1.0 Infrastructure Report Supplement:

This report contains the infrastructure requirements for the electronic media systems for ten District Courtrooms and the Jury Assembly Room located in the John Joseph Moakley United States Courthouse, Boston, Massachusetts. This report is intended to provide the minimal requirements for infrastructure design to support the audio-visual system design(s) herein. These are requirements only and not a design; they are to be used by a qualified engineer to assist in his or her design of the courtroom technology infrastructure system(s). They are not construction documents and should not be directly used to install infrastructure. Where exact dimensions are not given, the scale of the Drawings are intended to be accurate enough for determining the location of equipment, junction boxes, outlet boxes, wireways, power panels, etc.

Coordinate final locations with the District Courts contracting officers technical representative, Chris Gross.

Room dimensions have been taken from available architectural drawings and/or field measurements and are not to be interpreted as "as-built" dimensions. All dimensions must be field verified and any deviations exceeding 152mm (6") shall be brought to the attention of the Contracting Officer.

All electrical outlets referenced on the attached drawings are to be installed under a seperate work order to be completed by the General Services administration and are provided for your reference only. Additionally, the referenced monitor stands and boxes for CR22 will be fabricated and installed through a seperate work order with also the General Services Administration. The VGA cables for CR22 should be pulled to the locations on SK AV100.

Fabricate and install in Courtrooms 1, 2, 4, 9, 10, 11, 12, 19, 21, and 22 cabling as shown on drawings GSA SK-AV100, GSA SK-AV101, GSA SK-AV102, and GSA SK-AV103.

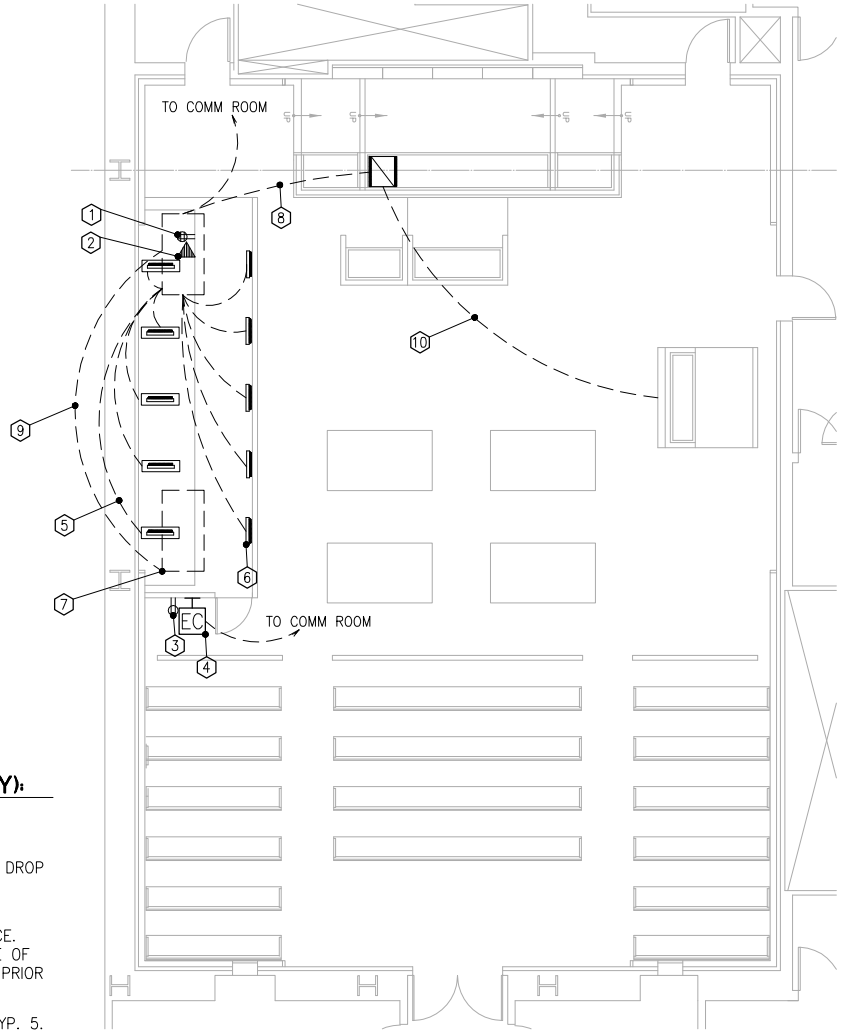
Provide all telecom-data cabling/faceplates, audio, and video cable as per drawings GSA SK-AV100, GSA SK-AV101, GSA SK-AV102, and GSA SK-AV103.

Include grommets in Jury box to provide access to pulled cables.

Use CR12 as basis of design for locations of where custom boxes and stands are to be installed.

Best and final offers are due to the contracting officer, Douglas Holmes, 1 courthouse Way, Suite 2300, Boston, MA 02210 by Noon on Friday, August 15, 2008. The submissions can be sent electronically via email at Douglas_Holmes@mad.uscourts.gov as long as an original signed by an authorized agent of your company is submitted by Tuesday, August 19, 2008.

Work is to commence as soon as possible after the award and should be completed October 31, 2008.



KEY NOTES:

