



**LANCASTER  
COUNTY**

A rich history. An inspired future.

Memo: Lancaster County RFP No. 400200116 [Detention Center Cameras]  
From: Cathy McDaniel, Procurement Director  
Subject: Addendum No. 2  
Date: January 21, 2020

Due to scheduling issues, the dates for the Detention Center Camera Replacement Proposal Opening has been revised. The new dates are as follows:

SUBMIT OFFER: TUES January 28, 2020 3:30 PM

The meeting location will remain the same.

The following questions were answered during the inquiry period: **See Attached**

Please note these changes and contact me at [cdmcdaniel@lancastersc.net](mailto:cdmcdaniel@lancastersc.net) if you have any questions.

Best Regards,

Cathy McDaniel  
Procurement Director  
Lancaster County, SC

1. Can the County of Lancaster provide a better version of the detention center drawing?
  - a. If alternate drawings are not available, then an original clean version of the existing drawing could help.

No further detailed drawings available; please see cleaned floor plan and floor plan with estimated dimensions provided with Addendum #3.

2. What functions is the current PLC/HMI providing the detention center?
  - a. Does it create an acknowledgement or alert of an opened door?
  - b. Does it create an acknowledgement or alert of a closed door?
  - c. Does a door need to be released from the PLC/HMI screen for the key to unlock a door?
  - d. Does it provide any additional alerts to the PLC/HMI screen beside the ones listed?

The existing PLC/HMI generates notifications under the following situations:

- The existing system is designed so that only a single door within the sally port area, located at the rear of the correctional facility, may be unlocked at a time – if a staff member attempts to unlock door #2 while door #1 remains unlocked, the HMI/PLC offers a notification and a prompt to override, allowing both doors to be unlocked together.
- The existing system creates an unauthorized access alert if a key is used to open a door or a door is otherwise not open via the HMI/PLC control station.

No hold open notifications are provided by the current system.

As shown in attachment C, the HMI's door lock icon changes from red and unlocked to grey and locked depending upon the status of individual doors.

3. Can the County of Lancaster provide a drawing of all existing cameras and locations?
  - a. During the walk through, we were not able to see every space and every location to take an accurate account of all existing equipment.

This information is available in Attachment A.

4. Can the County of Lancaster provide the number of cameras currently working and connected to the existing VMS?

Thirty-nine (39) cameras are currently connected to the existing VMS; all cameras are in working condition, with the exception of three exterior PTZ cameras, all of which continue to show footage, but are no longer capable of manual movement.

5. Can the County of Lancaster provide a drawing that shows only the new cameras being added to the detention facility that would not be replacing an existing camera?
  - a. During the walk we were not able to see every space and every location to take an accurate account of all existing equipment.

This information may be obtained by comparing Attachment C's marked camera locations to Attachment A's marked camera locations; total device counts are also provided within the RFP.

6. Can the County of Lancaster provide a drawing of all existing intercoms locations?
  - a. During the walk through, we were not able to see every space and every location to take an accurate account of all existing equipment.

This information is available in Attachment C – all intercoms are marked /C.

7. Can the County of Lancaster provide a drawing of all new intercoms locations that are not replacing an existing intercom?
  - a. During the walk through, we were not able to see every space and every location to take an accurate account of all existing equipment.

This information may be obtained by comparing Attachment C's marked intercom locations to Attachment B's marked intercom locations; total device counts are also provided within the RFP.

8. Can the County of Lancaster provide a drawing for the current location for speakers and microphones?
  - a. During the walk through, we were not able to see every space and every location to take an accurate account of all existing equipment.

This information is available in Attachment C – all speakers are marked S. No standalone microphones are currently in use; all of the facility's twenty-five (25) existing speakers are bi-directional.

9. Can the County of Lancaster provide a drawing for all new speakers and microphones?
  - a. During the walk through, we were not able to see every space and every location to take an accurate account of all existing equipment.

This information may be obtained by comparing Attachment C's marked speaker locations to Attachment B's marked speaker locations; total device counts are also provided within the RFP.

10. Can the County of Lancaster provide any current programming information to the PLC/HMI?

No additional programming information available; please see additional schematic attachments provided in Addendum #3.

11. Is there an ability to have remote access for HMI/PLC/VMS programming changes?

No remote access is currently provided for the support of the existing HMI, PLC or VMS component.

Lancaster County is willing to discuss the logistics and requirements surrounding remote access with the awarded Vendor, but reserves the right to decline such a request.

12. The County of Lancaster is asking for an unlimited number of changes to be included at no additional costs for a period of 1 year. Can this be limited in scope?
- The unlimited changes cannot be quantified.
  - Is there a standard of expectation here that can be defined?

This requirement is primarily geared toward visual and operational changes, e.g., the color, text or overall look of a button, the positioning of an icon, the type, frequency or addition of triggers and notifications, etc. One of the principal goals of this project is to provide correctional staff with a system that satisfies their operational requirements; while Lancaster County's correctional staff are familiar with the shortcomings and limitations of the existing, antiquated system, they are not familiar with the capabilities of a modern system. This requirement is included to provide correctional staff with the time required to become acquainted and familiar with a modern system; the required one-year (1) period is sufficient for correctional staff to become fully accustomed to the new system. This project will result in a major upgrade for correctional staff and will significantly change their existing workflows, day-to-day procedures overall methods of conducting operations. This requirement is geared toward safeguarding correctional staff against any programming requirements that may have been initially overlooked due to unfamiliarity with the capabilities of a modern system.

There is no expectation that this requirement covers additional integrations with any systems that are outside of the scope of this project; expectations are limited to video surveillance, access or door control and intercoms or speakers as outlined within the RFP.

13. At what voltage does the locking hardware devices operate at?

Unable to answer; please see additional schematic attachments provided in Addendum #3.

14. What is specifically monitored on the locking hardware?

Unclear regarding this question's focus; doors are not monitored for forced or held open events.

15. Can the County of Lancaster provide the model numbers on all locking door hardware?

No model information available for door hardware.

16. Is there more information being provided by the PLC/HMI than if a door is open or closed?

Please see response to question #2.

17. Is there a timing sequence between locking and unlocking the doors between the PLC/HMI?

No.

18. How many status switches are being used on the doors at the detention center?

Unable to answer; please see additional schematic attachments provided in Addendum #3.

19. Can the county provide a copy of the PLC/HMI program files?

Unable to provide existing PLC/HMI programming files.

20. How does the detention center intend to account for tools and equipment brought into the detention center?

Tools and equipment will not be inventoried or catalogued as installation technicians and other Vendor personnel visit the correctional facility; given the correctional facility environment, all Vendor personnel are tasked with using appropriate discretion and best judgment regarding the proper care and custody of all tools and equipment while onsite.

If any tools or equipment are to remain onsite during installation, the equipment must be stored under the guidance of correctional staff.

21. On the intercom system, is there a requirement to program the system for communication in an emergency?

The proposed intercom system should provide the ability to broadcast to all intercoms or a subset of intercoms simultaneously; the proposed intercom should also provide the ability to play a siren, horn, or other audible alert to all intercoms or a subset of intercoms simultaneously.

22. Will the County of Lancaster provide information to the installing of communicable diseases known at the facility?

The awarded Vendor will be provided information regarding any illness or disease outbreaks, but will not be provided information regarding individual inmates due to HIPAA restrictions.

Onsite Vendor personnel will not be required to work within any areas that are immediately available to inmates; all inmates will be vacated from any areas that onsite Vendor personnel are required to access.

23. Has the County of Lancaster provided design documents and working drawings to the Jail and Prison Inspection Division for pre-construction review to evaluate compliance with these standards prior to release of this bid?

The Jail and Prison Inspection Division handles requests relating to new construction and renovations; the systems outlined within this RFP do not fall beneath either of these areas.

24. Have the current bid documents been approved by the Jail and Prison Inspection Division?

The Jail and Prison Inspection Division handles requests relating to new construction and renovations; the systems outlined within this RFP do not fall beneath either of these areas.

25. Do you have the Customer Number or License Number for the Indusoft software that I can use to discuss your application with Indusoft?

No customer number or licensing information available; Lancaster County has no direct relation or contact with Indusoft. All support for the existing Wonderware system has been provided by SimplexGrinnell of Tyco, the system's original installer.

26. Can surface mount conduit be used on the ceiling and walls inside areas where inmates are housed?

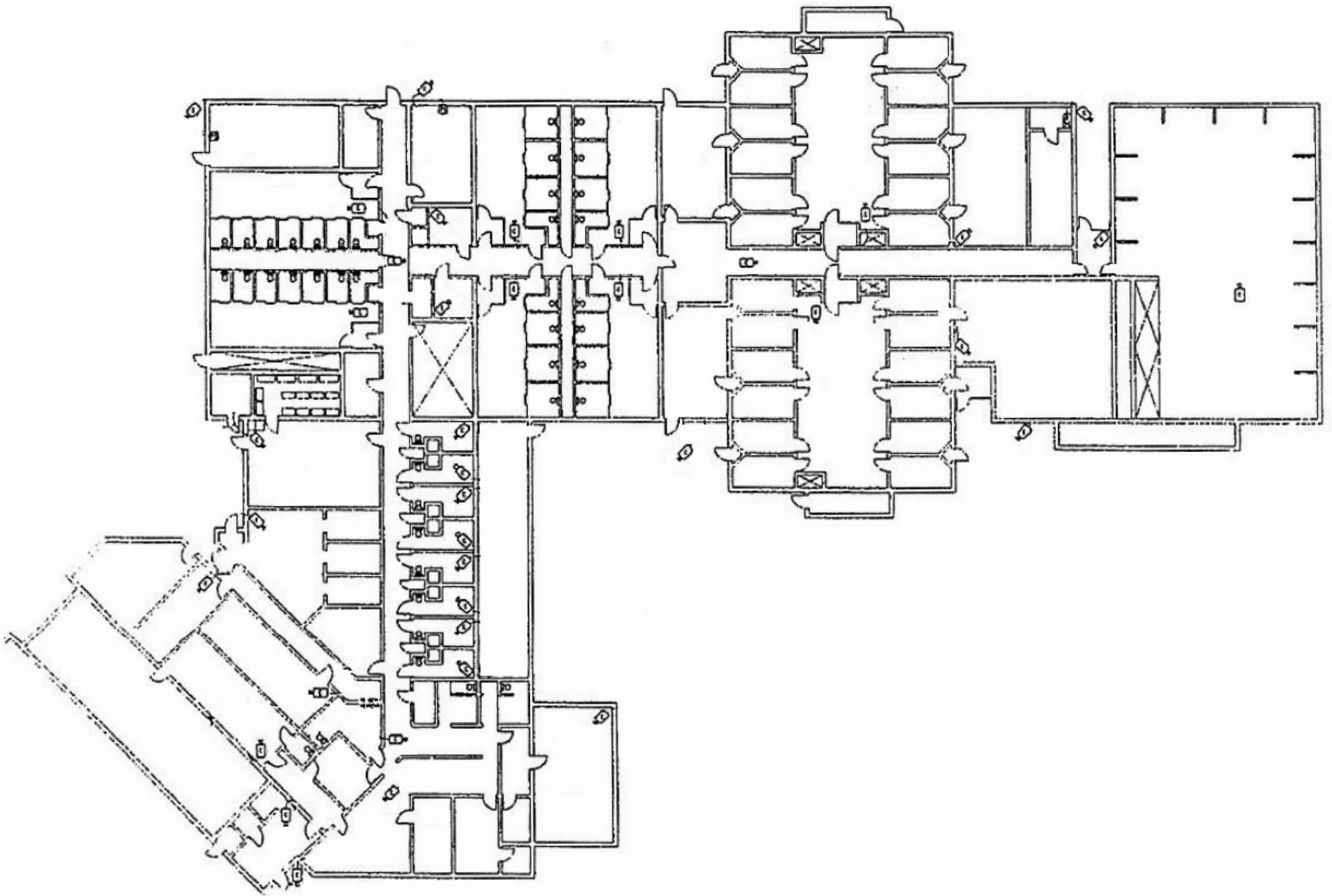
Surface-mount equipment is acceptable within areas that are not immediately available to inmates; low-hanging or otherwise easily accessible conduit, cable runs and surface-mounted equipment are to be avoided in areas in which inmates are housed.

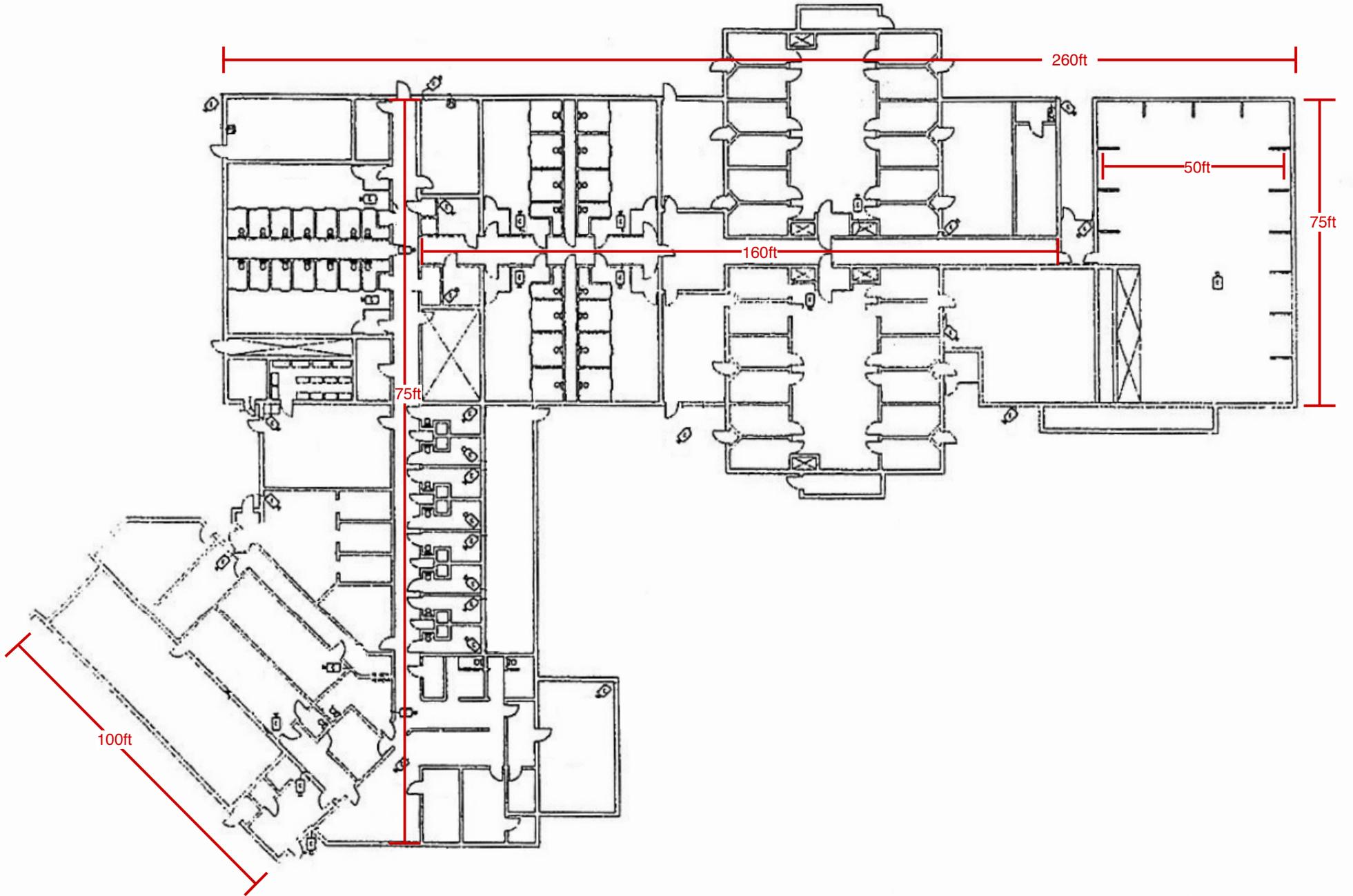
27. The Aiphone intercom listed in the RFP uses speakers and microphones that are flush mount, there are no back boxes available for them, will these need to be cut into the ceilings?

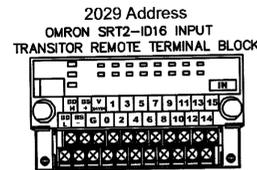
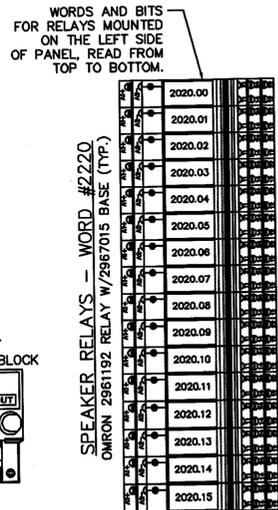
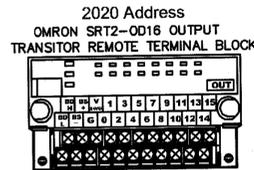
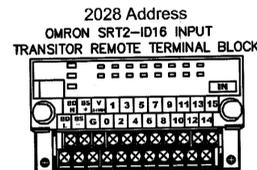
Please see response to question #26.

28. The Aiphone call stations are flush mount but they have a backbox, can these be surface mounted in the areas where the inmates are housed or will they need to be flush mount? These are much bigger and will not fit to replace the old call stations flush mounted in the wall.

Please see response to question #26.







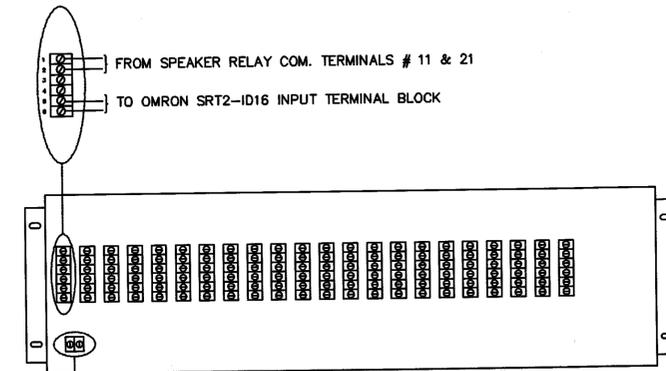
AUDIO CALL-IN PUSHBUTTON WORD - #2028

ARCH #	DESCRIPTION	SLAVE#	I/O	TERM.#	SPEAKER TYPE	PB VOLTAGE
21	IC-PB	0	2028.00	0	RAULAND	-24VDC
22	IC-PB	0	2028.01	1	RAULAND	-24VDC
23	IC-PB	0	2028.02	2	RAULAND	-24VDC
24	IC-PB	0	2028.03	3	RAULAND	-24VDC
25	IC-PB	0	2028.04	4	RAULAND	-24VDC
26	IC-PB	0	2028.05	5	RAULAND	-24VDC
28	IC-PB	0	2028.06	6	RAULAND	-24VDC
29	IC-PB	0	2028.07	7	RAULAND	-24VDC
31	IC-PB	0	2028.08	8	RAULAND	-24VDC
32	IC-PB	0	2028.09	9	RAULAND	-24VDC
33	IC-PB	0	2028.10	10	RAULAND	-24VDC
34	IC-PB	0	2028.11	11	RAULAND	-24VDC
35	IC-PB	0	2028.12	12	RAULAND	-24VDC
36	IC-PB	0	2028.13	13	RAULAND	-24VDC
37	IC-PB	0	2028.14	14	RAULAND	-24VDC
38	IC-PB	0	2028.15	15	RAULAND	-24VDC

\* NOTE: THE INPUT, (CALL-IN), WIRING FOR #s 21, 22, 23, 24, 28 & 29 SCREAM SPEAKERS MAY TERMINATE IN THE SEC EQUIPMENT ROOM.

