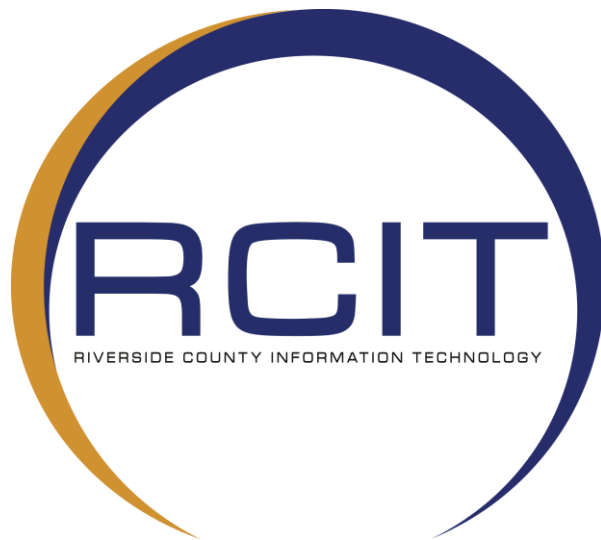


**RIVERSIDE COUNTY INFORMATION TECHNOLOGY  
Detailed Scope of Work**

**Telecommunications Structured Cabling Project**

**DCSS Campus Soundmasking Project  
2001, 2041, 2081 Iowa Ave.  
Riverside, CA 92507**



## Detailed Scope of Work

**General Information:** The general scope of this project includes the installation of a telecommunications audiovisual soundmasking solution at 2001, 2041 & 2081 Iowa Avenue Riverside, CA 92507. The project shall consist of the provision of all necessary Lencore equipment (provided by the County) and labor required for the complete execution of the Soundmasking system and related work for this project. As required by the schedules and keynotes on the drawings.

All work must adhere to all Riverside County Information Technology (RCIT) specifications and standards. It is the Contractor's responsibility to ensure all labor and materials needed to deliver a complete, fully functional system that complies with all applicable codes, industry standards and industry best practices are accounted for in the cost proposal.

Other trades may be working in the facility concurrently, and it is the Contractor's Superintendent/Foreman responsibility to coordinate work with other trades during this project to prevent conflicts and to adhere to the construction schedule. All Contractor personnel performing work associated with this project shall wear shirts and/or badges clearly identifying their company.

The Contractor shall provide safety equipment to each employee to be used as appropriate or required for the work. (e.g., eye protection, sound suppressors, hard hats, gloves, respirators, etc., as required).

### **The project will in general include the following:**

**2001, 2041 and 2081 Iowa Ave.** This specification includes all components required for a fully functional SoundMasking System for the purpose of increased speech privacy and freedom from distraction.

#### **2001 Iowa Ave First Floor:**

- Install (1) Lencore G62471-EX IP Data Bridge Receiver
- Install (1) Lencore G1525 1RU I.NET Quad OP
- Install (1) Lencore G21 Data Terminator
- Install (48) Lencore G545-U-I.net Ceiling Speaker
- Configure Lencore speakers into (9) Zones per drawing.

#### **2001 Iowa Ave Second Floor:**

- Install (1) Lencore G1525 1RU I.NET Quad OP.
- Install (98) Lencore G545-U-I.net Ceiling Speaker
- Configure Lencore speakers into (16) Zones per drawing.

#### **2041 Iowa Ave First Floor:**

- Install (1) Lencore G8350 iNet Headend Rack Unit.
- Install (1) Lencore G1505 iNet MPI2 Music Page Interface.
- Install (1) Lencore G21 Data Terminator.
- Install (1) Lencore G62470 IN IP receiver/transmitter w/enclosure.
- Install (1) Lencore G1525 iNet Quad OP 1RU.
- Provide and install (1) Cat 5e and (1) 16/2 between G8350 and first G1525.
- Provide and install (1) Cat 5e and (1) 16/2 between each G1525 in each building per drawing.
- Install patch cords from network switch to Lencore G62471 IP Bridge (Transmitter or Receiver) and to first G1525 in each building. Coordinate with RCIT for IP addresses. Installer to provide power cable for the G62471 at the appropriate length.
- Install patch cords from Leviton QuickPort patch panel to corresponding G1525 channel port per drawing. Patch panel port shall be labeled with OP # and channel designation (example 1-A, 1-B, 1-C) as shown on drawing.
- Install (62) Lencore G545 U iNet Ceiling speaker.
- Configure Lencore speakers into (13) zones per drawing.