1. PROVIDE ONE DEDICATED 20A POWER CIRCUIT WITH QUAD OUTLET IN CAVITY UNDER JURY BOX STEP.
2. PROVIDE ONE SINGLE GANG BACK BOX WITH FOUR (4) CAT 5e CABLES TO LOCAL TELECOM ROOM. CONNECT ALL FOUR (4) TO DATA SWITCH.
3. PROVIDE ONE FLUSH MOUNTED DUPLEX OUTLET IN JURY BOX RAIL.
4. PROVIDE ONE SINGLE GANG FLUSH MOUNTED BACK BOX WITH FOUR (4) CAT 5e CABLES TO LOCAL TELECOM ROOM. CONNECT ALL FOUR (4) CABLES TO DATA SWITCH.
5. PROVIDE ONE 1.5 INCH CONDUIT FROM EACH MONITOR LOCATION TO CAVITY UNDER JURY BOX STEP FOR VIDEO SIGNAL AND MONITOR POWER CABLING. PROVIDE RGBHV AND POWER CABLING TO EACH LOCATION. PROVIDE GROMMETTS AT EACH LOCATION FOR FUTURE ACCESS.
6. PROVIDE REMOVABLE STAND FOR MONITOR.
7. CUT HINGED ACCESS PANEL IN BACK ROW STEP. TYP. OF 2.
8. USE EXISTING CONDUITS AND/OR CABLE PATHWAYS TO INSTALL COURT-PROVIDED SPEAKER CABLE BETWEEN AUDIO EQUIPMENT RACK AND ACCESS PANEL CLOSEST TO RACK. PROVIDE 60" SERVICE LOOP ON BOTH ENDS. SUPPLEMENT AS NECESSARY COURT-PROVIDED CABLE WITH LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN.
9. INSTALL COURT-PROVIDED SPEAKER CABLE BETWEEN BETWEEN ACCESS PANELS IN JURY BOX FLOOR. PROVIDE 60" SERVICE LOOP ON BOTH ENDS. PROVIDE CABLE PATHWAY BETWEEN ACCESS PANELS AS NECESSARY. SUPPLEMENT AS NECESSARY COURT-PROVIDED CABLE WITH LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN.
10. INSTALL THE FOLLOWING COURT-PROVIDED CABLE BETWEEN THE AUDIO EQUIPMENT RACK AND THE REMOTE WITNESS BOX. PROVIDE 60" SERVICE LOOP ON EACH END. SUPPLEMENT THE COURT-PROVIDE CABLE WITH IDENTICAL NEW CABLE AS NECESSARY.
    - ONE (1) MIC/LINE CABLE (LIBERTY CABLE 22-2C-PSH-WHT OR EQUIVALENT BY BELDEN OR WEST PENN)
    - ONE (1) SPEAKER CABLE (LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN)

NOTE: Disregard notes 1,3, 6, 7 in their entirety above as this work will be performed by the General Services Administration. For Note 5, you are only asked to provide the video cabling to each location - not power or conduit.

LEGEND (THIS SHEET ONLY):

- QUAD OUTLET
- DUPLEX OUTLET
- DATA OUTLET – SEE NOTES FOR DROP QUANTITY AND BOX TYPE
- EXISTING AUDIO EQUIPMENT RACK LOCATION. SHOWN FOR REFERENCE. RACK MAY BE ON OPPOSITE SIDE OF BENCH IN SOME ROOMS. VERIFY PRIOR TO CONSTRUCTION.
- BACK ROW MONITOR LOCATION. TYP. 5. SHOWN FOR REFERENCE ONLY.
- FRONT ROW MONITOR LOCATION. TYP. 5. SHOWN FOR REFERENCE ONLY.
- – – – CONDUIT AND/OR CABLE PATH.

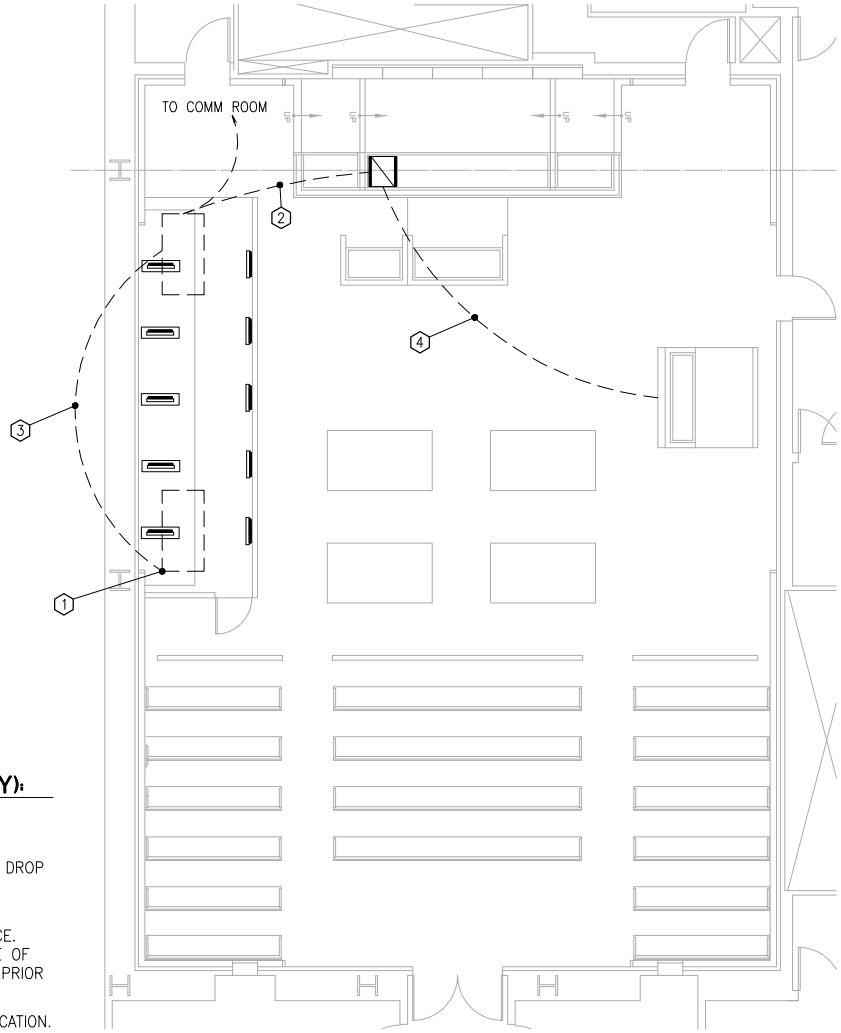
1 / AV100 **COURTROOM 22 FLOOR PLAN**
NO SCALE

TO: 08-NB3-125 N&B: 08N088

SCALE: NO SCALE
DATE: 7-14-2008

SK-AV100

COURTROOM 22 INFRASTRUCTURE PLAN
UNITED STATES DISTRICT COURT
BOSTON, MASSACHUSETTS



KEY NOTES:

