

GENERAL NOTES:

- A. ENSURE THAT EXISTING WIRING EXPOSED OR AFFECTED DURING CONSTRUCTION IS REDONE OR REROUTED IN A PROPER MANNER. RE-USE CIRCUITS AND WIRING WHERE POSSIBLE. WHERE WIRING IS NOT RE-USED, STRIP BACK TO CLOSEST DISCONNECT OR PANEL.
- B. ALL AV RECEPTACLES IN ROOMS R19 SHALL BE FED FROM THE SAME PANEL.
- C. FOR WALLS WHICH WILL BE TREATED TO INCREASE THEIR FIRE RATING, REMOVE ALL DEVICES, EXTEND BOXES AS NECESSARY, AND RE-INSTALL DEVICES WHEN WORK IS COMPLETE.
- D. WHERE A NEW RECEPTACLE IS SHOWN IN THE APPROXIMATE AREA ON AN EXISTING WALL WHERE A DEVICE ALREADY EXISTS, THE NEW DEVICE NEED NOT BE ADDED, PROVIDED THE EXISTING DEVICE IS IN PROPER WORKING CONDITION.
- E. RTU'S TO BE FED OR REFEED IN SUCH A WAY AS TO ACCOMMODATE THE SKYLIGHT.

- F. DATA:
 - (A) THE BIDDER AND/OR ANY PROPOSED SUBCONTRACTOR (FOR THE PORTION OF THE WORK PROPOSED TO BE SUBCONTRACTED TO THEM) SHALL:
 - (A) HAVE A STRUCTURED CABLING INDUSTRY AFFILIATION SUCH AS BICSI (BUILDING INDUSTRY CONSULTANTS INTERNATIONAL) RCDD (REGISTERED COMMUNICATIONS DISTRIBUTOR DESIGNER) AND/OR A STRUCTURED CABLING VENDOR CERTIFICATION (PANDUIT CERTIFIED INSTALLER, BELDEN CERTIFIED INSTALLER, AMP ACT II, ETC.) THAT IS ACCEPTABLE TO THE CONTRACT ADMINISTRATOR. ALL DATA CABLING INSTALLERS SHALL BE LICENSED AND INSURED.
 - (B) HAVE THE "LIMITED SPECIALIZED CLASS M TRADE ELECTRICIAN'S LICENSE" WITH THE PROVINCE OF MANITOBA AND THE INSTALLER EITHER HAVE THE M LICENSE OR BE SUPERVISED ON SITE BY SOMEONE FROM THE COMPANY WHO HAS IT.

PROVIDE 3/4" CONDUIT FROM EVERY DATA LOCATION TO ACCESSIBLE CEILING SPACE. RUN TWO CABLES FROM EACH DATA LOCATION TO SERVER LOCATION. RUN CABLE IN CONDUIT WHEN RUNNING ACROSS EXPOSED CEILING OR WALLS. IN ACCESSIBLE CEILING SPACES, RUN CABLES PARALLEL TO BUILDING LINES IN J-HOOKS WHICH ARE SIZED LARGE ENOUGH TO HAVE EXTRA CAPACITY AFTER INSTALLATION. INSTALL JACKS, RACKS, PATCH CORDS, AND PATCH PANELS AND MAKE ALL TERMINATIONS TO ENSURE FULLY OPERATIONAL SYSTEMS. THE CITY SHALL SUPPLY AND INSTALL SWITCHES AND UPS.

CABLE SHALL BE PANDUIT, NORDX/CDT, BELDEN, AMP-NETCONNECT OR COMMSCOPE-SYSTEMAX. PROVIDE CABLE CERTIFICATION REPORT TO THE CITY UPON COMPLETION OF WORK. CABLES MUST BE A MINIMUM CATEGORY 6 AND PLENUM RATED. THE CONTRACTOR SHALL SPECIFY CABLES PROPOSED FOR USE AND SUBMIT DOCUMENTATION PROVING THAT THE PROPOSED CABLES MEET THESE SPECIFICATIONS BEFORE COMMENCEMENT OF ANY WORK.

ALL CATEGORY 6 CABLING SHALL BE TERMINATED IN THE TELECOMMUNICATIONS CLOSET ON 19 INCH RACK MOUNT RJ45 PATCH PANELS TO MATCH EXISTING CONFIGURATION. THE CATEGORY 6 CABLING IN THE RACKS SHALL BE INSTALLED WITH SUFFICIENT AND APPROPRIATE MOUNTING CLIPS, BRACKETS, AND CABLE MANAGEMENT TO PROVIDE A SECURE AND MAINTAINABLE SYSTEM.

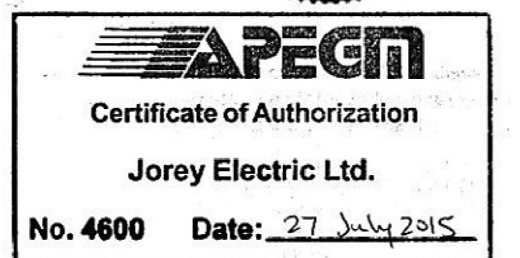
ALL TERMINATIONS MUST BE WIRED ACCORDING TO THE TIA568A PINOUT FIGURE 1.0: TIA 568A STANDARD PINOUT; CATEGORY 6 DATA CABLING WILL BE TERMINATED TIA568A-STANDARD. THE TERMINATION JACK SHALL BE OF TYPE RJ45 AND SHALL BE TIA/EIA CERTIFIED CATEGORY 6. IN BLACK UNLESS OTHERWISE SPECIFIED; THE UTP CATEGORY 6 CABLE TAIL SHALL BE TERMINATED WITH A MINIMUM OF 14" OF SLACK BUT NOT TO EXCEED 18"; ANALOG OR DIGITAL VOICE CABLING WILL BE CATEGORY 6 TERMINATED IN BLUE USING TIA568A STANDARD PINOUT AT THE DROP LOCATION; THE CITY WILL SUPPLY CABLE NAMING CONVENTIONS FOR USE BY CONTRACTORS FOR LABELING EACH TERMINATION POINT;