# Detailed Scope of Work

## 2041 Iowa Ave Second Floor:

- Install (1) Lencore G1525 1RU I.NET Quad OP.
- Install (67) Lencore G545-U-I.net Ceiling Speaker.
- Configure Lencore speakers into (13) zones per drawing.

## 2081 Iowa Ave First Floor:

- Install (1) Lencore G62471-EX IP Data Bridge Receiver
- Install (1) Lencore G1525 1RU I.NET Quad OP
- Install (1) Lencore G21 Data Terminator
- Install (86) Lencore G545-U-I.net Ceiling Speaker
- Configure Lencore speakers into (13) Zones per drawing.

## 2081 Iowa Ave Second Floor:

- Install (1) Lencore G1525 1RU I.NET Quad OP.
- Install (73) Lencore G545-U-I.net Ceiling Speaker.
- Configure Lencore speakers into (16) zones per drawing.

## 1. Scope of Work:

### 1.1. 2001 Iowa Ave First Floor TR1A:

#### 1.1.1. SM Cabling:

- 1.1.1.1. Provide and install (1) White Cat5e UTP Berk-Tek plenum rated cable from QuickPort panel located in TR 1A to first speaker of each zone.
  - 1.1.1.1.1. Provide and install White Cat5e UTP Berk-Tek plenum rated cable from speaker to speaker in each zone (Daisy Chain) .
  - 1.1.1.1.2. Terminate all speaker-to-speaker cable ends using standard RJ45 modular connectors.
  - 1.1.1.1.3. Provide and install (9) White Leviton Extreme Cat5E inserts.
  - 1.1.1.1.4. In the telecom room, the jack inserts will be housed in a Leviton QuickPort patch panel dedicated for A/V.
  - 1.1.1.1.5. Provide and install (1) Cat 5e and (1) 16/2 between each G1525 in each building per drawing.
  - 1.1.1.1.6. Install patch cords from Leviton QuickPort patch panel to corresponding G1525 channel port per drawing. Patch panel port shall be labeled with OP # and channel designation (example 1-A, 1-B, 1-C) as shown on drawing.

#### 1.1.2. Patch Cords:

- 1.1.2.1. Provide **(9)** 7' White Category 5e patch cords.

### 1.2. 2001 Iowa Ave Second Floor TR 2A:

#### 1.2.1. SM Cabling:

- 1.2.1.1. Provide and install (1) White Cat5e UTP Berk-Tek plenum rated cable from QuickPort panel located in TR 2A to first speaker of each zone.
  - 1.2.1.1.1. Provide and install White Cat5e UTP Berk-Tek plenum rated cable from speaker to speaker in each zone (Daisy Chain) .
  - 1.2.1.1.2. Terminate all speaker-to-speaker cable ends using standard RJ45 modular connectors.
  - 1.2.1.1.3. Provide and install (16) White Leviton Extreme Cat5E inserts.
  - 1.2.1.1.4. In the telecom room, the jack inserts will be housed in a Leviton QuickPort patch panel dedicated for A/V.

#### 1.2.2. Patch Cords:

- 1.2.2.1. Provide **(16)** 7' yellow Category 5e patch cords.

## Detailed Scope of Work

### **1.3. 2041 Iowa Ave First Floor TR1A:**

#### **1.3.1. SM Cabling**

- 1.3.1.1. Provide and install (1) White Cat5e UTP Berk-Tek plenum rated cable from QuickPort panel located in TR 1A to first speaker of each zone.
  - 1.3.1.1.1. Provide and install White Cat5e UTP Berk-Tek plenum rated cable from speaker to speaker in each zone (Daisy Chain) .
  - 1.3.1.1.2. Terminate all speaker-to-speaker cable ends using standard RJ45 modular connectors.
  - 1.3.1.1.3. Provide and install (13) White Leviton Extreme Cat5E inserts.
  - 1.3.1.1.4. In the telecom room, the jack inserts will be housed in a Leviton QuickPort patch panel dedicated for A/V.

