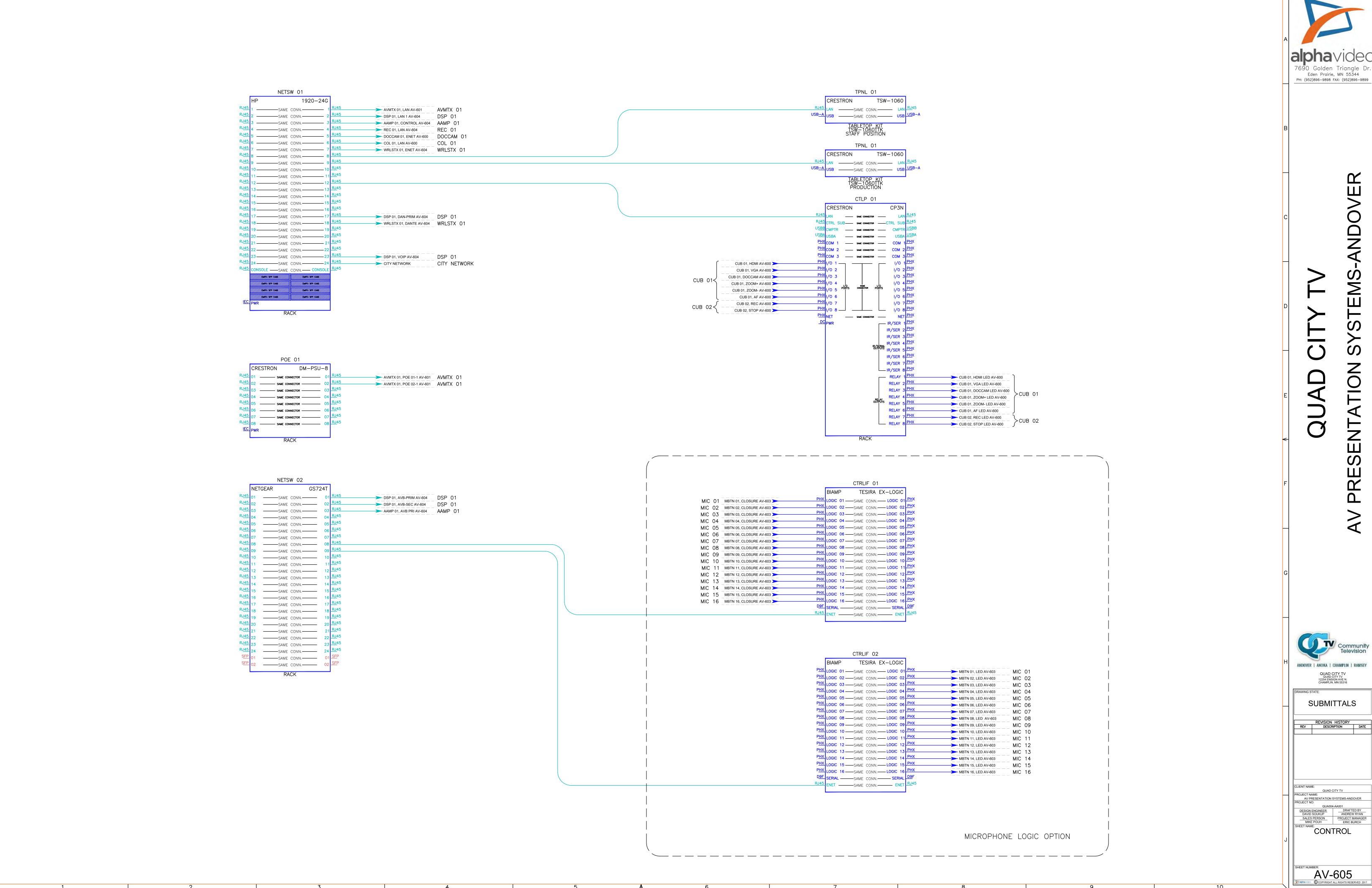


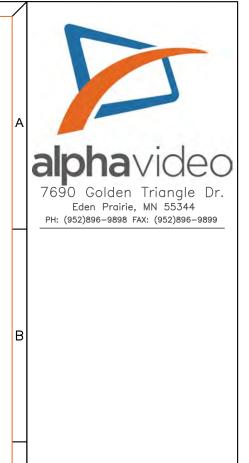
PRES

AV-602





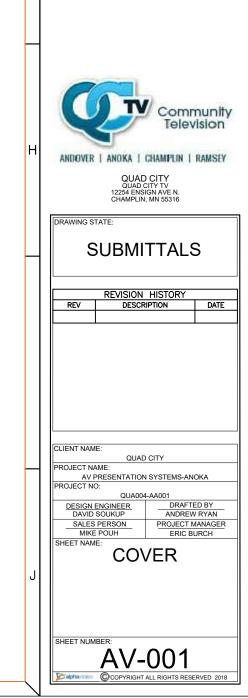


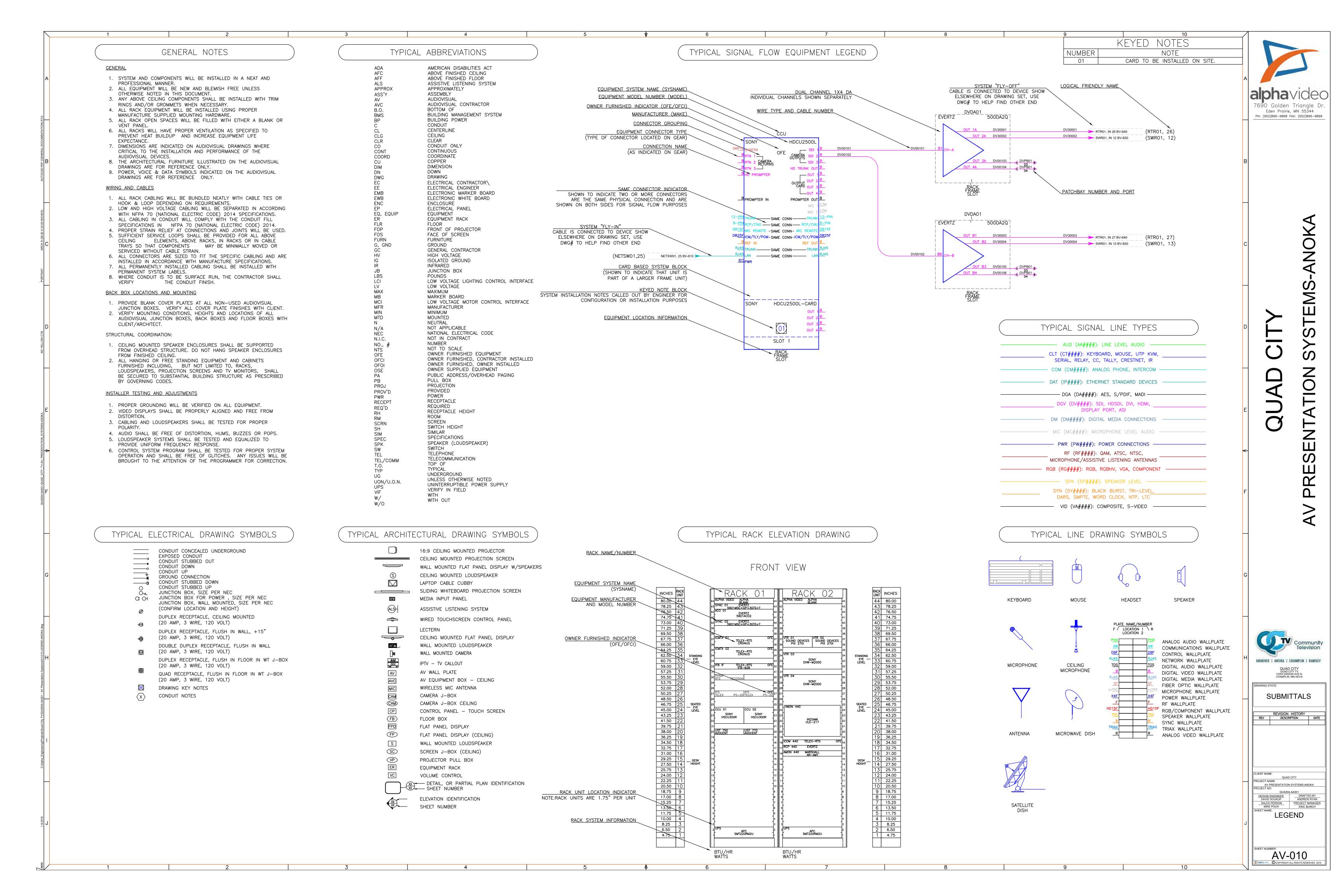




QUAD CITY AV PRESENTATION SYSTEMS-ANOKA SUBMITTALS

SHEET	LIST TABLE
AV-001	COVER
AV-010	LEGEND
AV-100	FLOOR PLAN
AV-200	RCP
AV-550	CUSTOM PANELS
AV-560	FRAME LAYOUTS
AV-600	VIDEO SOURCES
AV-601	VIDEO MATRIX
AV-602	DISPLAYS
AV-603	MICROPHONES
AV-604	AUDIO
AV-605	CONTROL

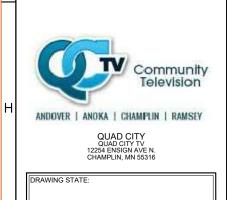












PRE

CHAMPLIN, MN 55316

DRAWING STATE:

SUBMITTALS

REVISION HISTORY
REV DESCRIPTION DATE

CLIENT NAME:

QUAD CITY

PROJECT NAME:

AV PRESENTATION SYSTEMS-ANOKA

PROJECT NO:

QUA004-AA001

DESIGN ENGINEER
DAVID SOUKUP
ANDREW RYAN
SALES PERSON
MIKE POUH
SHEET NAME:

RCP

HEET NUMBER:

AV-200

©COPYRIGHT ALL RIGHTS RESERVED 2018

PRE

SUBMITTALS

REVISION HISTORY
REV DESCRIPTION DATE

PROJECT NO:

QUAD CITY

PROJECT NAME:

AV PRESENTATION SYSTEMS-ANOKA

PROJECT NO: PROJECT NO:

QUA004-A4001

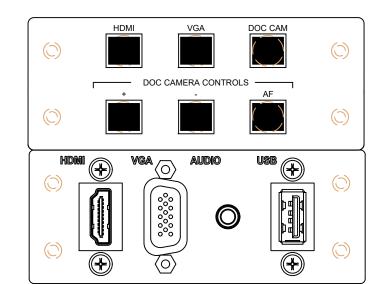
DESIGN ENGINEER
DAVID SOUKUP
SALES PERSON
MIKE POUH
SHEET NAME:

CUSTOM PANELS

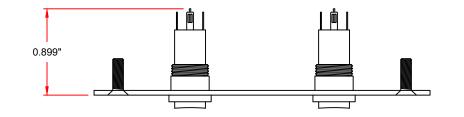
NUMBER:

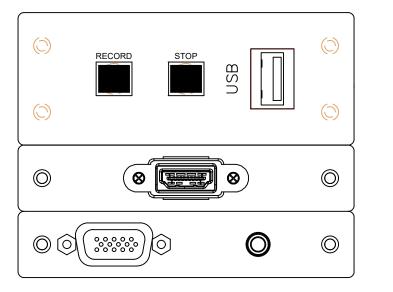
AV-550

© COPYRIGHT ALL RIGHTS RESERVED 2018







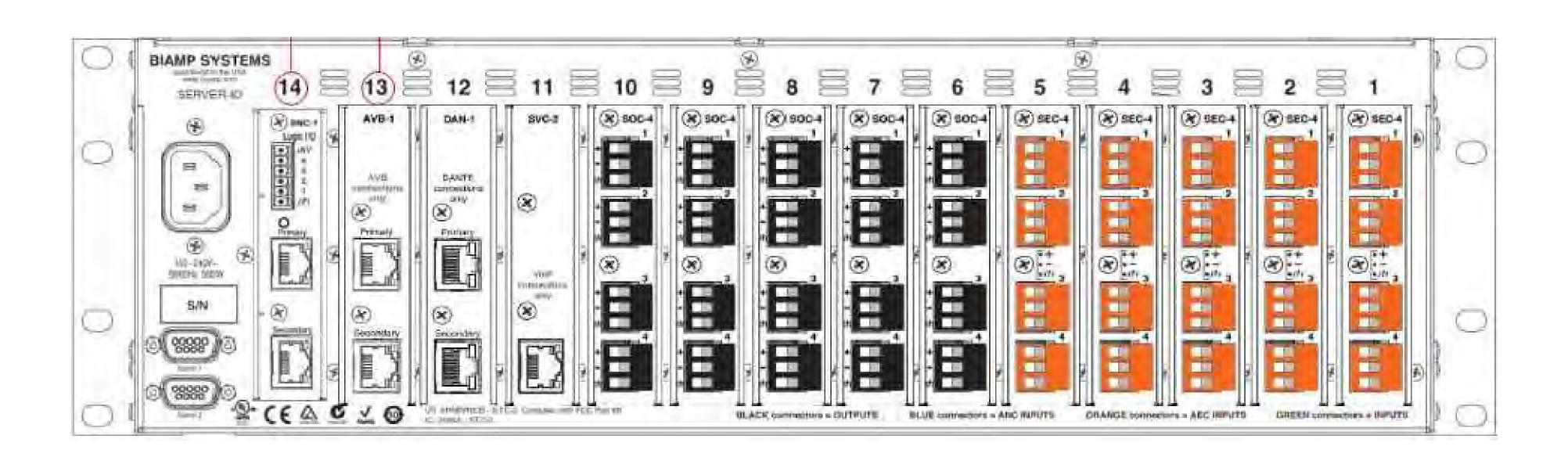


03 CUB 02 (STAFF RIGHT)

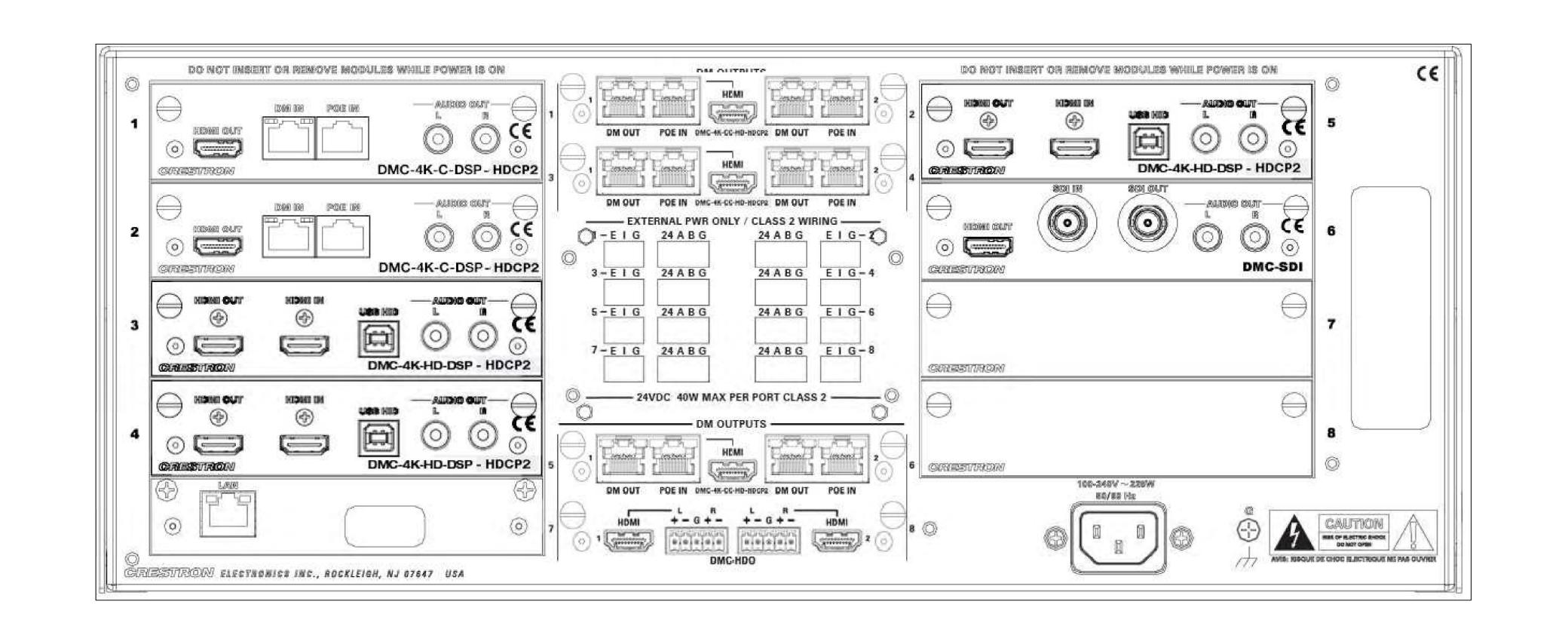
