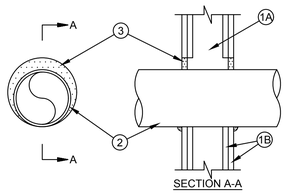
THROUGH PENETRATION DETAIL

System No. W-L-1054

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Items 1 and 3)	F Ratings — 1 and 2 Hr (See Items 1 and 3)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating at Ambient — Less Than 1 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Items 1 and 3)
L Rating at 400 F — Less Than 1 CFM/sq ft	FTH Rating — 0 Hr
	L Rating at Ambient — Less Than 1 CFM/sq ft
	L Rating at 400 F — Less Than 1 CFM/sq ft



SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

   A. Studs — Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610) OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. (102 to 152 mm) wider and 4 to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the framing on all four sides.

   B. Gypsum Board* — Nom 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the Fire Resistance Directory. Max diam of opening is 32-1/4 in. (819 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (386 mm) for wood stud walls.
   The F and FH Ratings of the firestop system are equal to the fire rating of the wall assembly.

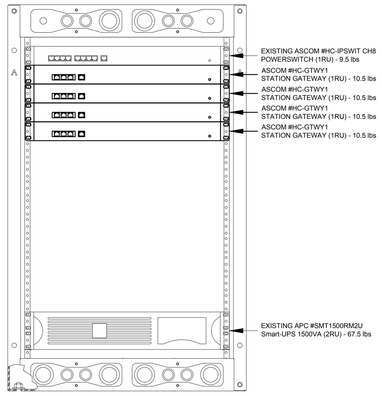
2. Through Penetrants — One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 2-1/4 in. (57 mm). Pipe may be installed with continuous point contact. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

   A. Steel Pipe — Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) diam steel conduit.
   D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
   E. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) regular (or heavier) copper pipe.

3. Fill Void or Cavity Material* — Sealant — Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point or continuous contact locations between pipe and wall, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe wall interface on both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-ONE MAX Intumescent Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

EXISTING RACK 'NCR-1NW' DETAIL



SYSTEM DESIGN INFORMATION

1. OCCUPANCY TYPE: I-2
2. CONSTRUCTION TYPE: TYPE I
3. AREA OF WORK: 10,331 SQUARE FEET (APPX.)
4. SCOPE OF PROJECT.
   FURNISH AND INSTALL NEW ASCOM "TELLIGENCE" NURSE CALL SYSTEM DEVICES AS SHOWN IN THE EMERGENCY DEPARTMENT EXPANSION AT V.A. LOMA LINDA MEDICAL CENTER. NEW "TELLIGENCE" NURSE CALL SYSTEM SHALL TIE INTO EXISTING "TELLIGENCE" NURSE CALL SYSTEM AS SHOWN.
   SYSTEM TO INCLUDE: TELLIGENCE STATION GATEWAYS INSTALLED IN EXISTING NURSE CALL SYSTEM RACK, SINGLE PATIENT STATIONS, LAVATORY STATIONS, STAFF DUTY STATIONS, CORRIDOR DOME LIGHTS AND NURSE MASTER STATIONS.