#### **1.3.2. Patch Cords:**

- 1.3.2.1. Provide **(13)** 7' White Category 5e patch cords.

### **1.4. 2041 Iowa Ave Second Floor TR2A:**

#### **1.4.1. SM Cabling**

- 1.4.1.1. Provide and install (1) White Cat5e UTP Berk-Tek plenum rated cable from QuickPort panel located in TR 2A to first speaker of each zone.
  - 1.4.1.1.1. Provide and install White Cat5e UTP Berk-Tek plenum rated cable from speaker to speaker in each zone (Daisy Chain) .
  - 1.4.1.1.2. Terminate all speaker-to-speaker cable ends using standard RJ45 modular connectors.
  - 1.4.1.1.3. Provide and install (13) White Leviton Extreme Cat5E inserts.
  - 1.4.1.1.4. In the telecom room, the jack inserts will be housed in a Leviton QuickPort patch panel dedicated for A/V.
  - 1.4.1.1.5. Provide and install (1) Cat 5e and (1) 16/2 between G8350 and first G1525.
  - 1.4.1.1.6. Provide and install (1) Cat 5e and (1) 16/2 between each G1525 in each building per drawing.
  - 1.4.1.1.7. Install patch cords from Leviton QuickPort patch panel to corresponding G1525 channel port per drawing. Patch panel port shall be labeled with OP # and channel designation (example 1-A, 1-B, 1-C) as shown on drawing.
  - 1.4.1.1.8. Install patch cords from network switch to Lencore G62471 IP Bridge (Transmitter or Receiver) and to first G1525 in each building. Coordinate with RCIT for IP addresses. Installer to provide power cable for the G62471 at the appropriate length.

#### **1.4.2. Patch Cords:**

- 1.4.2.1. Provide **(13)** 7' White Category 5e patch cords.

### **1.5. 2081 Iowa Ave First Floor TR1A:**

#### **1.5.1. SM Cabling:**

- 1.5.1.1. Provide and install (1) White Cat5e UTP Berk-Tek plenum rated cable from QuickPort panel located in TR 1A to first speaker of each zone.
  - 1.5.1.1.1. Provide and install White Cat5e UTP Berk-Tek plenum rated cable from speaker to speaker in each zone (Daisy Chain) .
  - 1.5.1.1.2. Terminate all speaker-to-speaker cable ends using standard RJ45 modular connectors.
  - 1.5.1.1.3. Provide and install (9) White Leviton Extreme Cat5E inserts.
  - 1.5.1.1.4. In the telecom room, the jack inserts will be housed in a Leviton QuickPort patch panel dedicated for A/V.

## Detailed Scope of Work

### **1.5.2. Patch Cords:**

1.5.3. Provide **(16)** 7' White Category 5e patch cords.

### **1.6. 2081 Iowa Ave Second Floor TR 2A:**

#### **1.6.1. SM Cabling:**

1.6.1.1. Provide and install (1) White Cat5e UTP Berk-Tek plenum rated cable from QuickPort panel located in TR 2A to first speaker of each zone.

1.6.1.1.1. Provide and install White Cat5e UTP Berk-Tek plenum rated cable from speaker to speaker in each zone (Daisy Chain) .

1.6.1.1.2. Terminate all speaker-to-speaker cable ends using standard RJ45 modular connectors.

1.6.1.1.3. Provide and install (16) White Leviton Extreme Cat5E inserts.

1.6.1.1.4. In the telecom room, the jack inserts will be housed in a Leviton QuickPort patch panel dedicated for A/V.

1.6.1.1.5. Provide and install (1) Cat 5e and (1) 16/2 between each G1525 in each building per drawing.

1.6.1.1.6. Provide and install (1) Cat 5e and (1) 16/2 between each G1525 in each building per drawing.

#### **1.6.2. Patch Cords:**

Provide **(16)** 7' White Category 5e patch cords.