AV-550 REF. SCALE: 1:1 SCALE: 1:1

7690 Golden Triangle Dr. Eden Prairie, MN 55344 PH: (952)896-9898 FAX: (952)896-9899

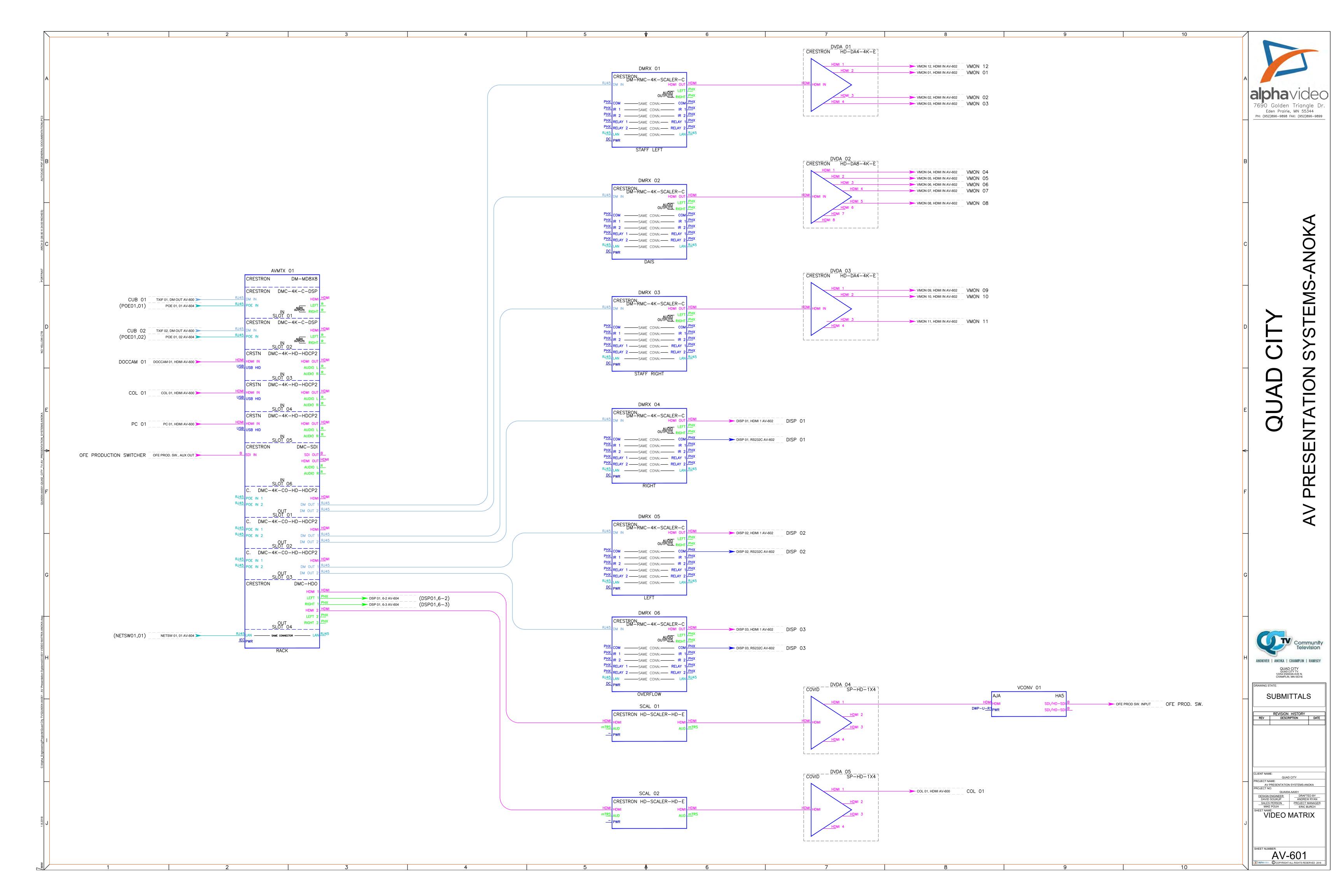
AV-560



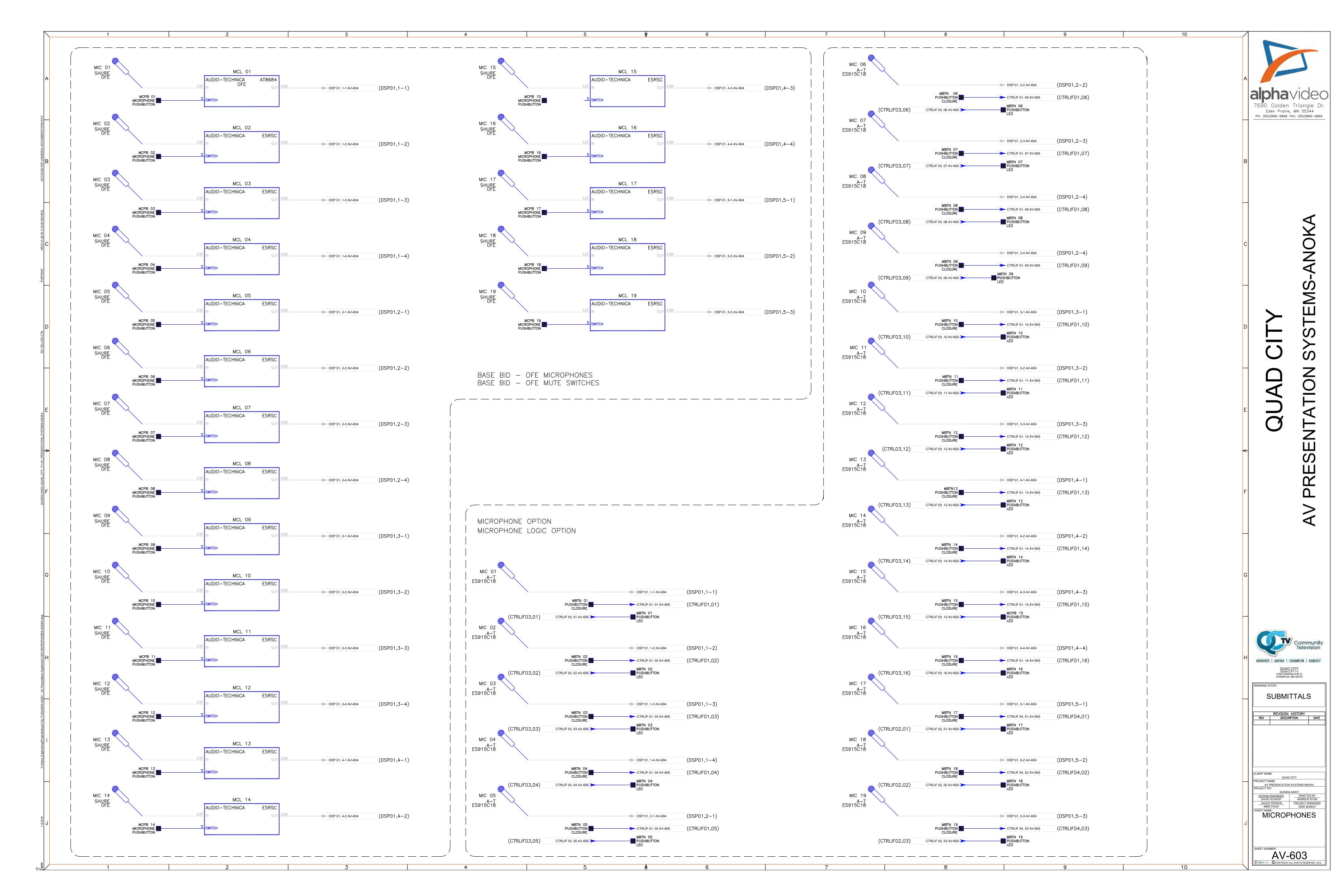
MAKE: BIAMP MODEL: TESIRA SERVER 10 AVB SYSNAME: DSP 01

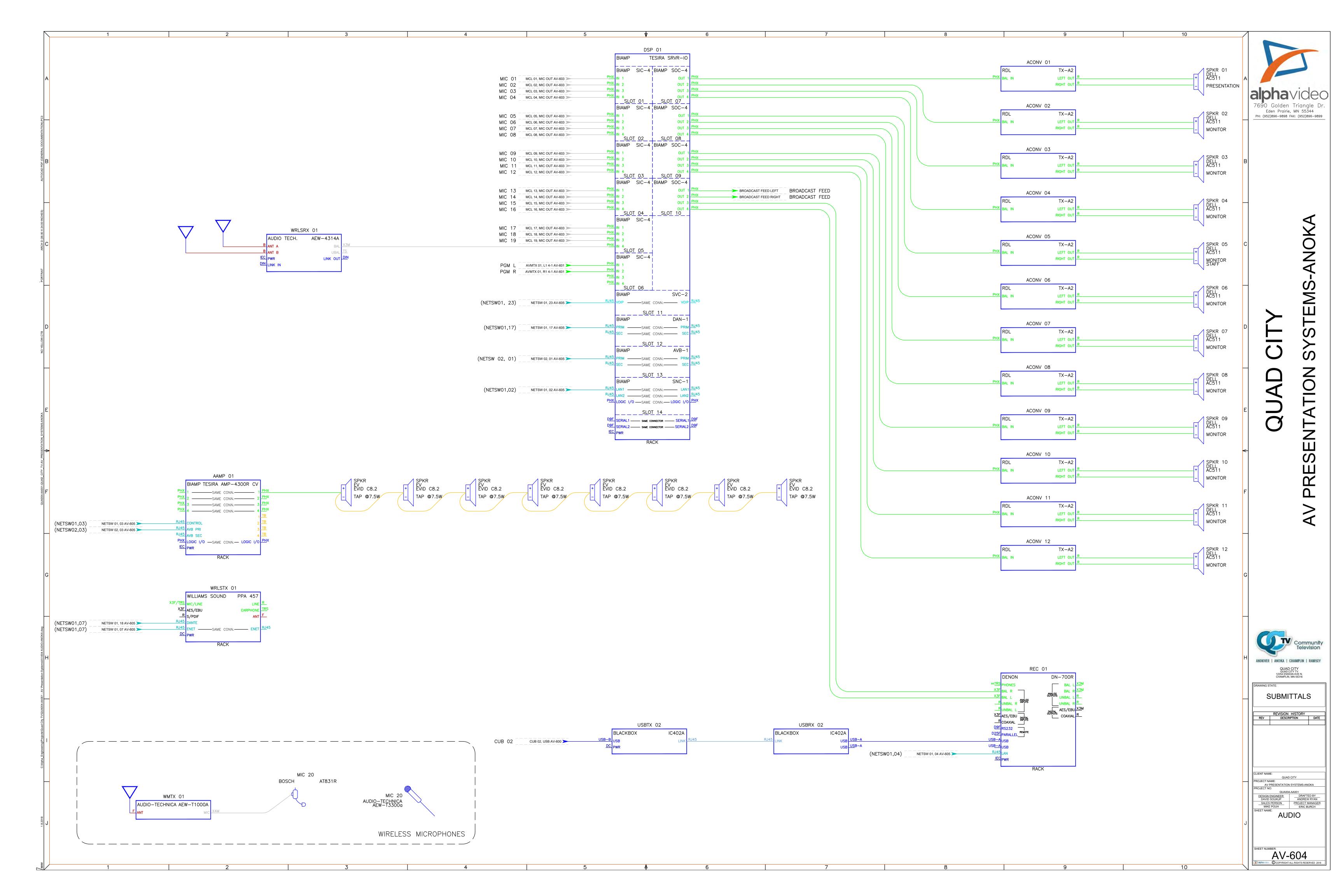


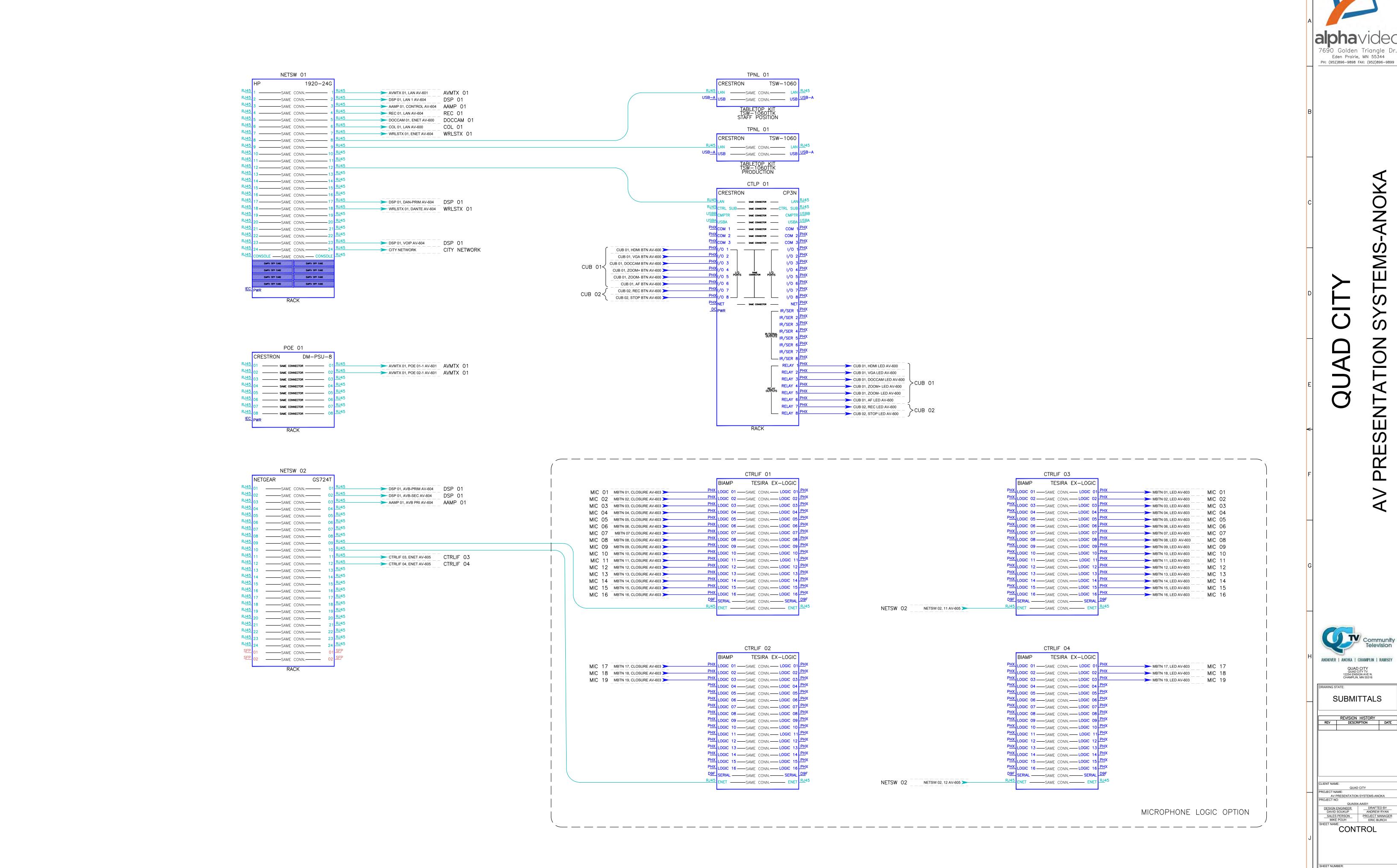
MAKE: CRESTRON MODEL: DM-MD8X8 SYSNAME: AVMTX 01