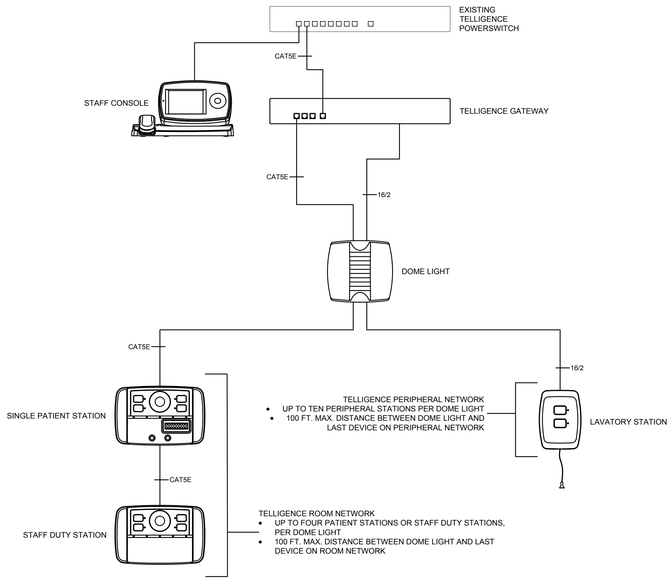
GENERAL NOTES

1. A MINIMUM OF 48 HOURS NOTICE SHALL BE REQUIRED FOR ANY INSPECTION AND/OR TESTING.
2. A STAMPED SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
3. THE INTENT OF THE CONSTRUCTION DOCUMENTS IS TO RECONSTRUCT THE HOSPITAL BUILDING IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARD LISTED ON SHEET 'NC-1'. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE APPROVED CONSTRUCTION DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THESE APPLICABLE CODES AND STANDARDS, A CHANGE ORDER DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE OFFICE BEFORE PROCEEDING WITH THE WORK.
4. CABLING SHALL BE INSTALLED IN RACEWAYS OR CABLE TRAYS WHERE AVAILABLE. IN ACCESSIBLE CEILING SPACES CABLING MAY BE RUN IN AN "OPEN" CONFIGURATION. IF CABLING IS RUN IN CONDUIT, CONDUIT SHALL BE SIZED PER N.E.C. REQUIREMENTS. ALL CONDUIT USED SHALL BE 3/4" MINIMUM.
5. U.L. LABELING SHALL BE CLEARLY MARKED ON ALL CABLE.
6. ALL SLEEVES TO BE FURNISHED AND INSTALLED BY OTHERS.
7. ALL CABLING TO BE RUN IN MINIMUM 3/4" CONDUIT OR IN CABLE TRAY UNLESS OTHERWISE NOTED. ALL CONDUIT AND CABLE TRAY BY OTHERS.
8. CONDUIT FILL SHALL BE SIZED PER N.E.C., CHAPTER 9, TABLE #3.
9. ALL WIRING IS TO BE POWER LIMITED, CLASS 2, IN ACCORDANCE WITH N.E.C. ARTICLE 760.
10. U.L. LABELING SHALL BE CLEARLY MARKED ON ALL CABLE.
11. CONDUCTORS IN VERTICAL RACEWAYS SHALL BE SUPPORTED. ONE CABLE SUPPORT SHALL BE PROVIDED AT THE TOP OF THE VERTICAL RACEWAY PLUS A SUPPORT FOR EACH 100 FEET. INTERVALS AS SPECIFIED IN N.E.C. 300-19(A).
12. CONDUCTORS IN VERTICAL RACEWAYS SHALL BE, MINIMUM, FPLR.

APPLICABLE CODES

2013 - California Administrative Code (CAC)
Part 1, Title 24, California Code of Regulations (CCR)
2013 - California Building Code (CBC)
Part 2, Title 24, CCR
Based on the 2012 International Building Code (IBC)
2013 - California Electrical Code (CEC)
Part 3, Title 24, CCR
Based on the 2011 National Electrical Code (NEC)
2013 - California Fire Code (CFC)
Part 9, Title 24, CCR
Based on the 2012 International Fire Code (IFC)

