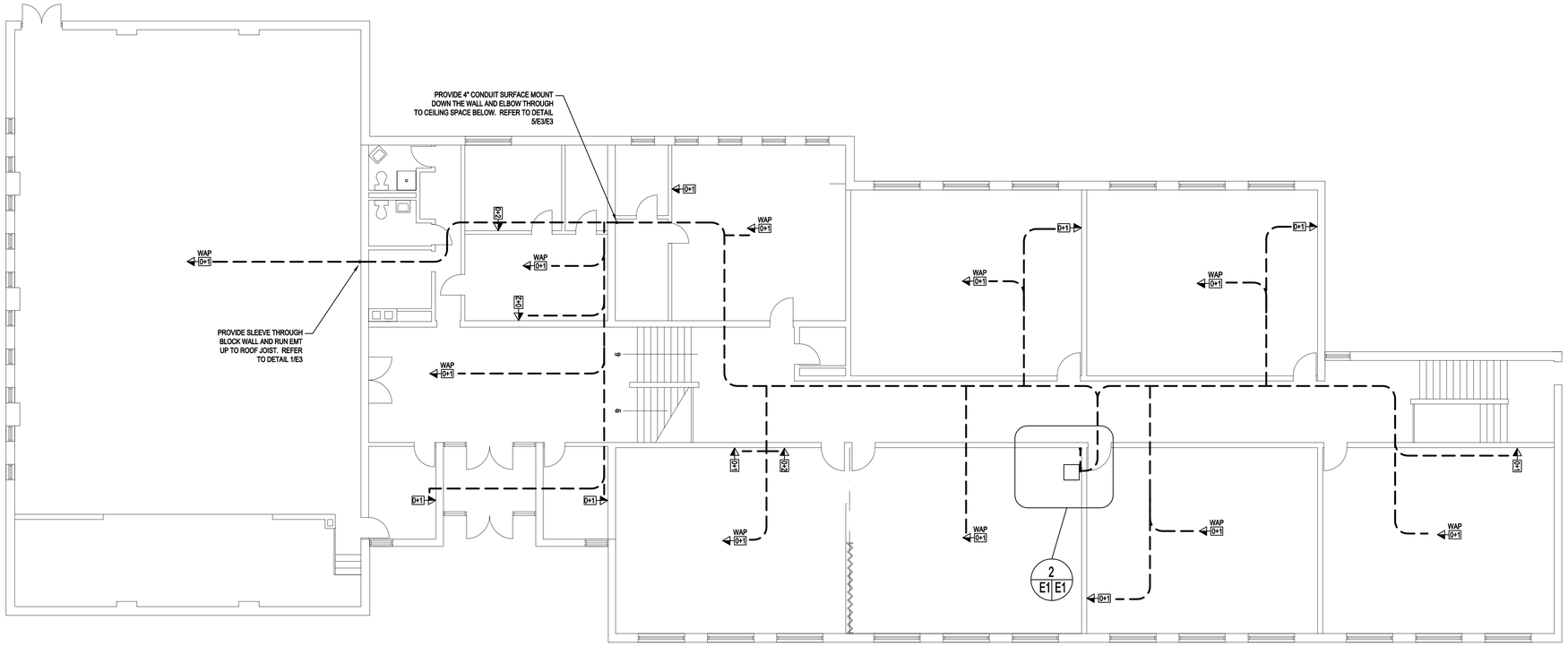
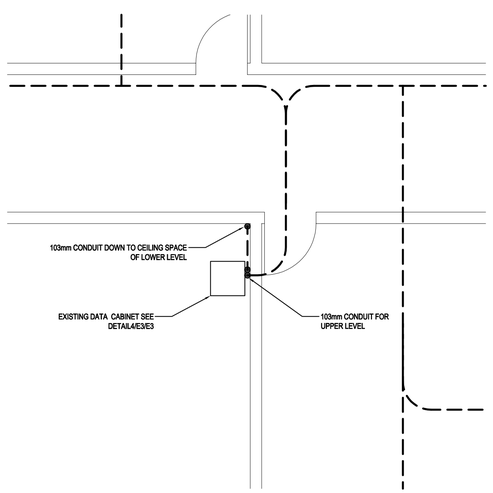
METRIC A1 AEC



1 E1 E1 MAIN LEVEL PLAN
1:100



2 E1 E1 MAIN LEVEL ENLARGED PLAN
1:50

COMMUNICATIONS LEGEND	
SYMBOL	DESCRIPTION
D+#	CAT 6 COMBINATION VOICE AND DATA OUTLET. FIRST NUMBER INDICATES VOICE AND THE SECOND NUMBER INDICATES DATA

POWER LEGEND	
SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE, COMMERCIAL SPECIFICATION GRADE 15A 125V, 18" AFF COMPLETE WITH OFFICE WHITE NYLON FACE AND COVERPLATE. HUBBELL #BR150 OR EQUAL BY LEVITON.
	DUPLEX RECEPTACLE, COMMERCIAL SPECIFICATION GRADE, 20A 125V, 18" AFF OR AS NOTED COMPLETE WITH OFFICE WHITE NYLON FACE AND COVERPLATE. HUBBELL #BR20 OR EQUAL BY LEVITON

