



NOTES :

THESE DRAWINGS SHALL NOT BE SCALED.

THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY HIMSELF ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.

THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH FLOORS, WALLS, AND CEILINGS FOR DUCT, PIPE & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOWN ON DRAWINGS.

ALL OPENINGS THROUGH FIRE ASSEMBLIES ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION, AND PROVIDE A SMOKE-TIGHT BARRIER.

ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE CODES.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING THE PART OF THE RENOVATION WORK.

WARNING: ASBESTOS IS PRESENT IN THE MAIN FLOOR CEILING SPACE, & EAST & WEST AIR SHAFTS.

SECOND FLOOR PLAN - DATA AND PHONE RENOVATION
SCALE: 1/8"=1'-0"

DATA AND PHONE SYMBOLS:

- POWER POLES, SEE ELECTRICAL DRAWING.
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- DATA PORTS (SUPPLY & INSTALL) ON POWER POLES, SEE ELECTRICAL DRAWING. TELEPHONE CABLE & JACKS ARE BY-OTHERS.
- DATA PORT IN WALL JACKS WITH PHONE PORT (SUPPLY & INSTALL). TELEPHONE CABLE & JACKS ARE BY-OTHERS.
- PATCH PANELS (24"x24"x8" 16 GA. MIN. WITH KNOCKOUTS, PAINTED GALV.) FOR 4" EMT (SUPPLY & INSTALL) MOUNT PATCH PANELS & EMT PARALLEL WITHOUT ELBOWS AND AS CLOSE AS POSSIBLE TO STRUCTURAL CEILING.
- NETWORK BOXES (24"x24"x8" 16 GA. MIN. WITH KNOCKOUTS, PAINTED GALV.) FOR 4" EMT (SUPPLY & INSTALL) NETWORK BOXES TO HOUSE (12-PORT) SURFACE MOUNT PATCH PANEL BOXES, HUBBELL MODEL SMB120W OR APPROVED EQUIV. (SUPPLY & INSTALL)
- TELEPHONE JACK LOCATION, WHERE WALL DATA JACK AND TELEPHONE JACK ARE SHOWN TOGETHER, A SINGLE DEVICE BOX (SUPPLY & INSTALL) TO HOUSE THE BOTH IS REQUIRED. A PULL STRING FOR THE TELEPHONE IS REQUIRED TO FACILITATE MTS TO PULL CABLE FROM CEILING SPACE INTO WALL DEVICE BOX. TELEPHONE SYSTEM TO BE INSTALLED BY MTS UNDER DIRECTIONS OF CITY OF WINNIPEG CORPORATE IT.

DATA AND PHONE RENOVATION NOTES:

- 1 SUPPLY & INSTALL PULL BOXES FOR DATA CABLING TO WIRING ROOM 221. MOUNT PULL BOXES & EMT PARALLEL WITHOUT ELBOWS AND CLOSE AS POSSIBLE TO STRUCTURAL CEILING. (TYP)
- 2 RACKS SHALL BE BUILDING GROUND WITH #3 AWG GROUND WIRE. RACK TO RACK GROUND TO BE #6 AWG GROUND WIRE. SUPPLY AND INSTALL (2) 48-PORT CATEGORY 6 PATCH PANEL WITH BLUE JACKS MOUNTED 3 RU BELOW EXISTING PATCH PANELS.

CATEGORY 6 CABLING SPECIFICATIONS

CONTRACTOR QUALIFICATIONS

THE CONTRACTOR PERFORMING THE DATA CABLING INSTALLATION SHALL HAVE A STRUCTURED CABLING INDUSTRY AFFILIATION SUCH AS BICSI (BUILDING INDUSTRY CONSULTANTS INTERNATIONAL) MEMBERSHIP, RCD (REGISTERED COMMUNICATIONS DISTRIBUTOR DESIGNER) AND/OR A STRUCTURED CABLING VENDOR CERTIFICATION.