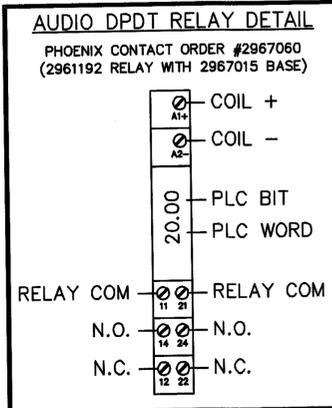
AUDIO LEVEL INPUT WORD - #2029

ARCH #	DESCRIPTION	SLAVE#	I/O	TERM.#	SPEAKER TYPE	PB VOLTAGE
21	SCREAM	2	2029.00	0	RAULAND	N/A
22	SCREAM	2	2029.01	1	RAULAND	N/A
23	SCREAM	2	2029.02	2	RAULAND	N/A
24	SCREAM	2	2029.03	3	RAULAND	N/A
25	SCREAM	2	2029.04	4	RAULAND	N/A
26	SCREAM	2	2029.05	5	RAULAND	N/A
28	SCREAM	2	2029.06	6	RAULAND	N/A
29	SCREAM	2	2029.07	7	RAULAND	N/A
31	SCREAM	0	2029.08	8	RAULAND	N/A
32	SCREAM	0	2029.09	9	RAULAND	N/A
33	SCREAM	0	2029.10	10	RAULAND	N/A
34	SCREAM	0	2029.11	11	RAULAND	N/A
35	SCREAM	0	2029.12	12	RAULAND	N/A
36	SCREAM	0	2029.13	13	RAULAND	N/A
37	SCREAM	0	2029.14	14	RAULAND	N/A
38	SCREAM	0	2029.15	15	RAULAND	N/A



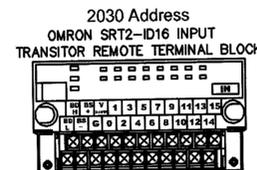
SD-RA RACK #1

SDR-C #	ARCH #	SPEAKER LOCATION	TERM.#	TERM.#	POINT	POINT
RELAY 1	21	DAYROOM M	1 & 2	5 & 6	2029.00	2020.00
RELAY 2	22	DAYROOM N	1 & 2	5 & 6	2029.01	2020.01
RELAY 3	23	DAYROOM L	1 & 2	5 & 6	2029.02	2020.02
RELAY 4	24	DAYROOM K	1 & 2	5 & 6	2029.03	2020.03
RELAY 5	25	H/C CELL	1 & 2	5 & 6	2029.04	2020.04
RELAY 6	28	PADDED CELL	1 & 2	5 & 6	2029.05	2020.05
RELAY 7	28	DAYROOM I	1 & 2	5 & 6	2029.06	2020.06
RELAY 8	29	DAYROOM I	1 & 2	5 & 6	2029.07	2020.07
RELAY 9	31	ISO CELL H	1 & 2	5 & 6	2029.08	2020.08
RELAY 10	32	ISO CELL G	1 & 2	5 & 6	2029.09	2020.09
RELAY 11	33	ISO CELL F	1 & 2	5 & 6	2029.10	2020.10
RELAY 12	34	ISO CELL E	1 & 2	5 & 6	2029.11	2020.11
RELAY 13	35	ISO CELL D	1 & 2	5 & 6	2029.12	2020.12
RELAY 14	36	ISO CELL C	1 & 2	5 & 6	2029.13	2020.13
RELAY 15	37	ISO CELL B	1 & 2	5 & 6	2029.14	2020.14
RELAY 16	38	ISO CELL A	1 & 2	5 & 6	2029.15	2020.15
RELAY 17	30	KITCHEN	1 & 2	5 & 6	2030.00	2021.00
RELAY 18	40	INMATE VISIT	1 & 2	5 & 6	2030.01	2021.01
RELAY 19	41	INMATE VISIT	1 & 2	5 & 6	2030.02	2021.02
RELAY 20	42	HOLDING CELL 3	1 & 2	5 & 6	2030.03	2021.03



NOTE:

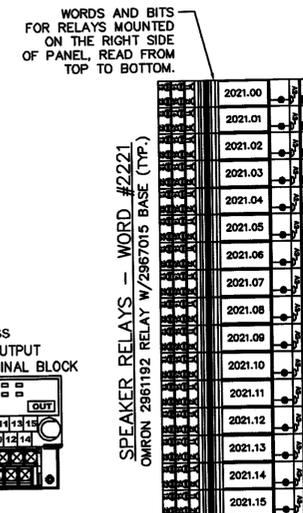
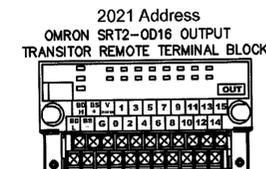
1. REFERENCE ALL AUDIO SECTION DE-600 DRAWINGS BEFORE WIRING AUDIO.
2. REFERENCE DRAWING DE-607 FOR TYPICAL FIELD DEVICE TERMINATIONS.



AUDIO CALL-IN PUSHBUTTON WORD - #2030

ARCH #	DESCRIPTION	SLAVE#	I/O	TERM.#	INTERCOM TYPE	PB VOLTAGE
30	SCREAM	4	2030.00	0	RAULAND	N/A
40	SCREAM	4	2030.01	1	RAULAND	N/A
41	SCREAM	4	2030.02	2	RAULAND	N/A
42	SCREAM	4	2030.03	3	RAULAND	N/A
39	N/A	4	2030.04	4	RAULAND	N/A
SPARE	N/A	4	2030.05	5	N/A	N/A
SPARE	N/A	4	2030.06	6	N/A	N/A
SPARE	N/A	4	2030.07	7	N/A	N/A
27	IC -PB	4	2030.08	8	DUKANE	-24VDC
43	IC -PB	4	2030.09	9	DUKANE	-24VDC
SPARE	N/A	4	2030.10	10	N/A	N/A
SPARE	N/A	4	2030.11	11	N/A	N/A
SPARE	N/A	4	2030.12	12	N/A	N/A
SPARE	N/A	4	2030.13	13	N/A	N/A
SPARE	N/A	4	2030.14	14	N/A	N/A
SPARE	N/A	4	2030.15	15	N/A	N/A

\* NOTE: NO INPUT NEEDED ROOM CHANGED FROM DAYROOM TO RECORDS



ARCH #	DESCRIPTION	SLAVE#	I/O	TERM.#	INTERCOM TYPE	PB VOLTAGE
30	SCREAM	2	2021.00	0	RAULAND	N/A
40	SCREAM	2	2021.01	1	RAULAND	N/A
41	SCREAM	2	2021.02	2	RAULAND	N/A
42	SCREAM	2	2021.03	3	RAULAND	N/A
39	N/A	2	2021.04	4	RAULAND	N/A
SPARE	N/A	2	2021.05	5	N/A	N/A
SPARE	N/A	2	2021.06	6	N/A	N/A
SPARE	N/A	2	2021.07	7	N/A	N/A
27	IC -PB	0	2021.08	8	DUKANE	-24VDC
43	IC -PB	0	2021.09	9	DUKANE	-24VDC
SPARE	N/A	0	2021.10	10	N/A	N/A
SPARE	N/A	0	2021.11	11	N/A	N/A
SPARE	N/A	0	2021.12	12	N/A	N/A
SPARE	N/A	0	2021.13	13	N/A	N/A
SECONDARY TP OUT	0	0	2021.14	14	N/A	N/A
SECONDARY TP SWIGS	0	0	2021.14	14	N/A	N/A
BOOKING TSK UNMUTE	0	0	2021.15	15	BOOKING	N/A

**SimplexGrinnell BE SAFE.**  
 A Tyco International Company  
 8826 SOUTHERN PINES BLVD  
 CHARLOTTE, NC 28273  
 SALES: 704-501-0500  
 SERVICE: 704-501-0500  
 FAX: 704-505-1550  
 © 2010 SIMPLEXGRINNELL LP  
 ALL RIGHTS RESERVED

REVISION DESCRIPTION

DATE

NO.

DETENTION SECURITY SYSTEM  
 BOOKING AUDIO TERMINATIONS  
 LANCASTER COUNTY JAIL

1941 PABELAND  
 LANCASTER, SC 29720

DRAWN BY: DATE: 8/31/11  
 JDB

CHECKED BY: DATE: 8/31/11  
 CH

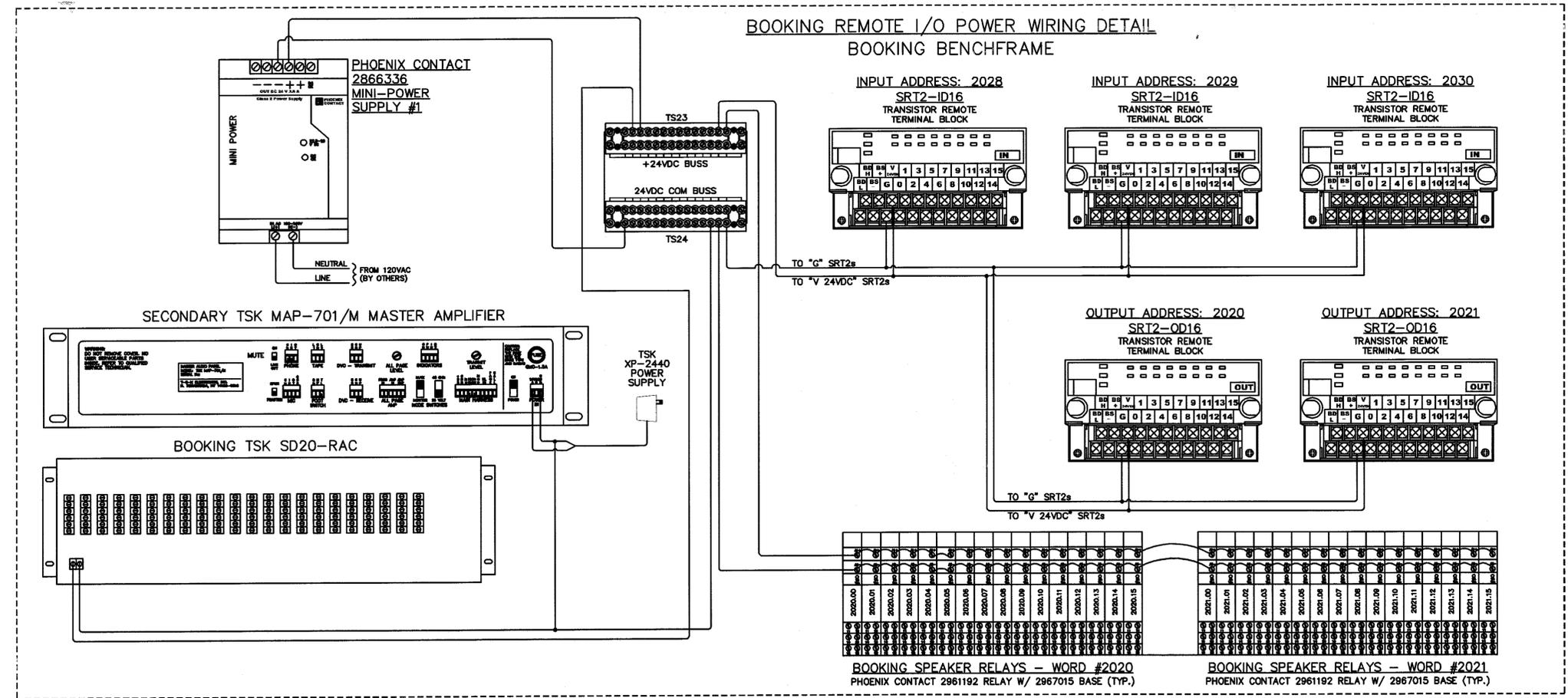
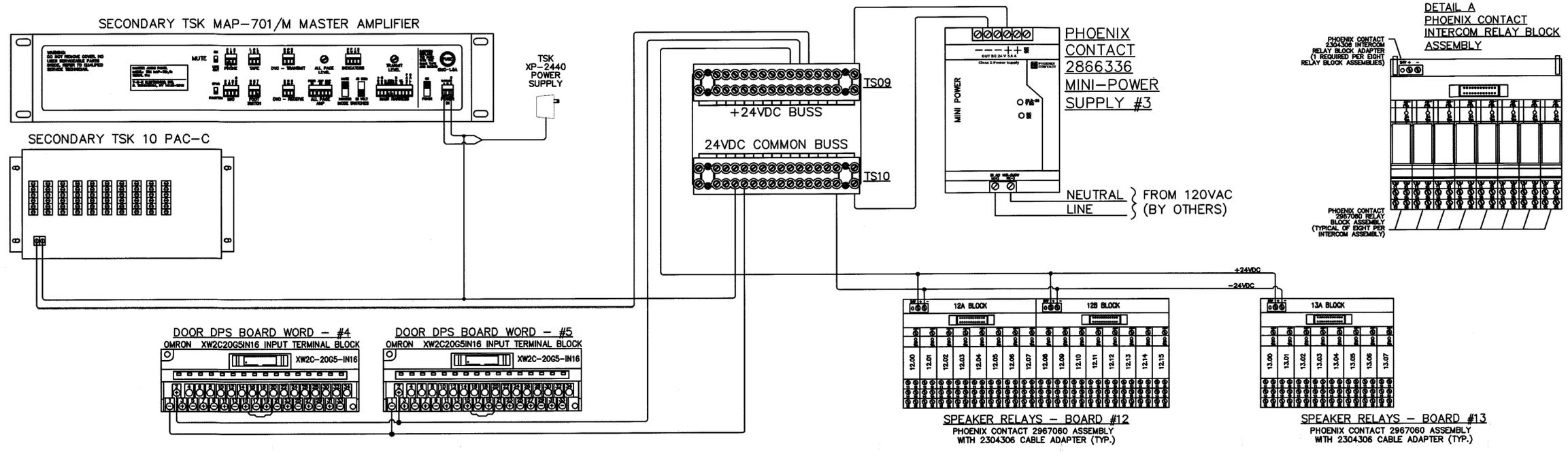
PROJECT NUMBER:  
 280-958608702

SHEET TITLE:  
 DETENTION SECURITY SYSTEM  
 BOOKING AUDIO TERMINATIONS

SHEET NUMBER:  
 DE-603

DE-603.dwg

FILE PATH: \\Pro5981s\c\pc\lancaster\lancaster\acad\Drawings\DE-603.dwg  
 LAST PRINTED: 11/11/2011 3:52:08 PM  
 LAST SAVED BY: JBARNETT



NOTES:  
1. SEE DRAWING DE-301 FOR EQUIPMENT LOCATIONS.  
2. SEE DRAWINGS DE-602 & DE-603 FOR FIELD TERMINATIONS.

**SimplexGrinnell BE SAFE.**

A Tyco International Company  
9626 SOUTHERN PINES BLVD  
CHARLOTTE, NC 28273  
SALES: 704-501-0500  
SERVICE: 704-501-0500  
FAX: 704-502-1550

DRAWN BY:	DATE:	REVISION DESCRIPTION:	NO.	DATE	NO.
JDB	8/31/11				
CHECKED BY:	DATE:				
CH	8/31/11				
PROJECT NUMBER: 260-958608702					
SHEET TITLE: DETENTION SECURITY SYSTEM AUDIO POWER TERMINATION					
SHEET NUMBER: DE-604 DE-604.dwg					

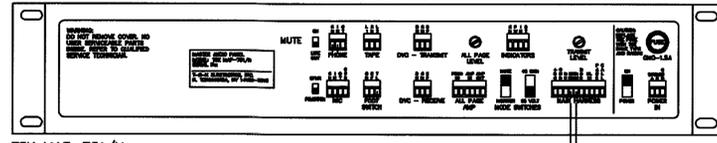
DETENTION SECURITY SYSTEM  
AUDIO POWER TERMINATION  
LANCASTER COUNTY JAIL  
1841 PAGERLAND  
LANCASTER, SC 29720

FILE PATH: \\P:\d8981s\poc\lancaster\lancaster\ACAD Drawings\DE-605.dwg

LAST PRINTED: 11/11/2011 3:52:51 PM LAST SAVED BY: JBARNETT

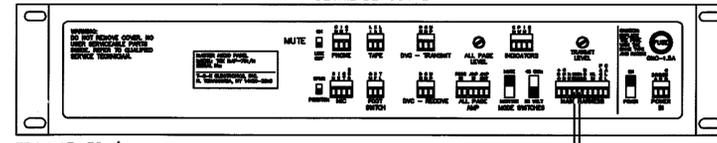
24 x 36"

**TSK-SECONDARY**  
DETAIL DE-604-A



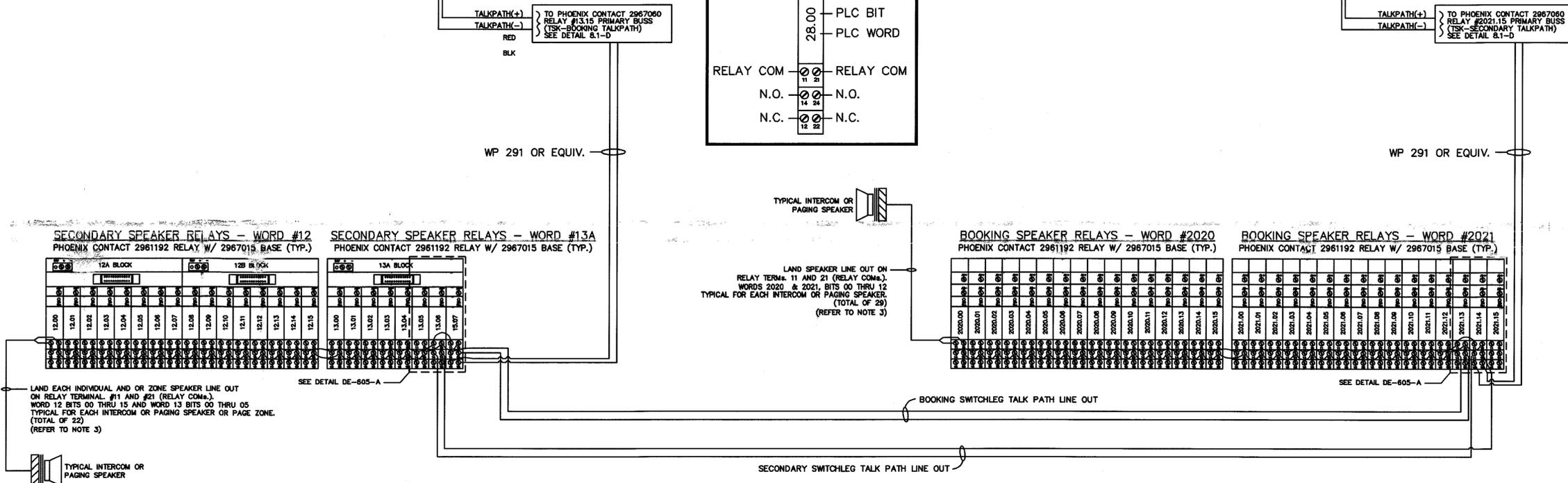
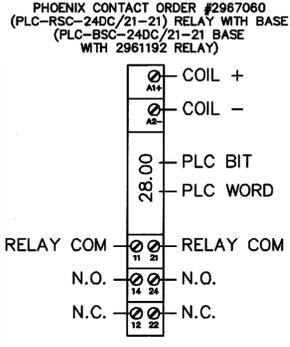
TSK MAP-701/M  
MASTER AMPLIFIER  
REAR VIEW

**TSK-BOOKING**  
DETAIL DE-604-B

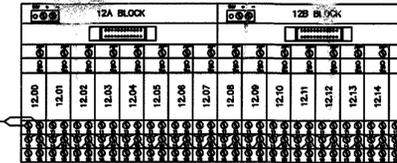


TSK MAP-701/M  
MASTER AMPLIFIER  
REAR VIEW

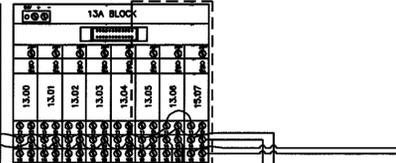
**AUDIO DPDT RELAY DETAIL**



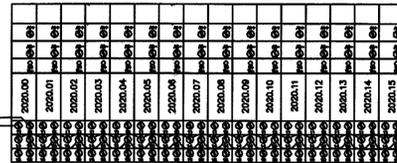
**SECONDARY SPEAKER RELAYS - WORD #12**  
PHOENIX CONTACT 2961192 RELAY W/ 2967015 BASE (TYP.)