MISCELLANEOUS	
SYMBOL	DESCRIPTION
e	EXISTING DEVICE LOCATION
WAP	WIRELESS ACCESS POINT
AFF	ABOVE FINISHED FLOOR
EC	EMPTY CONDUIT
C/W	COMPLETE WITH

GENERAL NOTES
UNLESS OTHERWISE NOTED ALL CEILING TYPES ARE T-BAR
DATA OUTLET - MOUNTING HEIGHT OF 915mm - PROVIDE OUTLET BOX AND SURFACE MOUNT NON-METALLIC RACEWAY, HUBBELL #PL1ABC7 OR EQUAL, FROM OUTLET TO ACCESSIBLE CEILING SPACE. PROVIDE CAT6 CABLING AS PER ITSS GUIDELINES FROM OUTLET TO PATCH PANELS IN DATA RACK IN COMMUNICATIONS ROOM INDICATED. CABLING TO BE INSTALLED USING J-HOOKS AS INDICATED. TERMINATE CABLING ON CAT6 MDVOs AT EACH END.
DATA OUTLET, MOUNTED IN ACCESSIBLE CEILING SPACE FOR WIRELESS ACCESS POINT BY OTHERS. PROVIDE OUTLET BOX AND CABLE BUSHING AT LOCATIONS INDICATED. PROVIDE CAT6 CABLING AS PER ITSS GUIDELINES FROM OUTLET TO PATCH PANELS IN DATA RACK IN COMMUNICATIONS ROOM INDICATED. CABLING TO BE INSTALLED USING J-HOOKS AS INDICATED. TERMINATE CABLING ON CAT6 MDVOs AT EACH END.
WAP: RED DOT ON T-BAR INDICATING THE WAP DROP LOCATING ABOVE CEILING TILE. MDVO SIDE ENTRY PORT BOX: BELDEN # AX102590. T-BAR INSTALLATION: INSTALL J-HOOK 6" FROM SIDE ENTRY BOX FOR SUPPORT.
FOR CABLE RUNS EXCEEDING 90M, COORDINATE WITH ITSS REPRESENTATIVE TO DECIDE THE COURSE OF ACTION.
DURING CONSTRUCTION ALL CEILING TILES MUST BE REPLACED EACH NIGHT PRIOR TO THE CONTRACTOR LEAVING THE SITE.
CONDUITS TO BE PAINTED TO MATCH WALL COLORING ON ALL LOCATIONS WHERE VISIBLE.

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11/22/2016
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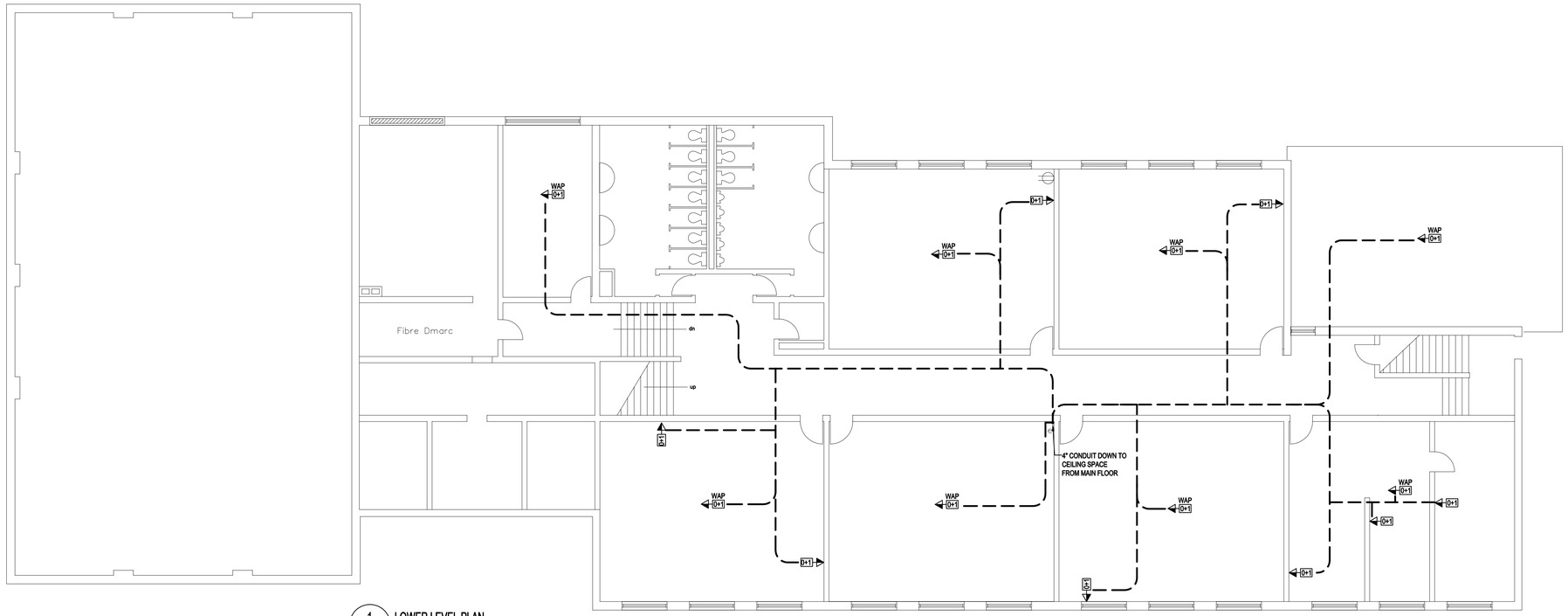
A = Detail #
BB = Sheet # (Where Detail Required)
CC = Sheet # (Where Detailed)

