

**TELECOMMUNICATIONS**

110 TWISTED PAIR TERMINATION BLOCK  
ADF AREA DISTRIBUTION FACILITY  
BDC BUILDING DISTRIBUTION TELECOMMUNICATIONS ROOM  
BDF BUILDING DISTRIBUTION FRAME  
BEF BUILDING ENTRANCE FRAME  
BO BY OTHERS  
CAB TELECOM CABINET OR ENCLOSURE  
CONN CONNECTOR  
CSC COPPER SPICE CLOSURE  
CVE CONTROLLED ENVIRONMENT VAULT  
FDF FIBER DISTRIBUTION FACILITY  
FS FIBER SHELF/FIBER TERMINATION PANEL  
FSC FIBER OPTIC SPICE CLOSURE  
HI HANDHOLE  
IDC INTERMEDIATE DISTRIBUTION TELECOMMUNICATIONS ROOM  
IDF INTERMEDIATE DISTRIBUTION FRAME  
ISP INSIDE PLANT - CABLE WITHIN A BUILDING  
IT INFORMATION TECHNOLOGY  
LAN LOCAL AREA NETWORK  
MDC MAIN DISTRIBUTION TELECOMMUNICATIONS ROOM  
MDF MAIN DISTRIBUTION FRAME  
MH MANHOLE, MAINTENANCE HOLE  
MPOE MINIMUM POINT OF ENTRY  
OCEF OPTICAL CABLE ENTRANCE FACILITY  
OCSF OUTSIDE PLANT - CABLE OUTSIDE A BUILDING  
PAV PAVEMENT  
PC PLASTIC CONDUIT  
PG PAIR GROUP  
POP POINT OF PRESENCE  
PR PAIR  
PVC POLYVINYL CHLORIDE  
RU RACK UNIT  
R/W RIGHT-OF-WAY  
SC SPICE CLOSURE  
SSC STRUCTURED CABLE SYSTEM  
SER SERIAL  
SMR SURFACE MOUNTED RACEWAY  
SS FIBER SPICE SHELF  
TC TELECOM CONDUIT  
TCH TELECOM CONDUIT SLEEVE, HORIZONTAL  
TCR TELECOM HORIZONTAL AND VERTICAL RISER CONDUIT  
TCT TELECOM CABLE TRAY  
TEC TELECOM ENTRANCE CONDUIT  
TEL TELEPHONE  
TELECOM TELECOMMUNICATIONS  
TERM TERMINAL  
TP TWISTED PAIR  
TPB TELECOM PULL BOX  
TR TELECOM ROOM  
TSL TELECOM WALL OR FLOOR SLOT  
TSV TELECOM CONDUIT SLEEVE, VERTICAL  
WAN WIDE AREA NETWORK

**ELECTRICAL**

A or AMP AMPERE  
BND BOND(ING)  
C CONDUIT  
ELEC ELECTRICAL  
EMT ELECTRICAL METALLIC TUBING  
ENT ELECTRICAL NON-METALLIC TUBING  
GND GALVANIZED RIGID CONDUIT  
GND GROUND  
Hz HERTZ  
IG ISOLATED GROUND  
IMC INTERMEDIATE METALLIC CONDUIT  
PB PULL BOX  
PLN PANEL  
PWR POWER  
UPS UNINTERRUPTIBLE POWER SUPPLY  
V VOLT  
VAC VOLTS, ALTERNATING CURRENT  
VDC VOLTS, DIRECT CURRENT  
W WATT  
XFMR TRANSFORMER