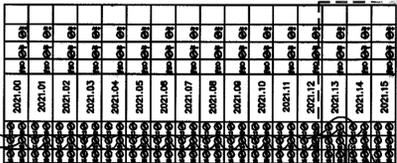
**SECONDARY SPEAKER RELAYS - WORD #13A**  
PHOENIX CONTACT 2961192 RELAY W/ 2967015 BASE (TYP.)



**BOOKING SPEAKER RELAYS - WORD #2020**  
PHOENIX CONTACT 2961192 RELAY W/ 2967015 BASE (TYP.)



**BOOKING SPEAKER RELAYS - WORD #2021**  
PHOENIX CONTACT 2961192 RELAY W/ 2967015 BASE (TYP.)



**RELAY PROGRAM TRUTH TABLE**

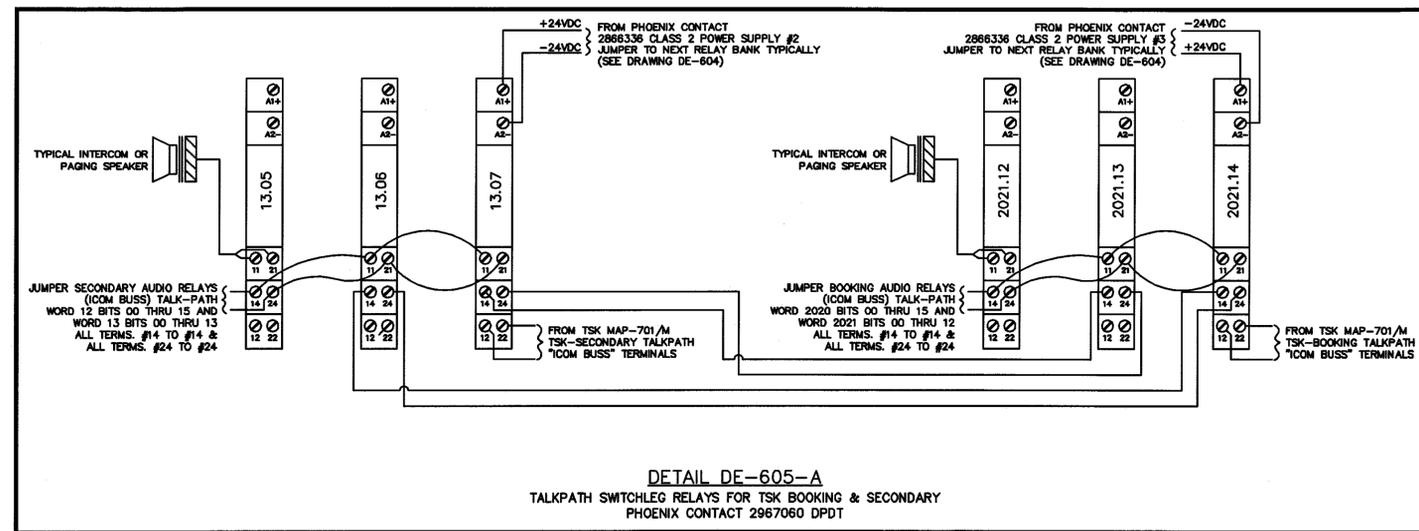
1. TYPICAL TOUCHSCREEN CONTROL AUDIO OPERATIONS FOR BOOKING AND SECONDARY STATION.

a. **BOOKING CONTROL LOCAL AUDIO:**  
IS PERFORMED BY ENERGIZING THE DESIRED INTERCOM RELAY FROM BLOCKS #2020 BITS 0 THRU 15 OR 2021 BITS 0 THRU 12 AND THE AMPLIFIER WAKE UP "MU" RELAY 2021.15. PAGING IN THE LOCAL AREA IS PERFORMED BY THE SAME SENARIO.

b. **BOOKING CONTROL REMOTE AUDIO:**  
INTERCOM COMMUNICATION WITHIN THE SECONDARY AREA IS PERFORMED BY ENERGIZING THE #2021.13 "BOOKING OUT" RELAY AND THE #13.07 "SECONDARY TP SWICHLG" RELAY, FOLLOWED BY THE DESIRED INTERCOM RELAY FROM BLOCKS #12 BIT 0 THRU 15 OR #13 BITS 0 THRU 5 AND THE AMPLIFIER WAKE UP "MU" RELAY 2021.15. PAGING IN THE REMOTE AREA IS PERFORMED BY THE SAME SENARIO.

a. **SECONDARY CONTROL LOCAL AUDIO:**  
IS PERFORMED BY ENERGIZING THE DESIRED INTERCOM RELAY FROM BLOCKS #12 BITS 0 THRU 15 OR 13 BITS 0 THRU 5 AND THE AMPLIFIER WAKE UP "MU" RELAY 10.00. PAGING IN THE LOCAL AREA IS PERFORMED BY THE SAME SENARIO.

b. **SECONDARY CONTROL REMOTE AUDIO:**  
INTERCOM COMMUNICATION WITHIN THE BOOKING AREA IS PERFORMED BY ENERGIZING THE #13.06 "SECONDARY OUT" RELAY AND THE #2021.14 "BOOKING TP SWICHLG" RELAY, FOLLOWED BY THE DESIRED INTERCOM RELAY FROM BLOCKS #2020 BIT 0 THRU 15 OR #2021 BITS 0 THRU 12 AND THE AMPLIFIER WAKE UP "MU" RELAY 10.00. PAGING IN THE REMOTE AREA IS PERFORMED BY THE SAME SENARIO.



**DETAIL DE-605-A**  
TALKPATH SWITCHLEG RELAYS FOR TSK BOOKING & SECONDARY  
PHOENIX CONTACT 2967060 DPDT

- NOTES:**
- SEE DRAWING DE-301 FOR AUDIO HEADEND EQUIPMENT LOCATIONS.
  - SEE DRAWING DE-604 FOR RELAY POWER TERMINATIONS.
  - SEE DRAWINGS DE-602 & DE-603 FOR RELAY & RELAY BOARD DEVICE TERMINATIONS.
  - SEE DRAWING DE-601 FOR MASTER & PAGING AMPLIFIERS' TERMINATIONS.

**SimplexGrinnell BE SAFE.**  
A Tyco International Company  
8826 SOUTHERN PINES BLVD  
CHARLOTTE, NC 28273  
SALES: 704-501-0500  
SERVICE: 704-501-0500  
FAX: 704-525-1550  
©2010 SIMPLEXGRINNELL LP  
ALL RIGHTS RESERVED

CHG#	BY	REVISION DESCRIPTION	DATE

**DETENTION SECURITY SYSTEM  
AUDIO SYSTEM TALKPATH DIAGRAM**

**LANCASTER COUNTY JAIL**

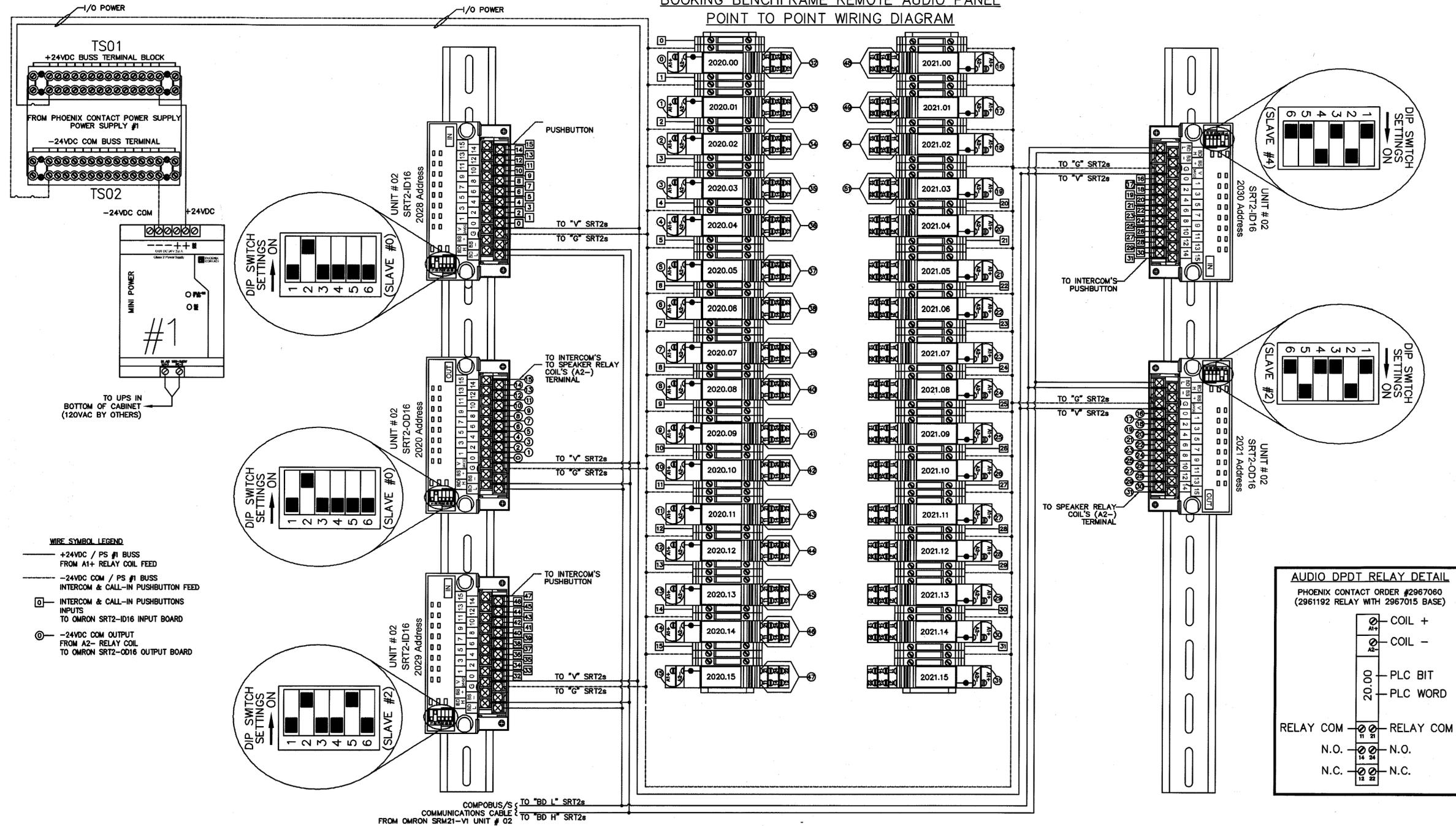
1841 PAGELAND  
LANCASTER, SC 29720

DRAWN BY: JDB DATE: 8/31/11  
CHECKED BY: CH DATE: 8/31/11

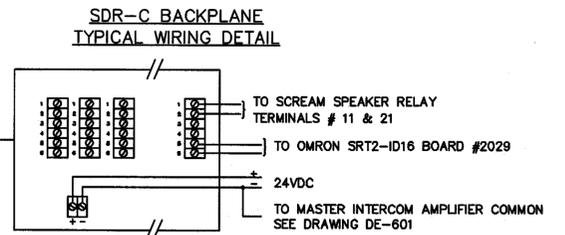
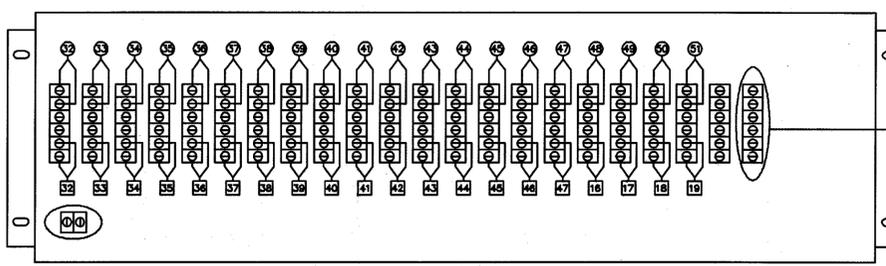
PROJECT NUMBER:  
260-85608702

SHEET TITLE:  
DETENTION SECURITY SYSTEM  
AUDIO SYSTEM TALKPATH DIAGRAM

SHEET NUMBER:  
**DE-605**  
DE-605.dwg



**NOTE:**  
 1. VERIFY ALL EXISTING RELAY SWITCHING AND COIL VOLTAGE BEFORE JUMPING, BUSSING OR WIRING RELAYS.  
 2. ALL CONNECTIONS TO OMRON SRT2-ID16 AND OD16 MUST NOT EXCEED 24VDC.



**DETAIL NOTE:**  
 1.) J1 SHORTING PLUG ON EACH RELAY MODULE TO BE INSTALLED FOR MOMENTARY OUTPUT.  
 2.) J2 PIN FOR EACH MODULE TO BE INSTALLED IN THE "B" POSITION FOR OUTPUT TO PINS 5 & 6.

**SimplexGrinnell BE SAFE.**  
 A Tyco International Company  
 8826 SOUTHERN PINES BLVD  
 CHARLOTTE, NC 28273  
 SALES: 704-501-0500  
 SERVICE: 704-501-0500  
 FAX: 704-525-1550  
 © 2010 SIMPLEXGRINNELL LP  
 ALL RIGHTS RESERVED

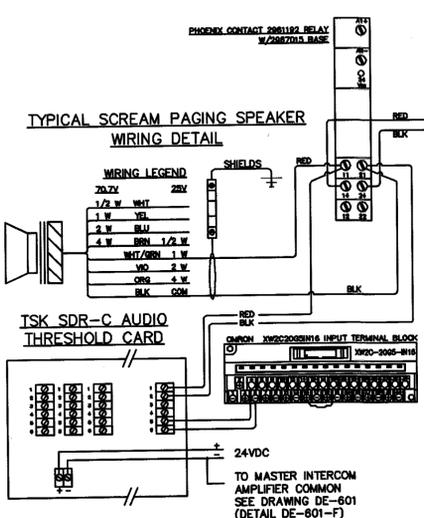
NO.	DATE	REVISION/DESCRIPTION


DETENTION SECURITY SYSTEM  
 BOOKING AUDIO PANEL WIRING DIAGRAM  
 LANCASTER COUNTY JAIL  
 1941 PABELAND  
 LANCASTER, SC 29720

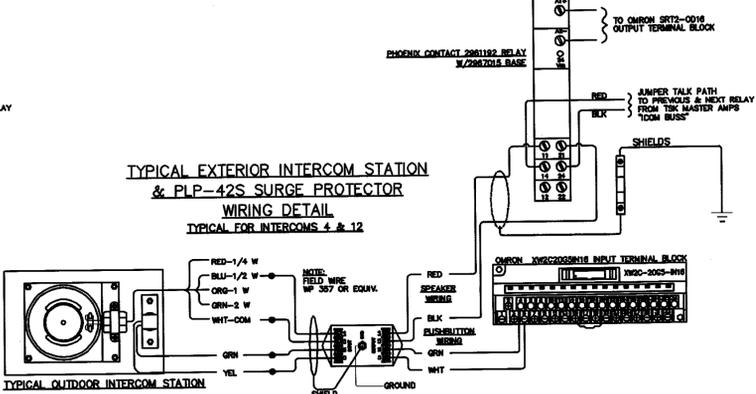
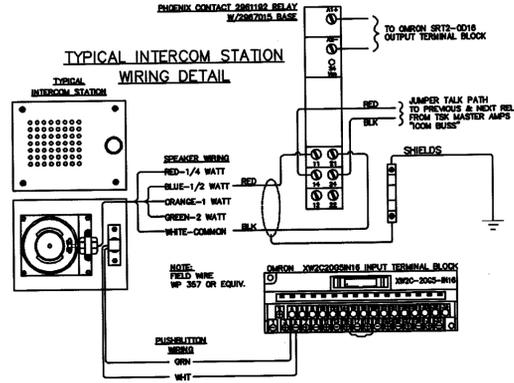
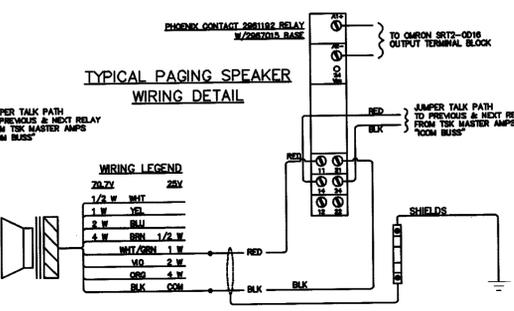
DRAWN BY: JDB	DATE: 8/31/11
CHECKED BY: CH	DATE: 8/31/11
PROJECT NUMBER: 260-958608702	
SHEET TITLE: DETENTION SECURITY SYSTEM BOOKING AUDIO PANEL WIRING DIAGRAM	
SHEET NUMBER: DE-606	DE-606.dwg

FILE PATH: \\Prs5986fa\pjc\lancaster\ACAD Drawings\DE-607.dwg  
 LAST PRINTED: 11/11/2011 3:53:39 PM LAST SAVED BY: JBARNETT

NOTE:  
 1. REFERENCE ALL AUDIO SECTION DE-600 DRAWINGS BEFORE WIRING AUDIO.

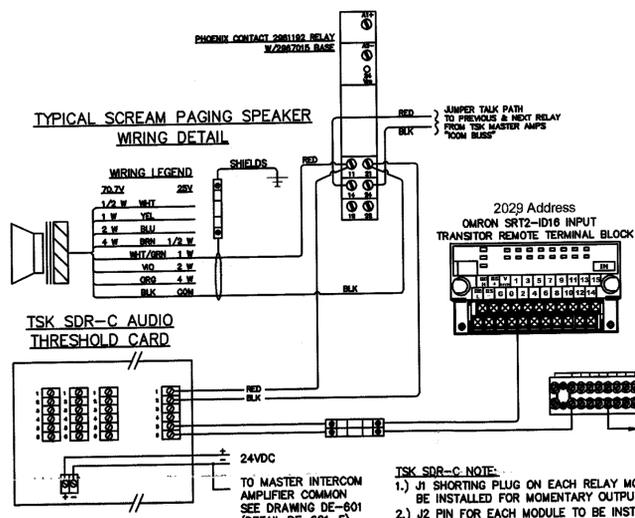
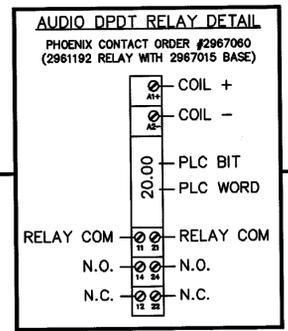


TSK SDR-C NOTE:  
 1.) J1 SHORTING PLUG ON EACH RELAY MODULE TO BE INSTALLED FOR MOMENTARY OUTPUT.  
 2.) J2 PIN FOR EACH MODULE TO BE INSTALLED IN THE "B" POSITION FOR OUTPUT TO PINS 5 & 6.

