

Media Center Complex--Technology Specifications and Cost Estimates

Media Center Television Studio

Studio Cameras/Tripods/Teleprompters/Communication

Item	Qty	Model	Description	Unit List	Ext.
1	3	Sony	Digital Studio Cameras (Box) Standard Definition--Switchable Between 4:3/16:9 Includes: Camera Head, Digital Hybrid Adapter, View Finder, Studio Hood, Camera Test Extender, Operation Manual, Service Manual, Base Station, Hybrid Adapter for Base Station, Power Supply, Base Station Test Extender BS Service Manual, 200ft Cables	\$50,000	\$150,000
2	3	Sony	Camera Control Panel, Control Cable, Camera Support Equipment	\$15,000	\$45,000
3	3	Canon	Studio Lens, Controls, Rear Configuration	\$22,000	\$66,000
4	1	Vinten	Tripod Heads, Wedge Plates, Handles, Pedestals	\$14,000	\$14,000
5	1	WinCue	Teleprompter Software	\$2,500	\$2,500
6	1	RTS	Main Station, Sub stations, Headsets, IFB channels, cabling	\$14,000	\$14,000
Studio Lighting/Ladder/Grip					
7	1	Strand	Studio Lighting System for 30 X 40 Studio-Includes Lighting Grid Hardware, ETC Dimmer System, Cyc Curtain, Background Curtain, Chroma Key Blue, Track and hardware, Ladder, Gaffers Basket, Meter, Electrical Distribution	\$120,000	\$120,000
8	1	Mole R.	Grip Equipment--Clamps, Flags, Soft Box, Filters,	\$12,000	\$12,000
9	1	Sony	Floor Monitor and Cart, Networking interface, Router Panel	\$2,100	\$2,100
Studio Equipment Sub-Total					\$425,600

Studio Control Room

Item	Qty	Model	Description	Unit List	Ext.
1	1	Ross	Synergy Digital Switcher, 2 ME with Dual DVE	\$50,000	\$50,000
2	1	GVG	Digital to Analog and Analog to Digital Monitoring Convertors	\$25,000	\$25,000
3	1	Yamaha	Digital Audio Mixer, Meter Bridge, Side Panels, AES Cards, Cables	\$6,500	\$6,500
4	4	Ikegami	20" Color Video Monitors, Rack Kits, Input Modules	\$2,500	\$10,000
5	1	Ikegami	14" Color Video Engineering Monitor, Rack Kit, Modules, Cabling	\$2,000	\$2,000
6	5	Sony	4 X LCD Color Source Monitors	\$2,200	\$11,000
7	1	360 System	Digital 3 Channel Server	\$17,000	\$17,000
8	4	Tannoy	Studio Control Room/Audio Booth Speaker Monitors	\$350	\$1,400
9	2	Crown	D-75 Audio Amplifier	\$523	\$1,046
10	1	360 System	Instant Audio Replay w/self Contained Hard drive, recorder, player	\$3,100	\$3,100
11	1	Sony	DVD/CD Player with Jog Control for Audio Cue, MP3, Wave, WMF, AIFF	\$850	\$850
12	1	Tektronix	Waveform Monitor Vectorscope, Rack Kit, Blank Panel	\$7,000	\$7,000
13	1	Tektronix	SPG Digital Component Sync Generator, Audio, Test Generator	\$6,500	\$6,500
14	1	Chyron	Character Generator w/quick cue keyboard, digital player, animation, mon.	\$26,000	\$26,000
15	1	Leitch	DPS-Digital Frame Synchronizer	\$7,500	\$7,500
16	1	ESE	GPS, Time Code Generator/Master Clock, Time Code Displays, Timer	\$3,800	\$3,800
17	1	Sennheiser	Wireless Microphones, Antennae Mounts, Hard wire Mics	\$10,000	\$10,000
18	1	Telos	Telephone Hybrid Interface and Control Surface for Live Call-in Programs	\$8,400	\$8,400
19	1	JBL	Stage Announce, Speaker, Amplifier System	\$1,000	\$1,000
Voice Over Booth					
20	1	Symetrix	Headphone Amplifier, Voice Processor	\$1,200	\$1,200
21	1	Electravoice	Voice Over Microphone	\$650	\$650
22	1	Shure/Tec	Telescoping Mic Stand, Shock Mount, Lecturn	\$1,450	\$1,450
23	4	Sony	12" LCD Video Monitor with A/B monitor, Custom Monitor Arm	\$1,500	\$6,000
Control Room Equipment Sub-Total					\$207,396

