PENETRATIONS OF EITHER FIRE OR SMOKE BARRIER RESISTANT WALL SHALLB E SLEEVED AND SEALED AGAINST THE PASSAGE OF FLAME OR SMOKE WITH SUITABLE NON-COMBUSTIBLE MATERIALS EQUAL TO THE CONSTRUCTION TO BE PENETRATED.

CONTRACTOR TO VERIFY ALL CEILING FINISHES WITH ARCHITECTURAL DRAWINGS. ARE RESPONSIBLE TO PROVIDE ALL PLASTER AND FINISHING FRAMES, MOUNTING HARDWARE AND ACCESSORIES TO SUIT ARCHITECTURAL CEILING TYPES. MECHANICAL CONTRACTOR SHALL CO-ORDINATE AND PROVIDE DETAILS OF MOUNTING REQUIREMENTS OF DIFFUSERS AND GRILLES IN DRYWALL CEILINGS TO DRYWALL TRADE AND ENSURE EDGES OF OPENINGS ARE FRAMED BY DRYWALL TRADE TO SUPPORT DIFFUSERS AND GRILLES PROPERLY. DIFFUSERS AND GRILLES MUST NOT BE SUPPORTED SOLELY BY HANGAR WIRES.

THE CONTRACTOR WILL HAVE ROOF PENTETRATIONS MADE AND SEALED BY AN APPROVED ROOFING CONTRACTOR IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS. ROOF STRUCTURE SHALL BE REINFORCED ACCORDINGLY, AS PER STRUCTURAL DRAWINGS AT EACH LOCATION OF ROOF TOP MECHANICAL EQUIPMENT INSTALLATION SUC AS: EXHAUST FANS, CONDENSING UNITS.

PENETRATIONS OF CONCRETE SHALL BE SAW-CUT OR CORE CORED. IMPACT HAMERS ARE NOT ALLOWED, SEALL ALL DUCTWORK AND SLEEVES TO PREVENT LEAKAGE THROUGH FLOOR.

CONTRACTOR IS TO CO-ORDINATE ALL CEILING FINISHES WITH ARCHITECTURAL DRAWINGS, CONTRACTOR WILL REVIEW MECHANICAL DRAWINGS. ARCHITECTURAL REFLECTED CEILING PLANS AND ARCHITECTURAL ROOM FINISH SCHEDULES AS SOON AS CONTRACT DOCUMENTS ARE SIGNED. ADVISE CONSULTANT OF ANY CONFLICTS BETWEEN CEILING TYPE AND DIFFUSER/GRILLE TYPE.

MECHANICAL, DIVISION 2-14 AND ELECTRICAL 20. REFER TO ARCHITECTURAL DRAWINGS AND TRADES SHALL WORK IN CONJUNCTION WITH ONE ANOTHER SO AS TO AVOID INTERFERENCES BETWEEN PIPING, DUCTWORK, CONDUIT, LIGHTING FIXTURES, ETC.

WORK SHALL BE CO-ORDINATED THROUGH THE GENERAL CONTRACTOR PRIOR TO AND CONTROLS. CO-ORDINATE WITH ARCHITECTURAL ELEVATIONS FOR ARCHITECTURAL, MECHANICAL AND ELECTRICAL ALLOCATIONS.

PROPERLY SUPPORT CEILING MOUNTED EQUIPMENT AND ANY OTHER EQUIPMENT INDEPENDENT OF CEILING SUPPORT SYSTEM. REFER TO ARCHITECTURAL DETAILS AND CO-ORDINATE WITH STRUCTURAL TRADES.

10. REFER TO ARCHITECTURAL FOR OWNER SUPPLIED EQUIPMENT. CONFIRM ALL MECHANIC REQUIREMENTS AND PROVIDE TO . REVIEW ARCHITECTURAL, ELECTRICAL, AND STRUCTURAL DRAWINGS AND PROVIDE ON SITE INSPECTION TO DETERMINE FULL EXTENT OF PROJECT PRIOR TO SUBMITTING BID.

12. AVOID ANY DIRECT CONTACT BETWEEN ANY PIPING, DUCTING AND ELECTRICAL CONDUIT SYSTEMS TO PREVENT SOUND TRANSMISSION. 23. CONTRACTOR SHALL START DEMOLITION AND

13. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CO-ORDINATION OF GRILLES, DIFFUSERS AND OTHER ELEMENTS.

AND WATER BALANCING. CONTRACTOR AND DIFFUSER/GRILLE SUPPLIER 15. DO NOT SCALE DRAWINGS FOR INSTALLATION 25. REMOVE AND DISPOSE OFFSITE EXISTING PURPOSES. OBTAIN ALL DIMENSIONS FROM MANUFACTURERS SHOP DRAWINGS AND ON

> 16. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH CODES, AMENDMENTS, BULLETINS ETC AND REQUIREMENTS OF ALL INSPECTION AUTHORITIES FOR THE CITY OF

SITE INPSECTIONS.

17. ALL RETURN FANS, EXHAUST FANS AND SUPPLY FANS TO BE SUSPENDED FROM STRUCTURE c/w VIBRATION ISOLATION AND FLEXIBLE DUCT CONNECTIONS.

18. MECHANICAL AND ELECTRICAL SYSTEMS SHOWN ON DEMOLITION PLANS ARE BAESD ON INFORMATION OBTAINED FROM ORIGINAL CONSTRUCTION CONTRACT/TENDER DOCUMENTS. THESE DRAWINGS ARE NOT BASED ON AS-BUILT RECORD OR ON EXHAUSTIVE FIELD MEASUREMENT AND ARE PROVIDED TO ASSIST THE CONTRACTOR IN DETERMINING TH EXTENT OF WORK REQUIRED. THE CONTRACTOR SHALL MAKE ALLOWANCES THEIR TENDER PRICE FOR THE REMOVAL OF ADDITIONAL ABANDONED SERVICES AND THE PROTECTION OF EXISTING SERVICES THAT MUST REMAIN. RECORD THE LOCATION 30. CONTRACTORS TO VISIT THE SITE AND OF ALL EXISTING SERVICES THAT REMAIN ON

AS-BUILT RECORD DRAWINGS.