Project Title :
CARDIGAN SCHOOL
IT CONSOLIDATION

Drawing Title :
UPPER LEVEL
COMMUNICATION PLAN

Scale : As Noted	Design By : CM
Drawn By : CM	Date : NOVEMBER 22 2016
Project No.: 080-16096	Drawing # : E1 of 3

METRIC A1 AEC



1 / E2 E2 LOWER LEVEL PLAN
1:100

GENERAL NOTES

UNLESS OTHERWISE NOTED ALL CEILING TYPES ARE T-BAR

DATA OUTLET - MOUNTING HEIGHT OF 915mm - PROVIDE OUTLET BOX AND SURFACE MOUNT NON-METALLIC RACEWAY, HUBBELL #PL1ABC7 OR EQUAL, FROM OUTLET TO ACCESSIBLE CEILING SPACE. PROVIDE CAT6 CABLING AS PER ITSS GUIDELINES FROM OUTLET TO PATCH PANELS IN DATA RACK IN COMMUNICATIONS ROOM INDICATED. CABLING TO BE INSTALLED USING J-HOOKS AS INDICATED. TERMINATE CABLING ON CAT6 MDVOs AT EACH END.

DATA OUTLET, MOUNTED IN ACCESSIBLE CEILING SPACE FOR WIRELESS ACCESS POINT BY OTHERS. PROVIDE OUTLET BOX AND CABLE BUSHING AT LOCATIONS INDICATED. PROVIDE CAT6 CABLING AS PER ITSS GUIDELINES FROM OUTLET TO PATCH PANELS IN DATA RACK IN COMMUNICATIONS ROOM INDICATED. CABLING TO BE INSTALLED USING J-HOOKS AS INDICATED. TERMINATE CABLING ON CAT6 MDVOs AT EACH END.

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FOR CABLE RUNS EXCEEDING 90M, COORDINATE WITH ITSS REPRESENTATIVE TO DECIDE THE COURSE OF ACTION.

DURING CONSTRUCTION ALL CEILING TILES MUST BE REPLACED EACH NIGHT PRIOR TO THE CONTRACTOR LEAVING THE SITE.

CONDUITS TO BE PAINTED TO MATCH WALL COLORING ON ALL LOCATIONS WHERE VISIBLE.

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1.) THE SUPPLY, INSTALLATION AND TESTING OF THE VOICE/DATA SYSTEM SHALL FOLLOW THE REQUIREMENTS IN LATEST EDITION OF "GOVERNMENT OF PRINCE EDWARD ISLAND STRUCTURED CABLING STANDARDS".

2.) IN ORDER TO GUARANTEE NETWORK PERFORMANCE, A SINGLE MANUFACTURER'S "SYSTEM" OF MATCHED COMPONENTS IS REQUIRED. THE GOVERNMENT STANDARD IS BELDEN IBDN SYSTEM 4800, DATATWIST CATEGORY 6.

3.) ALL INSTALLERS SHALL BE FAMILIAR WITH AND FOLLOW THESE INDUSTRY STANDARD DOCUMENTS:
- ANSI/TIA/EIA-569-A (CSA T530)
- ANSI/TIA/EIA-607 (CSA T527)
- ANSI/TIA/EIA-568-B.1,B.2, B.2-1 & B.3
- ANSI/TIA/EIA-606A
- ANSI/TIA/EIA-862
- TSB-155, IEEE 802.3an

4.) THE ENTIRE SYSTEM SHALL MEET OR EXCEED THE CURRENT DAY CATEGORY 6 STANDARD SPECIFICATIONS, WHICH INCLUDES FOUR PAIR, 23 GAUGE, COPPER CABLING PERFORMANCE OF 300MHz. ONLY MATCHED COMPONENTS FROM ONE MANUFACTURE'S SYSTEM SHALL BE USED TO PROVIDE AN END-TO-END SOLUTION. PROVIDE COMPLETE SYSTEM CONSISTING OF OUTLET BOXES, COVER PLATES, PATCH PANELS, PATCH CORDS AND CABLE, etc. THE CONTRACTOR SHALL VERIFY THAT ALL SYSTEM PARTS RECEIVED MEET SPECIFICATION, PRIOR TO INSTALLATION. CONTRACTOR TO PROVIDE TEST RESULTS FOR EACH PERMANENT LINK USING A LEVEL IV METER USING THE STANDARD SPECIFICATIONS FOR CATEGORY 6. ALL THE COMPONENTS OF THE TESTING EQUIPMENT ARE TO BE CALIBRATED BY AN AUTHORIZED SERVICE CENTER EVERY 12 MONTHS.