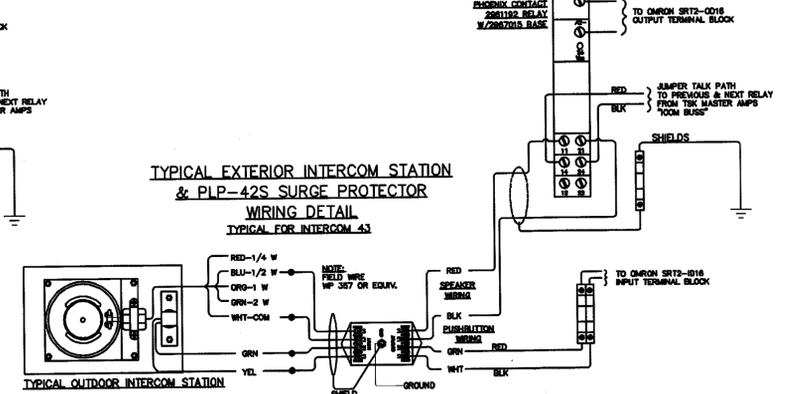
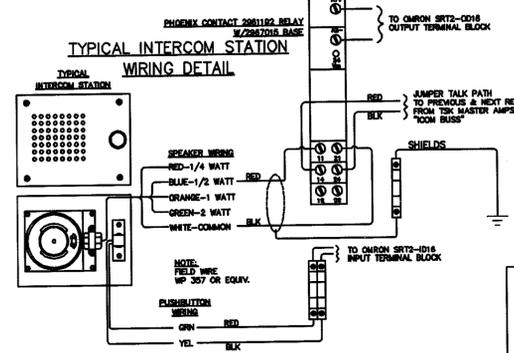
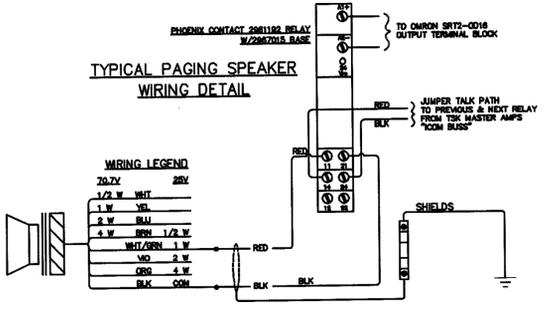


TYPICAL FIELD DEVICE TERMINATIONS FOR SECONDARY AUDIO

TYPICAL FIELD DEVICE TERMINATIONS FOR BOOKING AUDIO



TSK SDR-C NOTE:  
 1.) J1 SHORTING PLUG ON EACH RELAY MODULE TO BE INSTALLED FOR MOMENTARY OUTPUT.  
 2.) J2 PIN FOR EACH MODULE TO BE INSTALLED IN THE "B" POSITION FOR OUTPUT TO PINS 5 & 6.

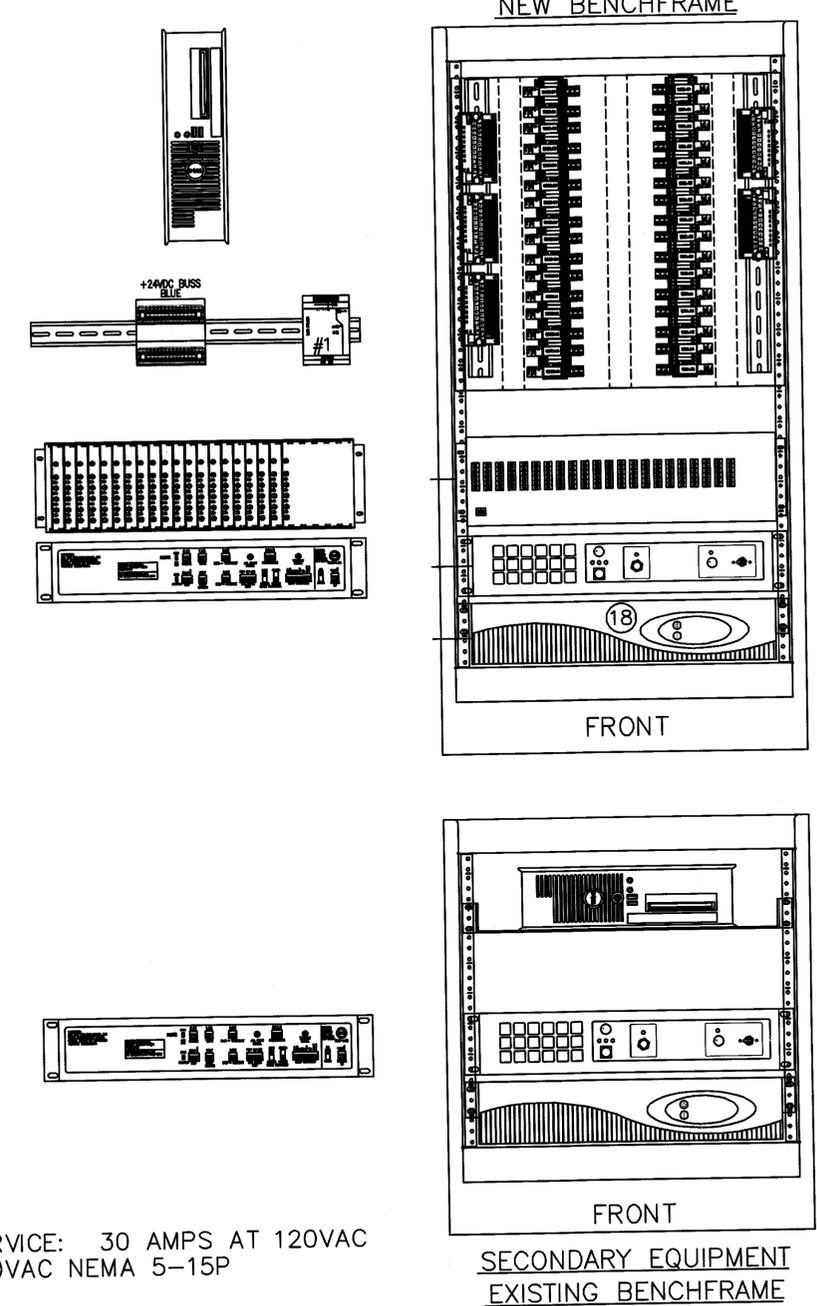
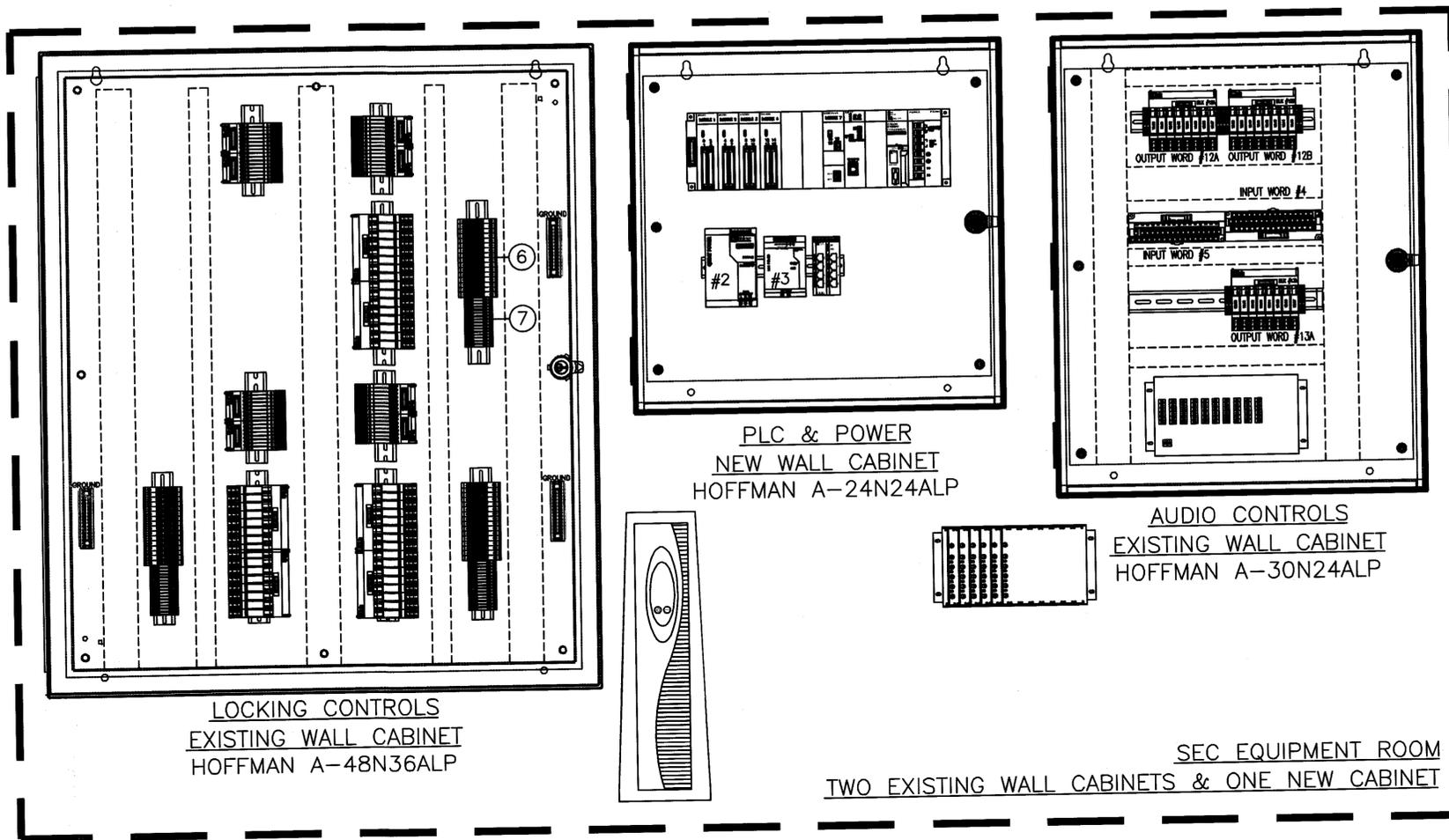


**SimplexGrinnell BE SAFE.**  
 A Tyco International Company  
 8626 SOUTHERN PINES BLVD  
 CHARLOTTE, NC 28273  
 SALES: 704-501-0500  
 SERVICE: 704-501-0500  
 FAX: 704-525-1550

REVISION DESCRIPTION	DATE	NO.

DETENTION SECURITY SYSTEM  
 TYPICAL AUDIO FIELD DEVICE TERMINATIONS  
 LANCASTER COUNTY JAIL  
 1841 PAGERLAND  
 LANCASTER, SC 29720

DRAWN BY: JDB DATE: 8/31/11  
 CHECKED BY: CH DATE: 8/31/11  
 PROJECT NUMBER: 260-958808702  
 SHEET TITLE: DETENTION SECURITY SYSTEM TYPICAL AUDIO FIELD DEVICE TERMINATIONS  
 SHEET NUMBER: DE-607  
 DE-607.dwg



SEC AUDIO & LOCKING WALL CABINET EXISTING

APC SMART-UPS 1500VA LCD 120V (PART # SMT1500)					
PART #	DESCRIPTION	QTY	WATTS (EA.)	WATTS (TOTAL)	AMPS (TOTAL)
C200HW-PA204	OMRON POWER SUPPLY	1	42	42	.35
2866336	PHOENIX CONTACT CLASS 2 P.S.	1	156	156	1.3
2938604	PHOENIX CONTACT QUINT P.S.	1	281	281	2.34
TOTALS			479	479	3.99

RECOMMENDED ELECTRICAL SERVICE: 30 AMPS AT 120VAC  
INPUT CONNECTION TYPE: 120VAC NEMA 5-15P

BOOKING CONTROL BENCHFRAME

APC SMART-UPS 1500VA LCD RM 2U 120V (PART # SMT1500RM2U)					
PART #	DESCRIPTION	QTY	WATTS (EA.)	WATTS (TOTAL)	AMPS (TOTAL)
OPTIPLEX 990	DELL COMPUTER POWER SUPPLY	1	235	235	2.00
2200L	22" ELO TOUCH MONITOR	1	44	44	.37
2866336	PHOENIX CONTACT CLASS 2 P.S.	1	156	156	1.3
MAP-701/M-1	TSK MASTER AMPLIFIER	1	50	50	.42
TOTALS			485	485	4.09

SECONDARY CONTROL BENCHFRAME (EXISTING)

APC SMART-UPS 1500VA LCD RM 2U 120V (PART # SMT1500RM2U)					
PART #	DESCRIPTION	QTY	WATTS (EA.)	WATTS (TOTAL)	AMPS (TOTAL)
OPTIPLEX 990	DELL COMPUTER POWER SUPPLY	1	235	235	2.00
2200L	22" ELO TOUCH MONITOR	1	44	44	.37
MAP-701/M-1	TSK MASTER AMPLIFIER	1	50	50	.42
TOTALS			329	329	2.79

**SimplexGrinnell BE SAFE.**

A Tyco International Company  
8826 SOUTHERN PINES BLVD  
CHARLOTTE, NC 28275  
SALES: 704-501-0500  
SERVICE: 704-501-0500  
FAX: 704-525-1550

© 2010 SIMPLEXGRINNELL LP  
ALL RIGHTS RESERVED

NO.	DATE	REVISION DESCRIPTION

**DETENTION SECURITY SYSTEM  
UPS CALCULATIONS**

**LANCASTER COUNTY JAIL**

1941 PAGELAND  
LANCASTER, SC 29720

DRAWN BY: JDB DATE: 8/31/11  
CHECKED BY: CH DATE: 8/31/11

PROJECT NUMBER:  
260-958608702

SHEET TITLE:  
DETENTION SECURITY SYSTEM  
UPS CALCULATIONS

SHEET NUMBER:  
**DE-701**  
DE-701.dwg

# Lancaster County Jail

1941 Pageland  
Lancaster, SC 29720

Security Electronic Controls  
11-11-2011

## Shop Drawings

**tyco** / *Fire & Security* / **SimplexGrinnell**

1281 NEWELL PARKWAY  
MONTGOMERY, ALABAMA 36110

PHONE: 334-272-0937  
FAX: 334-272-0994

SHEET #	SHEET DESCRIPTION
DE-001	COVER SHEET & INDEX
DE-101	FIRST FLOOR PLAN
DE-201	CONTROL & EQUIPMENT ROOM RISER
DE-202	DEVICE RISER DIAGRAM
DE-301	HEADEND EQUIPMENT LAYOUT
DE-401	PLC SYSTEM NETWORK RISER DIAGRAM
DE-402	PLC NETWORK CABLE DIAGRAM
DE-501	LOCKING DEVICE TERMINATION DIAGRAM
DE-503	LOCKING POWER TERMINATIONS
DE-601	MASTER AMPLIFIER WIRING DIAGRAM
DE-602	SECONDARY AUDIO TERMINATIONS
DE-603	BOOKING AUDIO TERMINATIONS
DE-604	AUDIO POWER TERMINATIONS
DE-605	AUDIO SYSTEM TALKPATH DIAGRAM
DE-606	BOOKING AUDIO PANEL WIRING DIAGRAM
DE-607	TYPICAL AUDIO FIELD DEVICE TERMINATIONS
DE-701	UPS CALCULATIONS

**SimplexGrinnell BE SAFE.**

A Tyco International Company  
9826 SOUTHERN PINES BLVD  
CHARLOTTE, NC 28273  
SALES: 704-501-0500  
SERVICE: 704-501-0500  
FAX: 704-525-1550  
© 2010 SIMPLEXGRINNELL, LP  
ALL RIGHTS RESERVED

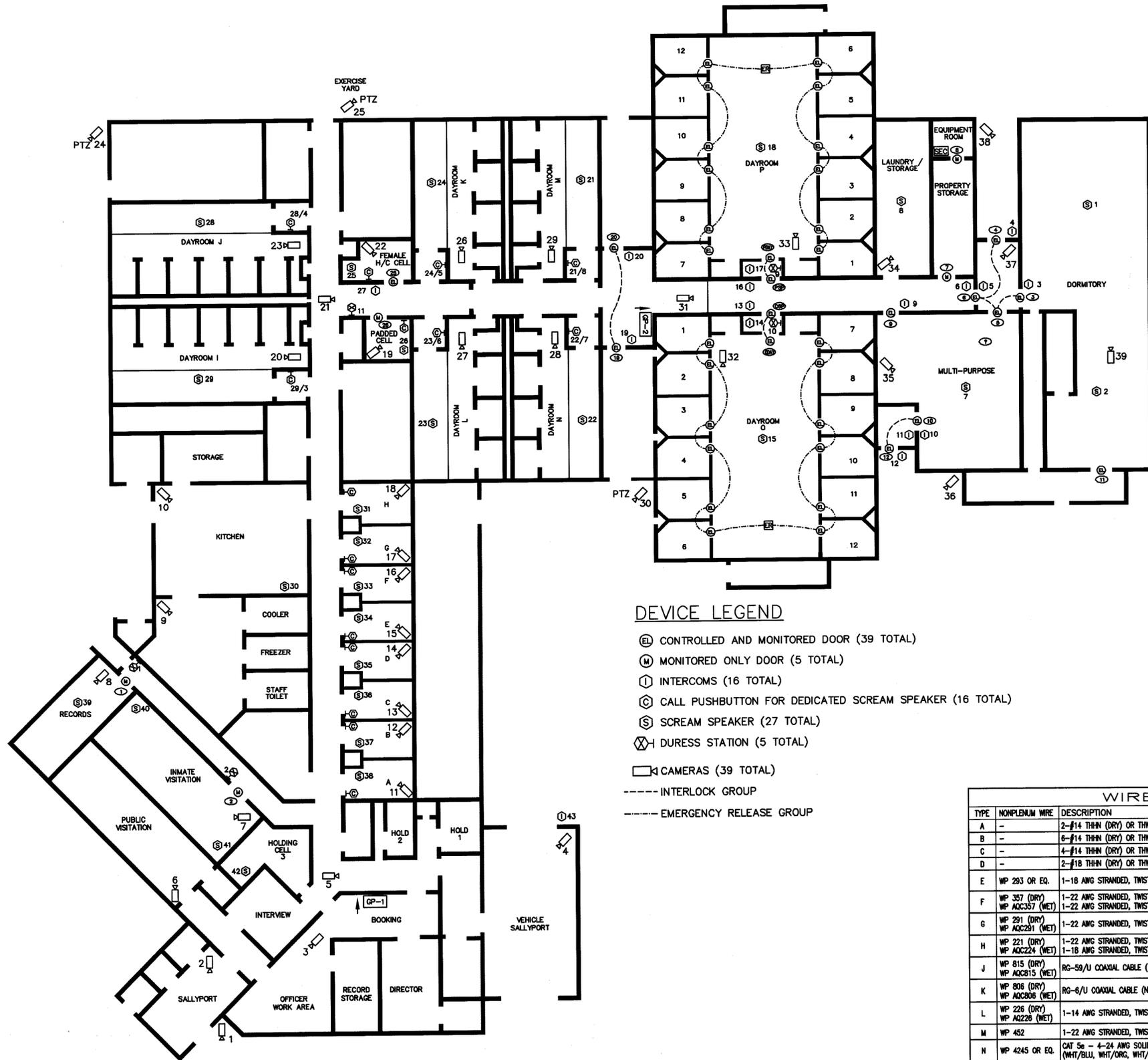
REV. NO.	DATE	REVISION DESCRIPTION

**DETENTION SECURITY SYSTEM**  
Cover Sheet & Drawing Index  
LANCASTER COUNTY JAIL  
1941 PAGELAND  
LANCASTER, SC 29720