**GENERAL**

(e)(x)(E) EXISTING  
(n)(x)(N) NEW  
ABV ABOVE  
ACH ABOVE COUNTER HEIGHT  
ACT ACOUSTICAL CEILING TILE  
ADJ ADJUST(ABLE)  
AFC ABOVE FINISHED CEILING  
AFF ABOVE FINISHED FLOOR  
AFG ABOVE FINISHED GRADE  
ALT ALTERNATE  
ANSI AMERICAN NATIONAL STANDARDS INSTITUTE  
APPROX APPROXIMATE  
ARCH ARCHITECTURAL  
ASA AMERICAN STANDARDS ASSOCIATION  
AV AUDIOVISUAL  
AVC AUDIOVISUAL CONTRACTOR  
BET BETWEEN  
BFC BELOW FINISHED CEILING  
BLDG BUILDING  
BLW BELOW  
CB CEILING BOX  
C-C CENTER TO CENTER  
CL CENTER LINE  
CLG CEILING  
CLR CLEAR  
CMU CONCRETE MASON UNIT  
COL COLUMN  
CONC CONCRETE  
CONT CONTINUOUS  
COORD COORDINATE, COORDINATION  
CORR CORRIDOR  
DED DEDICATE, DEDICATED  
DEMO DEMOLISH  
DEPT DEPARTMENT  
DET DETAIL  
DIM DIMENSION  
DST DISTANCE  
DTC DATA TELECOMMUNICATION CONTRACTOR  
DWG DRAWING  
EA EACH  
EC ELECTRICAL CONTRACTOR  
ELEV ELEVATION  
EMERG EMERGENCY  
EQ EQUAL  
EQUIP EQUIPMENT  
EQUIV EQUIVALENT  
EWB ELECTRONIC WHITE BOARD  
EXT EXTERIOR  
FCC FEDERAL COMMUNICATIONS COMMISSION  
FINISH FINISH  
FLX FLEXIBLE  
FLR FLOOR  
FLUOR FLUORESCENT  
FUT FUTURE  
GA GAUGE  
CALV GENERAL CONTRACTOR  
CMB GYPSUM WALL BOARD  
IFC IN FINISHED CEILING  
INF IN FINISHED FLOOR  
INCAN INCANDESCENT  
INCL INCLUDE, INCLUDING  
INFO INFORMATION  
INT INTERIOR  
LVI LOW VOLTAGE INTERFACE  
MAX MAXIMUM  
MECH MECHANICAL  
MEP MECHANICAL, ELECTRICAL, AND PLUMBING  
MFG MANUFACTURER  
MIN MINIMUM  
MISC MISCELLANEOUS  
NA NOT APPLICABLE  
NEMA NATIONAL ELECTRICAL CODE  
NFPA NATIONAL FIRE PROTECTION ASSOCIATION  
NT NOT IN CONTRACT  
No. NUMBER  
NOM NOMINAL  
NTS NOT TO SCALE

**MEASUREMENTS**

BTU BRITISH THERMAL UNIT  
D or Dp DEEP  
DIA DIAMETER  
FT FOOT or FEET  
H or HGT HEIGHT or HIGH  
D INSIDE DIAMETER  
IN INCH  
L LENGTH or LONG  
Lb POUND  
LIN LINEAR  
M METER  
mm MILLIMETER  
OD OUTSIDE DIAMETER  
R RADIUS  
RAD RADIAN  
um MICRON  
W WIDE  
WT WEIGHT  
YD YARD

**DIRECTIONAL**

DN DOWN  
E EAST  
HORIZ HORIZONTAL  
L LEFT  
LH LEFT HAND  
N NORTH  
PERP PERPENDICULAR  
R RIGHT  
RH RIGHT HAND  
S SOUTH  
V VERTICAL  
W WEST

**SYMBOLS**

# POUND OR NUMBER  
& AND  
@ AT  
' FOOT OR FEET  
" INCH OR INCHES  
+/- or + PLUS OR MINUS  
< LESS THAN  
= EQUAL  
> GREATER THAN  
° DEGREES, ANGULAR MEASURE  
CHM CHAMFER  
|| PARALLEL  
Ø DIAMETER  
∠ ANGLE

**COLOR CODE**

A ALMOND  
B BROWN  
C CRIMSON RED  
E BLACK  
G GRAY  
I IVORY  
L BLUE  
O ORANGE  
P PURPLE  
R DARK RED  
V GREEN  
W WHITE  
Y YELLOW