5.) 4-PORT ANGLED FACE PLATES SHALL BE FOR MDVO STYLE JACKS, WITH 3 PORTS USED IN EACH INSTANCE (2 DATA, 1 TELEPHONE). THE UPPER PORTS ARE TO BE USED FOR DATA TERMINATIONS AND THE LOWER FOR VOICE, UNLESS OTHERWISE STATED. THE MDVO JACKS IN ANGLED FACE PLATES ARE TO BE INSTALLED AS DESIGNED BY THE MANUFACTURER, WHICH IN THIS CASE HAS THE PRINTING INVERTED. THIS ALLOWS THE RELEASE TAB ON THE DATA CABLE TO BE FACING UPWARDS, MAKING IT EASIER TO REMOVE FROM THE JACK.

6.) EACH HORIZONTAL CABLE, DATA OUTLET AND PATCH PANEL PORT SHALL BEAR THE SAME IDENTIFYING NUMBER. THE NUMBERING SCHEME FOR THE BUILDING DATA OUTLETS SHALL BE ASSIGNED IN A LOGICAL, SEQUENTIAL MANNER. NUMBERING ON THE PLATES SHALL BE VIEWABLE VIEWABLE FROM BOTH IN FRONT AND ABOVE. A CONTRACTOR MUST ASSIGN A CONTRACTOR MUST ASSIGN THESE JACK NUMBERS ON THE FLOOR PLANS, PRIOR TO PULLING IN ANY CABLE.

7.) PATCH PANELS SHALL BE BELDEN CATEGORY 6 FLEX, FOR GIGAFLEX MDVO STYLE JACKS, FOR MOUNTING IN DATA CABINET. PANELS TO BE A MATCHED COMPONENTS OF THE CABLING SYSTEM BEING INSTALLED; 48-PORT TWO RACK UNITS HIGH. SUPPLY AND INSTALL TWO (2) 48 PORT PATCH PANELS.

8.) PATCH CORDS SHALL BE CATEGORY 6 BELDEN GIGAFLEX. TWO PATCH CORDS REQUIRED FOR EACH DATA LINE. CABLE JACKET AND BOOTS TO MATCH SYSTEM COLOR CODE: -"GREEN" JACKET AND BOOTS FOR BELDEN/CDT GIGAFLEX SYSTEM -"BLUE OR GREY" JACKET AND BOOTS FOR STANDARD CAT5 UTP CABLE

a.) ALL PATCH CORDS TO BE 4 FEET IN LENGTH.

9.) CONTRACTOR TO SUPPLY PATCH CORDS AT BOTH THE MAIN DATA RACK AND IN THE INDIVIDUAL ROOMS. NUMBER OF PATCH CORDS REQUIRED SHALL BE DETERMIND BY THE NUMBER OF DATA OUTLETS SHOWN ON THE DRAWINGS. PATCH CORD LENGTH REQUIRED IN THESE AMOUNTS: - 4 FEET (1.2M), 100% OF TOTAL COUNT.

10.) THE INSTALLER SHALL BE RESPONSIBLE FOR PROVIDING TO IT SHARED SERVICES: -AN ELECTRONIC MAP OF THE DATA OUTLET NUMBERING AND CABLE PATHWAYS ON A COPY OF THE BUILDING FLOOR PLAN(S). - TEST RESULTS FOR EACH PERMANENT LINK WITH A LEVEL IV METER USING THE STANDARD SPECIFICATIONS FOR CATEGORY 6. CONTRACTOR IS RESPONSIBLE TO PROVIDE PROOF THAT THERE METER HAS BEEN CALIBRATED BY AN ACCREDITED CALIBRATION LAB IN THE LAST YEAR.

11.) ALL CABLE TERMINATIONS SHALL BE INSTALLED AND TESTED TO THE T-568A WIRING STANDARD.

12.) THE CONTRACTOR SHALL GUARANTEE THAT ALL ASPECTS OF THEIR INSTALLATION SHALL BE FREE FROM DEFECTS, AND SHALL WARRANTY WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF INSPECTION AND ACCEPTANCE BY THE REPRESENTATIVE OF PROVINCIAL TREASURY, IT SHARED SERVICES. THE CONTRACTOR SHALL ASSUME ALL COSTS ASSOCIATED WITH REPAIR OR REPLACEMENT; ANY FORM OF CABLE TRAUMA WILL BE CONSIDERED A DEFECT AND SHALL REQUIRE REPLACEMENT.

13.) CATEGORY 6 DATA CABLING SHALL MEET OR EXCEED SPECIFICATIONS FOR CATEGORY 6, BE 4 PAIR, 23 AWG, WITH FT4 RATED INSULATION. ACCEPTED SYSTEMS ARE COLOR-CODED TO UNIQUELY IDENTIFY THE INDIVIDUAL SYSTEM HORIZONTAL CABLING. FOR CABLING: - GREEN BELDEN/CDT (NORDX) SYSTEM (4812LX) - BLUE STANDARD CAT5 UTP CABLE - WHITE ALL TELEPHONE COPPER CABLE CABLING FOR TELEPHONE SHALL BE OF CATEGORY 6 TYPE (BELDEN 2412)

14.) IF AN INSTALLED BASE OF A MANUFACTURER'S CATEGORY 5E OR 6 SYSTEM IS ALREADY INSTALLED, CONSULT WITH THE IT SHARED SERVICES REPRESENTATIVE FOR THE SPECIFICATION OF PRODUCT TO BE INSTALLED. IF THERE ARE ANY DEFICIENCIES, ANOMALIES, LINK LENGTH ISSUES, DESIGN FLAWS, FIT UP PROBLEMS REGARDING TO THE STRUCTURED CABLING SYSTEM, THE CONTRACTOR SHALL CONTACT THE IT SHARED SERVICES REPRESENTATIVE FOR CLARIFICATION AND/OR RESOLUTION, BEFORE PROCEEDING.