DRAWN BY: <b>JDB</b>	DATE: <b>8/31/11</b>
CHECKED BY: <b>CH</b>	DATE: <b>8/31/11</b>
PROJECT NUMBER: <b>200-958608702</b>	
SHEET TITLE: <b>DETENTION SECURITY SYSTEM Cover Sheet &amp; Drawing Index</b>	
SHEET NUMBER: <b>DE-001</b>	

DE-001.dwg

FILE PATH: \\Pro5086a\c\pc\Lancaster\Lancaster ACAD\Drawings\DE-001.dwg  
LAST PRINTED: 11/11/2011 3:47:03 PM  
LAST SAVED BY: BARNETT



**DEVICE LEGEND**

- ⊕ CONTROLLED AND MONITORED DOOR (39 TOTAL)
- ⊙ MONITORED ONLY DOOR (5 TOTAL)
- Ⓜ INTERCOMS (16 TOTAL)
- Ⓞ CALL PUSHBUTTON FOR DEDICATED SCREAM SPEAKER (16 TOTAL)
- Ⓢ SCREAM SPEAKER (27 TOTAL)
- ⊗ DURESS STATION (5 TOTAL)
- Ⓚ CAMERAS (39 TOTAL)
- INTERLOCK GROUP
- EMERGENCY RELEASE GROUP

**WIRE LEGEND**

TYPE	NONPLENUM WIRE	DESCRIPTION	USE
A	-	2-#14 THHN (DRY) OR THHN (WET) STRANDED (BLU, WHT)	24VDC POWER
B	-	6-#14 THHN (DRY) OR THHN (WET) STRANDED (MATCH PIGTAIL)	CTRL & MONITORED SLIDER OR OH DOOR
C	-	4-#14 THHN (DRY) OR THHN (WET) STRANDED (WHT, BLU, BRN, GRN)	CONTROLLED & MONITORED DOOR
D	-	2-#18 THHN (DRY) OR THHN (WET) STRANDED (BLK, RED)	DOOR POSITION SWITCH
E	WP 283 OR EQ.	1-18 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	CCTV KEYBOARD, DATA CABLE, PAGING HORN
F	WP 357 (DRY) WP AXC357 (WET)	1-22 AWG STRANDED, TWISTED, SHIELDED PAIR & 1-22 AWG STRANDED, TWISTED PAIR (RED, BLK, WHT, GRN, SHLD)	INTERCOM STN W/PB
G	WP 291 (DRY) WP AXC291 (WET)	1-22 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	INTERCOM WITHOUT PB, MICROPHONE, PAGING SPEAKER
H	WP 221 (DRY) WP AXC224 (WET)	1-22 AWG STRANDED, TWISTED PAIR (DRY) (RED, BLK) & 1-18 AWG STRANDED, TWISTED PAIR (WET) (RED, BLK)	CALL BUTTON
J	WP 815 (DRY) WP AXC815 (WET)	RG-59/U COAXIAL CABLE (NO RUNS OVER 500 FEET)	CCTV VIDEO SIGNAL
K	WP 806 (DRY) WP AXC806 (WET)	RG-6/U COAXIAL CABLE (NO RUNS OVER 1000 FEET)	CCTV VIDEO SIGNAL
L	WP 226 (DRY) WP AXC226 (WET)	1-14 AWG STRANDED, TWISTED PAIR (BLK, WHT)	CCTV POWER
M	WP 452	1-22 AWG STRANDED, TWISTED SHIELDED PAIR (BLK, RED, SHLD)	DOME LIGHTS
N	WP 4245 OR EQ.	CAT 5e - 4-24 AWG SOLID, TWISTED PAIR (WHT/BLU, WHT/ORG, WHT/GRN, WHT/BRN)	PLC NETWORK COMMUNICATION MICROPHONE WITH BASE

**SimplexGrinnell BE SAFE.**

A Tyco International Company

1281 NEWELL PARKWAY  
MONTGOMERY, AL 36110

SALES: 334-272-0837

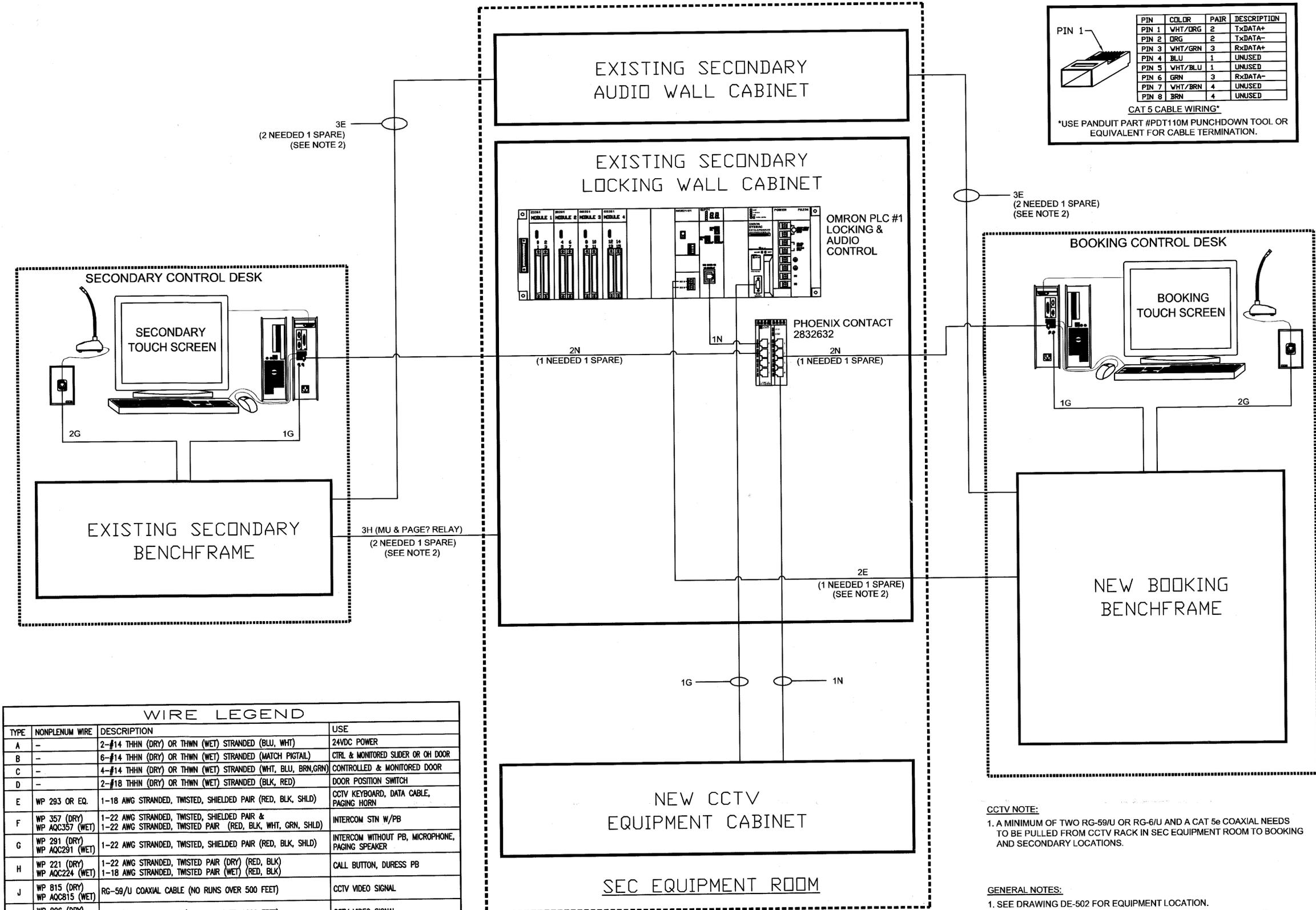
SERVICE: 334-272-0864

© 2010 SIMPLEXGRINNELL LP  
ALL RIGHTS RESERVED

NO.	DATE	REVISION DESCRIPTION

DETENTION SECURITY SYSTEM  
FIRST FLOOR PLAN  
LANCASTER COUNTY JAIL

DRAWN BY: JDB	DATE: 8/31/11
CHECKED BY: CH	DATE: 8/31/11
PROJECT NUMBER: 260-958608702	
SHEET TITLE: DETENTION SECURITY SYSTEM FIRST FLOOR PLAN	
SHEET NUMBER: DE-101	
DE-101.dwg	



PIN 1

PIN	COLOR	PAIR	DESCRIPTION
PIN 1	WHT/ORG	2	TxDATA+
PIN 2	ORG	2	TxDATA-
PIN 3	WHT/GRN	3	RxDATA+
PIN 4	BLU	1	UNUSED
PIN 5	WHT/BLU	1	UNUSED
PIN 6	GRN	3	RxDATA-
PIN 7	WHT/BRN	4	UNUSED
PIN 8	BRN	4	UNUSED

CAT 5 CABLE WIRING\*

\*USE PANDUIT PART #PDT110M PUNCHDOWN TOOL OR EQUIVALENT FOR CABLE TERMINATION.

WIRE LEGEND			
TYPE	NONPLENUM WIRE	DESCRIPTION	USE
A	-	2-#14 THHN (DRY) OR THWN (WET) STRANDED (BLU, WHT)	24VDC POWER
B	-	6-#14 THHN (DRY) OR THWN (WET) STRANDED (MATCH PIGTAIL)	CTRL & MONITORED SLIDER OR OH DOOR
C	-	4-#14 THHN (DRY) OR THWN (WET) STRANDED (WHT, BLU, BRN, GRN)	CONTROLLED & MONITORED DOOR
D	-	2-#18 THHN (DRY) OR THWN (WET) STRANDED (BLK, RED)	DOOR POSITION SWITCH
E	WP 293 OR EQ.	1-18 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	CCTV KEYBOARD, DATA CABLE, PAGING HORN
F	WP 357 (DRY) WP AQC357 (WET)	1-22 AWG STRANDED, TWISTED, SHIELDED PAIR & 1-22 AWG STRANDED, TWISTED PAIR (RED, BLK, WHT, GRN, SHLD)	INTERCOM STN W/PB
G	WP 291 (DRY) WP AQC291 (WET)	1-22 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	INTERCOM WITHOUT PB, MICROPHONE, PAGING SPEAKER
H	WP 221 (DRY) WP AQC224 (WET)	1-22 AWG STRANDED, TWISTED PAIR (DRY) (RED, BLK) 1-18 AWG STRANDED, TWISTED PAIR (WET) (RED, BLK)	CALL BUTTON, DURESS PB
J	WP 815 (DRY) WP AQC815 (WET)	RG-59/U COAXIAL CABLE (NO RUNS OVER 500 FEET)	CCTV VIDEO SIGNAL
K	WP 806 (DRY) WP AQC806 (WET)	RG-6/U COAXIAL CABLE (NO RUNS OVER 1000 FEET)	CCTV VIDEO SIGNAL
L	WP 226 (DRY) WP AQC226 (WET)	1-14 AWG STRANDED, TWISTED PAIR (BLK, WHT)	CCTV POWER
M	WP 452	1-22 AWG STRANDED, TWISTED SHIELDED PAIR (BLK, RED, SHLD)	DATA (COMMUNICATION CABLE)
N	WP 4245 OR EQ.	CAT 5e - 4-24 AWG SOLID, TWISTED PAIR (WHT/BLU, WHT/ORG, WHT/GRN, WHT/BRN)	PLC NETWORK COMMUNICATION

**CCTV NOTE:**  
 1. A MINIMUM OF TWO RG-59/U OR RG-6/U AND A CAT 5e COAXIAL NEEDS TO BE PULLED FROM CCTV RACK IN SEC EQUIPMENT ROOM TO BOOKING AND SECONDARY LOCATIONS.

**GENERAL NOTES:**  
 1. SEE DRAWING DE-502 FOR EQUIPMENT LOCATION.  
 2. EXISTING COMMUNICATIONS WIRE BETWEEN THE CABINETS AND EXISTING EQUIPMENT MAY BE USED IF THEY ARE COMPATIBLE.  
 3. POWER LIMITED AND NONPOWER LIMITED CIRCUITS ARE NOT TO BE COMBINED IN THE SAME CONDUIT AND THE ELECTRICAL CONTRACTOR IS TO INSTALL AND PROVIDE SEPERATION PER NEC.  
 4. ALL 120VAC CIRCUIT PROVIDED BY OTHERS.

**SimplexGrinnell BE SAFE.**

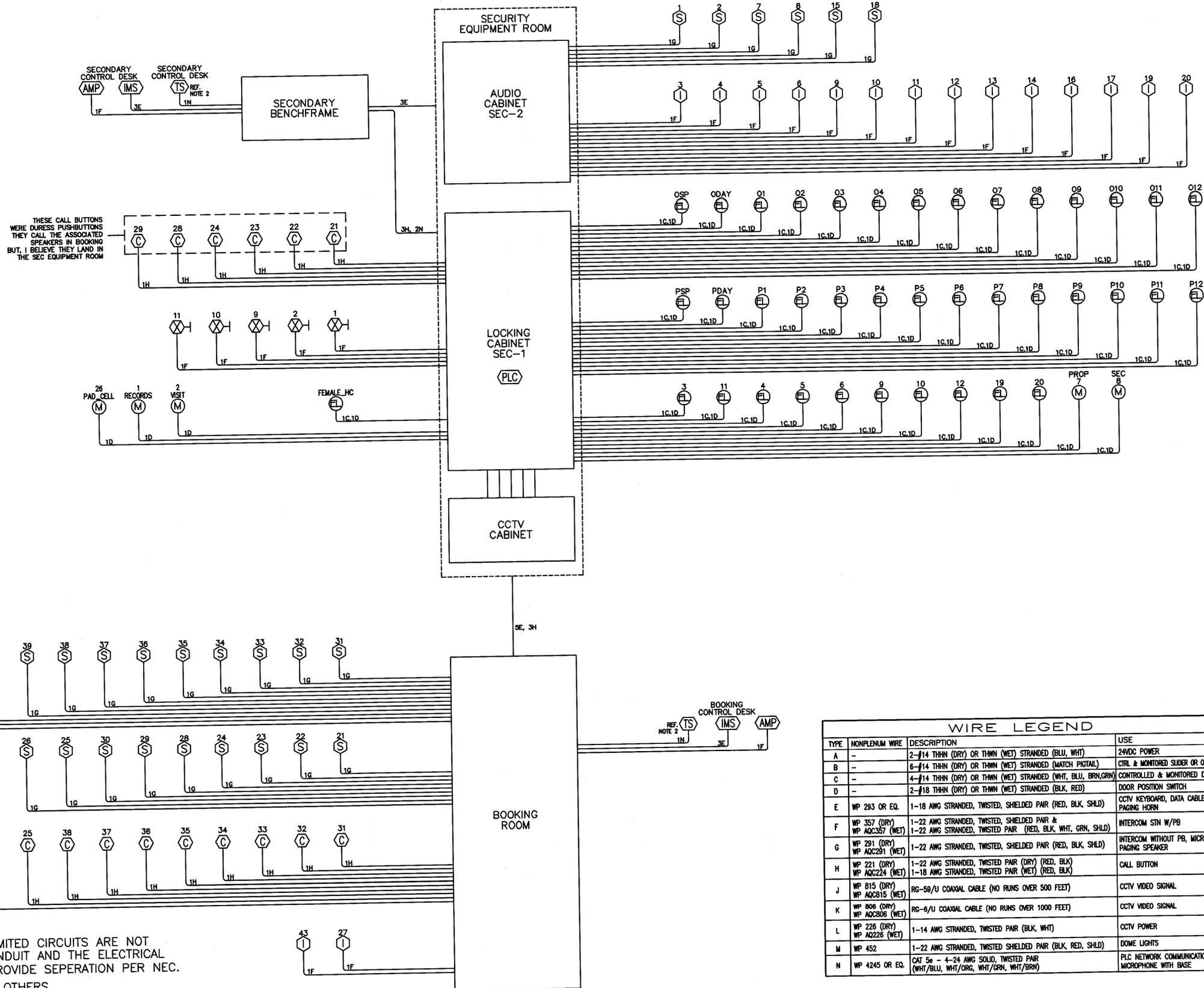
A Tyco International Company  
 8828 SOUTHERN PINES BLVD  
 CHARLOTTE, NC 28273  
 SALES: 704-551-0500  
 SERVICE: 704-551-1550  
 FAX: 704-525-1550

NO.	DATE	REVISION DESCRIPTION

**DETENTION SECURITY SYSTEM  
 CONTROL & EQUIPMENT ROOM RISER  
 LANCASTER COUNTY JAIL**

DRAWN BY: JDB DATE: 8/31/11  
 CHECKED BY: CH DATE: 8/31/11  
 PROJECT NUMBER: 260-958608702  
 SHEET TITLE: DETENTION SECURITY SYSTEM CONTROL & EQUIPMENT ROOM RISER  
 SHEET NUMBER: DE-201  
 DE-201.dwg

DEVICE LEGEND	
<b>LOCKING CONTROL SYSTEM</b>	
(PLC)	LOCKING CONTROL SYSTEM HEAD-END (PLC CABINET)
(TS)	TOUCH SCREEN CONTROL STATION
(EL)	ELECTRICALLY MONITORED AND CONTROLLED SECURITY CLASS DOOR
(M)	DOOR POSITION SWITCH
<b>INTERCOM &amp; PAGING AUDIO SYSTEM</b>	
(AMP)	INTERCOM SYSTEM HEAD-END EQUIPMENT
(IMS)	INTERCOM / PAGING MASTER STATION
(S)	HIGH SECURITY CEILING SPEAKER.
(I)	INTERCOM CALL STATION
(C)	CALL PUSHBUTTON
<b>DURESS ALERT SYSTEM</b>	
(X)	PANIC BUTTON MOUNTED ON CASEWORK OR WALL



WIRE LEGEND		
TYPE	NONPLENUM WIRE DESCRIPTION	USE
A	2-#14 THIN (DRY) OR THIN (WET) STRANDED (BLU, WHT)	24VDC POWER
B	6-#14 THIN (DRY) OR THIN (WET) STRANDED (MATCH PIGTAIL)	CTRL & MONITORED SLIDER OR OH DOOR
C	4-#14 THIN (DRY) OR THIN (WET) STRANDED (WHT, BLU, BRN, GRN)	CONTROLLED & MONITORED DOOR
D	2-#18 THIN (DRY) OR THIN (WET) STRANDED (BLK, RED)	DOOR POSITION SWITCH
E	WP 293 OR EQ. 1-18 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	CCTV KEYBOARD, DATA CABLE, PAGING HORN
F	WP 357 (DRY) WP AQCS57 (WET) 1-22 AWG STRANDED, TWISTED, SHIELDED PAIR & 1-22 AWG STRANDED, TWISTED PAIR (RED, BLK, WHT, GRN, SHLD)	INTERCOM STN W/PB
G	WP 291 (DRY) WP AQCS91 (WET) 1-22 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	INTERCOM WITHOUT PB, MICROPHONE, PAGING SPEAKER
H	WP 221 (DRY) WP AQCS24 (WET) 1-22 AWG STRANDED, TWISTED PAIR (DRY) (RED, BLK) 1-18 AWG STRANDED, TWISTED PAIR (WET) (RED, BLK)	CALL BUTTON
J	WP 815 (DRY) WP AQCS15 (WET) RG-59/U COAXIAL CABLE (NO RUNS OVER 500 FEET)	CCTV VIDEO SIGNAL
K	WP 808 (DRY) WP AQCS08 (WET) RG-6/U COAXIAL CABLE (NO RUNS OVER 1000 FEET)	CCTV VIDEO SIGNAL
L	WP 226 (DRY) WP AQCS26 (WET) 1-14 AWG STRANDED, TWISTED PAIR (BLK, WHT)	CCTV POWER
M	WP 452 1-22 AWG STRANDED, TWISTED SHIELDED PAIR (BLK, RED, SHLD)	DOOR LIGHTS
N	WP 4245 OR EQ. CAT 5e - 4-24 AWG SOLID, TWISTED PAIR (WHT/BLU, WHT/ORG, WHT/GRN, WHT/BRN)	PLC NETWORK COMMUNICATION MICROPHONE WITH BASE

- NOTE:**
- POWER LIMITED AND NONPOWER LIMITED CIRCUITS ARE NOT TO BE COMBINED IN THE SAME CONDUIT AND THE ELECTRICAL CONTRACTOR IS TO INSTALL AND PROVIDE SEPERATION PER NEC.
  - ALL 120VAC CIRCUIT PROVIDED BY OTHERS.