**WIRE AND CABLE**

AFMW BONDED FILL FLOODED TWISTED CABLE  
ARMW ARMOR ARMORED BONDED MULTIPAIR CABLE  
AWC AMERICAN WIRE GAUGE  
CAT3 CATEGORY 3 TWISTED PAIR COPPER CABLE  
CAT4 CATEGORY 4 TWISTED PAIR COPPER CABLE  
CAT5 CATEGORY 5 TWISTED PAIR COPPER CABLE  
CAT5e CATEGORY 5 ENHANCED TWISTED PAIR COPPER CABLE  
CAT6 CATEGORY 6 TWISTED PAIR COPPER CABLE  
CM NEC, COMMUNICATIONS CABLE  
CMP NEC, COMMUNICATIONS PLENUM CABLE  
CNR NEC, COMMUNICATIONS RISER CABLE  
COAX COAXIAL CABLE  
FO FIBER OPTIC  
HDPE HIGH DENSITY POLYETHYLENE  
LTF LOOSE TUBE FILLED & FLOODED  
MDPE MEDIUM DENSITY POLYETHYLENE  
MM MULTIMODE FIBER OPTIC CABLE  
MPP NEC, MULTIPURPOSE PLENUM CABLE  
OFC NEC, OPTICAL FIBER CONDUCTIVE CABLE  
OFCP NEC, OPTICAL FIBER CONDUCTIVE PLENUM CABLE  
OFCR NEC, OPTICAL FIBER CONDUCTIVE RISERCABLE  
OFNR NEC, OPTICAL FIBER NON-CONDUCTIVE CABLE  
OFN NEC, OPTICAL FIBER NON-CONDUCTIVE PLENUM CABLE  
OFNP NEC, OPTICAL FIBER NON-CONDUCTIVE RISERCABLE  
SM SINGLE MODE FIBER OPTIC CABLE  
STP SHIELDED TWISTED PAIR  
TB TIGHT BUFFERED  
UTP UNSHIELDED TWISTED PAIR  
WM WIRE MANAGER/MANAGEMENT

**PROJECT NOTES**

1. TRADE COORDINATION BETWEEN NETWORK AND SECURITY VENDORS:  
A. ALL RACKS WILL BE PROVIDED BY IT/COMMUNICATIONS VENDOR. RACKS ARE SHOWN IN THIS SET FOR CLARITY.  
B. ALL CONDUIT AND POWER TO BE PROVIDED BY ELECTRICAL CONTRACTOR.  
C. ALL DOOR SECURITY DEVICES AND CABLING TO BE PROVIDED BY SECURITY VENDOR.  
D. ALL CAMERA MOUNTS AND ROUGH IN BY SECURITY VENDOR.

**GENERAL NOTES**

1. PROVIDE 25 FEET OF SPARE NETWORK CABLE OUT EACH WAP FOR RELOCATION BASED ON RF MAP.  
2. MINIMUM CONDUIT DIAMETER IS 1" UN.  
3. STUB ALL NETWORK CONDUIT OUR TO ACCESSIBLE PATH IN CEILING PLENUM

1. POWER:  
A. EACH CIRCUIT THAT SERVES TECHNOLOGY SYSTEMS MUST HAVE A DEDICATED GROUND AND NEUTRAL CONDUCTOR. SHARED GROUNDS AND NEUTRALS ARE NOT ACCEPTABLE.  
B. ALL CIRCUITS ARE 120 VAC, 60 HZ, 1-PHASE, UN.  
C. NOMINAL ELECTRICAL VOLTAGE IS 120 VAC. VOLTAGE MUST BE MAINTAINED WITH +/-10 PERCENT OF NOMINAL AT ALL TIMES FOR PROPER EQUIPMENT OPERATION.  
2. TECHNOLOGY CONVEYANCE SYSTEM:  
A. CONDUITS WHICH CARRY POWER MUST BE SEPARATED FROM TECHNOLOGY CONDUITS BY 12 INCHES FOR VOLTAGES OVER 100 VAC, 24 INCHES FOR VOLTAGES OVER 200 VAC AND 48 INCHES FOR ALL VOLTAGES OVER 300 VAC.  
B. ALL CONDUIT SHALL BE CLEANED, DEBURRED AND HAVE PULL-STRINGS INSTALLED.  
C. ALL INTERIOR AND ABOVE GRADE CONDUIT SHALL BE SOLID FERRIC METALLIC. ALL CONDUIT BELOW GRADE SHALL BE PLASTIC. CONTRACTOR SHALL NOT CHANGE CONDUIT TYPE WITHOUT DESIGN CONSULTANT APPROVAL.  
D. PROVIDE PULL BOXES USING SWEEP ELBOWS AS REQUIRED BY CONDUIT PATH, CABLE BEND RADIUS OR PULLING TENSION LIMITS.  
E. BACK BOXES TO BE SET TO ALLOW ALL TECHNOLOGY FACEPLATES TO BE INSTALLED TIGHT TO THE ADJACENT SURFACE.  
3. PRIOR TO THE START OF ACTIVE EQUIPMENT INSTALLATION THE EQUIPMENT SPACES SHALL BE:  
A. CLEAN AND SEALED FROM DUST PRIOR TO EQUIPMENT INSTALLATION.  
B. MAINTAINED AT A TEMPERATURE OF 72 ± 10 DEGREES FAHRENHEIT AT ALL TIMES.  
C. MAINTAINED AT A RELATIVE HUMIDITY BETWEEN 40 AND 70 PERCENT AT ALL TIMES.  
4. ALL BLOCKING TO BE PROVIDED BY OTHERS.  
5. VENTS, GRILLS AND GROMMETS PROVIDED BY THE CASEWORK/MILLWORK VENDOR.