15.) ALL CAT6 T-568A MDVO'S SHALL BEAR THE FOLLOWING COLORS FOR EASE OF IDENTIFICATION, IN THE EVENT OF THEIR USAGE: -GREEN BELDEN/CDT (NORDX) CAT6 GIGAFLEX DATA JACKS. -BLUE REGULAR CAT5 DATA JACKS. -WHITE VOICE CABLE TERMINATION JACKS GIGAFLEX. -BLACK FAX CABLE TERMINATION JACKS GIGAFLEX.

16.) PATCH PANELS SHALL ONLY BE MOUNTED IN IT SHARED SERVICES APPROVED EQUIPMENT RACKING DEVICE(S). THIS SHALL BE IN ACCORDANCE WITH THE ATTACHED RACK OR CABINET PACKAGE DOCUMENTS. NO SUBSTITUTIONS.

17.) ATTACHMENT OF PANELS AND DEVICES TO SPECIFIED RACKS AND CABINETS SHALL USE ONLY 10-32 ROBERTSON RACK MOUNTING SCREWS; ACCEPTED - MIDDLE ATLANTIC PART # HS.

18.) THE INSTALLER SHALL LEAVE A MINIMUM OF 12" (300mm) OF EXCESS UTP CABLE ON THE DATA OUTLET TERMINATION TO FACILITATE FUTURE RE-TERMINATION. THE EXCESS CABLE IS TO BE STORED IN A SWEEPING "S" PATTERN, COILS ARE NOT PERMITTED.

19.) THE INSTALLER SHALL LEAVE A MINIMUM OF 10 FEET (3 METERS) OF EXCESS UTP CABLE ON THE PATCH PANEL END TO FACILITATE FUTURE REPOSITIONING OF PANELS ON THE RACK UNIT. THE EXCESS CABLE IS TO BE STORED IN A SWEEPING "S" PATTERN; COILS ARE NOT PERMITTED.

20.) WHERE APPLICABLE, THE REAR OUTSIDE OF VERTICAL CABLE MANAGEMENT TROUGHS SHALL BE USED TO CONTROL CABLES ATTACHING TO THE RACKING UNIT. THIS SHALL BE IN ACCORDANCE WITH A DOCUMENT SUPPLIED TO THE INSTALLER, DETAILING THE TYPE AND CONFIGURATION OF SUCH DEVICE.

21.) WHERE PHYSICAL SECURITY IS OF CONCERN, ALL NETWORK CABLES SHALL BE ENCLOSED IN CONTINUOUS CONDUIT FROM THE WORKSTATION OUTLET TO THE SECURE TELECOMMUNICATIONS ROOM. THE CONDUIT SHALL BE OF SUFFICIENT SIZE TO MEET THE MAXIMUM FORTY (40) PERCENT FILL RATIO AND TURN RADIUS SPECIFICATIONS.

22.) HORIZONTAL CABLING SHALL BE INSTALLED TO THE MANUFACTURER'S SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO, THE MINIMUM BEND RADIUS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BUNDLING (WITH VELCRO WRAPS) AND HANDLING OF ALL CABLES (WITH CABLE TRAYS, CADDY FASTENERS AND/OR "J" HOOKS) BETWEEN THE TELECOMMUNICATION CLOSETS AND THE WORKSTATION MDVOS, IN COMMON PATHWAYS (ABOVE CORRIDORS); THE "HOME RUN" METHOD IS NOT PERMITTED. CABLE BUNDLES SHOULD BE SUPPORTED AT 2 FOOT INTERVALS. ALL J-HOOKS IN CORRIDORS SHALL ALL BE CADDY CAT54 OR EQUAL (SIZED FOR 185 CAT6 CABLES). BRANCH OFFS FROM MAIN . BRANCH OFFS FROM MAIN CORRIDOR OR CABLE RUNS WITHIN ROOMS BETWEEN 1 AND 5 CAT 6 CABLES SHALL USE CADDY CAT12 J-HOOKS, RUNS BETWEEN 6 AND 16 SHALL USE CADDY CAT21 J-HOOKS AND BETWEEN 17 AND 25 SHALL USE CADDY CAT32 J-HOOKS. ALL CABLE RUNS MORE THAN 25 SHALL USE CADDY CAT64 J HOOKS. CABLES WILL NOT BE LAID ON OR SUPPORTED DIRECTLY BY THE STEEL JOISTS. NEW CABLES WILL NOT BE INSTALLED WITH EXISTING CABLES IN EXISTING J-HOOKS OR BUNDLED OR FASTENED TO ANY EXISTING CABLES.