## **2. SoundMasking Systems Hardware:**

### **2.1. 2001 Iowa Ave First Floor**

2.1.1.1.1. Install (1) Lencore G62471-EX IP Data Bridge Receiver

2.1.1.1.2. Install (1) Lencore G1525 1RU I.NET Quad OP

2.1.1.1.3. Install (1) Lencore G21 Data Terminator

2.1.1.1.4. Install (48) Lencore G545-U-I.net Ceiling Speaker

2.1.1.1.5. Configure Lencore speakers into (9) zones per drawing.

### **2.2. 2001 Iowa Ave Second Floor**

2.2.1.1.1. Install (1) Lencore G1525 1RU I.NET Quad OP.

2.2.1.1.2. Install (96) Lencore G545-U-I.net Ceiling Speaker

2.2.1.1.3. Configure Lencore speakers into (16) Zones per drawing.

### **2.3. 2041 Iowa Ave First Floor**

2.3.1.1.1. Install (1) Lencore G8350 iNet Headend Rack Unit.

2.3.1.1.2. Install (1) Lencore G1505 iNet MPI2 Music Page Interface.

2.3.1.1.3. Install (1) Lencore G21 Data Terminator.

2.3.1.1.4. Install (1) Lencore G62470 IN IP receiver/transmitter w/enclosure.

2.3.1.1.5. Install (1) Lencore G1525 iNet Quad OP 1RU.

2.3.1.1.6. Install (62) Lencore G545 U iNet Ceiling speaker.

2.3.1.1.8. Configure Lencore speakers into (13) zones per drawing.

### **2.4. 2041 Iowa Ave Second Floor**

2.4.1.1.1. Install (1) Lencore G1525 1RU I.NET Quad OP.

2.4.1.1.2. Install (67) Lencore G545-U-I.net Ceiling Speaker.

2.4.1.1.3. Configure Lencore speakers into (13) zones per drawing.

### **2.5. 2081 Iowa Ave First Floor**

2.5.1.1.1. Install (1) Lencore G62471-EX IP Data Bridge Receiver

2.5.1.1.2. Install (1) Lencore G1525 1RU I.NET Quad OP

2.5.1.1.3. Install (1) Lencore G21 Data Terminator

2.5.1.1.4. Install (86) Lencore G545-U-I.net Ceiling Speaker

2.5.1.1.5. Configure Lencore speakers into (13) Zones per drawing.

## Detailed Scope of Work

### 2.6. **2081 Iowa Ave Second Floor**

- 2.6.1.1.1. Install (1) Lencore G1525 1RU I.NET Quad OP.
- 2.6.1.1.2. Install (73) Lencore G545-U-I.net Ceiling Speaker.
- 2.6.1.1.3. Configure Lencore speakers into (16) zones per drawing.

### 3. **Miscellaneous:**

#### 3.1.1. **Pathways:**

- 3.1.1.1. Route cables through existing pathways entering the Telecommunications rooms.  
No soundmasking cables to run between floors.

#### 3.2. **Equipment installation:**

- 3.2.1.1. All Lencore equipment will be rack mounted in the perspective Telecommunications rooms per floor with the exceptions of the Speakers.

#### 3.3. **Tuning:**

- 3.3.1. All testing, system tuning and commissioning must be signed off by the Lencore engineer.

#### 3.4. **Suspension Hardware:**

- 3.4.1.1. It is the responsibility of the awarded cabling contractor to provide all P-rod, stringers, J hooks and hardware necessary to properly support and route the communications cables in the plenum and telecom spaces.

#### 3.5. **Firestopping:**

- 3.5.1.1. It is the responsibility of the awarded cabling contractor to provide firestop to all penetrations on fire-rated walls and floors using a UL approved system.

#### 3.6. **Contingency:**

- 3.6.1.1. Include a project contingency equivalent to 10% of your total estimated labor and materials cost.

End of Scope of Work