**SimplexGrinnell BE SAFE.**

A Tyco International Company  
 8808 SOUTHERN PINES BLVD  
 CHARLOTTE, NC 28273  
 SALES: 704-551-0500  
 SERVICE: 704-551-1500  
 FAX: 704-525-1550  
 ©2010 SIMPLEXGRINNELL  
 ALL RIGHTS RESERVED

CHG BY	
REVISION DESCRIPTION	
DATE	
NO.	

DETENTION SECURITY SYSTEM  
 DEVICE RISER  
 LANCASTER COUNTY JAIL

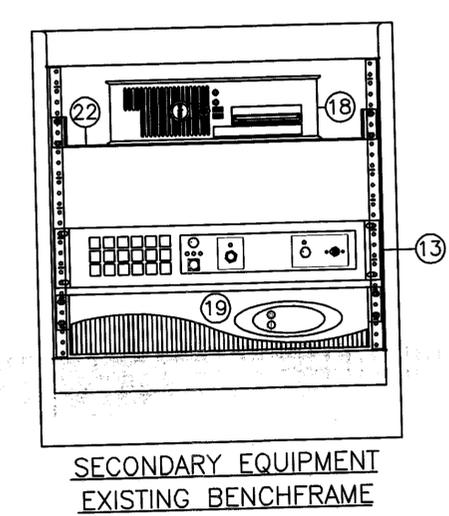
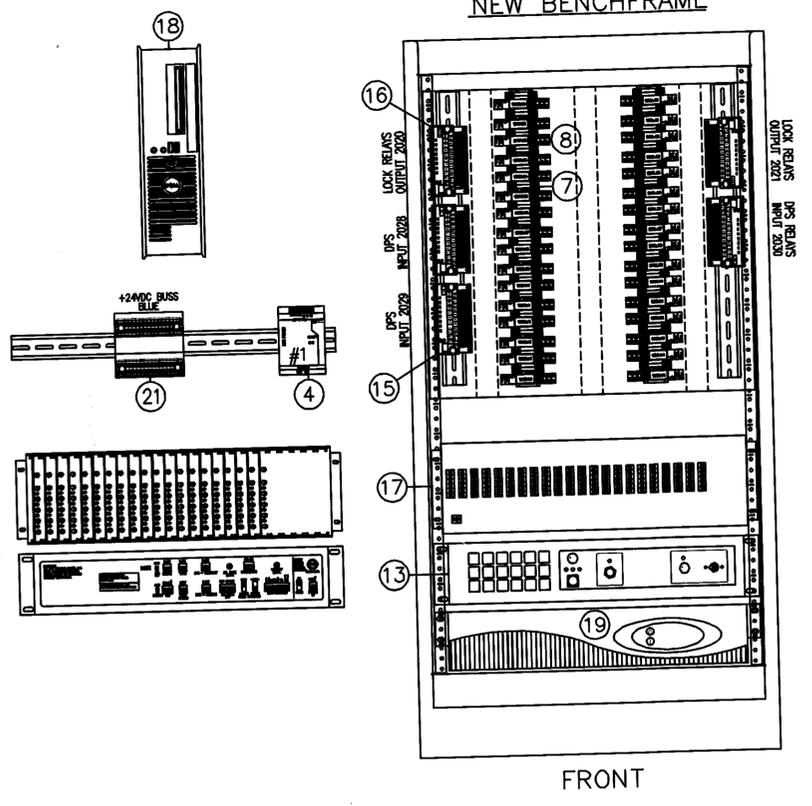
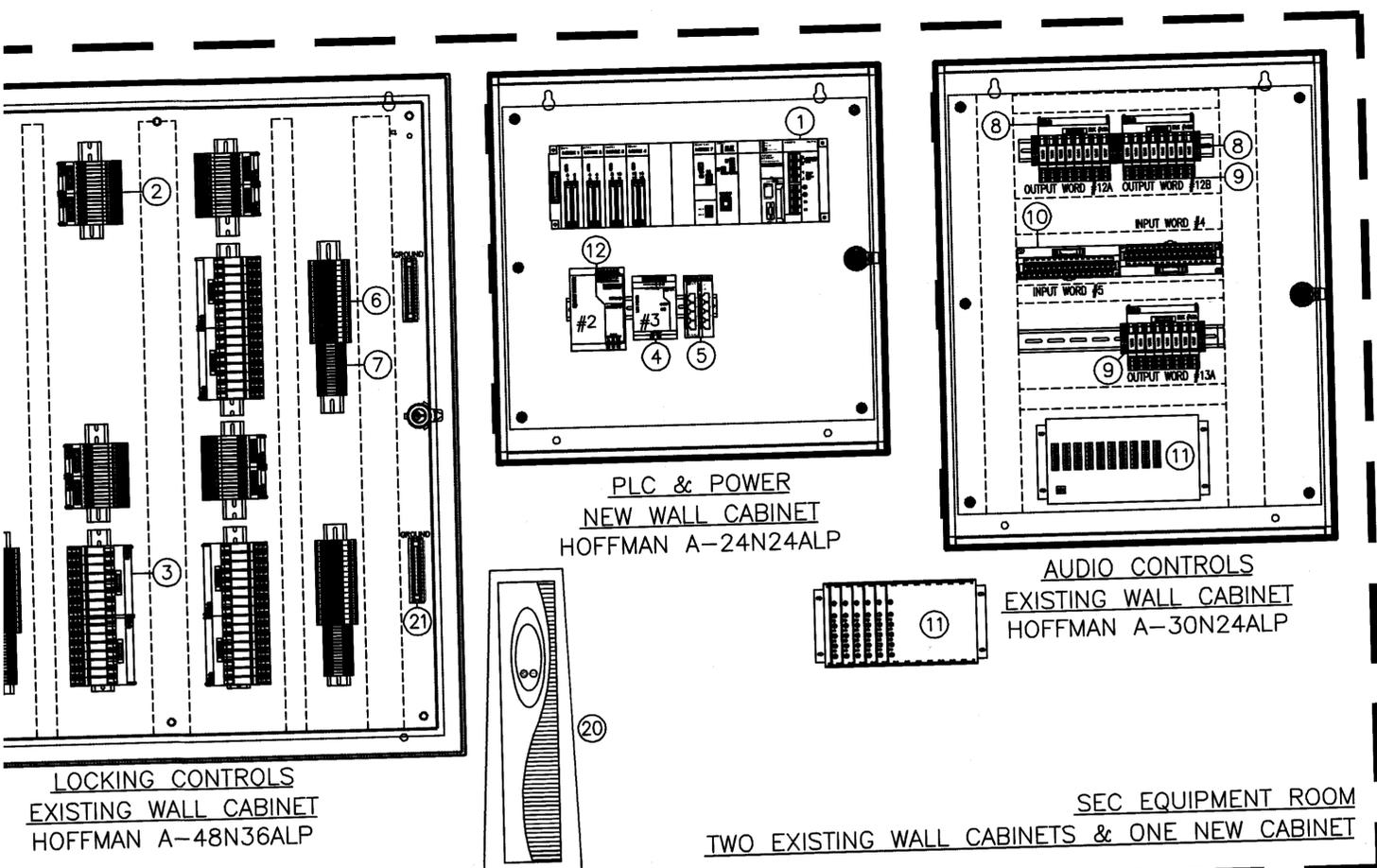
1841 PAGELAND  
 LANCASTER, SC 29720

DRAWN BY: JDB DATE: 8/31/11  
 CHECKED BY: CH DATE: 8/31/11

PROJECT NUMBER:  
 260-958608702

SHEET TITLE:  
 DETENTION SECURITY SYSTEM  
 DEVICE RISER

SHEET NUMBER:  
 DE-202



**EXISTING BACKPLANES AND ENCLOSURE DEVICE LEGEND**

- ⑧ PHOENIX CONTACT 2967060 RELAY & BASE W/ 2304306 CABLE ADAPTER (TYPICAL OF 56) W/ LABELS
- ⑨ PHOENIX CONTACT MTKD 3100017 (TYPICAL OF 12)
- ⑩ OMRON XW2C20G5IN16 INPUT (DPS) TERMINAL BOARD (TYPICAL OF 7)
- ⑪ TSK 5(10) PAC WALL MOUNT ASSEMBLY WITH 6 SDR-C SOUND DETECTION CARDS
- ⑫ PHOENIX CONTACT 2938604 QUINT 24VDC 10 AMP POWER SUPPLY #2 (LOCK POWER)
- ⑬ TSK MAP-701/M-1 MASTER AMP (TYPICAL OF 2)
- ⑭ TSK XP-2440 24VAC @ 40VA AMP POWER SUPPLY (TSK MAP-701/M POWER)
- ⑮ OMRON SRT2-ID16 TRANSISTOR REMOTE TERMINAL BLOCK (TYPICAL OF 2)
- ⑯ OMRON SRT2-OD16 TRANSISTOR REMOTE TERMINAL BLOCK (TYPICAL OF 3)
- ⑰ TSK SD-RA 19" CARD RACK ASSEMBLY WITH 20 SDR-C SOUND DETECTION CARDS
- ⑱ DELL OPTIPLEX TOUCHSCREEN CPU (TYPICAL OF 2)
- ⑲ APC SMT1500RM2U 1.5KVA RACK MOUNTED UPS (TYPICAL OF 2)
- ⑳ APC SMT1500RM2U 1.5KVA STAND-UP UPS (TYPICAL OF 1)
- ㉑ 4100-0632 UTILITY TERMINAL BLOCK (TYPICAL OF 4)
- ㉒ ATLAS SOUND SH2-15 RACK MOUNT SHELF

ON CS1W-BC083-SG RACK  
 PHOENIX CONTACT 2966317 INPUT RELAY BASE W/ 2304115 CABLE ADAPTER (TYPICAL OF 64) W/ LABELS  
 PHOENIX CONTACT 2967620 RELAY & BASE W/ 2304306 CABLE ADAPTER (TYPICAL OF 48) W/ LABELS  
 PHOENIX CONTACT 2866336 24VDC 10 AMP POWER SUPPLY #1 (LOCK POWER)  
 PHOENIX CONTACT FL SWITCH 2632 LM 8TX NETWORK HUB  
 PHOENIX CONTACT 3118203 3-FSI/C FUSE HOLDER (TYPICAL OF 48)  
 PHOENIX CONTACT 3101016 (TYPICAL OF 128)  
 SEE DWGS. DE-503 & DE-604 FOR POWER WIRING.  
 SEE DRAWING DE-701 FOR UPS CALCULATIONS AND POWER TERMINATION DETAILS.  
 SEPARATE CLASS 1 AND CLASS 2 WIRING IN CABINETS.  
 ALL CABINETS EXISTING OR PROVIDED BY OTHERS.

**SimplexGrinnell BE SAFE.**  
 A Tyco International Company  
 9628 SOUTHERN PINES BLVD  
 CHARLOTTE, NC 28273  
 SALES: 704-501-0500  
 SERVICE: 704-501-0500  
 FAX: 704-525-1550  
 © 2010 SIMPLEXGRINNELL LP  
 ALL RIGHTS RESERVED

NO.	DATE	REVISION DESCRIPTION

PROJECT NUMBER: 260-958608702  
 SHEET TITLE: DETENTION SECURITY SYSTEM HEADEND EQUIPMENT LAYOUT  
 SHEET NUMBER: DE-301  
 DE-301.dwg

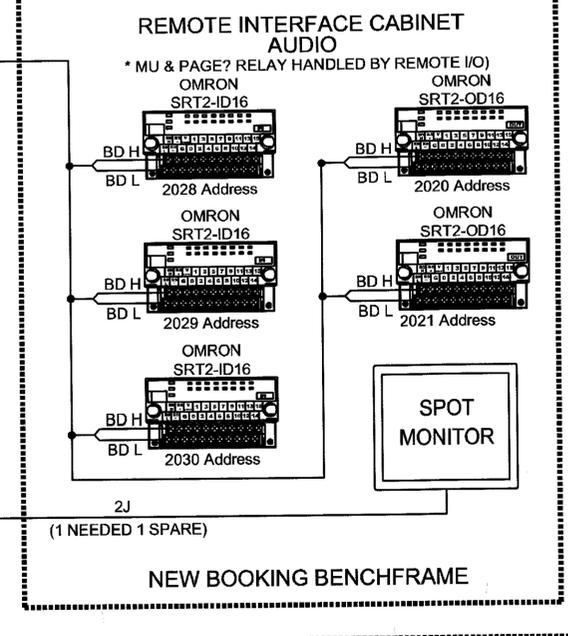
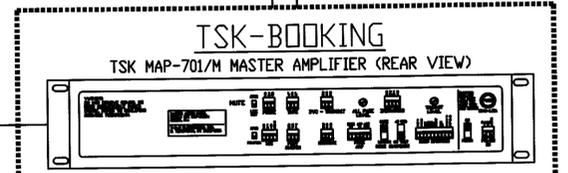
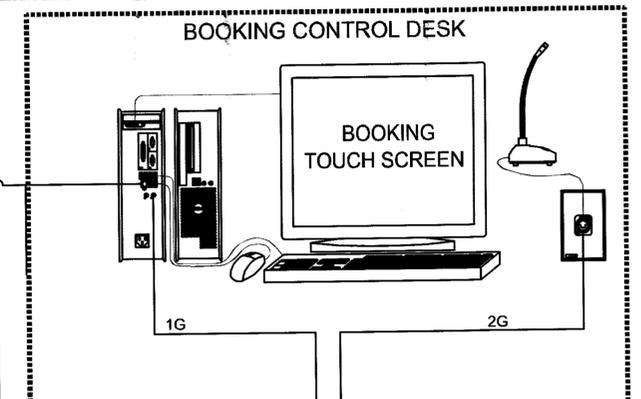
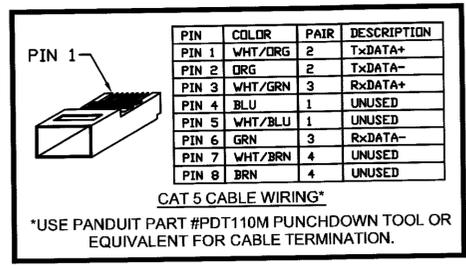
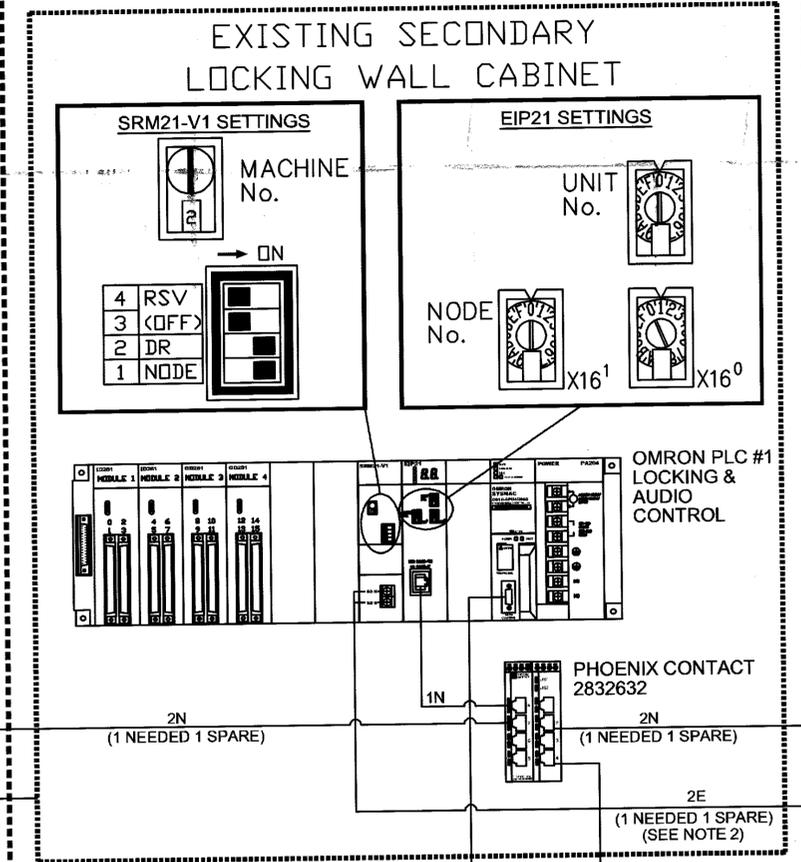
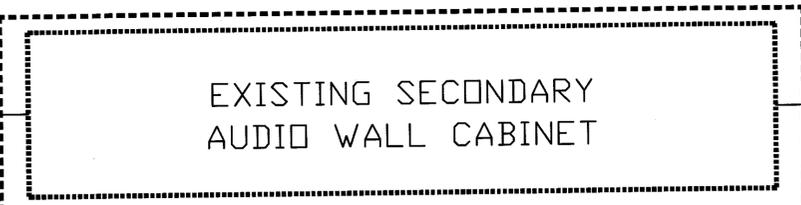
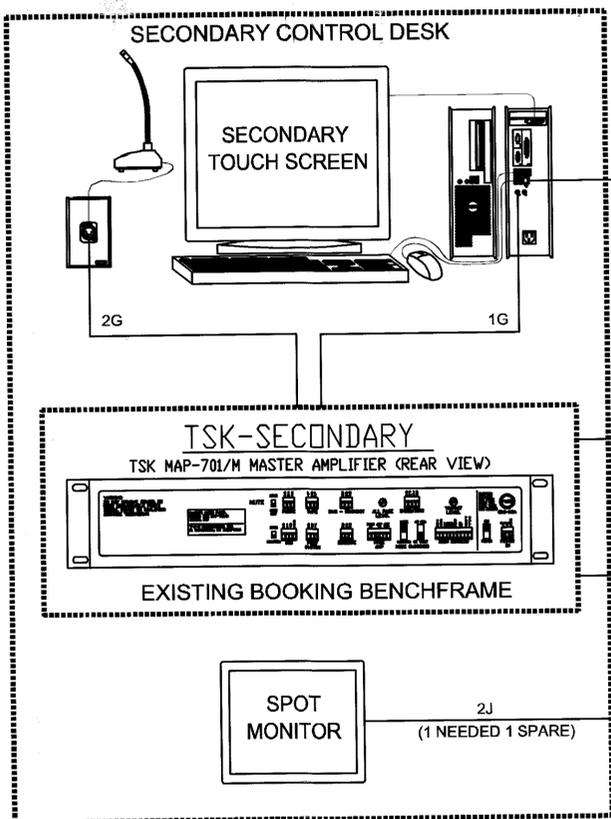
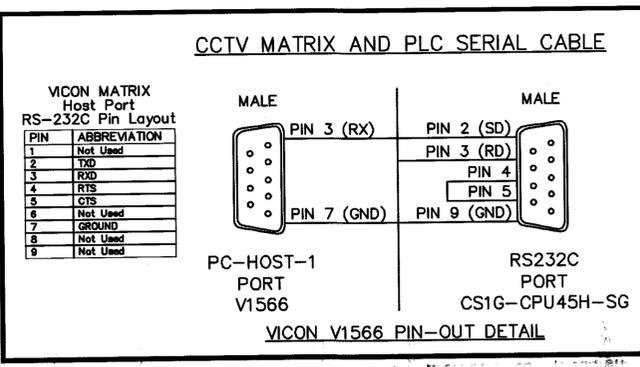
DETENTION SECURITY SYSTEM  
 HEADEND EQUIPMENT LAYOUT  
 LANCASTER COUNTY JAIL  
 1841 PAGELAND  
 LANCASTER, SC 29720