23.) EACH WORKSTATION OUTLET PLATE SHALL BE CONFIGURED WITH A MINIMUM OF 2 DATA DROPS PLUS TELEPHONE SERVICE IF REQUIRED. DATA DROPS SHALL ONLY BE USED TO DELIVER DATA SERVICES AND SHALL NOT BE USED FOR ANY OTHER SERVICE TO THE WORKSTATION.

24.) INSTALLER SHALL BE TRAINED BY THE MANUFACTURER OF THE CABLING SYSTEM BEING INSTALLED, FOLLOWING METHODS DEMONSTRATED IN THAT TRAINING, AND SHALL POSSESS A VALID CERTIFICATE OF COMPLETION FROM THE MANUFACTURER FOR THE COURSES TAKEN. TRAINING MUST HAVE BEEN TAKEN WITHIN THE PREVIOUS THREE (3) YEARS, TO BE CONSIDERED "VALID". CERTIFICATES MUST BE MADE AVAILABLE TO THE IT SHARED SERVICES REPRESENTATIVE FOR REVIEW, UPON REQUEST.

25.) BEFORE DEVIATING FROM THESE METHODS, CONTACT THE DEPARTMENT OF PROVINCIAL TREASURY IT SHARED SERVICES REPRESENTATIVE.

26.) BELDEN IBDN SYSTEM 4800 COMPONENTS INCLUDE:
-4812 005 1000 DATA TWIST 4812, 4 PAIR, 23 AWG, CMR, CAT6, GREEN, 1000ft.
-AX101070 CAT6+MODULAR JACKS, FOR DATA
-C601105004 BELDEN GIGAFLEX PS6+ PATCH CABLES 4 FEET (1.2M), GREEN
-C601105007 BELDEN GIGAFLEX PS6+ PATCH CABLES 7 FEET (2.1M), GREEN
-C601105010 BELDEN GIGAFLEX PS6+ PATCH CABLES 10 FEET (3M), GREEN
-AX101458 FLEX PATCH PANEL, 2U, 48-PORT, BLACK
-A0645269 MDVO ANGLED ENTRY FACEPLATE

27.) ITSS WILL INSTALL FLOOR MOUNTED RELAY RACKS;

28.) ACCEPTABLE CONDUIT RUNS
- ACHIEVE THE BEST DIRECT ROUTE (E.G., USUALLY PARALLEL TO BUILDING LINES) WITH NO BEND GREATER THAN 90 DEGREES OR AN AGGREGATE OF BENDS IN EXCESS OF 180 DEGREES BETWEEN PULL POINTS OR PULL BOXES.
- NO CONTINUOUS SECTIONS LONGER THAN 30.5 M (100 FT).
- BE BONDED TO GROUND ON ONE OR BOTH ENDS IN ACCORDANCE WITH NATIONAL OR LOCAL REQUIREMENTS.
- WITHSTAND THE ENVIRONMENT TO WHICH THEY WILL BE EXPOSED.
- FOR RUNS THAT TOTAL MORE THAN 30.5 M (100 FT) IN LENGTH, PULL POINTS OR PULL BOXES SHOULD BE INSERTED SO THAT NO SEGMENT BETWEEN POINTS/BOXES EXCEEDS THE 30.5 M (100 FT) LIMIT.

29.) CONDUIT CAPACITY
- CABLE CAPACITY OF HORIZONTAL PATHWAY CONDUITS THAT HAVE NO MORE THAN TWO 90 DEGREE BENDS (180 DEGREES TOTAL) AND ARE NO LONGER THAN 30.5m (100ft). THE TABLE SHOWS THE CONDUIT FILL RATIO GUIDELINES FOR HORIZONTAL CABLES: HOWEVER, THE NUMBER OF CABLES THAT CAN BE INSTALLED IS ACTUALLY LIMITED BY THE ALLOWED MAXIMUM PULLING TENSIONS OF THE CABLES. MAXIMUM CONDUIT FILL RATIO IS 40%.

30.) MAXIMUM CATEGORY 6 CABLE LENGTHS APPLY TO ALL HORIZONTAL DISTRIBUTION CABLES; FROM THE HORIZONTAL CROSS-CONNECT (PATCH PANEL) TO THE TELECOMMUNICATIONS OUTLET (WORKSTATIION END), MAXIMUM CABLE LENGTH IS 90 METERS, (295 FEET) INCLUDING SLACK REQUIREMENTS. BAS HORIZONTAL LINK LENGTHS ARE ALSO LIMITED TO 90 METERS, INDEPENDENT OF THE MEDIA TYPE.

31.) ALL CABLE SHALL RUN PARALLEL, OR PERPENDICULAR TO CORRIDORS TO PRESERVE NEATNESS AND TO MINIMIZE INTERFERENCE WITH STRUCTURES, MOUNTED ABOVE THE DROP CEILINGS, CORRIDOR CROSSOVERS SHALL BE MINIMIZED.

32.) CABLE RUNS SHALL BE FREE OF TENSION AT BOTH ENDS, AS WELL AS OVER THE LENGTH OF THE RUN. THE CABLE SHALL BE WIRED IN A SINGLE PLANE ABOVE THE SUSPENDED CEILING AND NOT DRAPED OVER DUCTS, BEAMS, OR PIPES.

