



KEY PLAN

- KEY NOTES**
- 1 PROVIDE NEW WALL & DOOR TO ACCOMMODATE NEW STAIR ACCESS TO NEW PENTHOUSE, SEE STRUCTURAL DRAWINGS FOR DETAILS.
 - 2 PROVIDE NEW STAIR ACCESS TO NEW PENTHOUSE, SEE STRUCTURAL DRAWINGS FOR DETAILS.
 - 3 PROVIDE NEW EXHAUST FANS, S605 & S655 AND THEIR ASSOCIATED 1065x1575 INSULATED MOTORIZED DAMPERS, MOTORIZED DAMPERS TO SIT DIRECTLY ON ROOF CURBS. PROVIDE EXHAUST FAN 1065x1575 FLANGE PLATES TO SIT DIRECTLY ON MOTORIZED DAMPERS. SEE SPECIFICATIONS AND MANUFACTURE INSTALLATION REQUIREMENTS FOR DETAILS.
 - 4 PROVIDE ROUGH OPENING THROUGH EXISTING WALL TO ACCOMMODATE NEW 100# P-TRAP COMBUSTION AIR DUCT FOR UH S625 & S626. COMBUSTION AIR OPENING SHALL BE LOCATED WITHIN 300mm ABOVE AND 600mm HORIZONTALLY FROM THE BURNER LEVEL OF THE UH. PROVIDE 20mm THICK INSULATING DUCT BLANKET ON DUCT.
 - 5 PROVIDE NEW 1015x760 ROUGH OPENING TO ACCOMMODATE NEW 915x660 SUPPLY AIR DUCT FROM MUA-650 C/W INSULATION AS SPECIFIED. SEE STRUCTURAL DRAWINGS SS2.1 & SS2.4 FOR FLOOR PENETRATION DETAILS.
 - 6 PROVIDE NEW 1015x760 ROUGH OPENING TO ACCOMMODATE NEW 915x660 SUPPLY AIR DUCT FROM MUA-600 C/W INSULATION AS SPECIFIED. SEE STRUCTURAL DRAWINGS SS2.1 & SS2.4 FOR FLOOR PENETRATION DETAILS.
 - 7 NEW 915x915 MUA-600 & MUA-650 SUPPLY DUCTWORK, CONNECT NEW STAINLESS STEEL DUCT TO EXISTING 915x915 STAINLESS STEEL DUCT AT LOCATIONS SHOWN, SUPPORT DUCTWORK AS SPECIFIED.
 - 8 WORK RELATED TO EXISTING CONDUITS THROUGH WALL TO BE COORDINATED WITH ELECTRICAL.
 - 9 NEW 75# PVC SANITARY DRAIN PIPING FROM PENTHOUSE FLOOR DRAIN PROVIDE TRAP WITHIN HEATED SPACE AND RUN PIPING TO LOCATION SHOWN, PROVIDE HORIZONTAL OFFSET UNDER THE DUCT AND PROVIDE CORED HOLE OPENING THROUGH CONCRETE SLAB MIN. 305 AWAY FROM WALL, SLOPE NEW PIPING AT MINIMUM 1:50 SLOPE.
 - 10 PROVIDE 100 HIGH RAISED CURB TO MOUNT EXHAUST FLOOR GRILLE, SEE STR. DRAWINGS FOR DETAIL.
 - 11 PROVIDE MANUAL ISOLATION DAMPER, SEE SPECIFICATIONS FOR DETAILS.
 - 12 RE-ROUTE THE EXISTING ELECTRICAL LIGHTING CONDUIT TO ACCOMMODATE DUCT PENETRATIONS, COORDINATE WITH ELECTRICAL.
 - 13 PROVIDE DISTRIBUTION DUCTWORK 915x915 END CAP, FIELD CONFIRM DUCT SIZE.
 - 14 PROVIDE DISTRIBUTION DUCTWORK 205x205 END CAP, FIELD CONFIRM DUCT SIZE.
 - 15 PROVIDE DISTRIBUTION DUCTWORK 300x350 END CAP, FIELD CONFIRM DUCT SIZE.
 - 16 RELOCATED CONDENSING UNIT MOUNTED ON ROOF, PROVIDE NEW REFRIGERANT PIPING FROM CONDENSING UNIT TO/FROM SCU S670. PROVIDE NEW WALL PENETRATIONS TO FACILITATE NEW REFRIGERANT PIPING, SEAL WATERTIGHT.
 - 17 PROVIDE NEW DUCTLESS SPLIT WALL MOUNTED INDOOR AND OUTDOOR UNITS, SEE SPECIFICATIONS AND MANUFACTURER'S INSTALLATION REQUIREMENTS FOR DETAILS. PROVIDE REQUIRED REFRIGERANT PIPING TO/FROM UNITS AND REQUIRED WALL PENETRATIONS, SEAL WATERTIGHT.
 - 18 PROVIDE HORIZONTAL OFFSET TO ACCOMMODATE ROOF PENETRATION LOCATIONS.
 - 19 PROVIDE VERTICAL OFFSET TO ACCOMMODATE ROOF PENETRATION LOCATIONS.
 - 20 PROVIDE FABRICATED PRESSURIZATION FAN SUPPORT/INLET PLENUM C/W FILTER RACK, SEE SPECIFICATIONS FOR FILTER AND MISCELLANEOUS STEEL DETAILS. FABRICATED SUPPORT TO ACCOMMODATE 610x610x50 INLET FILTER.
 - 21 NEW ELECTRICAL ROOM PRESSURIZATION FAN, S670, MOUNTED ON FABRICATED SUPPORT, SEE SPECIFICATIONS FOR DETAILS. PROVIDE TRANSITION FROM FAN DISCHARGE AND RUN 255# DISCHARGE VERTICALLY C/W BALANCING DAMPER, PROVIDE STAINLESS STEEL EXPANDED METAL SCREEN AT END OF DISCHARGE. PROVIDE 355x355 ROUGH OPENING THROUGH CONC. FLOOR SLAB TO ACCOMMODATE 305x305 SUCTION DUCT RUN DOWN INTO PUMP ROOM.
 - 22 RE-ROUTE 75# N.GAS PIPE TO AVOID INTERFERENCE WITH NEW MUA S600 & S650 DISCHARGE DUCT.
 - 23 REPLACE EXISTING 100# N.GAS ELBOW WITH 100# TEE AND 100x50 REDUCER. PROVIDE CORED HOLE OPENING THROUGH CONC. ROOF SLAB TO ACCOMMODATE NEW 50# PENTHOUSE N.GAS SUPPLY PIPE.
 - 24 PROVIDE NEW 75# N.GAS ISOLATION VALVE AND CAP, CONFIRM SIZE OF EXISTING TAKE-OFF ON SITE.
 - 25 PROVIDE NEW 38# N.GAS ISOLATION VALVE AND CAP LOCATED BENEATH EXISTING 915x915 DUCT.
 - 26 PROVIDE NEW N.GAS PIPING TO RELOCATED S625 FROM EXISTING TAKE-OFF, MATCH EXISTING PIPE SIZE, PROVIDE VERTICAL OFFSET TO ALLOW PIPE TO RUN BELOW EXISTING DUCT. PROVIDE NEW REGULATOR & REGULATOR VENT PIPING, MANUAL SHUTOFF VALVE, DRIP LEG & UNION NEAR GAS CONNECTION. PROVIDE NEW THERMOSTAT WIRE TO ACCOMMODATE NEW UNIT LOCATION IF REQUIRED, FIELD CONFIRM.
 - 27 PROVIDE NEW ROOF PITCH POCKET FOR NEW VENT PIPING FOR S625 & AVOID INTERFERENCE WITH NEW PENTHOUSE ABOVE, SEAL PENETRATION WATERTIGHT.
 - 28 S605 & S655 915# EXHAUST DUCTWORK TO BE SUPPORTED USING DUCT RISER CLAMP SUPPORT & VERTICAL DUCT WALL SUPPORT ON NORTH WALL, SEE SPECIFICATIONS AND SECTIONS C & D ON DWG SM2.5.
 - 29 PROVIDE DISCHARGE TAKE-OFF, SIZE AS SHOWN, PROVIDE BALANCING DAMPER & STAINLESS STEEL EXPANDED METAL SCREEN.