1. VERIFY HINGED ACCESS IN JURY BOX FLOOR. CUT HINGED ACCESS PANEL WHERE NONE EXISTS. TYP. OF 2.
2. USE EXISTING CONDUITS AND/OR CABLE PATHWAYS TO INSTALL COURT-PROVIDED SPEAKER CABLE BETWEEN AUDIO EQUIPMENT RACK AND ACCESS PANEL CLOSEST TO RACK. PROVIDE 60" SERVICE LOOP ON BOTH ENDS. SUPPLEMENT COURT-PROVIDED CABLE AS NECESSARY WITH LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN.
3. INSTALL COURT-PROVIDED SPEAKER CABLE BETWEEN BETWEEN ACCESS PANELS IN JURY BOX FLOOR. PROVIDE 60" SERVICE LOOP ON BOTH ENDS. PROVIDE CABLE PATHWAY AS NECESSARY BETWEEN ACCESS PANELS. SUPPLEMENT COURT-PROVIDED CABLE AS NECESSARY WITH LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN.
4. INSTALL THE FOLLOWING COURT-PROVIDED CABLE BETWEEN THE AUDIO EQUIPMENT RACK AND THE REMOTE WITNESS BOX. PROVIDE 60" SERVICE LOOP ON EACH END. SUPPLEMENT THE COURT-PROVIDE CABLE WITH THE CABLE LISTED BELOW AS NECESSARY.
   - -ONE (1) MIC/LINE CABLE (LIBERTY CABLE 22-2C-PSH-WHT OR EQUIVALENT BY BELDEN OR WEST PENN)
   - -ONE (1) SPEAKER CABLE (LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN)

NOTE: Disregard note 1 above in its entirety; this work will be performed by the General Services Administration.

LEGEND (THIS SHEET ONLY):

- QUAD OUTLET
- DUPLEX OUTLET
- DATA OUTLET - SEE NOTES FOR DROP QUANTITY AND BOX TYPE
- EXISTING AUDIO EQUIPMENT RACK LOCATION. SHOWN FOR REFERENCE. RACK MAY BE ON OPPOSITE SIDE OF BENCH IN SOME ROOMS. VERIFY PRIOR TO CONSTRUCTION.
- EXISTING BACK ROW MONITOR LOCATION. SHOWN FOR REFERENCE ONLY.
- EXISTING FRONT ROW MONITOR LOCATION. SHOWN FOR REFERENCE ONLY.
- - - - CONDUIT AND/OR CABLE PATH.

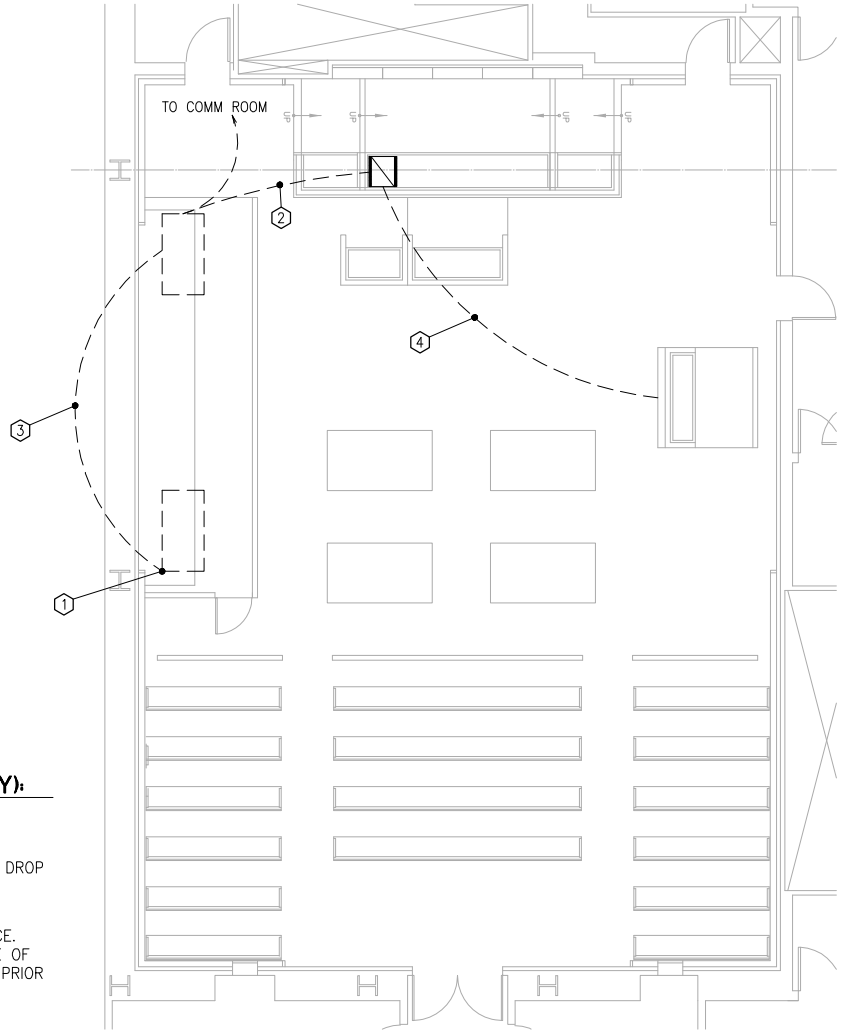
1 / AV101 **COURTROOM 1, 2, 9, 10, 11, 12, 19 FLOOR PLAN**
NO SCALE

TO: 08-NB3-125 N&B: 08N088

SCALE: NO SCALE
DATE: 7-14-2008

SK-AV101

COURTROOM INFRASTRUCTURE FLOOR PLAN
UNITED STATES DISTRICT COURT
BOSTON, MASSACHUSETTS



KEY NOTES:

1. CUT HINGED ACCESS PANEL IN TOP STEP OF JURY BOX. TYP. OF 2.
2. USE EXISTING CONDUITS AND/OR CABLE PATHWAYS TO INSTALL COURT-PROVIDED SPEAKER CABLE BETWEEN AUDIO EQUIPMENT RACK AND ACCESS PANEL CLOSEST TO RACK. PROVIDE 60" SERVICE LOOP ON BOTH ENDS. SUPPLEMENT AS NECESSARY COURT-PROVIDED CABLE WITH LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN.
3. INSTALL COURT-PROVIDED SPEAKER CABLE BETWEEN BETWEEN ACCESS PANELS IN JURY BOX FLOOR. PROVIDE 60" SERVICE LOOP ON BOTH ENDS. PROVIDE CABLE PATHWAY AS NECESSARY BETWEEN ACCESS PANELS. SUPPLEMENT AS NECESSARY COURT-PROVIDED CABLE WITH LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN.
4. INSTALL THE FOLLOWING COURT-PROVIDED CABLE BETWEEN THE AUDIO EQUIPMENT RACK AND THE REMOTE WITNESS BOX. PROVIDE 60" SERVICE LOOP ON EACH END. SUPPLEMENT THE COURT-PROVIDE CABLE WITH IDENTICAL NEW CABLE AS NECESSARY.
   - ONE (1) MIC/LINE CABLE (LIBERTY CABLE 22-2C-PSH-WHT OR EQUIVALENT BY BELDEN OR WEST PENN)
   - ONE (1) SPEAKER CABLE (LIBERTY CABLE 16-2C-P-WHT OR EQUIVALENT BY BELDEN OR WEST PENN)

NOTE: Disregard note 1 above in its entirety; this work will be performed by the General Services Administration.