19. ALL ITEMS REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED TO A LOCATION ON SITE DESIGNATED BY THE OWNER. IF THE OWNER DECLARES NO INTEREST IN THE REMOVED ITEMS. ASSUME OWNERSHIP AND REMOVE THE ITEMS FROM THE SITE. ALL DUCTLESS SPLIT SYSTEMS NOT BE REUSED ARE TO BE TURNED OVER TO

SPECIFICATIONS FOR PHASING AND STAGING. MECHANICAL AND ELECTRICAL PHASING AND SEQUENCING SPECIFICATION MUST REFERENCE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

21. AIR BLANCE TECHNICIAN TO TAKE ALL INSTALLATION OF ANY EQUIPMENT, DUCTWORK MEASUREMENTS NECESSARY TO DETERMINE CURRENT SYSTEM PERFORMANCE IN AREAS THAT WILL CONTINUE TO BE SERVED BY EXISTING/REPLACEMENT/NEW AIR HANDLING EQUIPMENT AND HYDRONIC SYSTEMS, AND SHALL REPORT ALL MEASUREMENTS PRIOR TO START OF DEMOLITION. ON COMPLETION OF AIR HANDLING UNIT REPLACEMENTS, DUCT ALTERATIONS, HYDRONIC SYSTEMS AND HYDRONIC EQUIPMENT, BALANCE TECHNICIAN SHALL REBALANCE ALL EXISTING SYSTEMS TO

DELIVER PRE-CONSTRUCTION FLOWS AS

INDICATED ON THE DRAWINGS.

22. ALL EXISTING AIR HANDLING UNIT FILTERS ARE TO BE MONITORED CLOSELY DURING DEMOLITION AND CONSTRUCTION PERIOD.

EXISTING AIR HANDLING UNITS TO HAVE ONE CHANGE OF FILTERS DURING CONSTRUCTION AND NEW AT END OF CONSTRUCTION.

24. DISCONNECT AND MAKE SAFE ALL 14. CONTRACTOR TO INCLUDE ALL REQUIRED AIR MECHANICAL AND ELECTRICAL SERVICES

REMOVAL OR MECHANICAL EQUIPMENT IN

ACCORDANCE WITH ARCHITECTURAL PHASING

REQUIRED TO BE REMOVED. MECHANICAL EQUIPMENT REQUIRED TO BE REMOVED, ALONG WITH ALL DEDICATED

26. CONTRACTOR SHALL REPAIR THE WALLS AND FLOORS AFFECTED BY THIS CONTRACT TO MATCH EXISTING.

27. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CO-ORDINATION OR GRILLES, DIFFUSERS, SPRINKLERS AND OTHER ELEMENTS INCLUDING PATIENT LIFTS.

28. IN ALL INSTANCES THE NEED FOR ACCESS DOORS IN GYPSUM BOARD CEILINGS SHOULD BE AVOIDED IF POSSIBLE. WHERE INSTALLATION OF COMPONENTS WHICH REQUIRE ACCESS CANNOT BE AVOIDED, SUBMIT (DIMENSIONED) LAYOUT ON ARCHITECTURAL REFLÉCTED CEILING PLANS TO CONSULTANTS PRIOR TO START OF WORK.

29. ALL CONNECTIONS TO EXISTING SERVICES TO BE DONE IN OFF HOURS. CONTRACTOR SHALL SUBMIT A SCHEDULE FOR REVIEW WITH OWNER AND CONSULTANTS PRIOR TO START

BECOME FULLY FAMILIAR WITH EXTENT OF THE WORK PRIOR TO TENDER CLOSING.

31. ALL DISTURBED SURFACES AFTER PIPE AND DUCT REMOVAL TO BE FILLED IN WITH APPROPRIATE MATERIALS TO MAINTAIN FIRE SEPARATION AND PATCH TO MATCH EXISTING

32. CO-ORDINATE LOCATION OF NEW PIPING WITH EXISTING OR NEW SERVICES (PIPING, DUCTWORK, ELECTRICAL CONDUITS, LIGHTS AND BUILDING STRUCTURE). IF REQUIRED REMOVE EXISTING SERVICES AND REINSTALL. TEST SERVICES AFTER WORK IN

33. ALL PIPES CONNECTED TO EQUIPMENT SHALL BE PROVIDED WITH SHUT-OFF VALVES SO ISOLATE EQUIPMENT FOR MAINTENANCE.

34. EXISTING MECHANICAL SERVICES SHOWN ON THESE DRAWINGS WERE TAKEN FROM THE ORIGINAL CONTRACT DRAWINGS. THE CONTRACTOR SHALL VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING SERVICES ON SITE AND SHALL REMOVE ALL REDUNDANT SERVICES IN THE AREAS OF CONSTRUCTION.

## **GENERAL DEMOLITION NOTES**

CONTRACTOR IS TO ENSURE THAT ALL EXISTING SERVICES SERVING EXITING AREAS REMAIN IN SERVICE UNTIL THESE AREAS ARE RECONNECTED TO NEW SERVICES. ONLY THEN OBSOLETE EQUIPMENT AND SYSTEMS IS TO BE REMOVED AS SHOWN.

ALL DISTURBED SURFACES AFTER EQUIPMENT AND SYSTEMS REMOVAL OR REROUTING TO BE FILLED-IN WITH APPROPRIATE MATERIAL TO MAINTAIN FIRE SEPARATION AND PATCHED TO MATCH EXISTING OR NEW.

3. CONTRACTOR IS TO ENSURE THAT ALL EXISTING REMOVED FIXTURES AND EQUIPMENT REMAIN THE PROPERTY OF THE OWNER, UNLESS DIRECTED FOR DISPOSAL AT THE OWNERS DISCRETION. COST OF REMOVAL AND DISPOSAL TO BE INCLUDED IN CONTRACT.

. CHECK AND VERIFY LOCATION OF ALL EXISTING PIPES, DUCTS AND EQUIPMENT AND COORDINATE WITH THE NEW PIPING, DUCTWORK, ETC. WITH ALL OTHER TRADES TO PREVENT INTERFERENCE AND ENSURE THE EXTENT OF THE REMOVAL CONSIDERS THE NEW/COMPLETE WORK. REMOVAL OR RELOCATION OF ANY SUCH WORK INTERFERING WITH WORK OF OTHER TRADES IS THE RESPONSIBILITY OF THE MECHANICAL TRADE CONCERNED UNLESS OTHERWISE APPROVED IN WRITING.

5. DUE TO INCONSISTENT RECORDS OF EXISTING SERVICES NOT ALL PIPING DUCTWORK MAY BE SHOWN, OR IF SHOWN MAY NOT BE ACCURATE. IT IS RESPONSIBILITY OF THE CONTRACTOR TO FIELD CONFIRM ALL SERVICES.