Exhibit 6

Media Center Television Studio Continued

Network Media Server/ SAN Storage/ Archive

Item	Qty	Model	Description	Unit List	Ext.
				\$60,000	\$60,000
1	1	Omneon	Production Server, Recording ISO Feeds, Program & Ancillary, Playback and File Transfer over Production Network throughout facilities		
2	1	Rorke	SAN Storage for NLE-w/two terabytes of Storage (Full Fibre RAID, Fabric)	\$55,000	\$55,000
3	1	Rorke	Asaca DVD/Hard drive Archival Storage System with Software	\$45,000	\$45,000
4	4	Cisco	DATA/Control Network, Routers, Switches, Hubs and panels	\$4,000	\$16,000
NETWORK-SERVER Sub-Total					\$176,000

Post Production Facilities

Item	Qty	Model	Description	Unit List	Ext.
1	4	Apple	G5 Macintosh Dual Processors, 2-GB RAM, 23" Cinema Display, Support	\$7,400	\$29,600
2	4	Adobe	Final Cut Pro HD, Motion Graphics Pack, Suite Premium, Pro Tools	\$6,200	\$24,800
3	4	Yamaha	Yamaha Mixers, Near-Field Audio Monitors	\$1,700	\$6,800
4	2	Apple	Compositing Software, Chroma Key, Effects	\$3,300	\$6,600
5	6	Sony	XDCAM Player/Recorder Network Devices	\$12,000	\$72,000
6	4	Misc.	Edit Console, Monitor Bridge, Rack low-boy,	\$2,850	\$11,400
Post Production Sub-Total					\$151,200

Field Equipment

Item	Qty	Model	Description	Unit List	Ext.
1	2	Lectrosonic	Wireless Transmitter, Receiver, Plug Trans., Lavalier, Hand Held Mic	\$4,500	\$9,000
2	2	Sony	XDCAM Digital Camcorders with Networking and MPEG 4 capability w/Lens	\$43,000	\$86,000
			Camera Accessories--Portable Lighting, Sun Gun, Batteries, Chargers, Fishpole	\$4,950	\$9,900
3	2	MISC.	Bulbs, Field softbags, adapters, filters, expendables		
4	2	Vinten	Dual Stage, Carbon fiber Tripod with Fluid Head, Mid-level Spreaders	\$4,850	\$9,700
Field Equipment Sub-Total					\$114,600

Master Control/Playback Facilities

Item	Qty	Model	Description	Unit List	Ext.
1	1	Omneon	Playback Servers (4) I/O Capacity/DV, HD, MPEG Codecs	\$90,000	\$90,000
2	1	Crispin	Automation of Playback, Ingest, Scheduling, Archiving	\$90,000	\$90,000
3	1	Leitch	Router 32X32 SDI, Analog Audio, RS 422 Control with 12 Panels	\$75,000	\$75,000
4	1	SCALA	ON-Air Graphics System	\$30,000	\$30,000
5	1	Ikegami	14" Color Video Engineering Monitor, Rack Kit, Modules, Cabling	\$2,000	\$2,000
6	4	Sony	4 X LCD Color Source Monitors	\$2,200	\$8,800
7	2	Tannoy	Studio Control Room/Audio Booth Speaker Monitors	\$350	\$700
8	1	Crown	D-75 Audio Amplifier	\$523	\$523
9	1	Tektronix	Waveform Monitor Vectorscope, Rack Kit, Blank Panel	\$7,000	\$7,000
10	1	Tektronix	SPG Digital Component Sync Generator, Audio, Test Generator	\$6,500	\$6,500
11	1	Panasonic	Dubbing System with DVD, VHS, Local Router	\$8,000	\$8,000
12	1	ESE	GPS, Time Code Generator/Master Clock, Time Code Displays, Timer	\$3,800	\$3,800
Master Control/Equipment Sub-Total					\$322,323