SECONDARY AREA TIP SCHEDULE

TIP NO.	DESCRIPTION.	NOTES
STIP3	TIE INTO EXISTING EXISTING 915x915 MUA DUCT	CONTRACTOR TO FIELD VERIFY EXISTING DUCT SIZE
STIP4	TIE INTO EXISTING 915x915 MUA DUCT	CONTRACTOR TO FIELD VERIFY EXISTING DUCT SIZE
STIP5	PROVIDE NEW CAP FOR EXISTING 915x915 MUA DUCT	REFER TO SM1.2 FOR EXISTING MUA DUCT LAYOUT
STIP6	PROVIDE NEW CAP FOR EXISTING 915x915 MUA DUCT	REFER TO SM1.2 FOR EXISTING MUA DUCT LAYOUT

AREA S - DISTRIBUTION BUILDING - PLAN
SCALE 1:50

GENERAL NOTES

1. PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND PROVINCIAL MECHANICAL ENGINEERING & INSPECTIONS BRANCH REQUIREMENTS.
2. COORDINATE WORKS WITH OTHER SUB-TRADES. REFER TO SPECIFIC DETAILS FOR CUTTING AND SEALING PENETRATIONS THROUGH OPENINGS & FIRE SEPARATIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR EQUIPMENT AND MATERIAL SPECIFICATIONS AND INSTALLATION CONSTRUCTION AND PHASING REQUIREMENTS.
4. INSULATE DUCTWORK WHERE INDICATED AND SPECIFIED.
5. SUPPORT ALL DUCTWORK TO MEET CODE REQUIREMENTS & ESTABLISHED INDUSTRY TRADE PRACTICES, (SMACNA, ASHRAE).
6. INVESTIGATE SITE PRIOR TO CONSTRUCTION TO CONFIRM ALL DIMENSIONS AND INSTALLATION REQ'S.
7. PERFORM ALL CUTTING & PATCHING NECESSARY FOR ANY REQUIRED OPENINGS.
8. PROVIDE TAB TO ENSURE AIR DISTRIBUTION TO VOLUMES INDICATED.
9. NOT ALL EQUIPMENT/PIPING, ETC. IS SHOWN.

APEGN
Certificate of Authorization
Alliance Engineering Services Inc.
No.2906 Date: _____

NO.	ISSUED FOR TENDER	DATE	BY
00	ISSUED FOR TENDER	2010-12-21	AFG
	REVISIONS	DATE	BY

ALLIANCE
Engineering Services Inc.

DESIGNED BY: IU	CHECKED BY: AG
DRAWN BY: IU	APPROVED BY:
HOR. SCALE: 1:50	RELEASED FOR CONSTRUCTION:
VERTICAL: 1:50	DATE: 2010-02-23

ENGINEER'S SEAL
PROVINCE OF MANITOBA
A.F.G. GOSSEN
REGISTERED PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

2010 HVAC REPLACEMENT AND ASSOCIATED WORKS
WEWPCC

AREA S - SECONDARY CLARIFIERS 1 & 2
DISTRIBUTION BUILDING - NEW PLAN

SHEET 1 OF 1
CITY DRAWING NUMBER
1-0103S-M0017-001