LEGEND (THIS SHEET ONLY):

- QUAD OUTLET
- DUPLEX OUTLET
- DATA OUTLET – SEE NOTES FOR DROP QUANTITY AND BOX TYPE
- EXISTING AUDIO EQUIPMENT RACK LOCATION. SHOWN FOR REFERENCE. RACK MAY BE ON OPPOSITE SIDE OF BENCH IN SOME ROOMS. VERIFY PRIOR TO CONSTRUCTION.
- – – – CONDUIT AND/OR CABLE PATH.

1 / AV102 COURTROOM 4 & 21 FLOOR PLAN

NO SCALE

TO: 08-NB3-125 N&B: 08N088

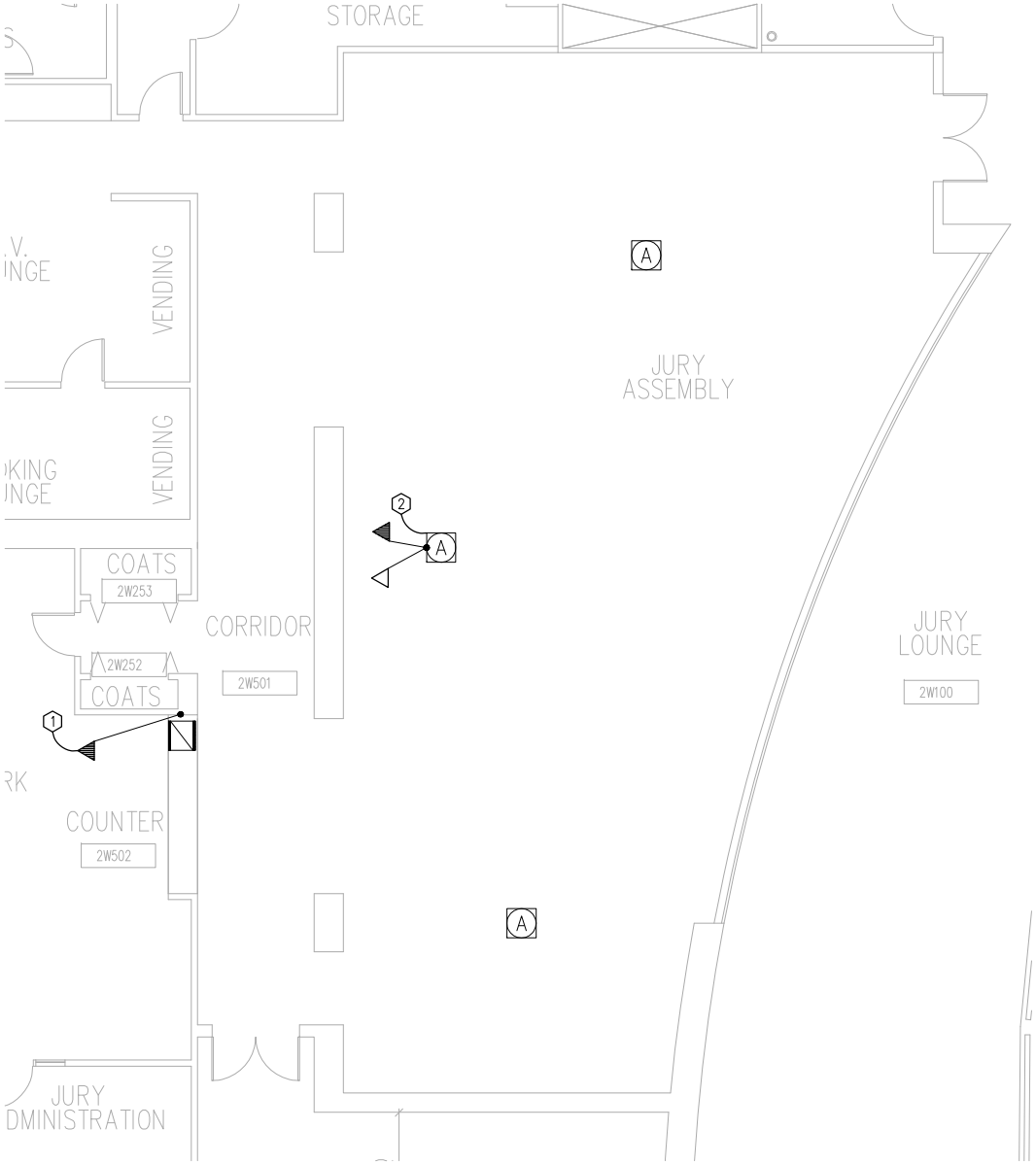
SCALE: NO SCALE
DATE: 7-14-2008

SK-AV102

COURTROOM INFRASTRUCTURE FLOOR PLAN
UNITED STATES DISTRICT COURT
BOSTON, MASSACHUSETTS

KEY NOTES:

1. PROVIDE SINGLE DATA RECEPTACLE IN CABINET ADJACENT TO RACK.
2. PROVIDE SINGLE DATA RECEPTACLE AND SINGLE VOICE RECEPTACLE IN EXISTING FLOOR BOX.



LEGEND (THIS SHEET ONLY):

- DATA OUTLET – SEE NOTES FOR DROP QUANTITY AND BOX TYPE
- VOICE OUTLET – SEE NOTES FOR DROP QUANTITY AND BOX TYPE
- EXISTING AUDIOVISUAL EQUIPMENT RACK LOCATION.
- (A) EXISTING AUDIOVISUAL FLOOR BOX LOCATION.