7690 Golden Triangle Dr. Eden Prairie, MN 55344 PH: (952)896-9898 FAX: (952)896-9899







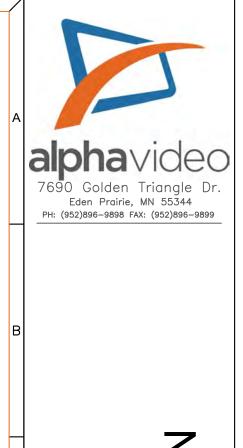
ANDOVER | ANOKA | CHAMPLIN | RAMSEY

SUBMITTALS REVISION HISTORY
REV DESCRIPTION

QUAD CITY
PROJECT NAME: AV PRESENTATION SYSTEMS-ANOKA
PROJECT NO: DESIGN ENGINEER DRAFTED BY ANDREW RYAN

SALES PERSON PROJECT MANAGER MIKE POUH ERIC BURCH CONTROL

AV-605





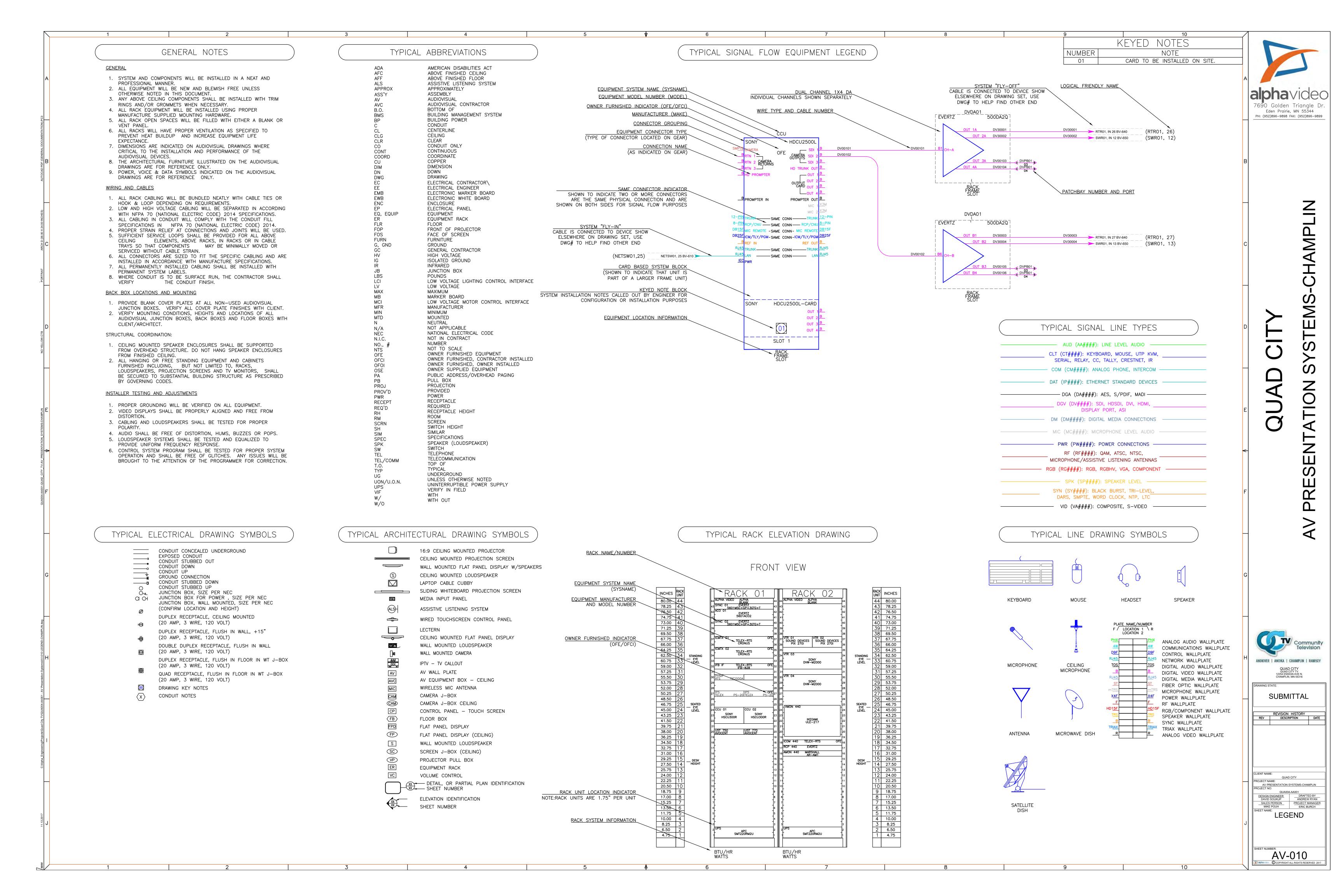


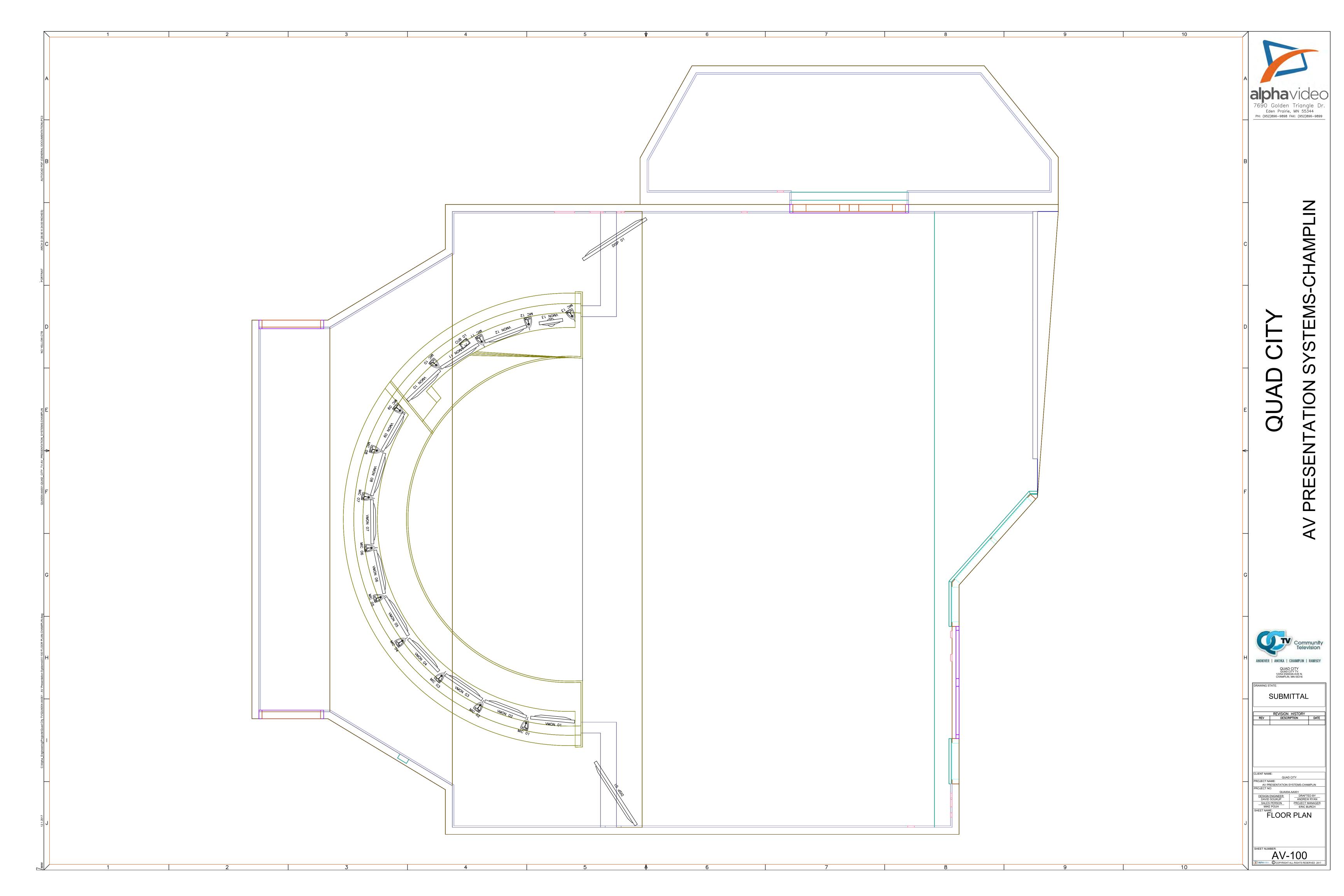
AV-001

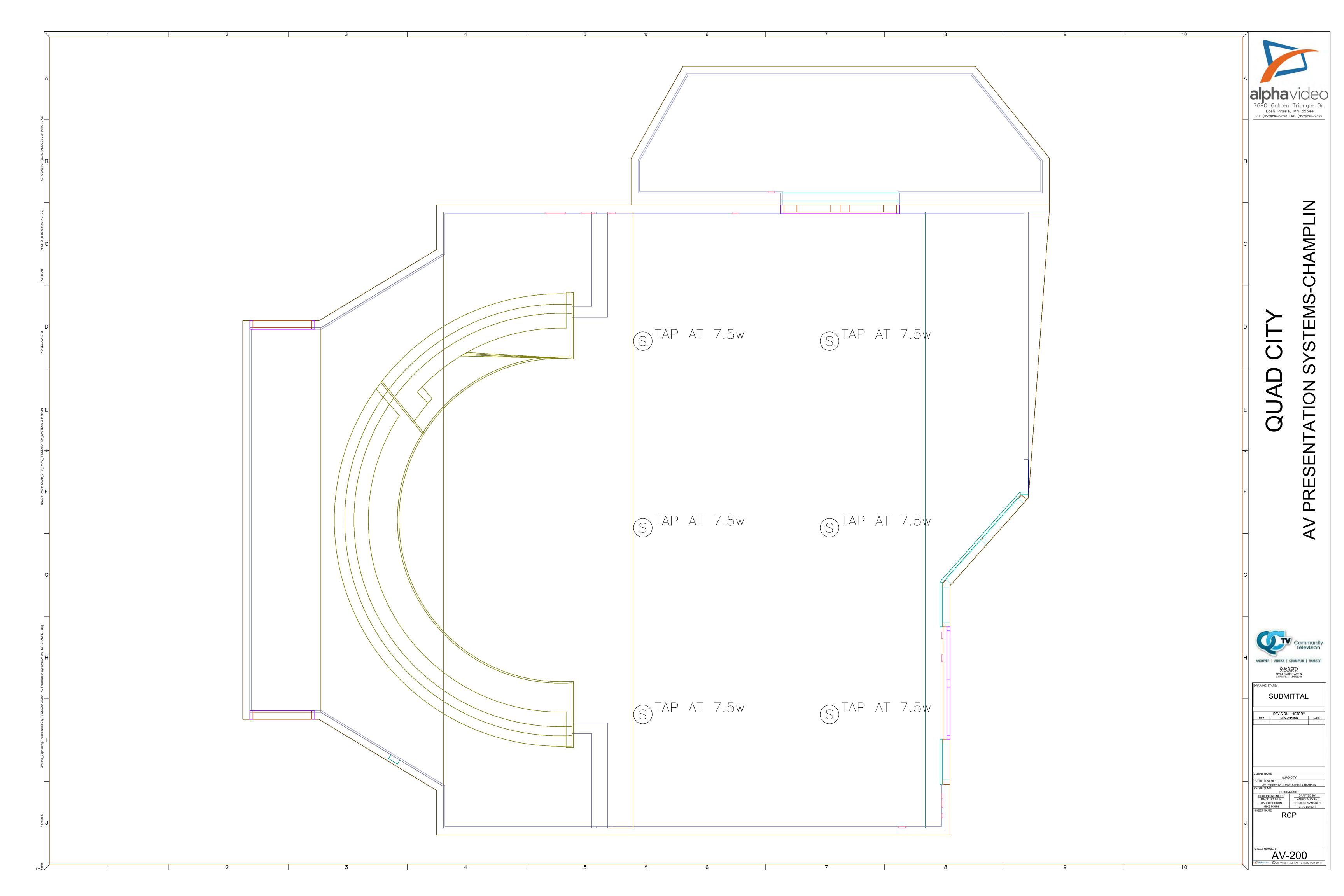


QUAD CITY AV PRESENTATION SYSTEMS-CHAMPLIN SUBMITTAL

SHEET	LIST TABLE
AV-001	COVER
AV-010	LEGEND
AV-100	FLOOR PLAN
AV-200	RCP
AV-550	CUSTOM PANELS
AV-560	FRAME LAYOUTS
AV-600	VIDEO SOURCES
AV-601	VIDEO MATRIX
AV-602	DISPLAYS
AV-603	MICROPHONES
AV-604	AUDIO
AV-605	CONTROL







REVISION HISTORY
REV DESCRIPTION DATE

CLIENT NAME:

QUAD CITY

PROJECT NAME:

AV PRESENTATION SYSTEMS-CHAMPLIN

PROJECT NO:

QUADDA-AADD1

PROJECT NO:

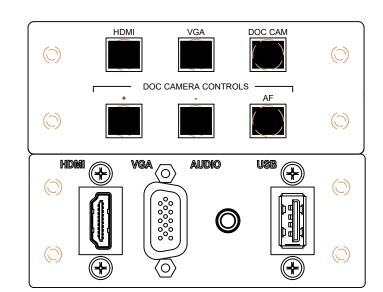
QUA004-A4001

DESIGN ENGINEER
DAVID SOUKUP
SALES PERSON
MIKE POUH
SHEET NAME:

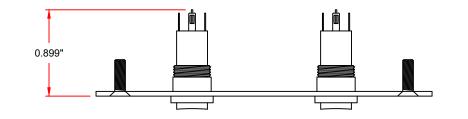
CUSTOM PANELS

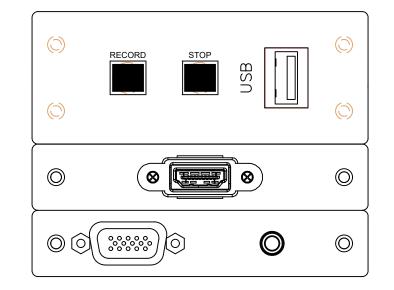
AV-550

©COPYRIGHT ALL RIGHTS RESERVED 20









03 CUB 02 (STAFF RIGHT)

AV-550 REF. SCALE: 1:1 SCALE: 1:1

7690 Golden Triangle Dr. Eden Prairie, MN 55344 PH: (952)896-9898 FAX: (952)896-9899

Community Television ANDOVER | ANOKA | CHAMPLIN | RAMSEY

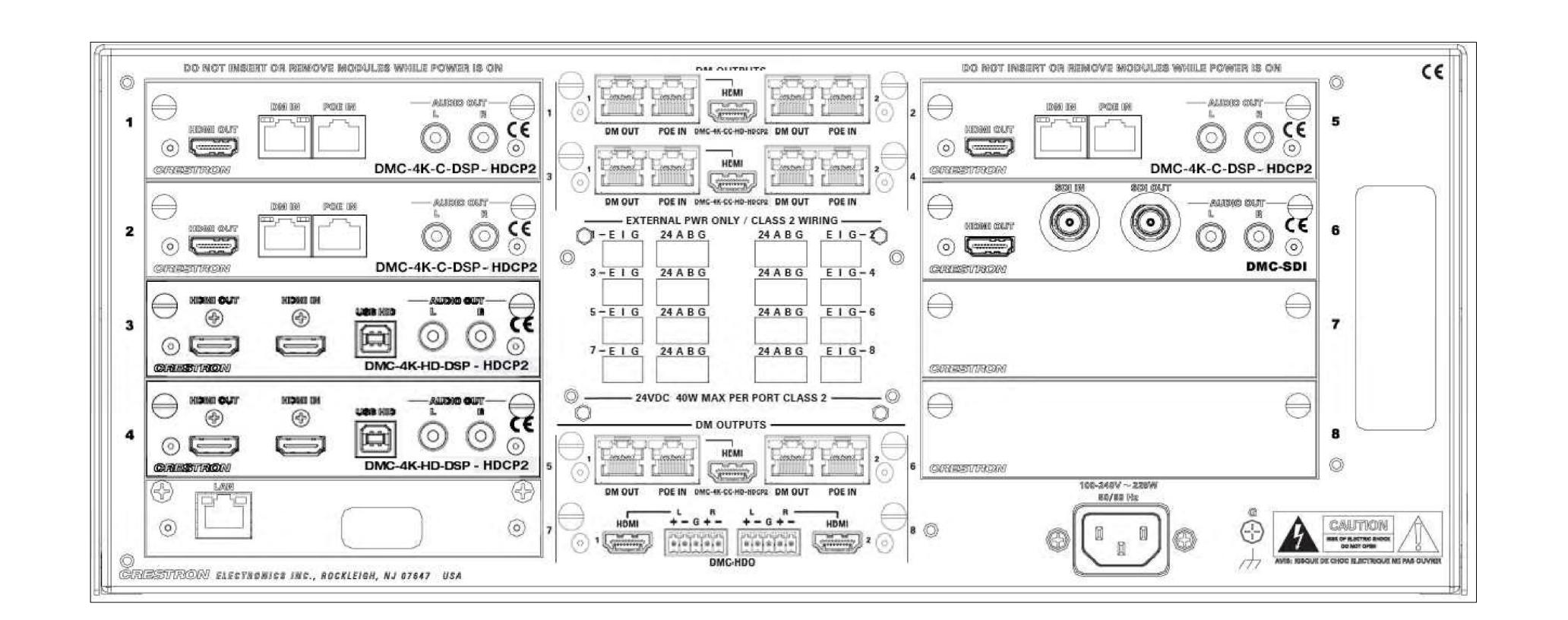
SUBMITTAL

FRAME LAYOUTS

AV-560

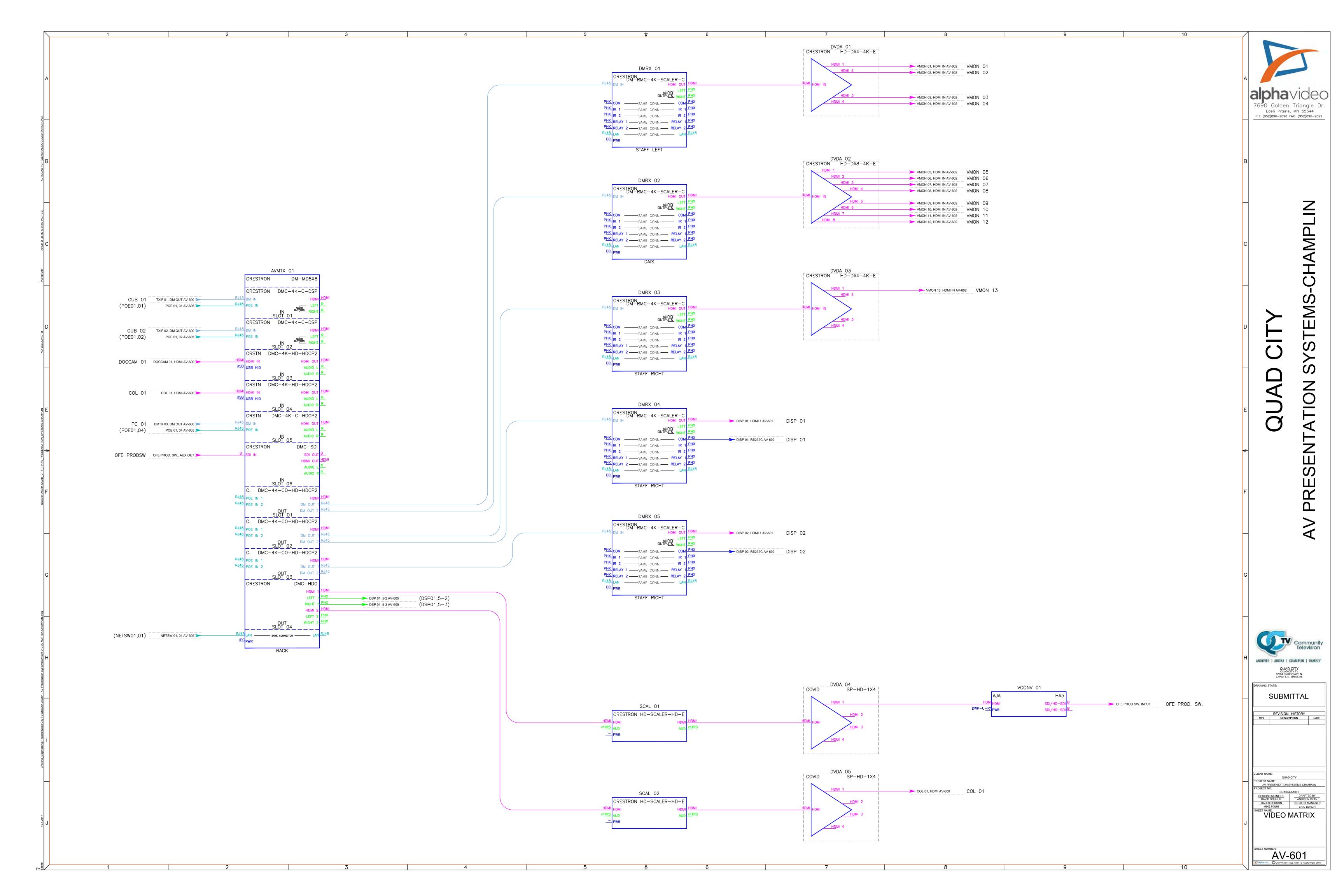