NO.	DATE	REVISION DESCRIPTION

DATE	NO.	REVISION DESCRIPTION

DETENTION SECURITY SYSTEM  
 PLC SYSTEM NETWORK RISER DIAGRAM  
 LANCASTER COUNTY JAIL

DRAWN BY: JDB DATE: 8/31/11  
 CHECKED BY: CH DATE: 8/31/11  
 PROJECT NUMBER: 280-858608702  
 SHEET TITLE: DETENTION SECURITY SYSTEM  
 PLC SYSTEM NETWORK RISER DIAGRAM  
 SHEET NUMBER: DE-401  
 DE-401.dwg



### WIRE LEGEND

TYPE	NONPLENUM WIRE	DESCRIPTION	USE
A	-	2-#14 THHN (DRY) OR THWN (WET) STRANDED (BLU, WHT)	24VDC POWER
B	-	6-#14 THHN (DRY) OR THWN (WET) STRANDED (MATCH PIGTAIL)	CTRL & MONITORED SLIDER OR OH DOOR
C	-	4-#14 THHN (DRY) OR THWN (WET) STRANDED (WHT, BLU, BRN,GRN)	CONTROLLED & MONITORED DOOR
D	-	2-#18 THHN (DRY) OR THWN (WET) STRANDED (BLK, RED)	DOOR POSITION SWITCH
E	WP 293 OR EQ.	1-18 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	CCTV KEYBOARD, DATA CABLE, PAGING HORN
F	WP 357 (DRY) WP AQC357 (WET)	1-22 AWG STRANDED, TWISTED, SHIELDED PAIR & 1-22 AWG STRANDED, TWISTED PAIR (RED, BLK, WHT, GRN, SHLD)	INTERCOM STN W/PB
G	WP 291 (DRY) WP AQC291 (WET)	1-22 AWG STRANDED, TWISTED, SHIELDED PAIR (RED, BLK, SHLD)	INTERCOM WITHOUT PB, MICROPHONE, PAGING SPEAKER
H	WP 221 (DRY) WP AQC224 (WET)	1-22 AWG STRANDED, TWISTED PAIR (DRY) (RED, BLK) 1-18 AWG STRANDED, TWISTED PAIR (WET) (RED, BLK)	CALL BUTTON, DURESS PB
J	WP 815 (DRY) WP AQC815 (WET)	RG-59/U COAXIAL CABLE (NO RUNS OVER 500 FEET)	CCTV VIDEO: SIGNAL
K	WP 806 (DRY) WP AQC806 (WET)	RG-6/U COAXIAL CABLE (NO RUNS OVER 1000 FEET)	CCTV VIDEO SIGNAL
L	WP 226 (DRY) WP AQC226 (WET)	1-14 AWG STRANDED, TWISTED PAIR (BLK, WHT)	CCTV POWER
M	WP 452	1-22 AWG STRANDED, TWISTED SHIELDED PAIR (BLK, RED, SHLD)	DATA (COMMUNICATION CABLE)
N	WP 4245 OR EQ.	CAT. 5e - 4-24 AWG SOLID, TWISTED PAIR (WHT/BLU, WHT/ORG, WHT/GRN, WHT/BRN)	PLC NETWORK COMMUNICATION

- ### GENERAL NOTES:
- SEE DRAWING DE-502 FOR EQUIPMENT LOCATION.
  - EXISTING COMMUNICATIONS WIRE BETWEEN THE CABINETS AND EXISTING EQUIPMENT MAY BE USED IF THEY ARE COMPATIBLE.
  - POWER LIMITED AND NONPOWER LIMITED CIRCUITS ARE NOT TO BE COMBINED IN THE SAME CONDUIT AND THE ELECTRICAL CONTRACTOR IS TO INSTALL AND PROVIDE SEPERATION PER NEC.
  - ALL 120VAC CIRCUIT PROVIDED BY OTHERS.

**GENERAL NOTES:**

1. SEE DRAWING DE-301 FOR EQUIPMENT LOCATION.
2. EXISTING COMMUNICATIONS WIRE BETWEEN THE CABINETS AND EXISTING EQUIPMENT MAY BE USED IF THEY ARE COMPATIBLE.
3. REFER TO ALL DE-500 DRAWINGS PRIOR TO LOCKING TERMINATIONS.
4. REFER TO ALL DE-600 DRAWINGS PRIOR TO LOCKING TERMINATIONS.

**SEC EQUIPMENT ROOM**

CS1W-0D261-SG 64 POINT OUTPUT MODULE  
(TYPICAL OF TWO)  
CS1W-ID261-SG 64 POINT INPUT MODULE  
(TYPICAL OF TWO)

C200HW-SRM21-V1 COMPOBUS/S MASTER MODULE  
CS1W-EIP21-SG ETHERNET MODULE  
CS1G-CPU45H-SG PROGRAMMABLE LOGIC CONTROLLER  
C200HW-PA204-SG POWER SUPPLY MODULE

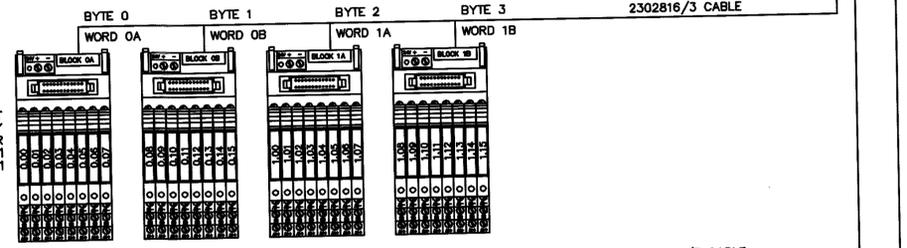
1B 120VAC FROM UPS  
SEE DRAWING 10.1  
FOR UPS SCHEDULE

CS1W-BC083-SG BACKPLANE

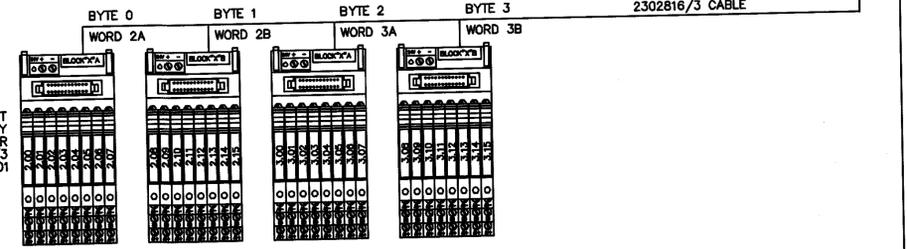
**OMRON PLC #1  
LOCKING, AUDIO  
& CAMERA CONTROL**

1N\_VICON  
SEE DRAWING 6.1 PIN-OUT DETAIL

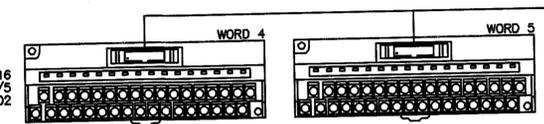
1N TO PHOENIX CONTACT 2832632 SWITCH  
SEE DETAILS ABOVE



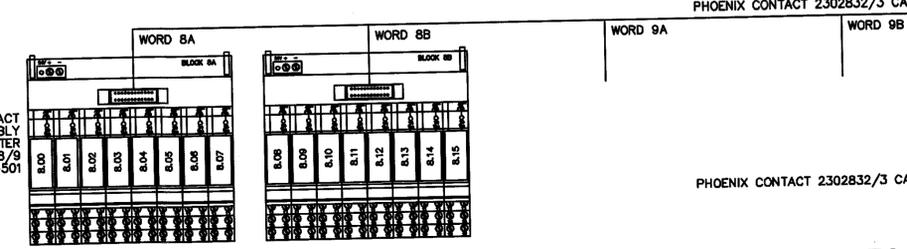
PHOENIX CONTACT  
2966317 INPUT RELAY ASSEMBLY  
& 2304115 CABLE ADAPTER  
INPUT RELAY BLOCKS #0/1  
SEE DRAWING DE-501



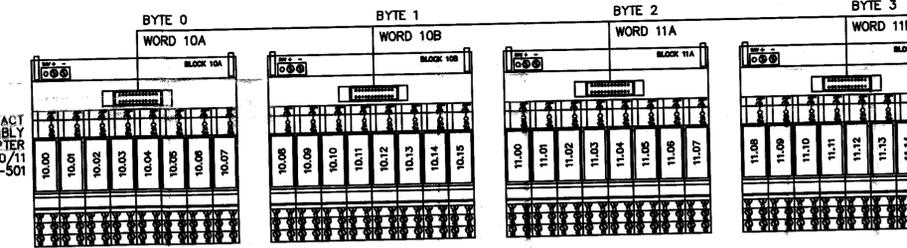
PHOENIX CONTACT  
2966317 INPUT RELAY ASSEMBLY  
& 2304115 CABLE ADAPTER  
INPUT RELAY BLOCKS #2/3  
SEE DRAWING DE-501



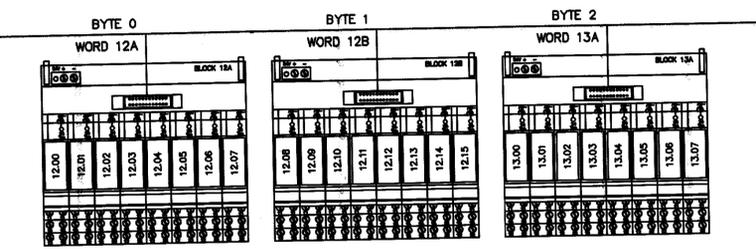
OMRON XW2C20GSIN16  
INPUT BOARD #4/5  
SEE DRAWING DE-602



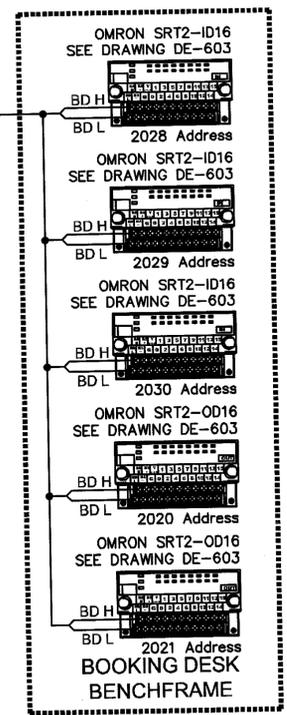
PHOENIX CONTACT  
2967620 RELAY ASSEMBLY  
& 2304306 CABLE ADAPTER  
OUTPUT RELAY BLOCKS #8/9  
SEE DRAWING DE-501



PHOENIX CONTACT  
2967620 RELAY ASSEMBLY  
& 2304306 CABLE ADAPTER  
OUTPUT RELAY BLOCKS #10/11  
SEE DRAWING DE-501



PHOENIX CONTACT  
2967060 RELAY ASSEMBLY  
& 2304306 CABLE ADAPTER  
OUTPUT RELAY BLOCKS #12/13  
SEE DRAWING DE-602



CABLE LENGTH	FEET
XW2Z-050B CABLE	1.84 FT
XW2Z-100B CABLE	3.28 FT
078-0100C-75 CABLE	2.48 FT
XW2Z-150B CABLE	4.82 FT
078-0150C-125 CABLE	4.10 FT
XW2Z-200B CABLE	6.56 FT
078-0200C-175 CABLE	5.74 FT
2304199	
XW2Z-300B CABLE	9.84 FT
078-0300C-275 CABLE	9.02 FT
2302832/3	
XW2Z-500B CABLE	16.40 FT
078-0500C-475 CABLE	15.58 FT
2302832/5	

**SimplexGrinnell BE SAFE.**  
A Tyco International Company  
8635 SOUTHERN PINES BLVD  
CHARLOTTE, NC 28275  
SALES: 704-501-5500  
FAX: 704-525-1550  
© 2010 SIMPLEXGRINNELL  
ALL RIGHTS RESERVED

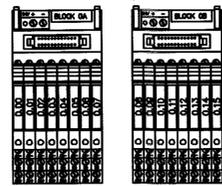
NO.	DATE	REVISION DESCRIPTION

NO.	DATE	REVISION DESCRIPTION

**DETENTION SECURITY SYSTEM  
PLC NETWORK CABLE DIAGRAM**  
LANCASTER COUNTY JAIL  
1941 PACELAND  
LANCASTER, SC 29720

DRAWN BY: JDB DATE: 8/31/11  
CHECKED BY: CH DATE: 8/31/11  
PROJECT NUMBER: 260-658608702  
SHEET TITLE: DETENTION SECURITY SYSTEM  
PLC NETWORK CABLE DIAGRAM  
SHEET NUMBER: DE-402  
DE-402.dwg

**DURESS/CALL INPUT RELAYS WORD - #0**  
 OMRON 2966317 RELAY ASSY. W/ 2304115 CABLE ADAPTER  
 OMRON 2961121 RELAY W/2966061 BASE (TYP.)

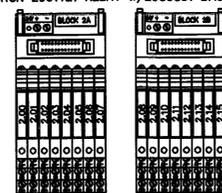


PROGRAMMING NOTE:  
 SIX OF THE ELEVEN DURESS PUSHBUTTONS  
 ARE INTERCOM CALLS FOR THE DAYROOM SPEAKERS.

DOOR #	LOCATION	RELAY #	I/O	WIRE COLOR	TERMS	VOLTAGE	TERMS	VOLTAGE	LOCATION	TERMS
1	RECORDS RM	R1	0.00	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	7
2	VISITATION	R2	0.01	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	6
11	CORR/PAD CELL	R3	0.02	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	5
SPARE	N/A	R4	0.03	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	4
SPARE	N/A	R5	0.04	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	3
SPARE	N/A	R6	0.05	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	2
SPARE	N/A	R7	0.06	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	1
SPARE	N/A	R8	0.07	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	0
29	L_DAYROOM	R9	0.08	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	7
28	J_DAYROOM	R10	0.09	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	6
24	K_DAYROOM	R11	0.10	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	5
23	L_DAYROOM	R12	0.11	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	4
22	N_DAYROOM	R13	0.12	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	3
21	M_DAYROOM	R14	0.13	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	2
9	P_SALLYPORT	R15	0.14	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	1
10	O_SALLYPORT	R16	0.15	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER LEFT	0

IF THE DPS VOLTAGE IS -24VDC, TAKE THE RED WIRE TO THE A2- TERMINAL AND JUMPER THE A1+ TERMINAL WITH #2836269 BLUE INSERTION BRIDGE AND FEED +24VDC FROM POWER SUPPLY. BUT IF THE DPS VOLTAGE IS +24VDC, TAKE THE RED WIRE TO THE A1+ TERMINAL AND JUMPER THE A2- TERMINAL WITH #2966838 GREY CONTINUOUS BRIDGE AND FEED -24VDC FROM POWER SUPPLY.  
 \*\* THE ORIGINAL WIRING WAS FOR DURESS PUSHBUTTONS.

**DPS INPUT RELAYS WORD - #2**  
 OMRON 2966317 RELAY ASSY. W/ 2304115 CABLE ADAPTER  
 OMRON 2961121 RELAY W/2966061 BASE (TYP.)



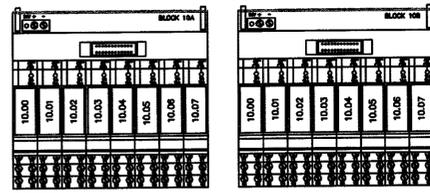
DOOR #	LOCATION	RELAY #	I/O	WIRE COLOR	TERMS	VOLTAGE	TERMS	VOLTAGE	LOCATION	TERMS
SPARE	SPARE	R1	2.00	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	7
SPARE	SPARE	R2	2.01	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	6
SPARE	SPARE	R3	2.02	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	5
5 (3)	MULTI/VEST	R4	2.03	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	4
5 (2)	DPS PADDED CELL	R5	2.04	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	3
25 (4)	FEMALE HC CELL	R6	2.05	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	2
11 (5)	DORM EXT EXT	R7	2.06	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	1
3 (6)	DORM/NEW VEST	R8	2.07	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	0
4 (8)	NEW VEST/EXT	R9	2.08	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	7
6 (9)	NEW CORR/VEST	R10	2.09	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	6
7 (11)	SEC EQUIP RM	R11	2.10	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	5
12 (12)	PROP STORAGE	R12	2.11	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	4
10 (13)	MULTI PUR SP/EXT	R13	2.12	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	3
9 (14)	MULTI PUR/SP	R14	2.13	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	2
8 (15)	MULTI PUR/CORR	R15	2.14	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	1
P_SP	P SP/CORR	R16	2.15	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER LEFT	0

IF THE DPS VOLTAGE IS -24VDC, TAKE THE RED WIRE TO THE A2- TERMINAL AND JUMPER THE A1+ TERMINAL WITH #2836269 BLUE INSERTION BRIDGE AND FEED +24VDC FROM POWER SUPPLY. BUT IF THE DPS VOLTAGE IS +24VDC, TAKE THE RED WIRE TO THE A1+ TERMINAL AND JUMPER THE A2- TERMINAL WITH #2966838 GREY CONTINUOUS BRIDGE AND FEED -24VDC FROM POWER SUPPLY.

**NOTE:**

1. REFERENCE ALL LOCKING SECTION DE-500 DRAWINGS BEFORE WIRING.

**LOCK RELAYS - WORD #10**  
 OMRON 2967620 RELAY ASSY. W/ 2304306 CABLE ADAPTER  
 OMRON 2961312 RELAY W/2967772 BASE (TYP.)