1/AV103 JURY ASSEMBLY ROOM FLOOR PLAN

NO SCALE

TO: 08-NB3-125 N&B: 08N088

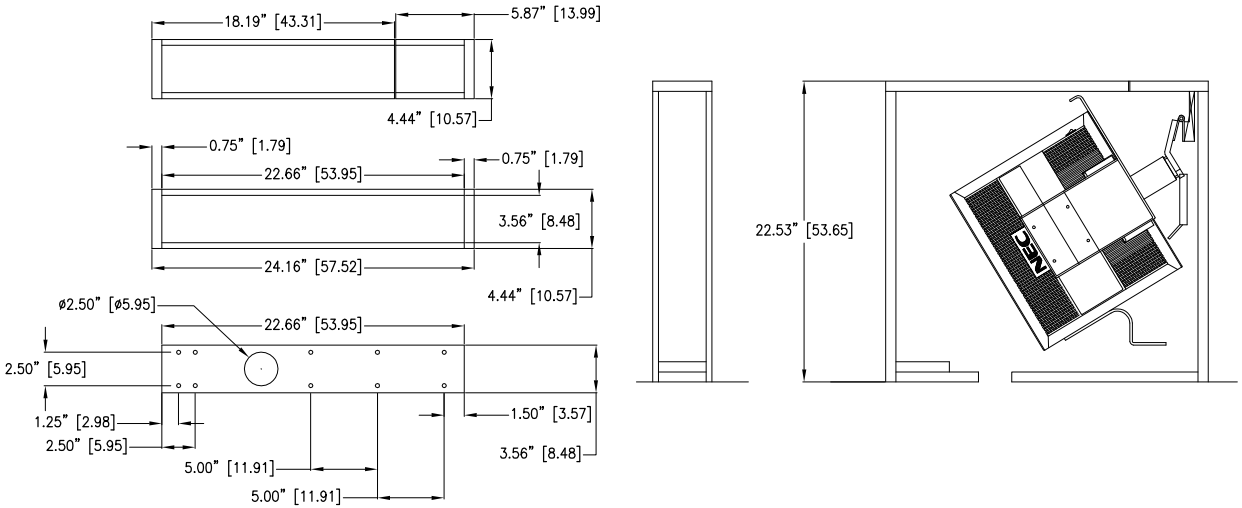
SCALE: NO SCALE
DATE: 7-14-2008

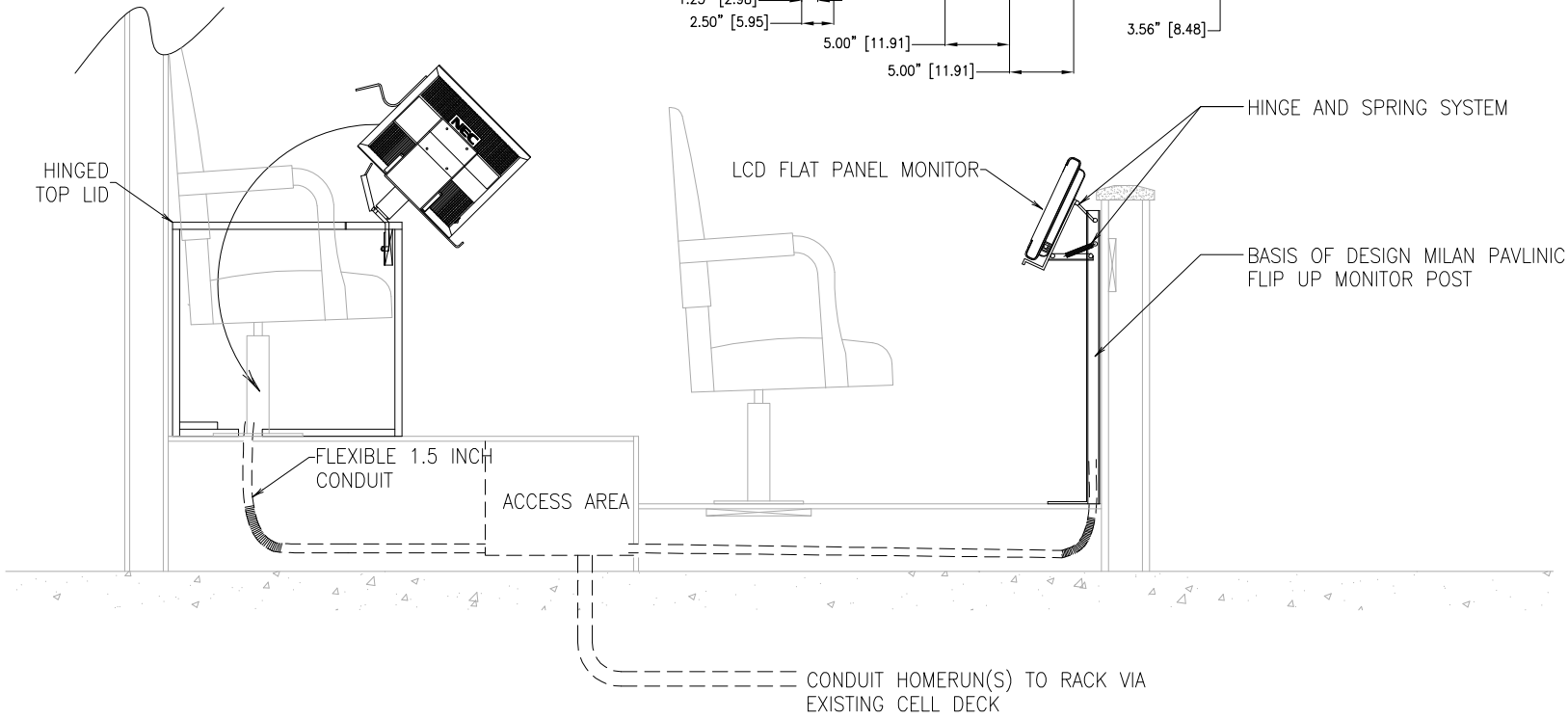
SK-AV103

JURY ASSEMBLY INFRASTRUCTURE FLOOR PLAN
UNITED STATES DISTRICT COURT
BOSTON, MASSACHUSETTS

NOTES: (THIS SHEET ONLY)

1. MILLWORK, MONITOR STANDS, AND MILLWORK BOXES ARE NIC.
2. PROVIDE SIGNAL AND LOW VOLTAGE POWER FROM AV ACCESS HATCH
3. COORDINATE FINISHES WITH THE COURT.