BIAMP SYSTEMS SEC-4 (B) MO-140V-MHONE MENN ULACK commenture - DUTFUTE BLUE commenters - AND WAPUTS - ORANGE connectors - AEC HIPUTS

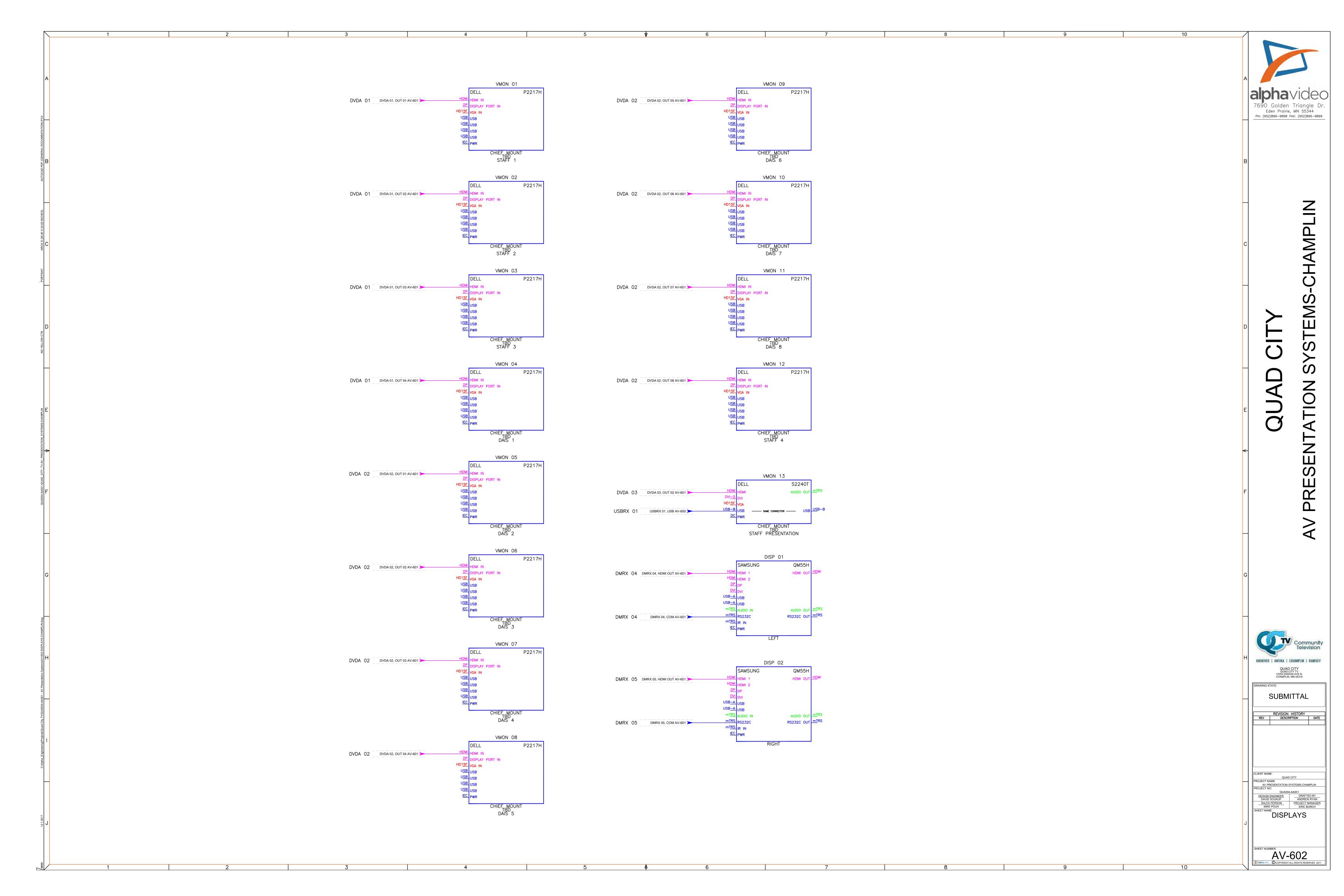
MAKE: BIAMP MODEL: TESIRA SERVER 10 AVB SYSNAME: DSP 01



MAKE: CRESTRON MODEL: DM-MD8X8 SYSNAME: AVMTX 01

Eden Prairie, MN 55344 PH: (952)896-9898 FAX: (952)896-9899







CHAMPLIN PRE



SUBMITTAL

REVISION HISTORY
REV DESCRIPTION DATE

QUAD CITY
PROJECT NAME: AV PRESENTATION SYSTEMS-CHAMPLIN PROJECT NO: QUA004-AA001

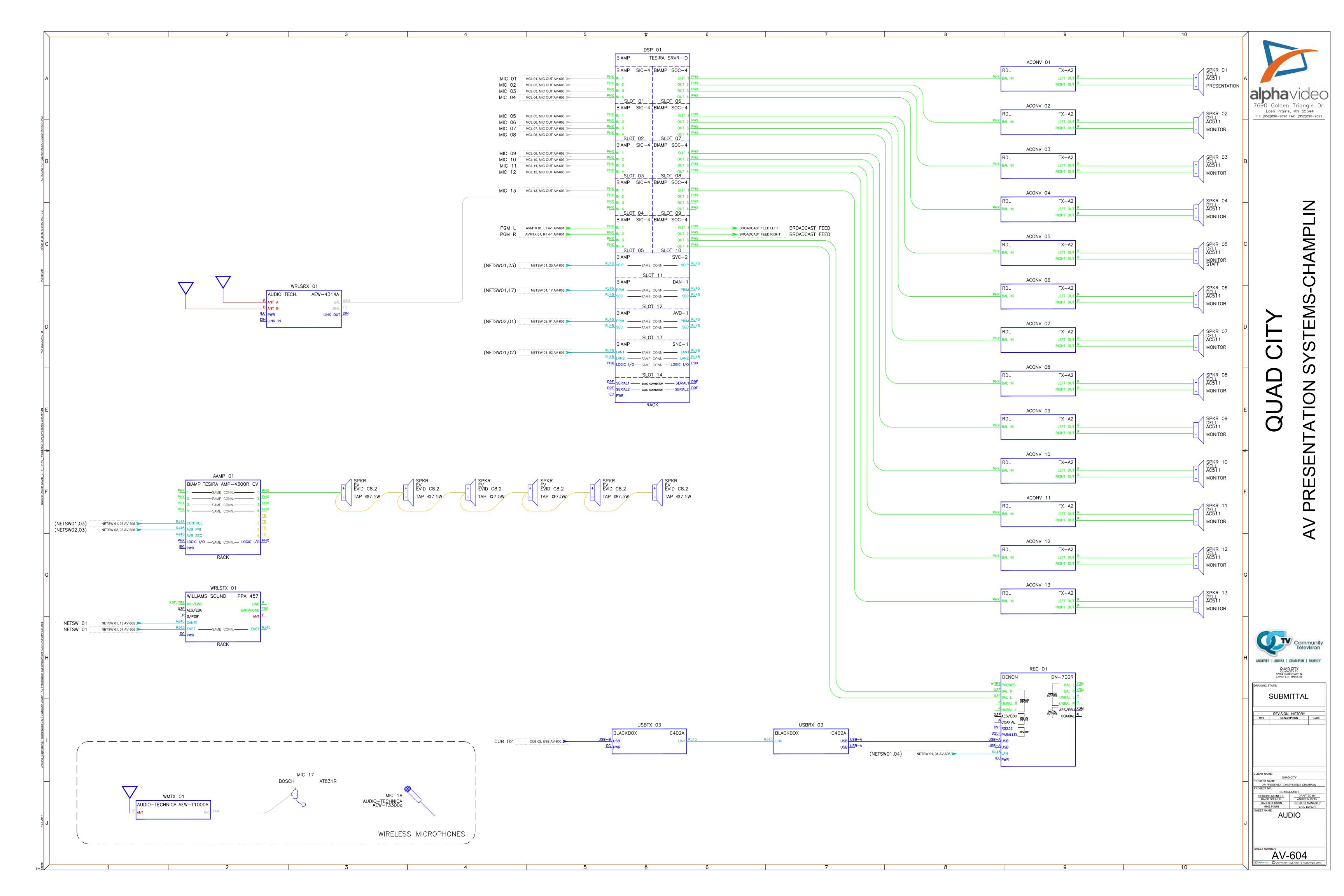
DESIGN ENGINEER DAVID SOUKUP ANDREW RYAN