TYPICAL WIRING DIAGRAM

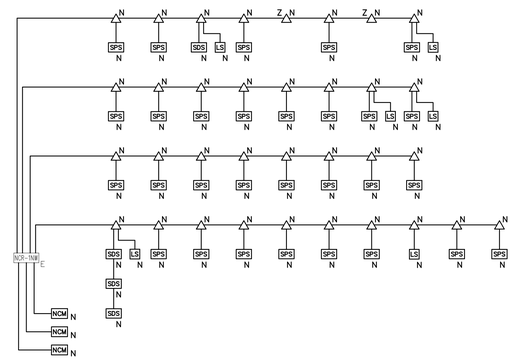


SYMBOL LEGEND

QTY. OF NEW DEVICES	SYMBOL	MODEL NUMBER	DESCRIPTION	BACK BOX REQUIREMENTS	MOUNTING INFORMATION
---	NCR-1NW	----------	TELLIGENCE RACK (EXISTING TO REMAIN)	----------	----------
4		ASCOM #NGGTWY-H	TELLIGENCE STATION GATEWAY	----------	MOUNTS IN RACK
3	NCM	ASCOM #HC-CONSOLE-3K	COLORTOUCH VOIP CONSOLE	----------	DESKTOP
29	SPS	ASCOM #HC-PSTN1	SINGLE SMART PATIENT STATION	RACO 692 (OR EQUIVALENT) THREE-GANG BOX WITHOUT COVER	FLUSH MOUNT AT 48" TO CENTER
29		ASCOM #HC-SCC-8	CALL CORD ASSEMBLY *	----------	PLUGS INTO PATIENT STATION
4	SDS	ASCOM #HC-DUTY-3K	SMART STAFF/DUTY STATION	RACO 692 (OR EQUIVALENT) THREE-GANG BOX WITHOUT COVER	FLUSH MOUNT AT 48" TO CENTER OR 18" ABOVE FINISHED COUNTER
6	LS	ASCOM #HC-PP2-LAV-3K	2-BUTTON PUSH/PULL STATION - LAVATORY **	RACO 231 (OR EQUIVALENT) 4S BOX WITH RACO 782 COVER	FLUSH MOUNT AT 48" TO CENTER
34	△	ASCOM #HC-CL4	INFINITY LED DOME/ZONE LIGHT, 4 SECTIONS	RACO 231 (OR EQUIVALENT) 4S BOX WITH RACO 778 COVER	MOUNT 6" ABOVE DOOR TO BOTTOM OF BACK BOX OR ON CEILING AS INDICATED OR AT EXISTING LOCATION
---	Z	----------	DENOTES ZONE LIGHT	----------	----------
---	N	----------	DENOTES NEW DEVICE TO BE INSTALLED	----------	----------
---	E	----------	DENOTES EXISTING DEVICE TO REMAIN	----------	----------

* CALL CORD BUTTONS ARE TO BE LOCATED WITHIN HAND REACH OF THE BED.
** MEANS OF OPERATION/ACTIVATION TO BE WITHIN HAND REACH OF THE TOILET SERVED. PULL CORD SHALL REACH WITHIN 12" OF FLOOR IN EACH TOILET ROOM.

RISER DIAGRAM



VA LOMA LINDA HEALTHCARE SYSTEM

TRL Systems
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NO.	DATE	REVISION / ISSUE