2 **JURY BOX DETAIL**
SK-AV303 NO SCALE

TO: 08-NB3-125 N&B: 08N088

SCALE: NO SCALE
DATE: 7-14-2008

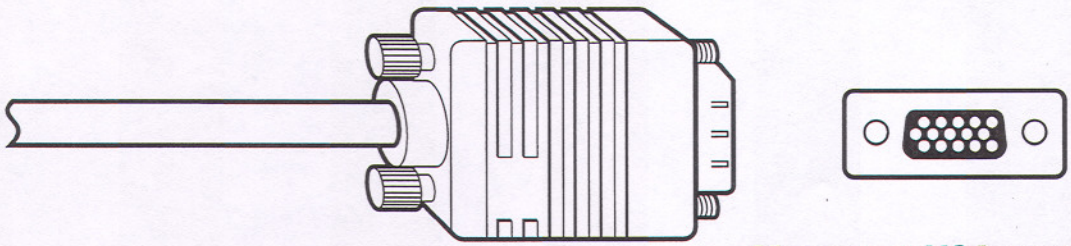
SK-AV200

JURY BOX DETAIL
UNITED STATES DISTRICT COURT
BOSTON, MASSACHUSETTS

BLACK BOX® NETWORK SERVICES

Black Box Corporation • 1000 Park Drive • Lawrence, PA 15055-1018 • Tech Support: 724-746-5500 • **www.blackbox.com** • **e-mail: info@blackbox.com**

VGA VIDEO CABLE



Move your VGA monitor up to 100 feet (30.5 m) from your CPU.

Key Features

- ***Connect monitors to splitters.***
- ***Run multiple CPUs from one monitor by linking them to a switch.***
- ***Triple shielded to extend signals.***
- ***Compatible with all VGA computers.***
- ***Features HD15 VGA connectors.***
- ***Meets the most rigorous VGA specs.***
- ***Molded hoods have thumbscrews.***
- ***NEC compliant.***
- ***Each coax wire has a separate drain wire.***

Because VGA video signals are analog signals, it's preferable to use a coaxial cable for the video lines for optimum performance. The coaxial cable provides the optimum impedance match of the video driver to cable at 75 ohms. Our Premium VGA Video Extension Cable is constructed with three 75-ohm mini coaxial cables plus seven 24-gauge conductors under either a PVC or plenum jacket.

The seven additional conductors provide support for all of the control leads. VGA cards typically provide three monitor ID bit leads, a horizontal sync, a vertical sync, and two ground leads. Our Premium VGA Video Extension Cable provides a unique conductor for each of these leads so that your expensive equipment will not be compromised. Newer multimedia workstations require and use all of the VGA control lines.

This cable is constructed with the finest materials available. The cable is UL® CL2 CMP and CSA FT4 listed for buildings' electric code requirements. The connectors are molded on for greater strength and durability. Each connector is 100% shielded for EMI/RFI protection. Thumbscrews are used for ease of connection.

Use the cable to put your monitor up to 100 feet (30.5 m) away. With a video splitter, you can put your monitor up to 250 feet (76.2 m) away from your CPU.

Use the VGA Video Cables with Ferrite Core for connecting your monitors to other video equipment for professional PC-based presentations. These cables are double shielded to extend monitor signals, and pins 9 and 15 are enabled for compliance with the Display Data Channel (DDC) standard.

Typical Applications

- Connect a remote monitor to a network server.
- Attach your monitors to splitters.
- Run multiple CPUs from one monitor via a switch.

Specifications

Conductors: Coax: (3) 75-ohm 28 AWG mini-coax; (7) 24 AWG standard; VGA: (7) 24 AWG, tinned copper

Hood Assembly: Molded plastic

Jacket: UL® CL2 CMP; CSA FT4

Shielding: Shield: Tinned copper braid; Inner tape: Aluminum and Mylar®; Outer braid: Tinned copper

Connectors: (2) HD15

Operating Temperature: -4 to +176°F (-20 to +80°C)

Ordering Information

ITEM	CODE
Premium VGA Video Extension Cable, HD15	
PVC, Straight Hoods	
Female/Female	
3-ft. (0.9-m)	EVNPS05-0003-FF
5-ft. (1.5-m)	EVNPS05-0005-FF
10-ft. (3-m)	EVNPS05-0010-FF
20-ft. (6.1-m)	EVNPS05-0020-FF
25-ft. (7.6-m)	EVNPS05-0025-FF
50-ft. (15.2-m)	EVNPS05-0050-FF
75-ft. (22.9-m)	EVNPS05-0075-FF
100-ft. (30.5-m)	EVNPS05-0100-FF
Custom Lengths	EVNPS05-FF
Male/Female	
3-ft. (0.9-m)	EVNPS05-0003-MF
5-ft. (1.5-m)	EVNPS05-0005-MF
10-ft. (3-m)	EVNPS05-0010-MF
20-ft. (6.1-m)	EVNPS05-0020-MF
25-ft. (7.6-m)	EVNPS05-0025-MF
50-ft. (15.2-m)	EVNPS05-0050-MF
75-ft. (22.9-m)	EVNPS05-0075-MF
100-ft. (30.5-m)	EVNPS05-0100-MF
150-ft. (45.7-m)	EVNPS05-0150-MF
200-ft. (60.9-m)	EVNPS05-0200-MF
300-ft. (91.4-m)	EVNPS05-0300-MF
400-ft. (121.9-m)	EVNPS05-0400-MF
500-ft. (152.4-m)	EVNPS05-0500-MF
Custom Lengths	EVNPS05-MF
Male/Male	
3-ft. (0.9-m)	EVNPS05-0003-MM
5-ft. (1.5-m)	EVNPS05-0005-MM
10-ft. (3-m)	EVNPS05-0010-MM
20-ft. (6.1-m)	EVNPS05-0020-MM
25-ft. (7.6-m)	EVNPS05-0025-MM
50-ft. (15.2-m)	EVNPS05-0050-MM
75-ft. (22.9-m)	EVNPS05-0075-MM
100-ft. (30.5-m)	EVNPS05-0100-MM
Custom Lengths	EVNPS05-MM
PVC, 90° Hoods	
Female/Female	
5-ft. (1.5-m)	EVNPS10-0005-FF
10-ft. (3-m)	EVNPS10-0010-FF
20-ft. (6.1-m)	EVNPS10-0020-FF
Custom Lengths	EVNPS10-FF
Male/Female	
5-ft. (1.5-m)	EVNPS10-0005-MF
10-ft. (3-m)	EVNPS10-0010-MF
20-ft. (6.1-m)	EVNPS10-0020-MF
Custom Lengths	EVNPS10-MF