ALL DRAWINGS ARE INTEGRATED WITH THE SPECIFICATIONS WHICH ACCOMPANY THEM. NEITHER IS TO BE USED ALONE. ANY ITEM OR SUBJECT OMITTED FROM ONE BUT IMPLIED IN THE OTHER IS FULLY AND PROPERLY REQUIRED. WHEREVER DIFFERENCE OCCURS, THE MOST ONEROUS CONDITION

ALL WORK SHALL BE IN ACCORDANCE WITH CODES, AMENDMENTS, BULLETINS ETC. AND REQUIREMENTS OF ALL INSPECTION AUTHORITIES FOR THE CITY OF

LEGEND OF SYMBOLS

DOMESTIC COLD WATER PIPING

DOMESTIC HOT WATER PIPING

SANITARY PIPING ABOVE FLOOR

FIXTURE DRAIN OUTLET WITH TRAP

STORM PIPING BELOW GRADE OR FLOOR

STORM PIPING ABOVE FLOOR

NATURAL GAS PIPING

ABANDONED PIPING

CLEANOUT IN FLOOR

CLEANOUT IN LINE OR STACK

HOSE BIBB c/w VACUUM BREAKER

CHECK VALVE c/w BALL DRIP VALVE

TEMPERATURE & PRESSURE RELIEF VALVE

PRESSURE REDUCING VALVE (WATER)

THROTTLING/BALANCING VALVE

RESILIENT SEAT CHECK VALVE

TEMPERATURE MIXING VALVE

NATURAL GAS PLUG VALVE

CAPPED PIPE

WATER METER

GAS METER

NOTE: NOT ALL SYMBOLS USED ON THIS PROJECT

PLUMBING VENT PIPING

DOMESTIC HOT WATER RECIRC. PIPING

SANITARY PIPING BELOW GRADE OR FLOOR

DESCRIPTION

DENOTES EXISTING

SYMBOL

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EX INDICATES EXISTING AIR OUTLET. EXE-EXISTING EXHAUST. CFM EXS-EXISTING SUPPLY, EXR-EXISTING RETURN

## PLUMBING DEMOLITION NOTES:

THE PLUMBING CONTRACTOR SHALL REMOVE ALL PLUMBING FIXTURES. CARRIERS, TRIM, ACCESSORIES, EQUIPMENT, FLOOR DRAINS AND PIPING AS SHOWN OR INDICATED ON THE DRAWINGS.

ALL PIPING TO BE REMOVED SHALL BE REMOVED COMPLETELY OR AS OTHERWISE SHOWN OR INDICATED ON DRAWINGS. ALL PIPE HANGERS, SLEEVES, RISER CLAMPS, ETC. SHALL BE REMOVED COMPLETELY WITH PIPING. NO EXISTING HANGER SYSTEMS SHALL BE REUSED FOR NEW

ALL PIPING TO BE REMOVED SHALL BE REMOVED TO BELOW FLOOR. ABOVE CEILING OR IN WALLS BACK TO MAINS OR SHUT OFF VALVES AT MAINS AND PROPERLY CAPPED PER CODE WITHOUT LEAVING DEAD ENDED PIPING.

. NO EQUIPMENT OR DEVICES THAT HAVE BEEN DISCONNECTED AND OR ABANDONED SHALL REMAIN.

ALL EXISTING PIPING AND EQUIPMENT SHOWN HAS BEEN TAKEN FROM THE BEST AVAILABLE EXISTING INFORMATION. THE DRAWINGS ARE DIAGRAMMATIC AND ALL FIXTURES, PIPING, AND DEVICES MAY NOT BE SHOWN. THE INTENT OF THESE DRAWINGS IS THAT IN ALL AREAS OF RENOVATION THAT THEY ARE REMOVED, WHETHER OR NOT SHOWN.

THE PLUMBING CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING SYSTEMS AND CONDITIONS IN AREAS OF RENOVATION.

THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR ANY AND ALL PHASING OF THE PLUMBING DEMOLITION WORK IN ORDER TO SATISFY THE CONSTRUCTION SCHEDULE.

ANY FIXTURE OR EQUIPMENT TO BE REMOVED AND REUSED OR TURNED OVER TO THE OWNER, AT OWNERS REQUEST, OR AS INDICATED ON THE DRAWINGS SHALL BE CAREFULLY REMOVED AND STORED TO PREVENT

THE PLUMBING CONTRACTOR SHALL ALSO REVIEW THE ARCHITECTURAL DEMOLITION DRAWINGS AS PART OF THIS CONTRACT FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

10. ALL SERVICE INTERRUPTIONS SHALL BE COORDINATED AND APPROVED WITH THE OWNER IN ADVANCE PRIOR TO COMMENCEMENT OF ANY WORK.

11. THE PLUMBING CONTRACTOR SHALL COORDINATE HIS DEMOLITION WORK WITH THAT OF OTHER TRADES IN ORDER TO AVOID CONFLICTS.

LEGEND OF SYMBOLS

POSITIVE PRESSURE (SUPPLY) DUCT UP

POSITIVE PRESSURE (SUPPLY) DUCT UP

NEGATIVE PRESSURE (RETURN) DUCT UP

POSITIVE PRESSURE (SUPPLY) DUCT DOWN

POSITIVE PRESSURE (SUPPLY) DUCT DOWN

NEGATIVE PRESSURE (RETURN) DUCT DOWN

CROSSHATCHING ON DUCTWORK INDICATES

ACOUSTICALLY INTERNALLY LINED DUCTWORK

EXISTING DUCTWORK TO BE REMOVED

EXISTING DUCTWORK TO REMAIN

SUPPLY AIR DIFFUSER (SQUARE)

RETURN/EXHAUST GRILLE

BLANK OFF PANEL

TURNING VANES

**BALANCING DAMPER** 

FIRE DAMPER

**THERMOSTAT** 

CAP SERVICE

SENSOR

NOTE: NOT ALL SYMBOLS USED ON THIS PROJECT

BDD 42223

BD 45333

(T)

S

CAP

SUPPLY AIR DIFFUSER (LAMINAR FLOW)

LINEAR SUPPLY/RETURN DIFFUSER

FULL RADIUS DUCT CONNECTION

BACK DRAFT DAMPER (GRAVITY)

TAP-IN DUCT CONNECTION

ROUND DUCT CONNECTION

SIDEWALL/DUCT MOUNTED SUPPLY GRILLE

SHADING INDICATES DIFFUSER TO HAVE

**NEW DUCTWORK** 

SYMBOL

## MECHANICAL DRAWING LIST

M100 MECHANICAL DRAWING LIST, LEGENDS AND NOTES

M200 NOT USED

M300 ENLARGED FLOOR PLAN - NEW PLUMBING

M400 ENLARGED FLOOR PLAN - PIPING DEMOLITION

ENLARGED FLOOR PLAN - HVAC DEMOLITION

M500 ENLARGED FLOOR PLAN - PIPING NEW

M501 ENLARGED FLOOR PLAN - HVAC NEW

M600 MECHANICAL SCHEDULES AND DETAILS

	LEGEND OF SYMBOLS
SYMBOL	DESCRIPTION
- <del>/////¤</del>	EXISTING PIPING TO BE REMOVED
—— EX(NAME) ——	EXISTING PIPING TO REMAIN
HWS	HOT WATER HEATING SUPPLY
HWR	HOT WATER HEATING RETURN
RS	REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
<del></del> 0	PIPING RISER UP
<del></del>	PIPING DROP
	PIPING RISER UP & DOWN
<del></del>	PIPING BOTTOM TAKE-OFF
<del></del>	REDUCER
	UNION
——II——	FLANGE
,±,	TEE
	CONNECT TO EXISTING
	FLEXIBLE CONNECTION
<del></del>	EXPANSION JOINT C/W PIPE GUIDES
×	ANCHOR
	INLINE PUMP
	ISOLATING (SHUT-OFF) VALVE
——D■CBV	CIRCUIT BALANCING VALVE
\	2-WAY CONTROL VALVE
<del></del>	3-WAY CONTROL VALVE
	CHECK (FLOW CONTROL)
<del></del>	STRAINER
₽	MANUAL AIR VENT
ф.	AUTOMATIC AIR VENT
NOTE: NOT ALL SYM	IBOLS USED ON THIS PROJECT