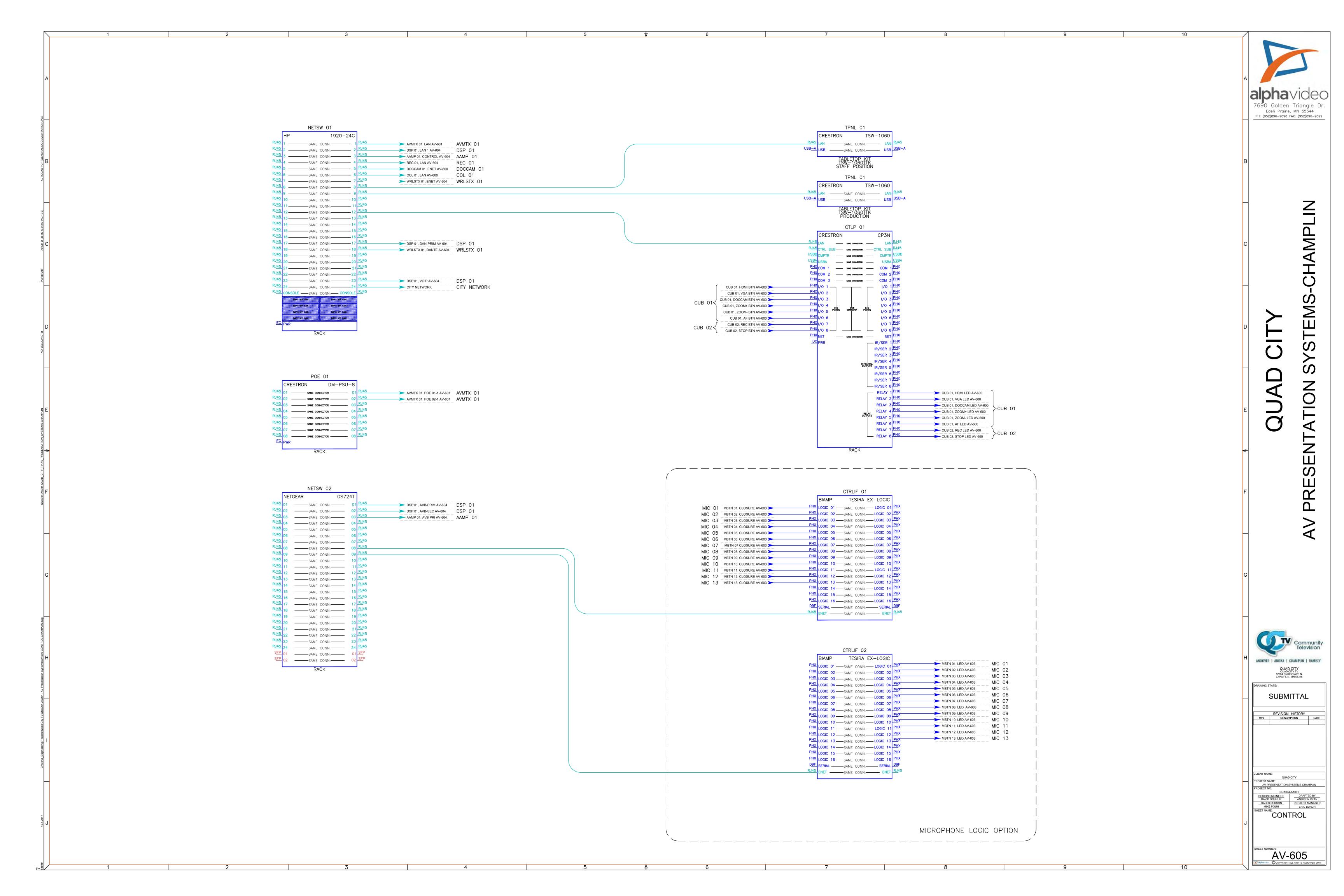
SALES PERSON PROJECT MANAGER MIKE POUH ERIC BURCH

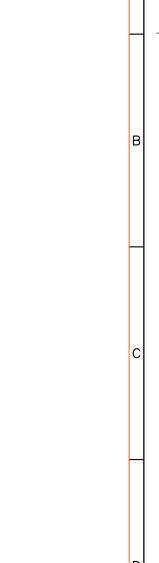
SHEET NAME:

MICROPHONES

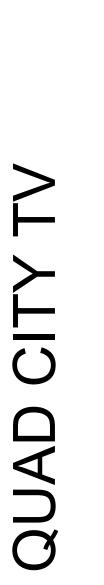
AV-603











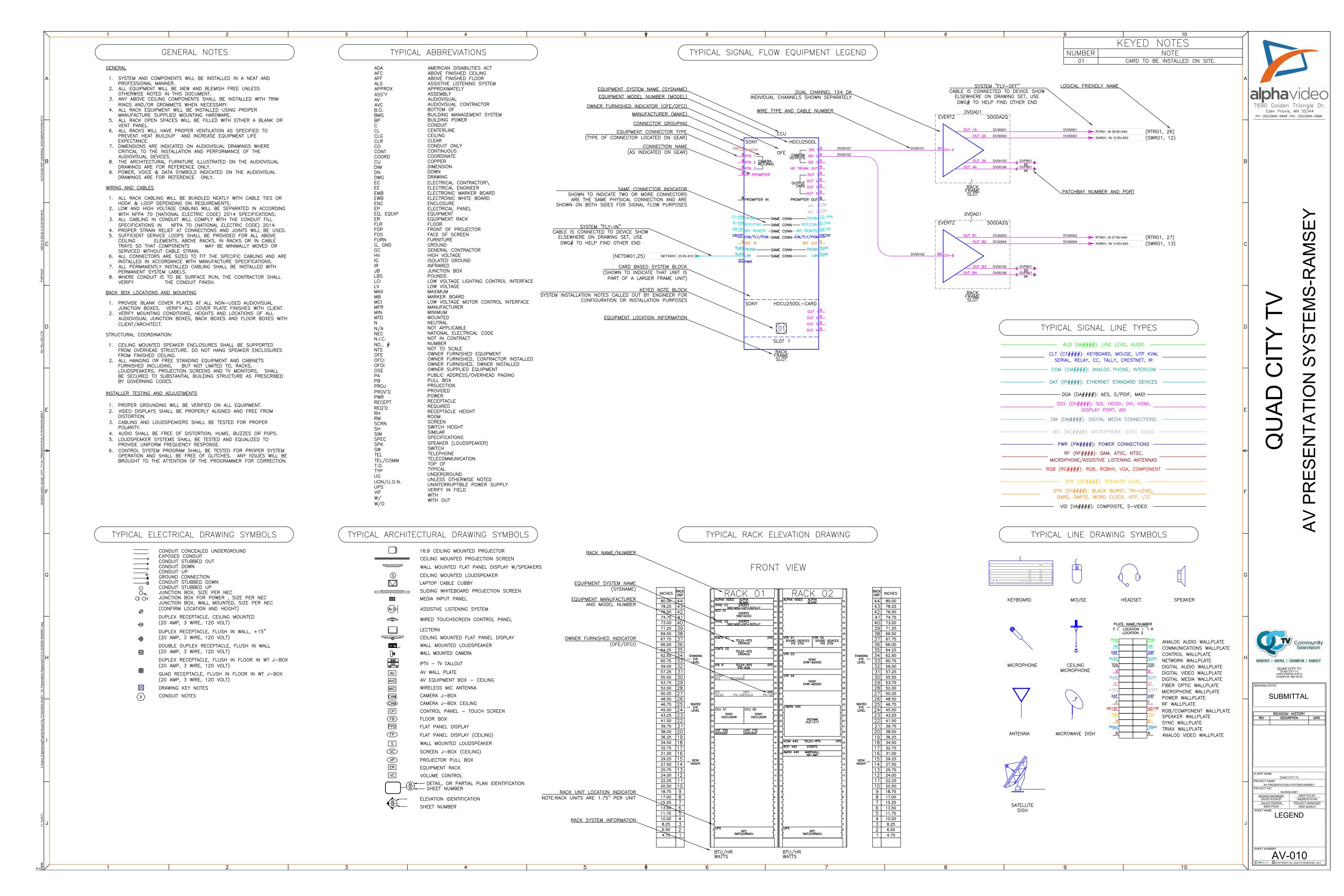


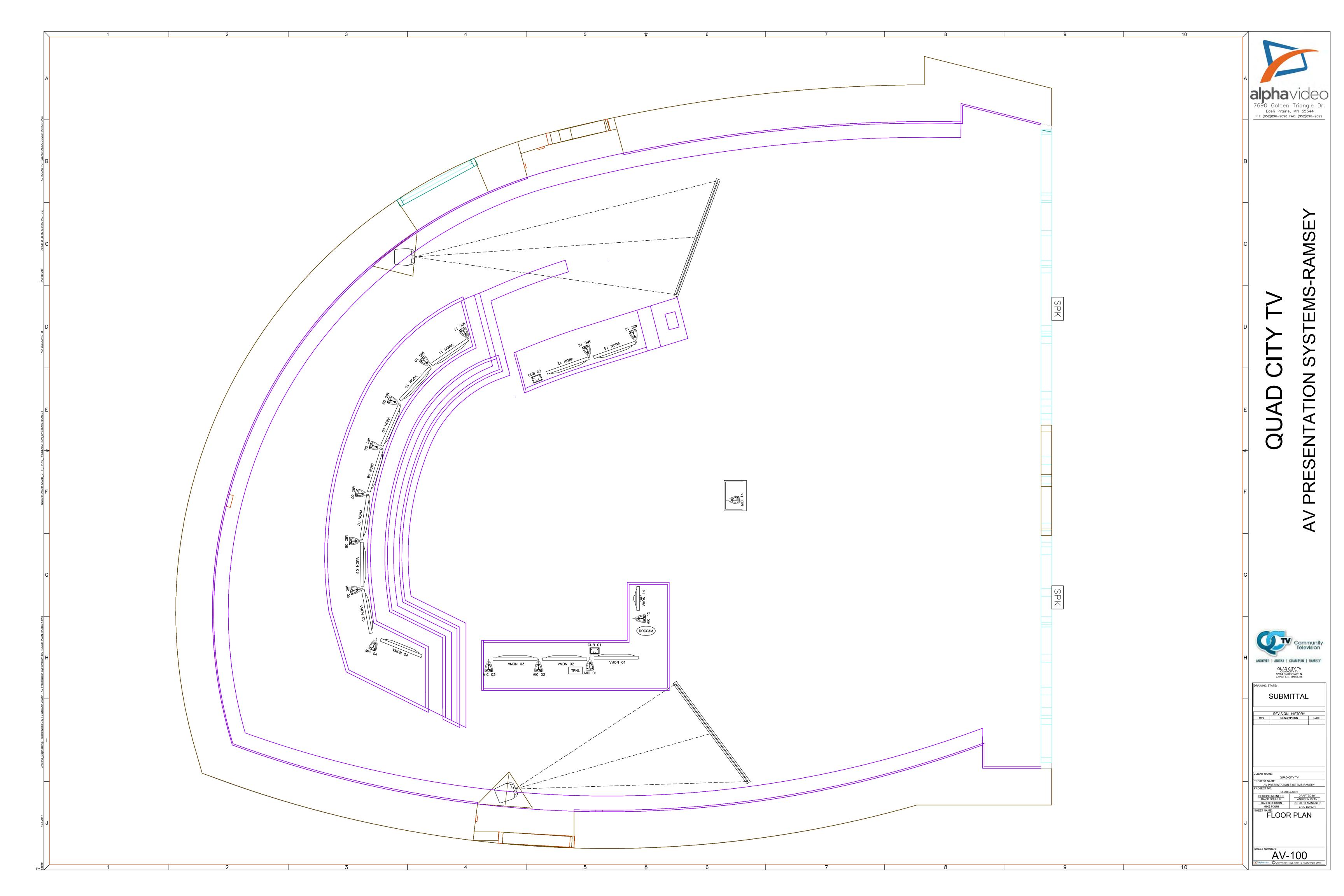


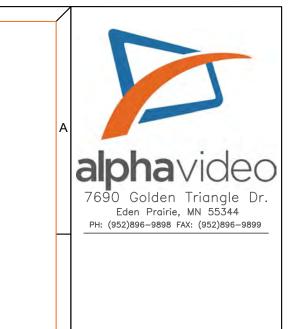
AV-001

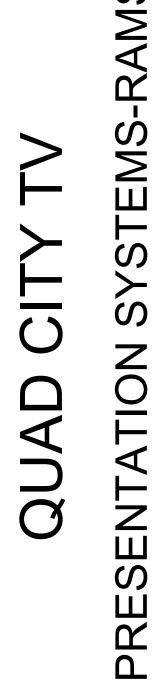
QUAD CITY TV AV PRESENTATION SYSTEMS-RAMSEY SUBMITTAL

SHEET	LIST TABLE
AV-001	COVER
AV-010	LEGEND
AV-100	FLOOR PLAN
AV-550	CUSTOM PANELS
AV-560	FRAME LAYOUTS
AV-600	VIDEO SOURCES
AV-601	VIDEO MATRIX
AV-602	DISPLAYS
AV-603	MICROPHONES
AV-604	AUDIO
AV-605	CONTROL









REVISION HISTORY
REV DESCRIPTION DATE

CLIENT NAME:

QUAD CITY TV

PROJECT NAME:

AV PRESENTATION SYSTEMS-RAMSEY

PROJECT NO:

OHANO4-ANO1

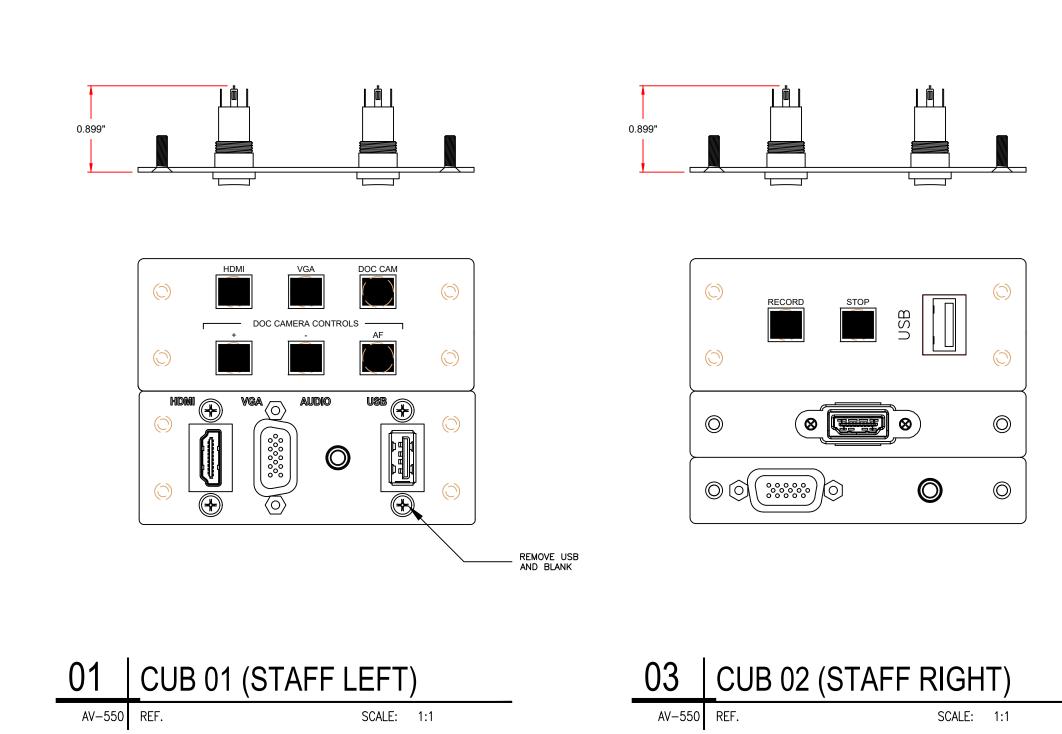
PROJECT NO:

QUA004-A001

DESIGN ENGINEER
DAVID SOUKUP
SALES PERSON
MIKE POUH
SHEET NAME:

CUSTOM PANELS

AV-550
©COPYRIGHT ALL RIGHTS RESERVED 2

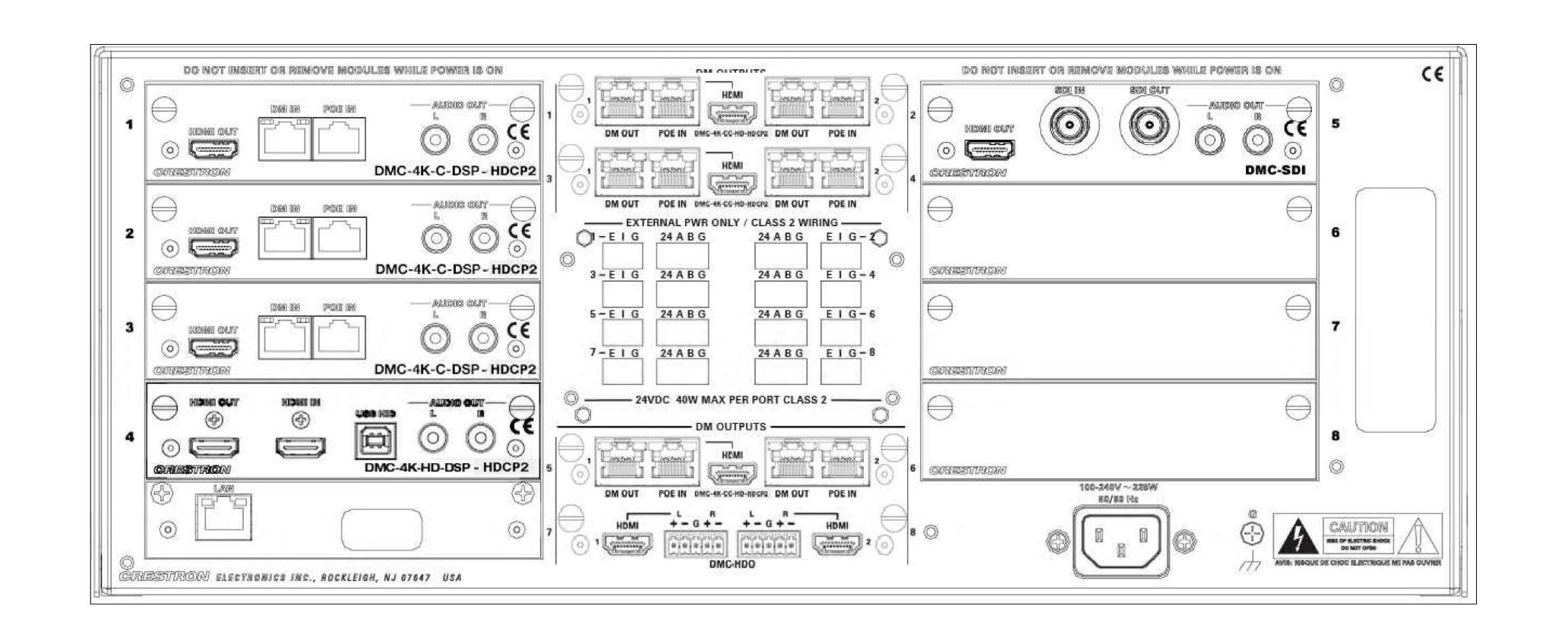


FRAME LAYOUTS

AV-560

BIAMP SYSTEMS SEC-4 目目 (B) MO-140V-MHONE MENN ULACK commenture = DUTPUTE BLUE commenters = ARC WAPUTS DRANGE connectors = AEC HIPUTS

MAKE: BIAMP MODEL: TESIRA SERVER 10 AVB SYSNAME: DSP 01



MAKE: CRESTRON MODEL: DM-MD8X8 SYSNAME: AVMTX 01