Ordering Information

ITEM	CODE
Premium VGA Video Extension Cable, HD15	
PVC, 90° Hoods (continued)	
Male/Male	
5-ft. (1.5-m)	EVNPS10-0005-MM
10-ft. (3-m)	EVNPS10-0010-MM
20-ft. (6.1-m)	EVNPS10-0020-MM
Custom Lengths	EVNPS10-MM
Plenum, Straight Hoods	
Female/Female	
5-ft. (1.5-m)	EVNPS07-0005-FF
10-ft. (3-m)	EVNPS07-0010-FF
20-ft. (6.1-m)	EVNPS07-0020-FF
25-ft. (7.6-m)	EVNPS07-0025-FF
35-ft. (10.7-m)	EVNPS07-0035-FF
50-ft. (15.2-m)	EVNPS07-0050-FF
75-ft. (22.9-m)	EVNPS07-0075-FF
100-ft. (30.5-m)	EVNPS07-0100-FF
Male/Female	
5-ft. (1.5-m)	EVNPS07-0005-MF
10-ft. (3-m)	EVNPS07-0010-MF
20-ft. (6.1-m)	EVNPS07-0020-MF
25-ft. (7.6-m)	EVNPS07-0025-MF
35-ft. (10.7-m)	EVNPS07-0035-MF
50-ft. (15.2-m)	EVNPS07-0050-MF
75-ft. (22.9-m)	EVNPS07-0075-MF
100-ft. (30.5-m)	EVNPS07-0100-MF
Male/Male	
5-ft. (1.5-m)	EVNPS07-0005-MM
10-ft. (3-m)	EVNPS07-0010-MM
20-ft. (6.1-m)	EVNPS07-0020-MM
25-ft. (7.6-m)	EVNPS07-0025-MM
35-ft. (10.7-m)	EVNPS07-0035-MM
50-ft. (15.2-m)	EVNPS07-0050-MM
75-ft. (22.9-m)	EVNPS07-0075-MM
100-ft. (30.5-m)	EVNPS07-0100-MM
VGA Video Cables with Ferrite Core, HD15, PVC *(available in female/female [-FF], male/female [-MF], and male/male [-MM] versions)*	
3-ft. (0.9-m)	EVNPS06-0003-XX
5-ft. (1.5-m)	EVNPS06-0005-XX
10-ft. (3-m)	EVNPS06-0010-XX
20-ft. (6.1-m)	EVNPS06-0020-XX
25-ft. (7.6-m)	EVNPS06-0025-XX
50-ft. (15.2-m)	EVNPS06-0050-XX
75-ft. (22.9-m)	EVNPS06-0075-XX
100-ft. (30.5-m)	EVNPS06-0100-XX
Custom Lengths	EVNPS06-XX

Moakley Building
Voice/Data Cabling Requirements
for the U.S. Courts

- The courts require CAT5 UTP plenum installed for all voice and data cabling.
- Workstation terminations will require that the contractor provide Lucent RJ-45 wall/floor jacks with associated mounting items/hardware.
- The data closet termination will also require a EIA/TIA-568B standard wiring termination on our existing category 5 patch panel. The data panel is rack mounted in the data closet. The voice panel is wall mounted in the same closet.
- The installation practices must meet CAT5 standards as well (i.e. the pairs should never be untwisted more than ½ inch from the point of termination). Termination of the cable must comply with the TIA/EIA-568-B standard, which can be purchased from the web site URL listed below:

  http://www.tiaonline.org/standards/search_results2.cfm?document_no=TIA/EIA-568-B

- We request that all data jacks are clearly labeled as outlined later in this document
- We request that all data jacks are within 4 feet of a grounded (orange) electrical outlet.

Closet layout/cable path requirements:
The building is split into quarters for cabling:

EE	=	East/East; everything East of the middle elevators on the East wing
EC	=	East/Center; everything West of the middle elevators on the East wing to mid-rotunda
WW	=	West West; everything West of the middle elevators on the West wing
WC	=	West Center; everything East of the middle elevators on the West wing to mid-rotunda

All cable pulled from the jack location to the closet should be pulled to the data closet within it's own quarter of the building.

All jacks be installed that are not on the same floor as the data closet, should be pulled to the floor *above that floor*. (Ex: cabled pulled from the 3rd floor should be pulled to 4th floor)

There should be 2 labels on every jack. One label is for the jack itself (A below) and the other label is the electrical room number (see chart 1 below for reference) of the data/voice closet where the jack is terminated (B below).

Face plate and jack labeling:

A. Floor number of jack + quarter of building + next available jack number
So, a jack on the 2nd floor East/East, jack number 78 is:
2 + EE + 078 and should be labeled as “2EE078" on the jack

B. The electrical closet number of the data/voice closet to which the cabling has been pulled (see chart below)

Chart 1:

Electrical Room Number (Jack label)	Signage Room Number
1WC382	1-315
1WW513	1-258
2EC213	2-506
2EE612	2-622
2WC205	2-301
2WW331	2-222
4EC211	4-603
4EE280	4-611
4WC215	4-321
4WW281	4-307
6EC211	6-603
6EE230	6-611
6WC215	6-321
6WW231	6-307
8EC211	8-603
8EE230	8-611
8WC215	8-311
8WW231	8-307
9EC111	9-606
9EE245	9-645
9WC111	9-409

The RJ45 adaptors on the face plate need to be color coded as follows:

Orange	DATA primary
Blue	DATA secondary
Ivory	VOICE primary
Gray	VOICE secondary

See examples below:

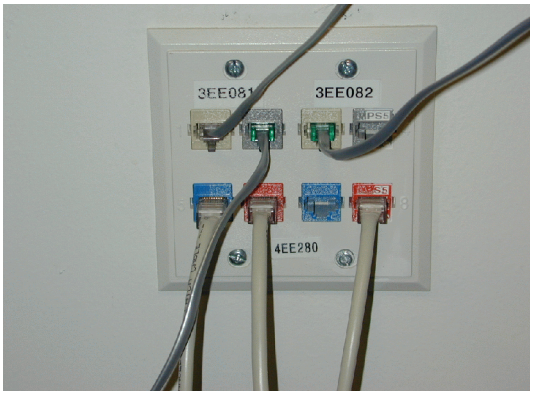


Figure 1

Figure 2

The IT Department and Telecommunications staff of the court unit (COA, MAD or MAP) occupying the space should determine the number and placement of jacks/cables needed in the space.