PHASE 1-PHASE 2 

REVIEW ALL DRAWINGS AND VERIFY ALL DIMENSIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION OR SHOP FABRICATION, ALL DRAWINGS. SPECIFICATIONS AND RELATED DOCUMENTS

ARE THE COPYRIGHT PROPERTY OF `VANDERWESTEN &

UPON REQUEST. REPRODUCTION OF DRAWINGS.

RUTHERFORD ASSOCIATES INC.' AND MUST BE RETURNED

SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR

WHOLE IS FORBIDDEN WITHOUT THE ENGINEER'S WRITTEN

KEY PLAN

3	Issued for Permit & Tender — Phase 1	09/03/2021	٧٦
2	Issued for Tender	05/04/2020	٧
1	Issued for Costing	03/10/2020	٧٦
No.	Issued	Date	В







Project:

KAWARTHA LAKES POLICE SERVICE **BUILDING RENOVATIONS** 

Drawing Title:

**MECHANICAL** DRAWING LIST, LEGENDS AND NOTES

Drawn By:	Checked By:
ND/RR	VT
Date:	Scale:
JUNE 18, 2020	N.T.S.
Project Number:	Drawing No.:
VR-19-160	M100

## **GENERAL PLUMBING NOTES:**

- PROVIDE A CLEANOUT AT THE BOTTOM OF EVERY SOIL AND WASTE STACK THAT CONNECTS TO A HORIZONTAL DRAINAGE PIPE.
- PROVIDE A CLEANOUT FROM EACH PLUMBING FIXTURE WHERE REQUIRED BY ONTARIO BUILDING CODE PART 7 - PLUMBING.
- CLEANOUT FOR WALL HUNG URINALS TO BE EXTENDED ABOVE THE FLOOD LEVEL AND BE ACCESSIBLE.
- CHECK AND VERIFY LOCATION OF ALL PIPES, DUCTS AND EQUIPMENT WITH ALL OTHER TRADES TO PREVENT INTERFERENCE. REMOVAL OR RELOCATION OF ANY SUCH WORK INTERFERING WITH WORK OF OTHER 16. INSTALL SHUT-OFF VALVES AT EACH PLUMBING FIXTURE. TRADES IS THE RESPONSIBILITY OF THE MECHANICAL TRADE CONCERNED UNLESS OTHERWISE APPROVED IN WRITING.
- . ALL PLUMBING FIXTURES INCLUDING FLOOR DRAINS TO BE TRAPPED, PRIMED AND VENTED AS REQUIRED BY ONTARIO BUILDING CODE, PART
- . ALL CONDENSATE LINES TO BE TRAPPED AT UNITS. REFER TO
- H.V.A.C. DRAWINGS FOR DETAIL. PROVIDE MIN. 2% SLOPE ON ALL HORIZONTAL CONDENSATE LINES.

PROVIDE ACCESS DOORS FOR ALL FLOOR DRAINS RECEIVING

CONDENSATE FROM FAN COIL UNITS LOCATED IN CONCEALED CEILING

RUN UNDER COUNTER, PIPING DISTRIBUTION IS TO BE INSTALLED AS

- 10. FOR MOUNTING HEIGHT OF ALL PLUMBING FIXTURES REFER TO
- ARCHITECTURAL ELEVATION DRAWINGS. 1. WHENEVER COLD AND HOT WATER DISTRIBUTION TO LAVATORIES IS TO

TIGHT TO UNDER SIDE OF THE COUNTER AS POSSIBLE.

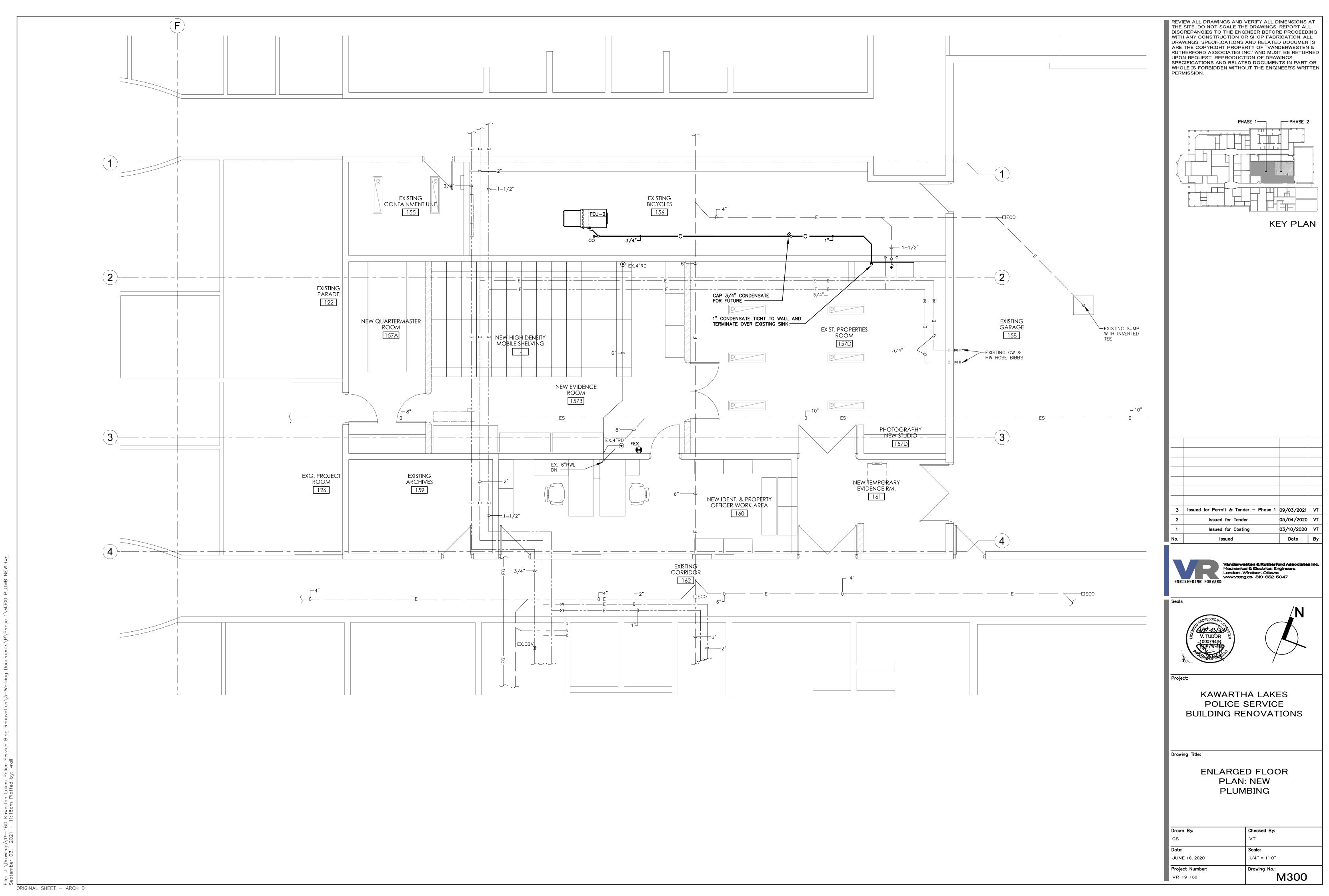
12. PLUMBING VENTS THROUGH ROOF SHALL BE AT LEAST 2'-11" HIGHER OR 11'-6" AWAY FROM ANY OUTDOOR AIR INTAKES, OPENABLE WINDOWS OR DOORS.