ALL DATA CABLING INSTALLERS SHALL BE LICENSED AND INSURED.

THE DATA CABLING CONTRACTOR SHALL PROVIDE REFERENCES OF SIMILAR PROJECTS.

HORIZONTAL CABLING

- 1.1 CATEGORY 6 CABLING SHALL BE CERTIFIED AND TESTED TO A MINIMUM OF 250 MHZ. THE CATEGORY 6 HORIZONTAL CABLING SHALL MEET THE MINIMUM TECHNICAL SPECIFICATIONS IN (TELECOMMUNICATIONS INDUSTRY ASSOCIATION) TIA 568A. COLOUR TO BE BLUE.
- 1.2 ALL DATA TELECOMMUNICATIONS JACKS SHALL BE OF CATEGORY 6 CONNECTORS AND SHALL BE TIA CERTIFIED CATEGORY 6. COLOUR TO BE BLUE.
- 1.3 NO INSTALLED CABLING MAY BE EXPOSED TO VIEW OUTSIDE OF THE LAN ROOM. IT SHALL BE WITHIN A RACEWAY, POWER POLE, BEHIND A SUSPENDED CEILING.
- 1.4 ALL HORIZONTAL CABLING RUNS SHALL RUN FROM EACH WORK AREA IN A STAR TOPOLOGY TO A LAN ROOM OR AS SHOWN. THERE SHALL BE NO CONNECTOR IN THE CABLE RUN BETWEEN THE OUTLET IN THE WORK AREA AND THE LAN ROOM, EXCEPT FOR PATCH PANELS BOXES INSIDE NETWORK BOXES SHOWN. ALL CABLES TO BE RUN INSIDE DATA EMT CONDUITS FROM PULL BOXES TO DATA JACK, EXCEPT RUNS FROM PATCH PANEL BOXES INSIDE NETWORK BOXES CAN BE EXPOSED. ALL EXPOSED CATEGORY 6 CABLING SHALL BE PLENUM-RATED.
- 1.5 NO CABLING RUN MAY EXCEED A LENGTH OF 90 METERS.
- 1.6 ALL CATEGORY 6 CABLING SHALL BE TERMINATED IN THE WIRING ROOM ON RACK MOUNT CATEGORY 6 PATCH PANELS (MAXIMUM OF 48 JACKS PER PANEL).
- 1.7 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. CARE SHALL BE TAKEN TO NOT CAUSE THE CABLES TO BE OVERLY CRIMPED.
- 1.8 THE UTP CATEGORY 6 CABLE TAIL SHALL BE TERMINATED WITH A MINIMUM OF 14" OF SLACK BUT NOT TO EXCEED 18".
- 1.9 AFTER DRESSING CABLE TO THE FINAL LOCATION, THE SHEATH SHALL BE REMOVED TO A POINT THAT ALLOWS THE CONDUCTORS TO BE SPREAD AND TERMINATED IN A NEAT AND UNIFORM FASHION. EVERY EFFORT MUST BE MADE TO MAINTAIN SHEATH INTEGRITY BY REMOVING ONLY AS MUCH AS IS PRACTICAL TO ACCOMPLISH TERMINATION. CABLE PAIR TWIST SHALL BE MAINTAINED UP TO THE POINT OF TERMINATION, AS STATED IN 568A. THE Pairs in a cable should NEVER BE UNTWISTED MORE THAN 0.5 INCH FROM THE POINT OF TERMINATION. UNDER NO CIRCUMSTANCES SHALL CABLE Pairs BE UNTWISTED OR OTHERWISE ALTERED PRIOR TO TERMINATION.
- 1.10 ANY UNUSED HORIZONTAL CABLING SHALL BE LABELED AND LOOSELY COILED.
- 1.11 CONTRACTOR SHALL SPECIFY CABLES PROPOSED FOR USE AND SUBMIT DOCUMENTATION PROVING THAT THE PROPOSED CABLES MEET THESE SPECIFICATIONS.