At minimum, 2 UTP CAT5 cables should be pulled per jack. If only 2 cables are used, orange and ivory should be used on the RJ45s at the jack. If 4 UTP CAT5 cables are pulled, orange, blue, ivory and gray should be used.

Labels on the jack should include the next available jack number as indicated on the patch panel in the appropriate closet. If you need help determining this, please contact Heather Restifo or Dennis Helleur, in the Office of the Circuit Executive, at (617)748-4590.

Modular Furniture:
The Court requires that all voice/data cabling be installed in any modular furniture and terminated on the furniture in the same fashion as described above for wall jacks. Voice and data cabling should be run in a separate furniture conduit from the electrical wiring.

Courtrooms:
The jacks inside the activation kits in the courtrooms follow the same color coding as described above. However, only the ivory jack is used for voice. The rest are used for data. Unlike the other building cabling, the gray jack is punched down on the data patch panel rather than the voice patch panel in the closet. It was believed during construction that the data requirements in the courtroom would be much higher than the voice needs at every location.

Patch panel and voice punch down labeling:
DATA PATCH PANELS:
Orange jacks at the wall should be terminated on the patch panel with orange labels
Blue jacks at the wall should be terminated on the patch panel with blue labels

- If the patch panel is not already labeled, it should be labeled using the appropriate color and jack number (which should be the last number on the panel)
- If the blue jack is not used, the cable vendor must still label it on the patch panel as an empty, but installed, jack
- If no data cabling is installed (voice only), the data jacks must still be labeled on the data patch panel with the corresponding jack number so that the jack number appears on the panel as "taken" and ready for future use. This will keep from the voice and data jack numbers from getting out of synch with each other.

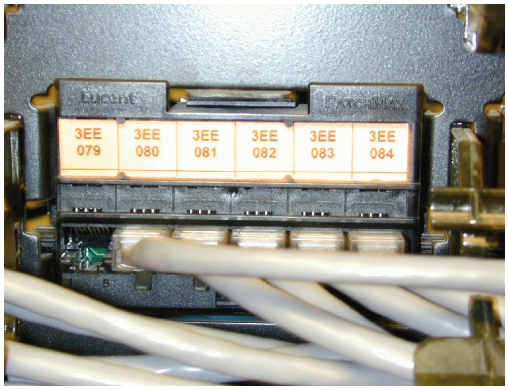


Figure 3

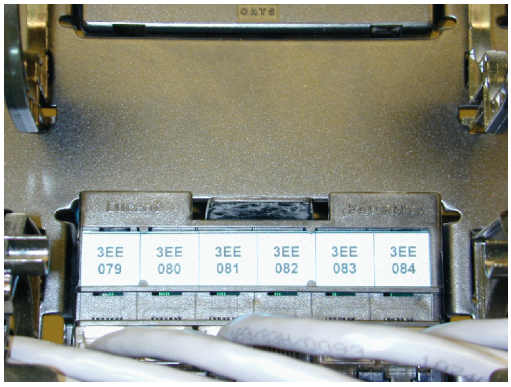


Figure 4

VOICE PATCH PANELS:
Ivory jacks at the wall should be terminated on the 110 block with ivory labels
Gray jacks at the wall should be terminated on the 110 block with gray labels

- If the patch panel is not already labeled, it should be labeled using the appropriate color and jack number (which should be the last number on the panel)

· If the gray jack is not used, you must still label it on the patch panel as an installed jack
· If no voice cabling is installed (data only), the jack number must still be labeled on the voice 110 block with the corresponding jack number so that the jack number appears on the panel as “taken” and ready for future use. This will keep from the voice and data jack numbers from getting out of synch with each other.

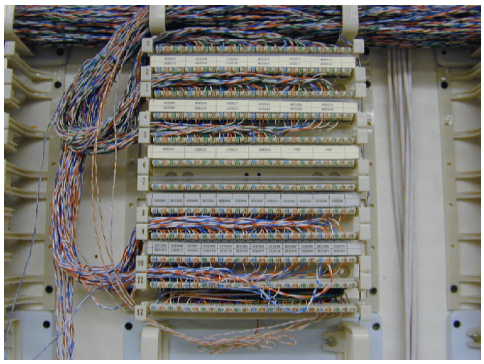


Figure 5

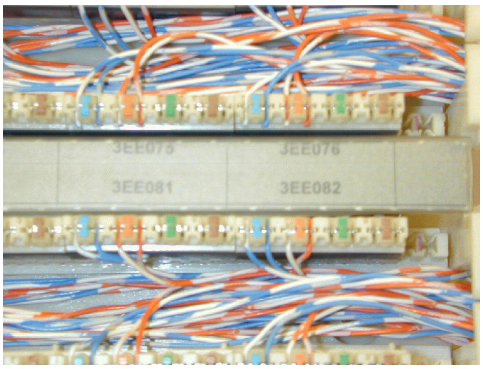


Figure 6

For every additional voice cable installed, one CAT5 UTP cable needs to be pulled vertically from the voice 110 block in the closet to the Main Distribution Frame in the courthouse basement. The vertical cable needs to be punched down on the 110 block in the basement and labeled with the jack number *exactly as labeled in the voice closet from which it was pulled (as shown in Figures 5 and 6 above).*

Test results:
Upon completion, we request a copy of the CAT5 testing results (electronic or paper), where:

a) Attenuation should be limited to 24dB according to the ANSI/TIA/EIA-568-B standards for a 100MHz signal
b) Near-end crosstalk (NEXT) should be limited to 27.1dB according to the ANSI/TIA/EIA-568-B standards for a 100MHz signal. Note: The vendor should avoid untwisting of pairs, cable jacket removal, excessive bending radius, fluorescent lights and motors in order to avoid near end crosstalk.

Vendors frequently used by the Court in the past are:

Company: Spectrum Cable	Contact: Randy Silva	Phone: 617-522-8800
Company: Brawley Assoc.	Contact: Hank Brawley	Phone: N/A