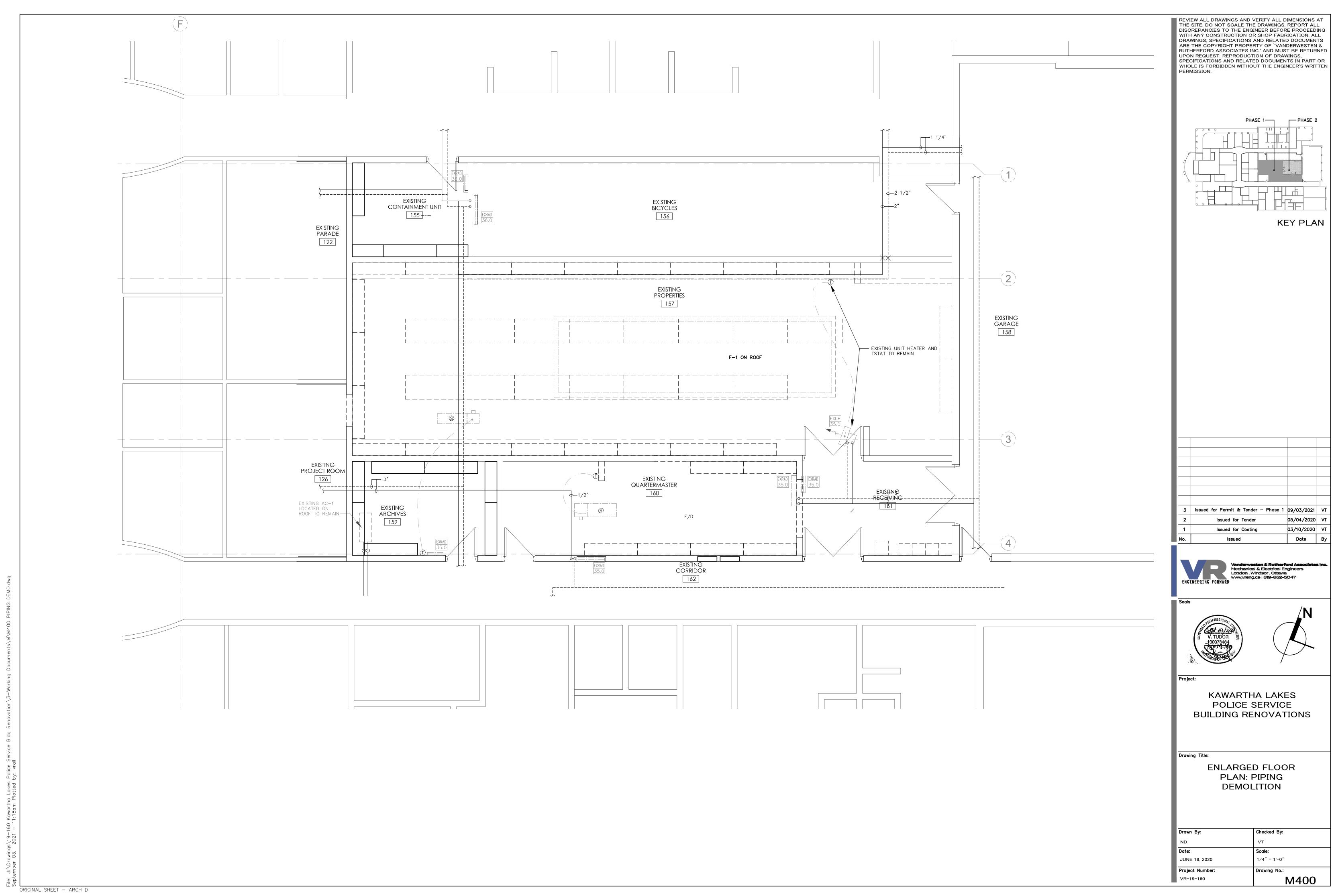
- WATER SHUT-OFF VALVES IN THE CEILING SPACE.
- 17. PROVIDE ALL BACKFLOW PREVENTERS AND VACUUM BREAKERS
- EACH BACKFLOW PREVENTER, UNLESS NOTED OTHERWISE.
- WITH AT LEAST 1" THICKNESS OF 0.25 BTU-IN/(H. CUBIC FT. DEG. F)
- 20. COORDINATE THE INSTALLATION OF CLEANOUTS AND ACCESS TO
- CONTRACTOR SHALL STOP WORK IN THE AREA AND NOTIFY THE CONSULTANT IN ORDER TO OBTAIN FURTHER INSTRUCTION. ALL WORK IN CONFORMANCE WITH INSTRUCTIONS FROM THE HAZARDOUS MATERIAL ABATEMENT CONSULTANT. ONLY PERSONNEL TRAINED IN HANDLING ASBESTOS-CEMENT PIPING AND WEARING APPROPRIATE PROTECTIVE CLOTHING AND EQUIPMENT SHALL BE PERMITTED TO ONLY AFTER THE HAZARDOUS MATERIALS ABATEMENT CONSULTANT HAS ISSUED A CLEARANCE CERTIFICATE.