Computer Media Arts Learning and EOC

Item	Qty	Model	Description	Unit List	Ext.
1	25	HP	25-Seat PC stations with Shared Centralized access to Storage RAID Pool	\$1,700	\$42,500
2	1	Various	Media Rack--DVD Player, A/V console, connection plate, router panel	\$25,000	\$25,000
3	1	Consoles	Furniture Desk-top space Consoles	\$22,000	\$22,000
4	1	Cisco	Networking Equipment and Support	\$1,800	\$1,800
5	2	Sony	Central Projector with Media Inputs, wireless communication, Networked,mounts	\$22,000	\$44,000
Learning Annex Equipment Sub-total					\$135,300

TV Station System Integration Labor

Item	Qty	Model	Description	Unit List	Ext.
1	1	Phase 1	Project Development, Planning, Feasibility, Assessment, General Design, System Design, Project Management	\$285,000	\$285,000
2	1	Phase 2	Purchase and Procurement	\$15,000	\$15,000
3	1	Phase 3	Pre-Build, Layout, Pre-Testing, Fabrication and Assembly	\$185,000	\$185,000
4	1	Phase 4	Network Integration and Infrastructure Deployment	\$20,000	\$20,000
5	1	Phase 5	Implementation, Installation, Performance Testing, Final Delivery, Docs, Inspection, Project Close-out, Acceptance	\$145,000	\$145,000
System Integration, Project Management Sub-total					\$650,000

Exhibit 6

Community Theater and Black Box Stage

Theatre Equipment (125-Seat)

Item	Qty	Model	Description	Unit List	Ext.
1	1	Peavey	Digital Processing Sound Reinforcement System	\$180,000	\$180,000
2	1	Strand	Theatre Lighting--Lighting Instruments, Grids, Control Panels,	\$215,000	\$215,000
3	1	(Rigging)	Backstage Rigging hardware, Electrical Lifts,	\$55,000	\$55,000
4	1	Misc.	Communications, Electronics, I/O panels, remote camera panels	\$56,000	\$56,000
5	1	(Props)	Prop, Fabrication & Assembly shop equipment, materials, etc	\$85,000	\$85,000
6	1	(A/V)	Media and A/V devices, interfaces (projection, amplification, digital, signage, etc)	\$125,000	\$125,000
7		Lot	Class A-1 Building Costs at 8000 sq feet	\$196	\$1,570,272
7	0	Labor	(System Integration and Installation labor reflected below)	\$140,000	\$0
Theater Equipment Sub-Total					\$2,286,272

Black Box Stage Equipment Equipment

Item	Qty	Model	Description	Unit List	Ext.
1	1	Peavey	Digital Processing Sound Reinforcement System	\$40,000	\$40,000
2	1	Strand	Theatre Lighting--Lighting Instruments, Grids, Control Panels,	\$85,000	\$85,000
3	0	Labor	(System Integration and Installation labor reflected below)	\$45,000	\$0
4		Lot	Class A-1 Building Costs at 3000 sq feet	\$196	\$588,852
Black Box Stage Equipment Sub-Total					\$713,852