LABELLING

- 2.1 ALL CABLES SHALL BE LABELLED WITH TAG WRAPS OR SOME OTHER PERMANENT MARKER CAPABLE OF WITHSTANDING MULTIPLE PULLING OF CABLE THROUGH RACEWAYS. LABELS SHALL BE LOCATED 0.5 METER FROM THE WORK AREA END.
- 2.2 ALL TERMINATIONS SHALL BE CLEARLY IDENTIFIED ON PATCH PANELS IN WIRING ROOM. ALL JACKS IN THE PATCH PANEL MUST BE IN SEQUENTIAL ORDER.
- 2.3 AT EACH WORK AREA, FACEPLATE OUTLET SHALL BE PROFESSIONALLY PRINTED WITH JACK NUMBERS CLEARLY VISIBLE WITHOUT REMOVING OUTLET FACEPLATE. THE LABELLING SHALL BE METAL OR VINYL ADHESIVE TAPE WITH EMBOSSED OR INDELIBLE PRINTING FOR EACH OUTLET.
- 2.4 THE ALPHA-NUMERIC NUMBERING SCHEME IS AS SHOWN:
XX-YY-ZZZ
XX LEVEL/FLOOR DESIGNATOR
YY ZONE NUMBER OR ROOM NUMBER ON FLOOR
ZZZ WORKSTATION JACK NUMBER
EXAMPLE:
WIRING ROOM, 221, 1st DATA JACK: 02-221-001

FIELD TEST QUALITY

- 3.1 THE CONTRACTOR SHALL VISUALLY INSPECT ALL CABLES, CABLE REELS, AND SHIPPING CARTONS TO DETECT CABLE DAMAGE INCURRED DURING SHIPPING AND TRANSPORT. VISIBLY DAMAGED ITEMS SHALL NOT BE INSTALLED.
- 3.2 CONDUCT CABLE TESTING ONLY UPON COMPLETION OF INSTALLATION.
- 3.3 A MINIMUM OF A LEVEL II-E FIELD TESTER SHALL BE USED TO VERIFY CABLING PERFORMANCE.
- 3.4 IN ADDITION TO HARD COPY TEST RESULTS, ACCEPTABLE ELECTRONIC FORMAT FOR TEST RESULTS ARE MICROSOFT EXCEL FOR EACH LINK.
- 3.5 THE CONTRACTOR SHALL DESCRIBE IN DETAIL ITS PROPOSED TEST PLAN TO DETECT ANY DEFECTIVE COMPONENTS AND TO DEMONSTRATE THAT THE INSTALLATION COMPLIES WITH THE SPECIFICATION.

RECORD DRAWINGS

- 4.1 THE CONTRACTOR SHALL KEEP A RECORD SET OF DRAWINGS ON THE SITE. AT ALL TIMES RECORDING ALL CHANGES THAT MAY OCCUR. AS-BUILT DRAWINGS ARE TO BE SUBMITTED WITH CONTRACTOR'S NAME, SIGNATURE AND DATE OF AS-BUILT.

ORIGINAL STAMPED BY: DOUG PALEY, P.ENG.
DATE: 2005.11.16

NO.	REVISION/DESCRIPTION	BY	DATE
SEALS			

DRAWN BY	DATE	CHECKED BY	APPROVED
DTA	2006.11.03	USER APPROVAL	

CITY OF WINNIPEG
PLANNING, PROPERTY & DEVELOPMENT DEPARTMENT
CIVIC ACCOMMODATIONS DIVISION
300 - 65 GARRY ST. R3C 4K4

PROJECT
ADMINISTRATION BUILDING
2ND FLOOR RENOVATIONS
CONVERSION TO OFFICE AREA
510 MAIN STREET

SHEET TITLE
SECOND FLOOR PLAN
DATA AND PHONE RENOVATION
SPECIFICATION

SCALE	PROJECT NO.	SHEET NO.
AS SHOWN	2004-180-06	T1