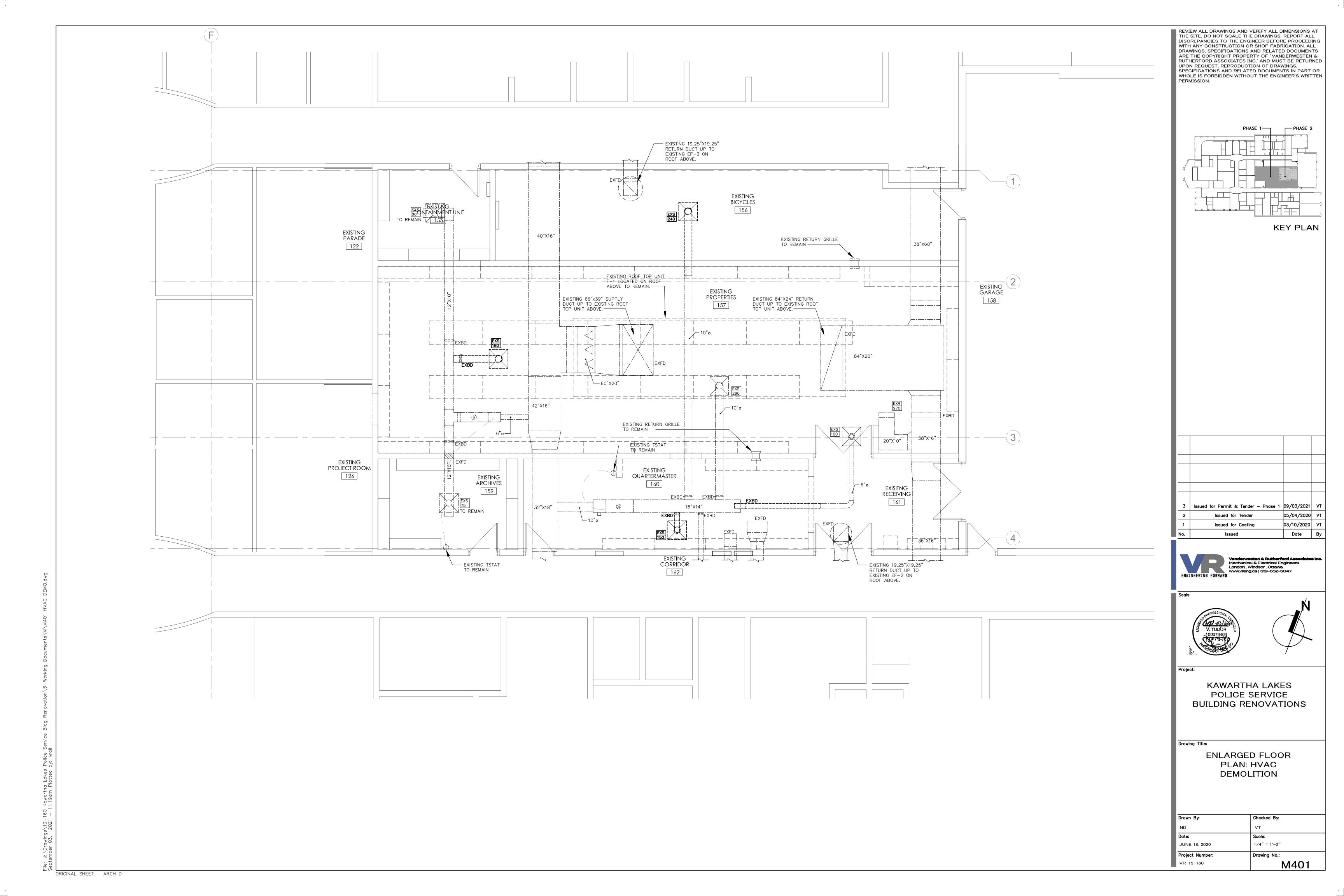
13. ALL WATER, SANITARY, SEWER AND VENT COPPER PIPING WITH SOLDER JOINTS SHALL BE LEAD FREE.

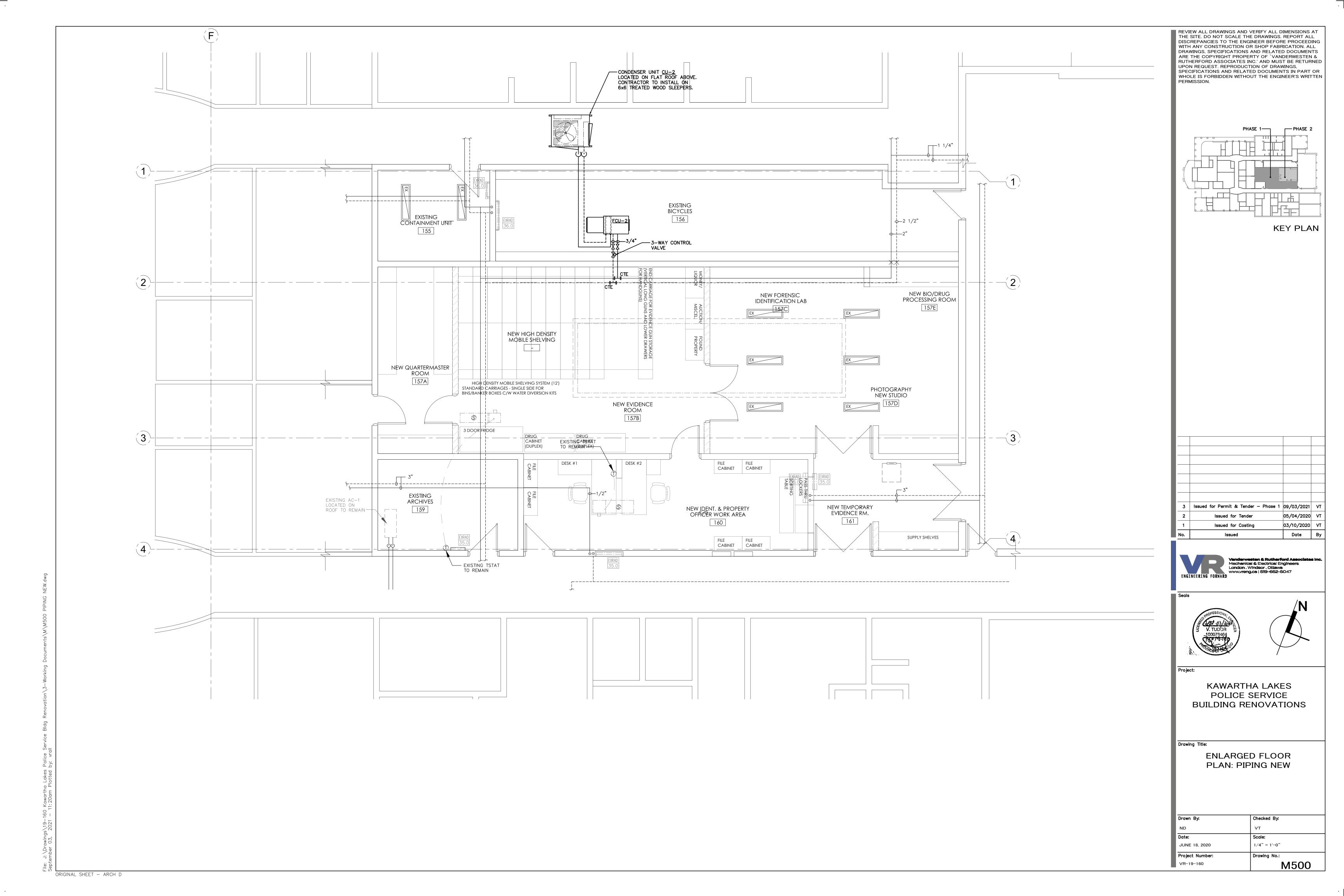
- 14. DO NOT INSTALL WATER LINES IN OUTSIDE WALL WHERE THEY MAY FREEZE, UNLESS BOTH THE WALL AND THE PIPES ARE PROPERLY
- 15. EACH GROUP OF PLUMBING FIXTURES SHALL BE EQUIPPED WITH
- REQUIRED BY ONTARIO BUILDING CODE AND AUTHORITIES HAVING JURISDICTION. 18. INSTALL STRAINER AND WATER HAMMER ARRESTOR UPSTREAM OF
- 19. COLD AND HOT WATER PIPING INSIDE WALLS SHALL BE INSULATED
- DOORS WITH ARCHITECTURAL FINISHES TO AVOID INTERFERENCE WITH BASE DETAILS.
- 9. FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT REFER TO H.V.A.C. 21. IMMEDIATELY ON DISCOVERY OF ASBESTOS—CEMENT PIPING, THE ASSOCIATED WITH THE ASBESTOS-CEMENT PIPING SHALL BE EXECUTED EXECUTE THE WORK. WORK IN THE AFFECTED AREA MAY BE RESUMED