Mobile Production Vehicle

Production Vehicle Specifications

Item	Qty	Model	Description	Unit List	Ext.
1	1	NOMAD	Mobile Production Chassis and rack-ready 20' box w/16' Production Space	\$170,000	\$170,000
1	4	Sony	Digital Studio Cameras (Box) Standard Definition--Switchable Between 4:3/16:9 Includes: Camera Head, Digital Hybrid Adapter, View Finder, Studio Hood, Camera Test Extender, Operation Manual, Service Manual, Base Station, Hybrid Adapter for Base Station, Power Supply, Base Station Test Extender BS Service Manual, 200ft Cables	\$35,000	\$140,000
2	4	Sony	Camera Control Panel, Control Cable, Camera Support Equipment	\$10,000	\$40,000
3	4	Canon	Studio Lens, Controls, Rear Configuration	\$5,000	\$20,000
4	4	Vinten	Vision Heavy Duty Tripods	\$8,000	\$32,000
2	1	Ross	Synergy Digital Switcher, 1ME with Dual DVE	\$30,001	\$30,001
3	1	GVG	Digital to Analog and Analog to Digital Monitoring Convertors	\$15,000	\$15,000
4	1	CalRAD	Digital Audio Mixer, Meter Bridge, I/FB modules, Hybride interfaces, Cables	\$3,200	\$3,200
5	3	Ikegami	20" Color Video Monitors, Rack Kits, Input Modules	\$2,500	\$7,500
6	4	Sony	4 X LCD Color Source Monitors	\$2,200	\$8,800
7	2	360 System	Digital 3 Channel Server	\$17,000	\$34,000
8	2	Tannoy	Studio Control Room/Audio Booth Speaker Monitors	\$350	\$700
9	1	Crown	D-75 Audio Amplifier	\$523	\$523
10	1	360 System	Instant Audio Replay w/self Contained Hard drive, recorder, player	\$3,100	\$3,100
11	1	PRV-LX1	Pioneer DVD Recorder/Player with 300GB hard drive	\$5,000	\$5,000
12	1	Tektronix	Waveform Monitor Vectorscope, Rack Kit, Blank Panel	\$7,000	\$7,000
13	1	Tektronix	SPG Digital Component Sync Generator, Audio, Test Generator	\$6,500	\$6,500
14	1	Chyron	Character Generator w/quick cue keyboard, digital player, animation, mon.	\$26,000	\$26,000
15	1	Leitch	DPS-Digital Frame Synchronizer, digital conertors, etc	\$24,000	\$24,000
16	2	Sennheiser	Wireless Microphones, Antennae Mounts, Hard wire Mics, etc	\$6,000	\$12,000
17	1	TEKNEK	I/O Panel, connectors, interfaces, cabling and transformers	\$8,500	\$8,500
18	1	Misc.	Equipment Hardware, Triax or Fiber Cabling,	\$15,000	\$15,000
19	0	(subtotaled)	(System Integration, Project Management added to sub totals below)	\$95,000	\$0
Post Equipment Sub-Total					\$608,824

Exhibit 6

Public Information Displays

Digital Signage/Public Information Equipment

Item	Qty	Model	Description	Unit List	Ext.
1	8	Panasonic	42" Plasma/LCD Monitor Panels w/RS 422 Controls	\$3,200	\$25,600
2	2	Crestron	16" Touch Screen Information Kiosk	\$8,000	\$16,000
3	1	Crestron	Matrix Switcher, Local and Network Controls, programmable panels, Interfaces	\$34,000	\$34,000
4	1	Cisco	Networking Equipment and Support	\$1,200	\$1,200
Digital Signage Sub-total					\$76,800

Media Center Complex Infrastructure & Labor (less TV Station Totals)

Media Fiber Interconnects

Item	Qty	Model	Description	Unit List	Ext.
1	1	Canare	Media Center INTRA-Fiber Communications Equipment	\$60,000	\$60,000
2	1	Consoles	Media Center INTER-Fiber Communications Equip. Including destination devices to include transceivers to and from 5 buildings	\$175,000	\$175,000
3	1	Cisco	Installation Fiber Cables, splices, patches, etc.	\$18,000	\$18,000
Fiber Interconnects Sub-total					\$253,000

IT Networking Infrastructure

Item	Qty	Model	Description	Unit List	Ext.
1	1	Terminal	Terminal Equipment-- Patching, Cabling	\$75,000	\$75,000
2	1	Interface	Fiber Interfacing SFP, GBICS, Media Links,	\$196,000	\$196,000
3	1	Cisco	Server/Router/Switch modules (all buildings)	\$290,000	\$290,000
4	1	Cabling	Cables, connectors, hardware	\$25,000	\$25,000
5	0	Labor	(Cabling Installation and Setup labor added below)	\$150,000	\$0
Terminal Equipment and Infrastructure Sub-total					\$586,000

Infrastructure/Terminal Equipment

Item	Qty	Model	Description	Unit List	Ext.
1	1	Canare	Terminal Equipment--Video, Audio, Control Patch Panels, Distribution Amps	\$75,000	\$75,000
2	1	Consoles	Furniture Consoles	\$85,000	\$85,000
3	1	Cisco	Media Based IT Networking Equipment and Support	\$44,000	\$44,000
Terminal Equipment and Infrastructure Sub-total					\$204,000