33.) CABLE RUNS SHALL BE FREE FROM BRIDGES, TAPS, OR SPLICES FROM THE USER INTERFACE (I.E. WALL PLATE) TO THE DISTRIBUTION FRAME. CABLES SHALL BE ROUTED SUCH AS TO MAINTAIN THE FOLLOWING MINIMUM DISTANCES FROM POWER SOURCES:
-12 INCHES (300mm) FROM POWER LINES OF 2KVA OR LESS (FOR EXAMPLE; LIGHTING OR DUPLEX RECEPTACLES).
-12 INCHES (300mm) FROM FLUORESCENT LIGHTING.
-36 INCHES (900mm) FROM POWER LINES 5KVA OR GREATER. (FOR EXAMPLE; ELECTRIC RANGE)
-40 INCHES (1000mm) FROM TRANSFORMERS OR MOTORS.

34.) DURING INSTALLATION THIS CONTRACTOR SHALL ON AN ON-GOING BASIS MAINTAIN RELEVANT, ACCURATE AND COMPREHENSIBLE RECORDS OF ALL TERMINATIONS, WIRING AND INTERCONNECTIONS.

35.) CONTRACTOR WILL PROVIDE: A. COPPER CABLING AND COPPER ACCESSORIES (I.E. JACKS). B. COPPER CABLE TERMINATION. C. PATCH PANELS

36.) CONTRACTOR TO CONTACT ITSS PRIOR TO RACK POPULATION.

37.) LABEL NEW DATA DROPS STARTING WITH NUMBERS AS REQUIRED BY ITSS.

38.) ALL WORKSTATION OUTLET PLATES MUST HAVE THE ADDITIONAL LABEL OF "TR1", SEPARATE FROM THE DATA JACK NUMBER.

39.) THERE SHALL BE SEPARATE PATCH PANELS FOR EACH FLOOR IN COMMUNICATION ROOMS THAT SERVE MORE THAN ONE FLOOR.

40.) IN TR1 PROVIDE TWO (2) PATCH PANELS.

		CABLE OUTSIDE DIAMETER mm(in)								
INSIDE DIAMETER (mm)	TRADE SIZE	3.3 (0.13)	4.6 (0.18)	5.6 (0.22)	6.1 (0.24)	7.4 (0.29)	7.9 (0.31)	9.4 (0.37)	13.5 (0.53)
16	1/2	1	1	0	0	0	0	0	0
21	3/4	6	5	4	3	2	2	1	0
27	1	8	8	7	6	3	3	2	1
35	1-1/4	16	14	12	10	6	4	3	1
41	1-1/2	20	18	16	15	7	6	4	2
50	2	30	26	22	20	14	12	7	4
63	2-1/2	45	40	36	30	17	14	12	6
78	3	70	60	50	40	20	20	17	7
91	3-1/2	--	--	--	--	--	--	22	12
100	4	--	--	--	--	--	--	30	14

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1	ISSUED FOR TENDER	NOV 22, 2016

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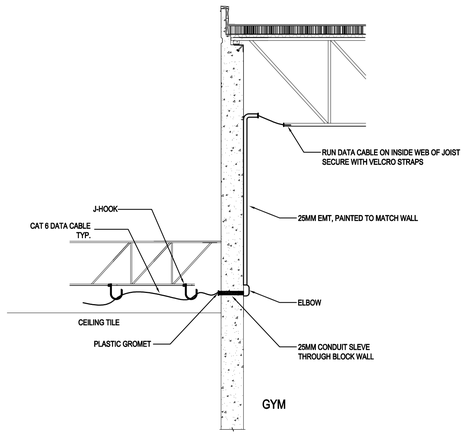
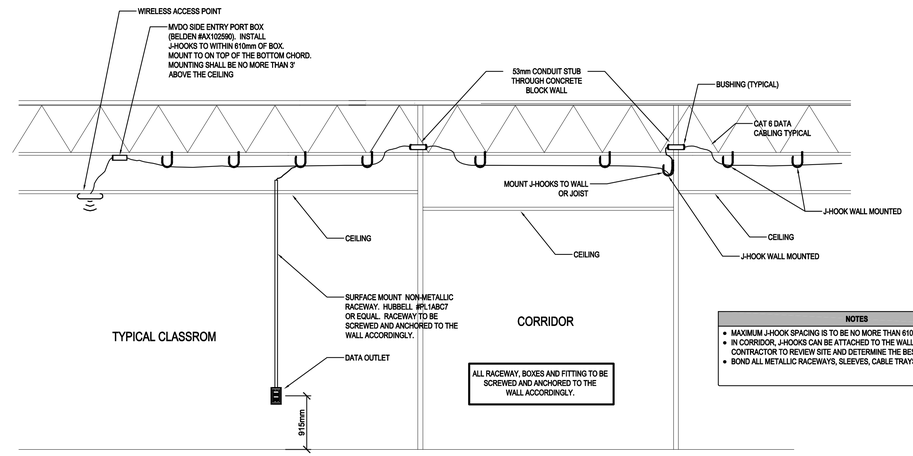
Project Title :
CARDIGAN SCHOOL
IT CONSOLIDATION

Drawing Title :
LOWER LEVEL
COMMUNICATION PLAN

Scale : As Noted	Design By : CM
Drawn By : CM	Date : NOVEMBER 22 2016
Project No.: 080-16096	Drawing # : E2 of 3