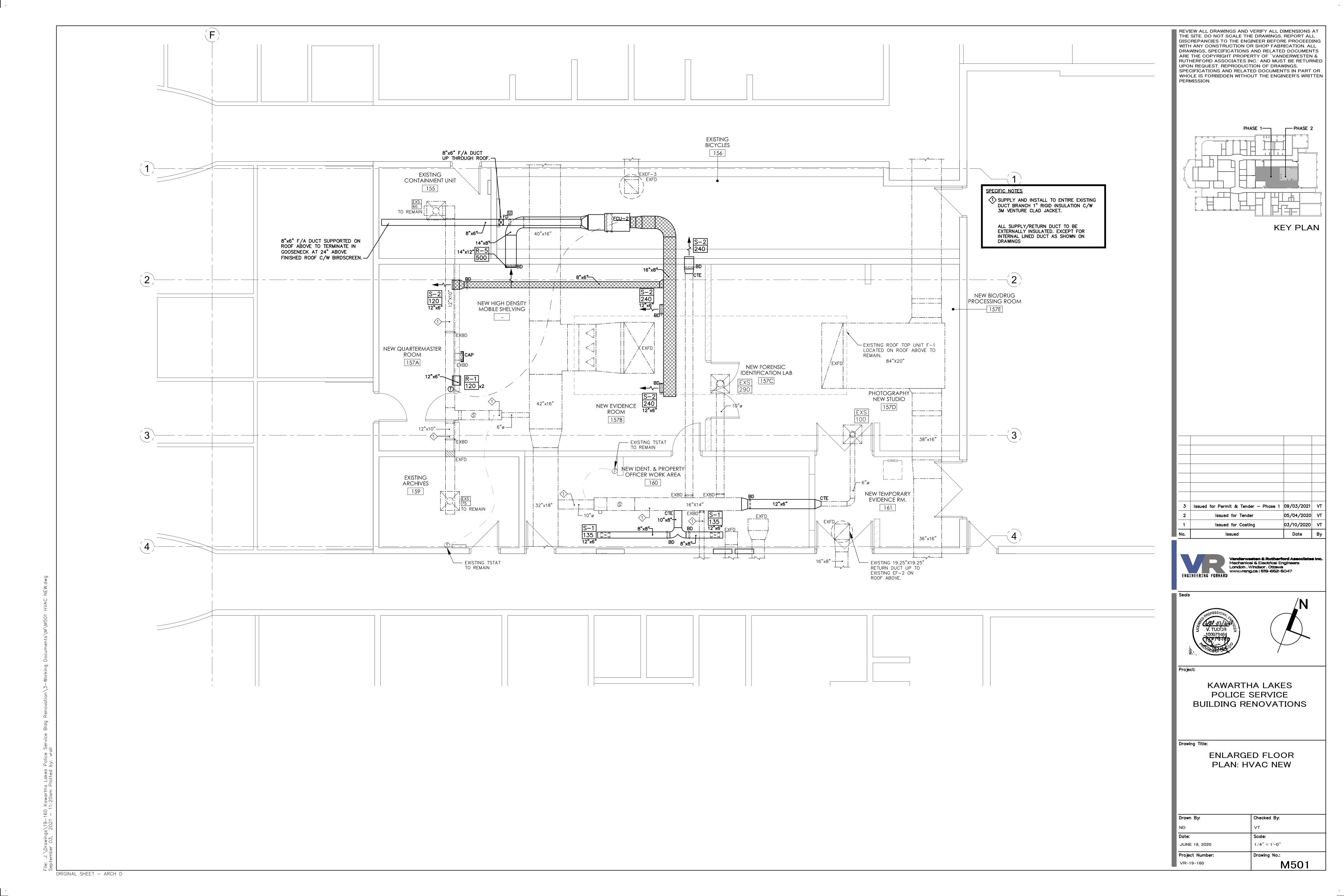
ORIGINAL SHEET - ARCH D

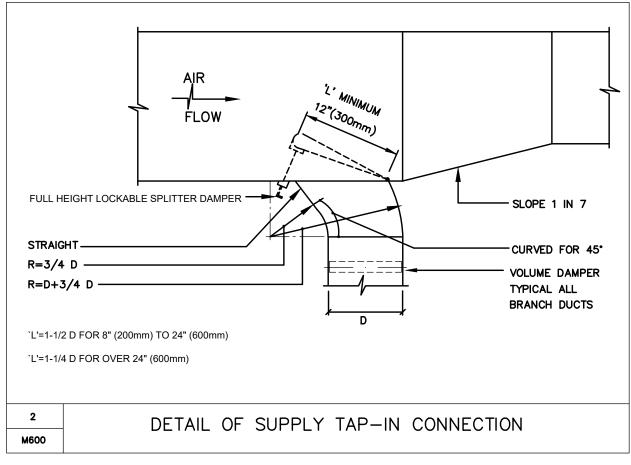












SUPPLY AIR O	UTLET SCHED	ULE									
DECICNATION	MANUEACTURER	MODEL	MOUNTING	NOMINAL	FACE SIZE	CONNEC	TION SIZE	AIRFLO	W RANGE:	MAXIMUM NOISE	DEMARKS
DESIGNATION	MANUFACTURER	REFERENCE	MOUNTING	INCH	mm	INCH	mm	CFM	I/s	CRITERIA: DBA	REMARKS
S-1	PRICE	520	CEILING	12" x 6"	300 x 150	-	-	115 - 300	54 - 141	NC 25	NO DAMPER
S-2	PRICE	520D	DUCT	12" x 6"	300 x 150	-	-	115 - 300	54 - 141	NC 25	DAMPER
S-3	PRICE	520	CEILING	14" x 6"	350 x 150	_	-	230 - 370	108 - 175	NC 25	NO DAMPER