Media Center Complex Labor

Item	Qty	Model	Description	Unit List	Ext.
1	1	Phase 1	Project Development, Planning, Feasibility, Assessment, General Design, System Design, Project Management	\$350,000	\$350,000
2	1	Phase 2	Purchase and Procurement	\$25,000	\$25,000
3	1	Phase 3	Pre-Build, Layout, Pre-Testing, Fabrication and Assembly	\$255,000	\$255,000
4	1	Phase 4	Network Integration and Infrastructure Deployment	\$185,000	\$185,000
5	1	Phase 5	Implementation, Installation, Performance Testing, Final Delivery, Docs, Inspection, Project Close-out, Acceptance	\$240,000	\$240,000
System Integration, Project Management Sub-total					\$1,055,000

Exhibit 6

QUARTERLY PROFILE-Media Center Television Station		
Description		Ext.
In Studio Cameras, Tripods, Teleprompter		\$425,600
Studio Control Room		\$207,396
Network Media Storage		\$176,000
Post Production	-30%	\$105,840
Field Equipment	-50%	\$57,300
Master Control Playback Facilities	-20%	\$257,858
Fiber Interconnects equip. for digital file transfer, storage, live broadcast support		\$253,000
Infrastructure Terminal Equipment	Factor Decrease	\$204,000
System Integration, Project Management Labor	Unit Cost	\$650,000
Building Costs - Class B Business Office Space 4,000 sq feet	\$151	\$756,690
Building Costs - Class A-1 Studio and Production 8,000 square feet	\$192	\$1,535,072
Building Costs - Class E Classrooms 1800 square feet	\$161	\$289,555
QUARTERLY PROFILE-Estimated Totals		\$4,918,312

MONTHLY PROFILE-Media Center Television Station		
Description		Ext.
In Studio Cameras, Tripods, Teleprompter		\$425,600
Studio Control Room		\$207,396
Network Media Storage		\$176,000
Post Production		\$151,200
Field Equipment		\$114,600
Master Control Playback Facilities		\$322,323
Fiber Interconnects equip. for digital file transfer, storage, live broadcast support		\$253,000
Infrastructure Terminal Equipment		\$204,000
Station Integration, Project Management Labor	Unit Cost	\$650,000
Building Costs - Class B Business Office Space 5,000 sq feet	\$151	\$756,690
Building Costs - Class A-1 Studio and Production 8,000 square feet	\$192	\$1,535,072
Building Costs - Class E Classrooms 1800 square feet	\$161	\$289,555
MONTHLY PROFILE-Estimated Totals		\$5,085,940

WEEKLY PROFILE-Media Center Television Station		
Description		Ext.
In Studio Cameras, Tripods, Teleprompter		\$425,600
Studio Control Room		\$207,396
Network Media Storage	Factor Increase	\$176,000
Post Production	60%	\$241,920
Field Equipment	125%	\$257,850
Master Control Playback Facilities	50%	\$483,485
Fiber Interconnects equip. for digital file transfer, storage, live broadcast support		\$253,000
Infrastructure Terminal Equipment		\$204,000
System Integration, Project Management Labor	Unit Cost	\$650,000
Building Costs - Class B Business Office Space 6,500 sq feet	\$151	\$983,697
Building Costs - Class A-1 Studio and Production 10,000 square feet	\$192	\$1,247,246
Building Costs - Class E Classrooms 1800 square feet	\$161	\$1,045,616
WEEKLY PROFILE-Estimated Totals		\$6,175,810

Media Center Complex Sites and Technology Costs	
Description	Ext.
Learning Center/ EOC Operations	\$135,300
Mobile Production Truck for remote location production	\$608,824
Community Theatre	\$2,286,272
Black Box Stage Equipment	\$713,852
Digital Signage/Public Information Displays	\$76,800
IT Networking Infrastructure	\$586,000
Development and Planning, System Integration, Project Management**	\$1,055,000
Estimated Totals	\$5,462,048

* Building costs based on 10% inflation using building valuation data square foot construction costs - Building Safety Journal 8/2005

**This figure does not include hours in rows 102-107