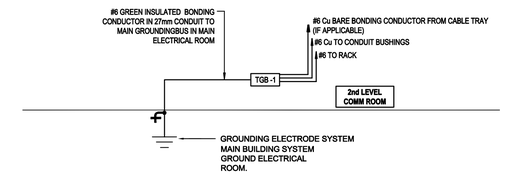


1 / E3 E3 SECTION - GYM
NTS



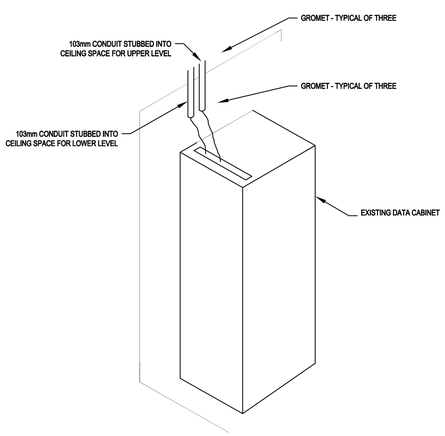
NOTES
• MAXIMUM J-HOOK SPACING IS TO BE NO MORE THAN 610mm.
• IN CORRIDOR, J-HOOKS CAN BE ATTACHED TO THE WALL FOR ROOF JOISTS. CONTRACTOR TO REVIEW SITE AND DETERMINE THE BEST METHOD.
• BOND ALL METALLIC RACEWAYS, SLEEVES, CABLE TRAYS, ETC.

2 / E3 E3 TYPICAL CLASSROOM/CORROOR SECTION
NTS

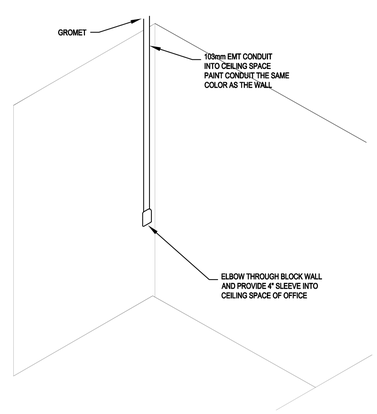


SERVICE ENTRANCE NOTES
•ALL BONDING CONNECTORS TO TGB BUSHING REQUIRE TWO BOLT LONG BARREL COMPRESSION CONNECTORS.
•BOND ALL METALLIC RACEWAYS, SLEEVES, CABLE TRAYS, ETC.
•MOUNT TGB BUS BARS ON INSULATED SUPPORTS.
•PROVIDE LAMACOID NAMEPLATE ON COMMUNICATIONS BONDING CONDUCTORS AS FOLLOWS - PROVIDE LAMACOID IDENTIFICATION TAGS AT BOTH ENDS OF EACH BONDING CONDUCTOR INDICATING ROOM NUMBER IT TERMINATES IN.
•PROVIDE LENGTH AS REQUIRED PLUS 50% SPARE
•BOLT HOLE SIZE AND SPACING AS PER NEMA STANDARDS
•PANDUIT OR EQUAL

3 / E3 E3 GROUNDING DETAIL
NTS



4 / E3 E3 DATA RACK ELEVATION
NTS



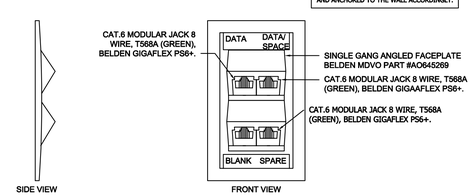
5 / E3 E3 CONDUIT DETAIL
NTS

NOTES:

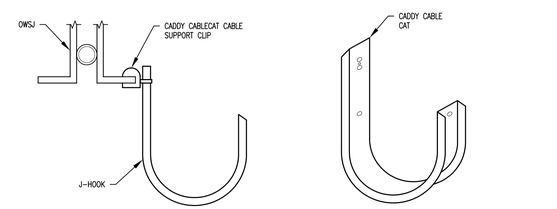
1.) FACEPLATE/JACKS PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR

2.) REFER TO FLOOR PLANS FOR QUANTITY OF DATA OUTLETS REQUIRED. IF ONLY ONE DATA OUTLET IS REQUIRED PROVIDE SPACE.

3.) COMMUNICATION BOXES TO BE SCREWED AND ANCHORED TO THE WALL ACCORDINGLY.



6 / E3 E3 TYPICAL LAN OUTLET
NTS



NOTES
•ALL J-HOOKS TO BE PRE-GALVANIZED STEEL.
•STANDARD OF ACCEPTANCE IS CADDY CAT64 OR EQUAL.

7 / E3 E3 J-HOOK DETAIL
NTS

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REVISIONS		DATE
1	ISSUED FOR TENDER	NOV 22, 2016

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A = Detail #
BB = Sheet # (Where Detail Required)
CC = Sheet # (Where Detailed)

Project Title :
CARDIGAN SCHOOL
IT CONSOLIDATION

Drawing Title :
COMMUNICATION DETAILS

Scale : As Noted	Design By : CM
Drawn By : CM	Date : NOVEMBER 22 2016
Project No.: 080-16096	Drawing # : E3 of 3

METRIC A1 AEC