ALL HORIZONTAL CABLING RUNS SHALL RUN FROM EACH WORK AREA IN A STAR TOPOLOGY TO A TELECOMMUNICATIONS CLOSET. THERE SHALL BE NO CONNECTOR OR SPLICE IN THE CABLE RUN BETWEEN THE OUTLET IN THE WORK AREA AND THE CLOSET; CABLING MUST BE RUN A MINIMUM OF 12 INCHES FROM FLUORESCENT LIGHTS AND POWER CABLES; CABLING MUST NOT BE RUN DIRECTLY ADJACENT TO AND PARALLEL TO POWER CABLES; MINIMUM CABLE BEND RADIUS IS 4 TIMES THE CABLE DIAMETER; MAINTAIN THE MANUFACTURER'S WIRE TWIST OF ALL CONDUCTOR PAIRS AS CLOSE AS POSSIBLE TO THE TERMINATION POINT. FOR CATEGORY 6 WIRING, THE MAXIMUM LENGTH OF UN-TWISTED PAIRS IS 0.5'; DURING TERMINATION, THE CABLE SHEATH SHALL ONLY BE REMOVED THE MINIMUM AMOUNT REQUIRED TO PROPERLY TERMINATE THE CABLE.

CATEGORY 6 TESTING REQUIREMENTS:
 (A) CABLING MUST BE MINIMUM CATEGORY 6 AND PLENUM RATED.
 (B) THE CONTRACTOR MUST TEST THE ANSI/TIA/EIA-568-C.2 CATEGORY 6 CABLE STANDARD.
 (C) ALL CABLING MUST BE CERTIFIED USING AN INSTRUMENT DESIGNED FOR COMMUNICATION CABLE CERTIFICATION TO EIA/TIA 568-C.2 STANDARDS APPLICABLE TO THE CABLE CATEGORY AND ACCEPTABLE TO THE CONTRACT ADMINISTRATOR. CABLE VERIFICATION INSTRUMENTS ARE NOT ACCEPTABLE.
 (D) CERTIFICATION RECORDS FOR EACH CABLE WILL BE FORWARDED TO THE CITY WITH CABLE NUMBER IDENTIFICATION AS PER THE CITY.
 (E) THE CONTRACTOR MUST TEST WITH THEIR OWN EQUIPMENT.
 (F) THE CONTRACTOR MUST PROVIDE A RECORD OF THE SUCCESSFUL TESTING TO THE CITY UPON COMPLETION.

DRAWING NOTES:

- 1 EXISTING RTU TO REMAIN.
- 2 DISCONNECT EXISTING RTU. THE WIRING FROM THIS LOCATION SHALL BE USED TO FEED RTU-1 IF SUITABLE. ADD DISCONNECT AS NECESSARY. EXHAUST FANS LOCATED ON ROOF.
- 3 DISCONNECT EXISTING RTU-2. THE WIRING FROM THIS LOCATION SHALL BE USED TO RE-FEED RTU-2 AT ITS NEW LOCATION IF SUITABLE. ADD DISCONNECT AS NECESSARY.
- 4 LOCATED ON ROOF. RECEPTACLE IS TO BE MOUNTED A MINIMUM OF 750mm ABOVE FINISH ROOF.
- 5 EXISTING WASHROOM EXHAUST FANS TO REMAIN OPERATIONAL.
- 6 PROVIDE FOUR 120V CCTS. REFER TO AUDIO-VISUAL DRAWINGS FOR EXACT TABLE REQUIREMENTS.
- 7 CONFIRM LOCATION AND ELECTRICAL AND CONTROL REQUIREMENTS OF MOTORIZED SHADES.
- 8 RECEPTACLE IN CEILING FOR PROJECTOR.
- 9 CONFIRM THE LOCATION AND QUANTITIES OF POWER AND DATA OUTLETS IN R19. IN ADDITION TO THE OUTLETS SHOWN ON THIS DRAWING, REFER TO THE AUDIO-VISUAL DRAWINGS FOR AUDIO SPEAKER, CONDUIT AND COMMUNICATION WIRING REQUIREMENTS FOR THE SYSTEMS WITHIN THIS ROOM.



JOREY ELECTRIC
 Engineering Consultants
 6-1375 Nisakwa Road E
 Winnipeg MB R2J 3T3
 p. 204-255-4842
 e. info@joreyelectric.com

4	ISSUED FOR ADDENDUM #0	27 JUL 2015	JJD
3	ISSUED FOR ADDENDUM #1	14 JUL 2015	JJD
2	PRE-ISSUED FOR TENDER	22 JUN 2015	JJD
1	ISSUED FOR TENDER	12 JUN 2015	JJD
0	ISSUED FOR CONSTRUCTION	1 JUN 2015	JJD
NO	REVISION	DATE	BY

Project: TRANSPORTATION MANAGEMENT CENTRE RENOVATIONS
 821 ELGIN AVE., WINNIPEG, MANITOBA

Sheet Title: SECOND FLOOR POWER PLAN

Date: 1 JUN 2015
 By: TD
 Project No: 14-131
 Sheet No: E-4/R-4

1 SECOND FLOOR POWER PLAN
 SCALE: 1/4" = 1' - 0"