Facility:
VA LOMA LINDA
HEALTHCARE SYSTEM
11201 BENTON STREET
LOMA LINDA, CA 92357

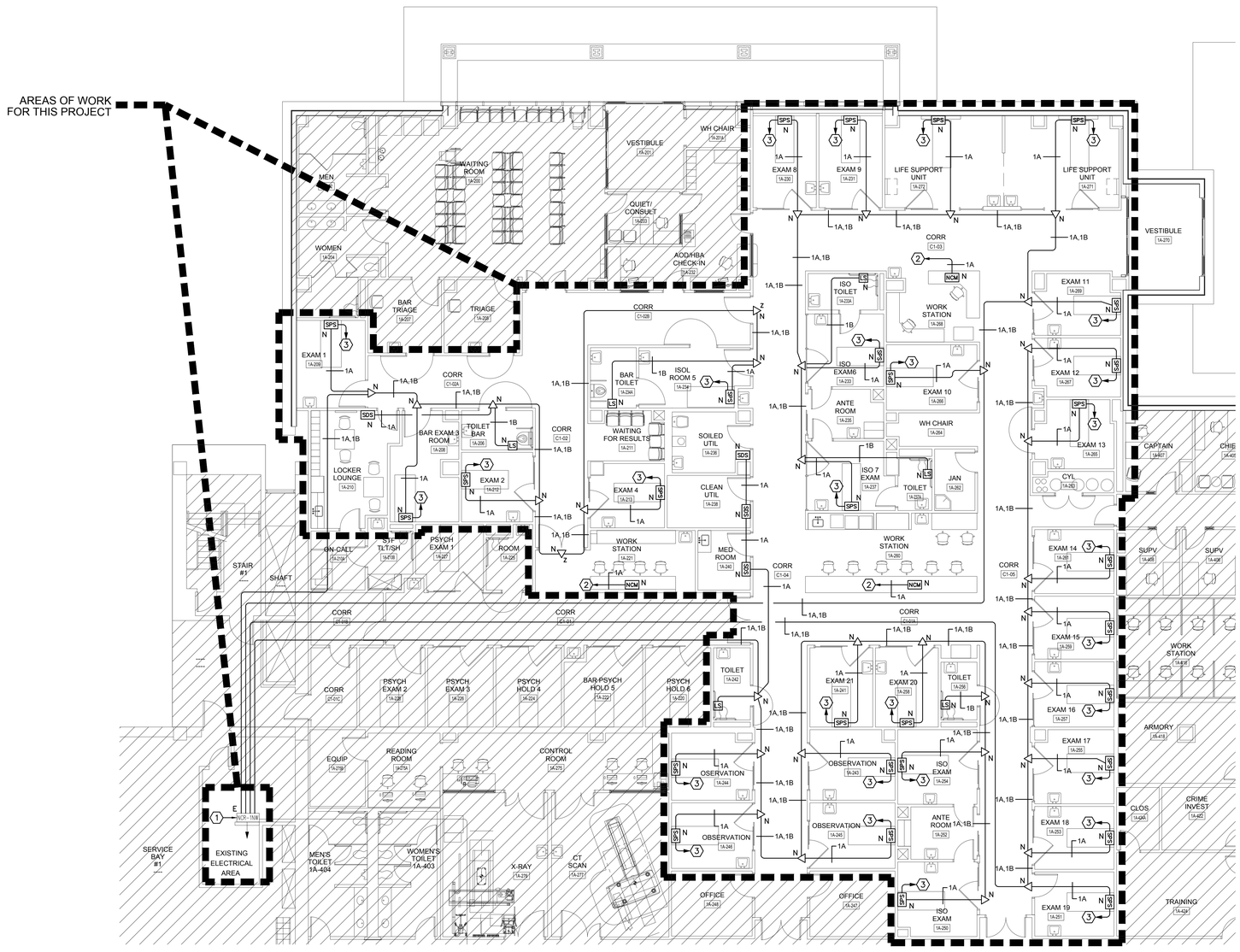
Project Name:
EXPAND EMERGENCY DEPARTMENT
NURSE CALL SYSTEM ADDITION

Sheet Title:
SYMBOL LEGEND, NOTES, DETAILS AND RISER DIAGRAM

Sheet Number:
NC-1

Of 02 Sheets

Drawn By:	G.R.
TRL Proj. #	4516
Scale:	AS NOTED
Date:	5.10.16



SPECIFIC NOTES

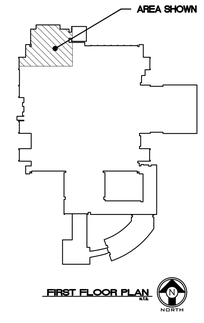
1. = INSTALL NEW TELLIGENCE SYSTEM GATEWAYS IN EXISTING TELLIGENCE RACK AT THIS LOCATION.
2. = TIE TO EXISTING POWER SWITCH AT EXISTING NURSE CALL RACK 'NCR-1NW'.
3. = OUT TO CALL CORD. CALL CORD TO BE WITHIN HAND REACH OF PATIENT.

CABLE LEGEND

KEY	MANUFACTURER AND CATALOG NUMBER	DESCRIPTION	RATING	COLOR
A	PAIGE/DUKANE #800536E OR EQUAL	CAT5E, 24 AWG, 4 PAIR	PLENUM	GREEN
B	PAIGE/DUKANE #800036 OR EQUAL	16 AWG, 2 CONDUCTOR	PLENUM	GREEN

NOTE:
ALL WIRE TO BE RAN IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.

KEY PLAN



PARTIAL FIRST FLOOR PLAN — 1/8"=1-'0"

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Sheet Number:
NC-2

Of 02 Sheets

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