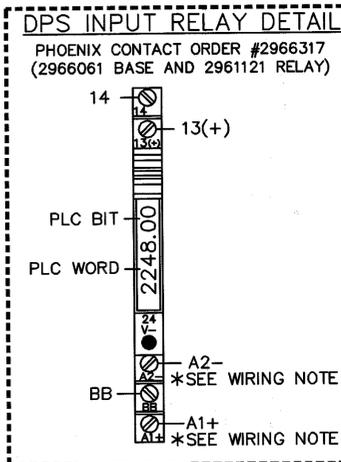


ARCH#	LOCATION	RELAY #	I/O	WIRE COLOR	TERMS	VOLTAGE	TERMS	VOLTAGE	LOCATION	TERMS
SECONDARY TSK UNMUTE	R1	10.00	14	YELLOW	126-E	120VAC				
SPARE	N/A	R2	10.01	14	YELLOW	126-E	120VAC			
SPARE	N/A	R3	10.02	14	YELLOW	126-E	120VAC			
5 (2)	MULTI/VEST	R4	10.03	14	YELLOW	126-E	120VAC			
SPARE	N/A	R5	10.04	14	YELLOW	126-E	120VAC			
25 (4)	FEMALE HC CELL	R6	10.05	14	YELLOW	126-E	120VAC			
11 (5)	DORM EXT EXT	R7	10.06	14	YELLOW	126-E	120VAC			
3 (6)	DORM/NEW VEST	R8	10.07	14	YELLOW	126-E	120VAC			
4 (8)	NEW VEST/EXT	R9	10.08	14	YELLOW	126-E	120VAC			
6 (9)	NEW CORR/VEST	R10	10.09	14	YELLOW	126-E	120VAC			
SPARE	N/A	R11	10.10	14	YELLOW	126-E	120VAC			
SPARE	N/A	R12	10.11	14	YELLOW	126-E	120VAC			
12 (12)	MULTI PUR SP/EXT	R13	10.12	14	YELLOW	126-E	120VAC			
10 (13)	MULTI PUR/SP	R14	10.13	14	YELLOW	126-E	120VAC			
9 (14)	MULTI PUR/CORR	R15	10.14	14	YELLOW	126-E	120VAC			
P_SP	P SP/CORR	R16	10.15	14	YELLOW	126-E	120VAC			

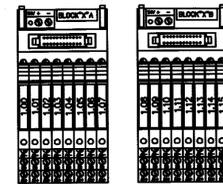
**\* DPS WIRING NOTE:**

A2-  
 IF ORIGINAL VOLTAGE IS -24VDC, LAND BROWN WIRE  
 IF ORIGINAL VOLTAGE IS +24VDC, JUMPER WITH #2966838  
 GREY CONTINUOUS BRIDGE AND FEED -24VDC FROM PS#2

A1+  
 IF ORIGINAL VOLTAGE IS +24VDC, LAND BROWN WIRE  
 IF ORIGINAL VOLTAGE IS -24VDC, JUMPER WITH #2836269  
 BLUE INSERTION BRIDGE AND FEED +24VDC FROM PS#2



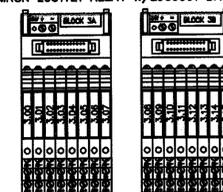
**DPS INPUT RELAYS WORD - #1**  
 OMRON 2966317 RELAY ASSY. W/ 2304115 CABLE ADAPTER  
 OMRON 2961121 RELAY W/2966061 BASE (TYP.)



DOOR #	LOCATION	RELAY #	I/O	WIRE COLOR	TERMS	VOLTAGE	TERMS	VOLTAGE	LOCATION	TERMS
1	RECORDS	R1	1.00	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	0
2	INMATE VISITATION	R2	1.01	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	1
SPARE	SPARE	R3	1.02	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	2
19 (35)	2nd CTRL R	R4	1.03	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	3**
20 (36)	2nd CTRL L	R5	1.04	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	4
O_SP	O SP/CORR	R6	1.05	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	5
O_DAY	O SP/O DAY	R7	1.06	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	6
O_7	DAYRM 0 7 CELL	R8	1.07	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	7
O_8	DAYRM 0 8 CELL	R9	1.08	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	0
O_9	DAYRM 0 9 CELL	R10	1.09	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	1
O_10	DAYRM 0 10 CELL	R11	1.10	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	2
O_11	DAYRM 0 11 CELL	R12	1.11	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	3
O_12	DAYRM 0 12 CELL	R13	1.12	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	4
O_6	DAYRM 0 6 CELL	R14	1.13	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	5
O_5	DAYRM 0 5 CELL	R15	1.14	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	6
O_4	DAYRM 0 4 CELL	R16	1.15	BROWN	A2-	-24VDC	A1+	+24VDC	UPPER RIGHT	7

IF THE DPS VOLTAGE IS -24VDC, TAKE THE RED WIRE TO THE A2- TERMINAL AND JUMPER THE A1+ TERMINAL WITH #2836269 BLUE INSERTION BRIDGE AND FEED +24VDC FROM POWER SUPPLY. BUT IF THE DPS VOLTAGE IS +24VDC, TAKE THE RED WIRE TO THE A1+ TERMINAL AND JUMPER THE A2- TERMINAL WITH #2966838 GREY CONTINUOUS BRIDGE AND FEED -24VDC FROM POWER SUPPLY.  
 \*\* DO NOT KNOW WHAT THIS ORIGINAL BROWN WIRE (INPUT) IS FOR?

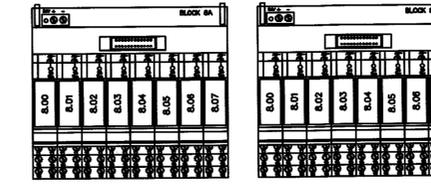
**DPS INPUT RELAYS WORD - #3**  
 OMRON 2966317 RELAY ASSY. W/ 2304115 CABLE ADAPTER  
 OMRON 2961121 RELAY W/2966061 BASE (TYP.)



DOOR #	LOCATION	RELAY #	I/O	WIRE COLOR	TERMS	VOLTAGE	TERMS	VOLTAGE	LOCATION	TERMS
O_3 (16)	DAYRM 0 3 CELL	R1	3.00	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	0
O_2 (17)	DAYRM 0 2 CELL	R2	3.01	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	1
O_1 (18)	DAYRM 0 1 CELL	R3	3.02	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	2
P_7 (19)	DAYRM P 7 CELL	R4	3.03	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	3
P_8 (20)	DAYRM P 8 CELL	R5	3.04	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	4
P_9 (21)	DAYRM P 9 CELL	R6	3.05	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	5
P_10 (22)	DAYRM P 10 CELL	R7	3.06	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	6
P_11 (23)	DAYRM P 11 CELL	R8	3.07	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	7
P_12 (24)	DAYRM P 12 CELL	R9	3.08	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	0
P_5 (25)	DAYRM P 5 CELL	R10	3.09	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	1
P_4 (26)	DAYRM P 4 CELL	R11	3.10	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	2
P_3 (27)	DAYRM P 3 CELL	R12	3.11	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	3
P_2 (28)	DAYRM P 2 CELL	R13	3.12	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	4
P_1 (30)	DAYRM P 1 CELL	R14	3.13	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	5
P_DAY(31)	P SP/P DAY	R15	3.14	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	6
		R16	3.15	BROWN	A2-	-24VDC	A1+	+24VDC	LOWER RIGHT	7

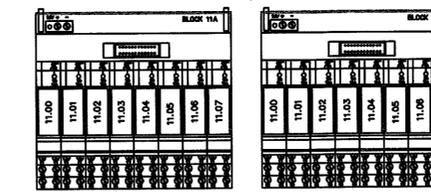
IF THE DPS VOLTAGE IS -24VDC, TAKE THE RED WIRE TO THE A2- TERMINAL AND JUMPER THE A1+ TERMINAL WITH #2836269 BLUE INSERTION BRIDGE AND FEED +24VDC FROM POWER SUPPLY. BUT IF THE DPS VOLTAGE IS +24VDC, TAKE THE RED WIRE TO THE A1+ TERMINAL AND JUMPER THE A2- TERMINAL WITH #2966838 GREY CONTINUOUS BRIDGE AND FEED -24VDC FROM POWER SUPPLY.

**LOCK RELAYS - WORD #8**  
 OMRON 2967620 RELAY ASSY. W/ 2304306 CABLE ADAPTER  
 OMRON 2961312 RELAY W/2967772 BASE (TYP.)



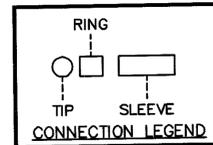
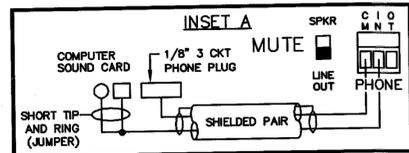
ARCH#	LOCATION	RELAY #	I/O	WIRE COLOR	TERMS	VOLTAGE	TERMS	VOLTAGE	LOCATION	TERMS
SPARE	RECORDS	R1	8.00	14	YELLOW	126-E	120VAC			
SPARE	INMATE VISITATION	R2	8.01	14	YELLOW	126-E	120VAC			
SPARE	SPARE	R3	8.02	14	YELLOW	126-E	120VAC			
19 (35)	2nd CTRL R	R4	8.03	14	YELLOW	126-E	120VAC			
20 (36)	2nd CTRL L	R5	8.04	14	YELLOW	126-E	120VAC			
O_SP	O SP/CORR	R6	8.05	14	YELLOW	126-E	120VAC			
O_DAY	O SP/O DAY	R7	8.06	14	YELLOW	126-E	120VAC			
O_7	DAYRM 0 7 CELL	R8	8.07	14	YELLOW	126-E	120VAC			
O_8	DAYRM 0 8 CELL	R9	8.08	14	YELLOW	126-E	120VAC			
O_9	DAYRM 0 9 CELL	R10	8.09	14	YELLOW	126-E	120VAC			
O_10	DAYRM 0 10 CELL	R11	8.10	14	YELLOW	126-E	120VAC			
O_11	DAYRM 0 11 CELL	R12	8.11	14	YELLOW	126-E	120VAC			
O_12	DAYRM 0 12 CELL	R13	8.12	14	YELLOW	126-E	120VAC			
O_6	DAYRM 0 6 CELL	R14	8.13	14	YELLOW	126-E	120VAC			
O_5	DAYRM 0 5 CELL	R15	8.14	14	YELLOW	126-E	120VAC			
O_4	DAYRM 0 4 CELL	R16	8.15	14	YELLOW	126-E	120VAC			

**LOCK RELAYS - WORD #11**  
 OMRON 2967620 RELAY ASSY. W/ 2304306 CABLE ADAPTER  
 OMRON 2961312 RELAY W/2967772 BASE (TYP.)



ARCH#	LOCATION	RELAY #	I/O	WIRE COLOR	TERMS	VOLTAGE	TERMS	VOLTAGE	LOCATION	TERMS
O_3 (16)	DAYRM 0 3 CELL	R1	11.00	14	YELLOW	126-E	120VAC			
O_2 (17)	DAYRM 0 2 CELL	R2	11.01	14	YELLOW	126-E	120VAC			
O_1 (18)	DAYRM 0 1 CELL	R3	11.02	14	YELLOW	126-E	120VAC			
P_7 (19)	DAYRM P 7 CELL	R4	11.03	14	YELLOW	126-E	120			

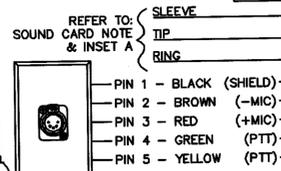




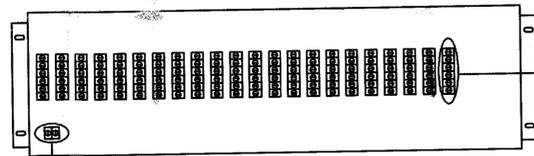
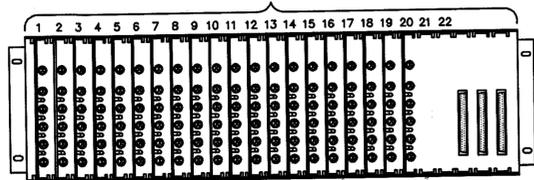
TSK DM827S MICROPHONE CENTRAL CONTROL ROOM 567

TSK MAP-701/M MASTER AMPLIFIER REAR VIEW

1/8\"/>

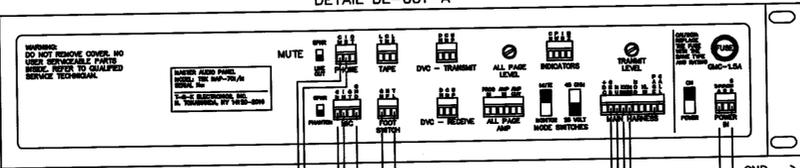


TSK SDR-C BACKPLANE LOCATED IN BOOKING

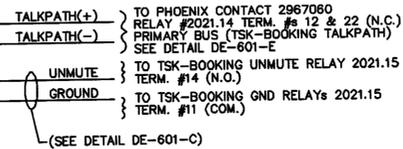


SEE DETAIL 8.1-D FOR TYPICAL 24VDC POWER WIRING

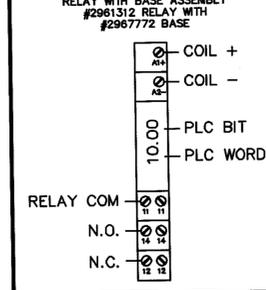
**TSK-BOOKING**  
DETAIL DE-601-A



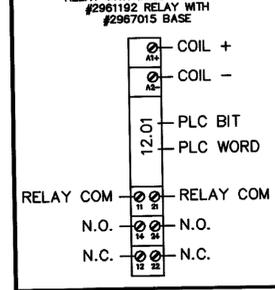
120VAC POWER OUTLET BACKED BY UPS



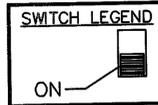
**LOCKING SPDT RELAY DETAIL**  
PHOENIX CONTACT ORDER #2987820  
RELAY WITH BASE ASSEMBLY #2981312 RELAY WITH #2987772 BASE



**AUDIO DPDT RELAY DETAIL**  
PHOENIX CONTACT ORDER #2987060  
RELAY WITH BASE ASSEMBLY #2981192 RELAY WITH #2987715 BASE



GENERAL NOTES:  
1. USE WP 293 (18AWG T.S.P.) OR EQUIVALENT FOR AUDIO INTERCONNECTIONS.  
2. REFER TO DRAWING DE-301 FOR EQUIPMENT LOCATION.  
3. REFER TO ALL DE-600 DRAWINGS FOR AUDIO HEADEND TERMINATIONS.

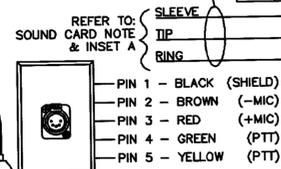


**TSK-SECONDARY**  
DETAIL DE-601-B

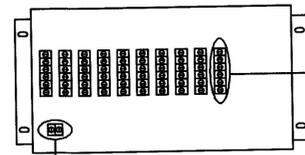
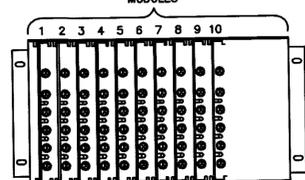
TSK MAP-701/M MASTER AMPLIFIER REAR VIEW

1/8\"/>

TSK DM827S MICROPHONE INTAKE CONTROL ROOM 431

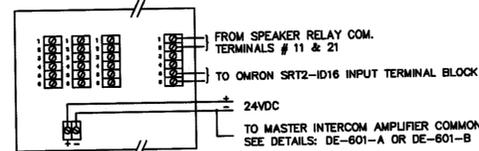


TSK PAC-C BACKPLANE FOR SECONDARY LOCATED IN SEC EQUIPMENT ROOM

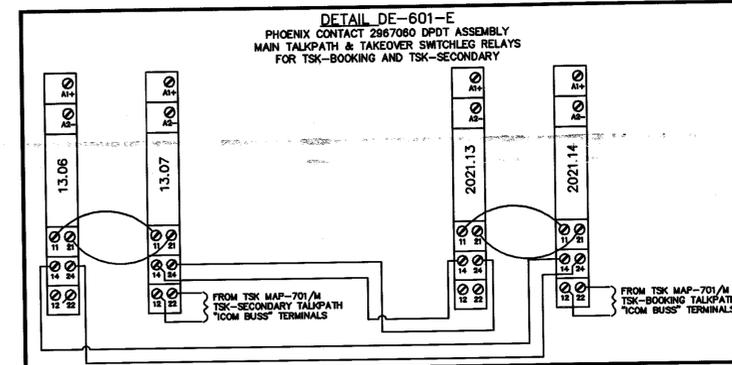


SEE DETAIL 8.1-D FOR TYPICAL 24VDC POWER WIRING

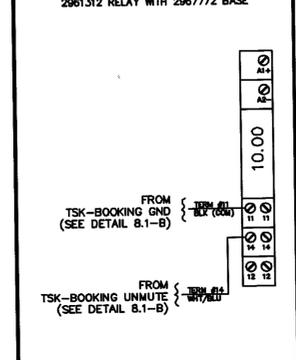
**TSK SDR-C TYPICAL WIRING**  
DETAIL DE-601-F



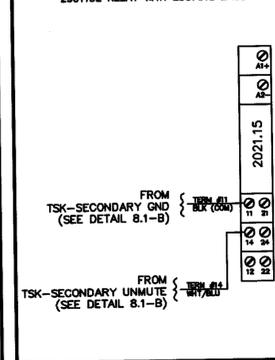
DETAIL DE-601-F NOTE:  
1.) J1 SHORTING PLUG ON EACH RELAY MODULE TO BE INSTALLED FOR MOMENTARY OUTPUT.  
2.) J2 PIN FOR EACH MODULE TO BE INSTALLED IN THE "B" POSITION FOR OUTPUT TO PINS 5 & 6.



**DETAIL DE-601-C**  
SECONDARY TSK AMPLIFIER WAKE-UP "MU" RELAY  
PHOENIX CONTACT 2987620 ASSEMBLY - 2981312 RELAY WITH 2987772 BASE



**DETAIL DE-601-D**  
BOOKING TSK AMPLIFIER WAKE-UP "MU" RELAY  
PHOENIX CONTACT 2987060 ASSEMBLY - 2981192 RELAY WITH 2987715 BASE



**SOUND CARD NOTE:**  
1.) BEFORE CONNECTING TO COMPUTER, MAKE SURE THE COMPUTER IS UP AND RUNNING.  
2.) ALT F4 OUT OF WONDERWARE APP.  
3.) PLUG INTO THE BLUE COLORED "MIC/LINE-IN" FEMALE INPUT ON THE BACK OF THE COMPUTER.  
4.) A POPUP SHOULD APPEAR ON SCREEN ASKING TO SELECT "MICROPHONE OR LINE-IN DEVICES" CHOOSE "LINE-IN" DEVICE.  
5.) ON THE COMPUTER SCREEN GO DOWN TO THE WINDOWS TASKBAR AND ON THE RIGHT SIDE DOUBLE CLICK THE "VOLUME" ICON (LOOKS LIKE A SPEAKER) AND REMOVE THE CHECK, IN FRONT OF THE MUTE FOR THE LINE-IN DEVICE AND TURN UP THE SOUND.

**MONITOR SPEAKER NOTE:**  
1.) WHEN USING THE MONITOR SPEAKERS, CONNECT THE GREEN AND BLUE 1/8 STEREO PHONE JACK PATCH CORD. PLUG THE GREEN JACK INTO THE GREEN SPEAKER OUTPUT IN BACK OF COMPUTER, AND THE BLUE JACK INTO THE MONITOR'S BLUE INPUT.

**SimplexGrinnell BE SAFE.**

A Tyco International Company  
8808 SOUTHERN PINES BLVD  
CHARLOTTE, NC 28273  
TEL: 704-501-8500  
FAX: 704-501-1550  
© 2010 SIMPLEXGRINNELL, LP  
ALL RIGHTS RESERVED

CHG BY	REVISION DESCRIPTION	DATE	NO.

DETENTION SECURITY SYSTEM  
MASTER AMPLIFIER WIRING DIAGRAM  
LANCASTER COUNTY JAIL

1941 PABELAND  
LANCASTER, SC 29720

DRAWN BY: JDB DATE: 8/31/11  
CHECKED BY: CH DATE: 8/31/11  
PROJECT NUMBER: 280-858608702  
SHEET TITLE: DETENTION SECURITY SYSTEM MASTER AMPLIFIER WIRING DIAGRAM  
SHEET NUMBER: DE-601 DE-601.dwg