**PROJECT SYMBOLS**

POS POINT OF SALE BY OFF  
--- ZONE  
--- JH --- CABLE PATHWAY  
### CABLE HOME RUN TO LOCATION  
### CONDUIT HOME RUN TO LOCATION  
WHITE BOARD  
SMARTBOARD  
SMARTBOARD WALL BOX 2 GANG, 2.5" DEEP SEE DETAIL 11/TN-701  
INTERCOM WALL BOX 2 GANG, 2.5" DEEP SEE DETAIL 10/TN-701  
WIRELESS ACCESS POINT SEE DETAIL 13/TN-701  
15 AMP 120 VAC QUAD RECEPTACLE  
20 AMP 120 VAC TWIST LOCK RECEPTACLE  
2 PORT DATA JACK IN FLOOR BOX  
2 PORT DATA JACK FOR MENU BOARD  
4 PORT DATA JACK AT OUTLET HEIGHT SEE DETAIL 5/TN-701  
2 PORT DATA JACK AT OUTLET HEIGHT SEE DETAIL 6/TN-701  
1 PORT DATA JACK AT OUTLET HEIGHT SEE DETAIL X/TN-70X  
CORRIDOR CEILING MOUNTED 25V INTERCOM LOUSPEAKER BY DTC  
OUTDOOR/CYM/CAFETERIA WALL MOUNTED 25V INTERCOM LOUSPEAKER BY DTC  
CEILING MOUNTED INTERCOM VOIP LOUSPEAKER BY DTC SEE DETAIL 14/TN-701  
GROUND BUS BAR  
19" X 84" ALUMINUM RACK WITH CABLE MANAGEMENT AND AC POWER DISTRIBUTION.  
RISER CONDUIT THRU SEE DETAIL 1/TN-701  
12 INCH CABLE RUNWAY  
DETAIL LOCATION ARROW

**FACILITY NOTES**

1. DRAWINGS ISSUED LOG

NO.	DESCRIPTION	DATE
1	ISSUED FOR SET	05/24/2018
2	ADDENDUM #2	6/19/2018

**REVISIONS**

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1	ISSUED FOR SET	05/24/2018
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**ISSUED: CONSTRUCTION DOCUMENTS**

**DATE: 05/24/2018**

**SCALE: 1/16" = 1'-0"**

**SHEET NAME:**

**SHEET INDEX AND NOTES**

NUMBER	DRAWING NAME	X	X	X	X	X
TN-001	SHEET INDEX AND NOTES	X	X	X	X	X
TN-100	OVERALL FLOOR PLANS	X	X	X	X	X
TN-101A	FIRST FLOOR PLAN - AREA A	X	X	X	X	X
TN-101Ba	FIRST FLOOR PLAN - AREA Ba	X	X	X	X	X
TN-101Bb	FIRST FLOOR PLAN - AREA Bb	X	X	X	X	X
TN-101C	FIRST FLOOR PLAN - AREA C	X	X	X	X	X
TN-102C	SECOND FLOOR PLAN - AREA C	X	X	X	X	X
TN-501	RACK ELEVATIONS AND DETAILS	X	X	X	X	X
TN-701	COORDINATION DETAILS	X	X	X	X	X
TN-801	MDF ROOM (1122) ENLARGED PLANS	X	X	X	X	X
TN-802	IDF ROOM (1810) ENLARGED PLANS	X	X	X	X	X
TN-803	IDF ROOM (2810) ENLARGED PLANS	X	X	X	X	X

**SHEET INDEX**

**1**

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**SHEET NUMBER:**

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