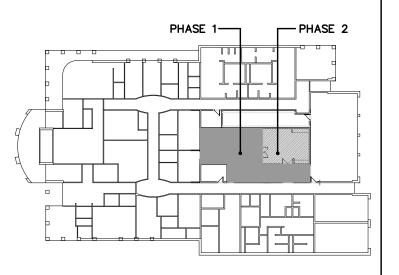
DESCRIPTION MANUFACTURER MODEL REFERENCE MOUNTING: NOMINAL FACE SIZE AIRFLOW RANGE MAXIMUM NOISE CRITERIA: DBA REMAR	EXHAUST AIR INLET SCHEDULE								
	REMARKS								
<b>E-1</b> PRICE 530D DUCT 16" x 6" 400 x 150 100 - 290 47 - 137 NC 25 DAMPI	/IPER								
E-2 PRICE 530D DUCT 8" x 6" 200 x 150 52 - 155 24 - 73 NC 25 DAMPI	/IPER								

R-1 R-2 R-3	MANUFACTURER	MODEL REFERENCE	MOUNTING:	NOMINAL I	FACE SIZE	AIDEL OVA			
R-1 R-2 R-3	WANDFACTURER	REFERENCE	WOONTING.		NOMINAL FACE SIZE		V RANGE	MAXIMUM NOISE	REMARKS
R-2 R-3				INCH	mm	CFM	l/s	CRITERIA: DBA	REWARKS
R-3	PRICE	530	SIDE WALL GRILLE	12" x 6"	300 x 150	78 - 200	37 - 94	NC 25	-
	PRICE	530	SIDE WALL GRILLE	6" x 6"	150 x 150	36 - 110	17 - 52	NC 25	-
D /	PRICE	530	CEILING	10" x 8"	250 x 200	100 - 275	47 - 127	NC 25	-
N-4	PRICE	530	SIDE WALL GRILLE	12" x 12"	300 x 300	275 - 455	127 - 215	NC 25	-
R-5	PRICE	530	SIDE WALL GRILLE	14" x 12"	350 x 300	320 - 535	151 - 252	NC 25	-

	DESCRIPTION	CU-2		
	TOTAL COOLING CAPACITY, kW (MBH)	5.9 (20.4)		
PERFORMANCE	HEATING CAPACITY, kW (MBH)	N/A		
	COMPRESSOR TYPE	SCROLL		
	REFRIGERANT TYPE:	R410A		
	COMPRESSOR QUANTITY	1		
	NO. OF OUTDOOR FANS	1		
ELEC.	UNIT VOLTAGE: V/PH/HZ	208/3/60		
	UNIT MCA: (AMPS)	18		
	UNIT MOCP: (AMPS)	25		
OTHER	DIMENSIONS: H x W x L, IN (MM)	45 x 41 x 49 (1143 x 1041 x 1244)		
	NET WEIGHT, LBS (KG)	600 (272)		
	SERVES:	FCU-2		
	ENGINEERED AIR MODEL: CU21/O			
NOTES	C/W LOW AMBIENT CONTROLS REFRIGERANT OPTIONS     WEATHERPROOF NON-FUSED DISCONNECTS (QTY.2)     REFRIG. CIRC/COMPRESSOR STAGING-SINGLE CIRCUIT, SINGLE STAGE     OUTDOOR CONDENSING UNITS TO BE MOUNTED OUTDOOR ON 6"x6" TREATED WOOD SLEEPERS.			

	DESCRIPTION	ECH 0
	DESCRIPTION	FCU-2
	SERVICES	EVIDENCE AREA
	MAX. AIRFLOW: (CFM)	600
	EXT. STATIC PRESS.: (in.wg)	0.45
⋖	AIRFLOW: (CFM)	150
	TOTAL CAPACITY: (MBH)	25.9
	ENTERING AIR TEMP.: DB/WB (°F)	49.7 / -
. [	LEAVING AIR TEMP.: DB/WB (°F)	90.5 / -
HEALING COIL	AIR PRESSURE DROP: (IN.WC.)	0.06
	MAX. FLUID FLOW: Usgpm	2.6
į	FLUID PRESS.: (FT.WC)	1.9
•	ENTERING FLUID TEMP.: (°F)	140
	LEAVING FLUID TEMP.: (°F)	160
	NO. ROWS	1
	TOTAL CAPACITY: (MBH)	20.4
	SENSIBLE CAPACITY: (MBH)	14
	ENTERING AIR TEMP.: DB/WB (°F)	77.2 / 65.8
	LEAVING AIR TEMP.: DB/WB (°F)	55.2 / 54.7
╡ [	WATER REMOVAL (LB/HR)	5.6
	LEAVING COIL VELOCITY (FPM)	411
	AIR PRESSURE DROP (IN.WC)	0.63
3	FLUID:	R410
	FLUID STATIC PRESS.: (ft.wg)	-
Ī	ENTERING FLUID TEMP.: (°F)	-
	LEAVING FLUID TEMP.: (°F)	-
	NO. ROWS	6
	EFFICIENCY	see spec
<u> </u>	AVERAGE FACE VELOCITY FPM	see spec
	LENGTH (in.)	20
	WIDTH (in.)	16
	POWER: (HP)	0.75
	VOLTAGE: (V/Ph/Hz)	208/3/60
<b>'</b>	DRIVE TYPE:	Belt
	DIMENSIONS, L x W x H: (in.)	53.5x23x18
	ACCESSORIES:	EC Motor
ľ	ENGINEERED AIR MODEL REFERENCE:	JM700
	COMMENTS	UNIT PROVIDED WITH MANUFACTURER MIXING BOX EQUIPPED WITH MOTORIZED DAMPER OF RETURN INLET.

■ REVIEW ALL DRAWINGS AND VERIFY ALL DIMENSIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION OR SHOP FABRICATION. ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF `VANDERWESTEN & RUTHERFORD ASSOCIATES INC.' AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS,
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**KEY PLAN** 

3	Issued for Permit & Tender - Phase 1	09/03/2021	VT
2	Issued for Tender	05/04/2020	VT
1	Issued for Costing	03/10/2020	VT
lo.	Issued	Date	Ву





KAWARTHA LAKES POLICE SERVICE **BUILDING RENOVATIONS** 

Drawing Title:

MECHANICAL SCHEDULES AND **DETAILS** 

wn By:	Checked By:
	VT
е:	Scale:
NE 18, 2020	N.T.S.
ject Number:	Drawing No.:
-19-160	M600