

SANITARY PIPE RE-ROUTE

HORIZON TOWERS

4960 SANDERS STREET, BURNABY, BC, V5H 1S9

PROJECT TEAM

CLIENT

HORIZON TOWERS HOLDINGS LTD.

5050 SANDERS STREET, BURNABY, BC V5H 1T1

CONSULTANT

MCCUAIG & ASSOCIATES ENGINEERING LTD.

200-3999 HENNING DRIVE, BURNABY, BC V5C 6P9

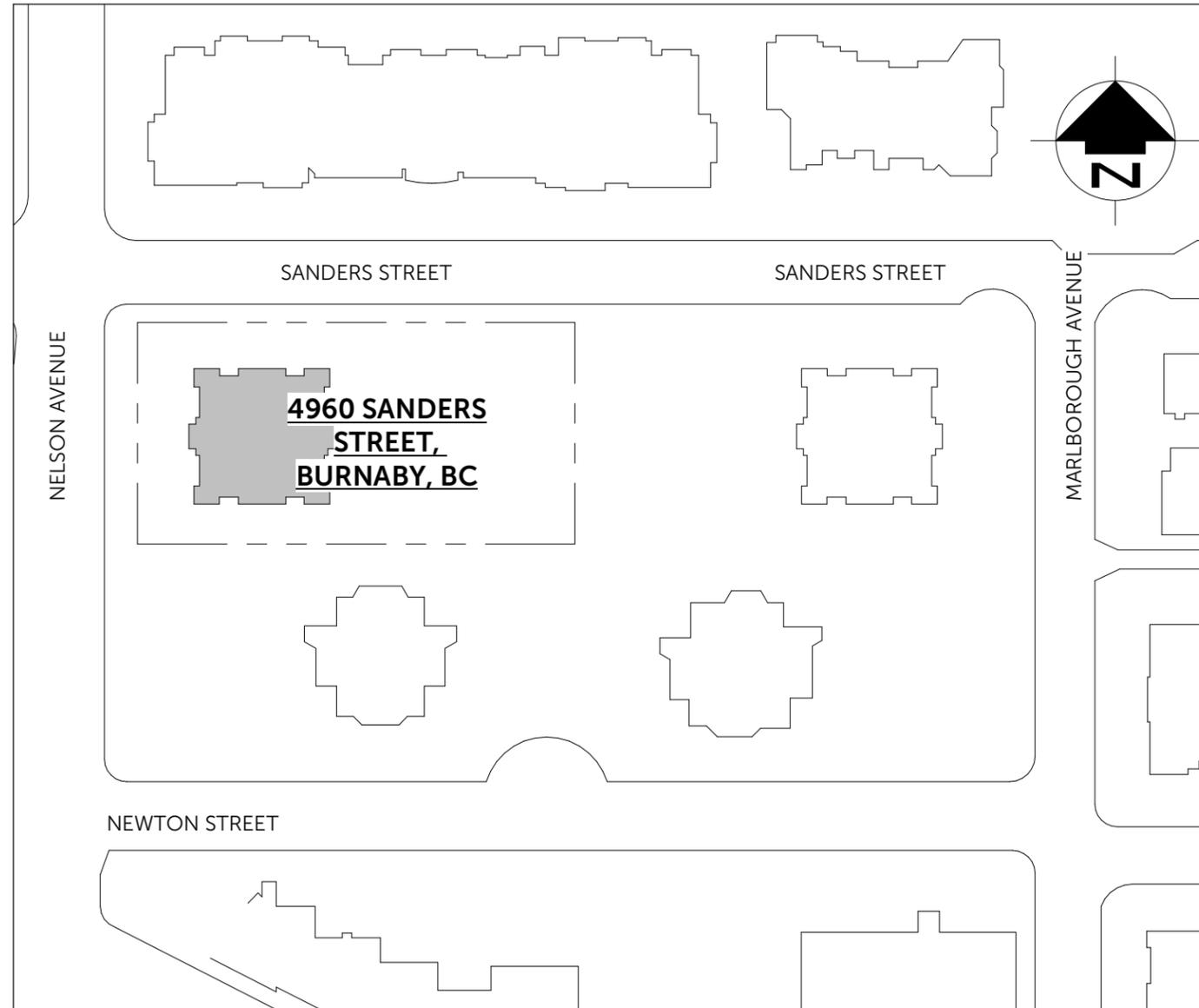
PROJECT DATA

GENERAL PROPERTY INFORMATION:

CIVIC ADDRESS: 4960 SANDERS STREET, BURNABY, BC V5H 1S9
 PID: 002-670-356
 LOT: 127
 DISTRICT LOT: 32
 PLAN: NWP36340
 AHJ: CITY OF BURNABY
 APPLICABLE CODE: BCBC 2024

DRAWING LIST

SHEET NO.	SHEET TITLE
M-001	SITE PLAN / COVER SHEET
M-002	PLUMBING LEGEND
M-101	LEVEL P2 EXISTING SANITARY PIPE PLAN
M-102	LEVEL P1 EXISTING SANITARY PIPE PLAN
M-103	LEVEL P1 SANITARY PIPE RE-ROUTE PLAN
M-104	LEVEL 1 FLOOR PLAN
M-105	UNIT 07/08 SANITARY SYSTEM LAYOUT
M-106	SANITARY STACK SCHEMATIC
M-701	FIRESTOPPING DETAILS



1 SITE PLAN
 M-001 SCALE: 1" = 100'-0"

NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS



#200 - 3999 HENNING DRIVE, BURNABY, BC, V5C 6P9
 PHONE: 604-255-0992 / FAX: 604-255-1054

ONLY VALID FOR
 PERMIT WHEN
 SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC):
 1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT

HORIZON TOWERS HOLDINGS LTD.

5050 SANDERS STREET,
 BURNABY, BC V5H 1T1

PROJECT TITLE

SANITARY PIPE RE-ROUTE

HORIZON TOWERS

4960 SANDERS STREET,
 BURNABY, BC, V5H 1S9

CHECKED BY **JM**

DRAWN BY **LC** DATE **2024/05/14**

SCALE **As indicated**

DRAWING TITLE

SITE PLAN / COVER SHEET

PROJECT NUMBER 2302.017	SHEET NO. M-001	REVISION NO. 2
-----------------------------------	---------------------------	--------------------------

PLUMBING LEGEND

----	DOMESTIC COLD
-.-.-.-	DOMESTIC HOT
— · · · —	DOMESTIC RETURN
—V—	SANITARY VENT
—SAN—	SANITARY ABOVE GRADE
—SAN - - - -	SANITARY BELOW GRADE
—ST—	STORM ABOVE GRADE
—ST- - - -	STORM BELOW GRADE
—G—	NATURAL GAS
—HWS—	HOT WATER SUPPLY
—HWR—	HOT WATER RETURN
—CWS—	CHILLED WATER SUPPLY
—CWR—	CHILLED WATER RETURN
—	PIPE CLEANOUT
→	DIRECTION OF FLOW
⊗	GATE VALVE
⊙	BALL VALVE
⊠	BALANCING VALVE
	UNION
↗	CHECK VALVE
⊗	PRESSURE REDUCING VALVE

	MOTORIZED THREE WAY CONTROL VALVE
	MOTORIZED CONTROL VALVE
	DRAIN VALVE
	RELIEF VALVE
	WATER METER
	PUMP
	PRESSURE GAUGE
	RISER TAG (DOMESTIC)
	RISER TAG (SANITARY)
	RISER
	FIXTURE CONNECTION
	FLOOR DRAIN
	AQUASTAT
	WATER HAMMER ARRESTER
	HOSE BIB
	STRAINER

GENERAL NOTE:

- SUPPLY AND INSTALL SANITARY DRAINAGE AND VENT PIPES USING SYSTEM XFR PVC MEETING CSA-B181.2 AND IN COMPLIANCE WITH BC BUILDING CODE 2024 AND NATIONAL PLUMBING CODE 2020.
- REPAIR WALLS, CEILINGS AND FLOORS AS REQUIRED BY WORK.
- PROVIDE WALL, CEILING AND FLOOR FINISHES AS REQUIRED BY WORK.
- THE MODIFICATIONS ON SANITARY PIPES ARE TO ALLOW INSTALLATIONS OF CLOTHES WASHERS ON EXISTING BATHROOM GROUP STACK.



#200 - 3999 HENNING DRIVE, BURNABY, BC, V5C 6P9
PHONE: 604-255-0992 / FAX: 604-255-1054

ONLY VALID FOR PERMIT WHEN SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC): 1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT
HORIZON TOWERS HOLDINGS LTD.
5050 SANDERS STREET,
BURNABY, BC V5H 1T1

PROJECT TITLE
SANITARY PIPE RE-ROUTE
HORIZON TOWERS
4960 SANDERS STREET,
BURNABY, BC, V5H 1S9

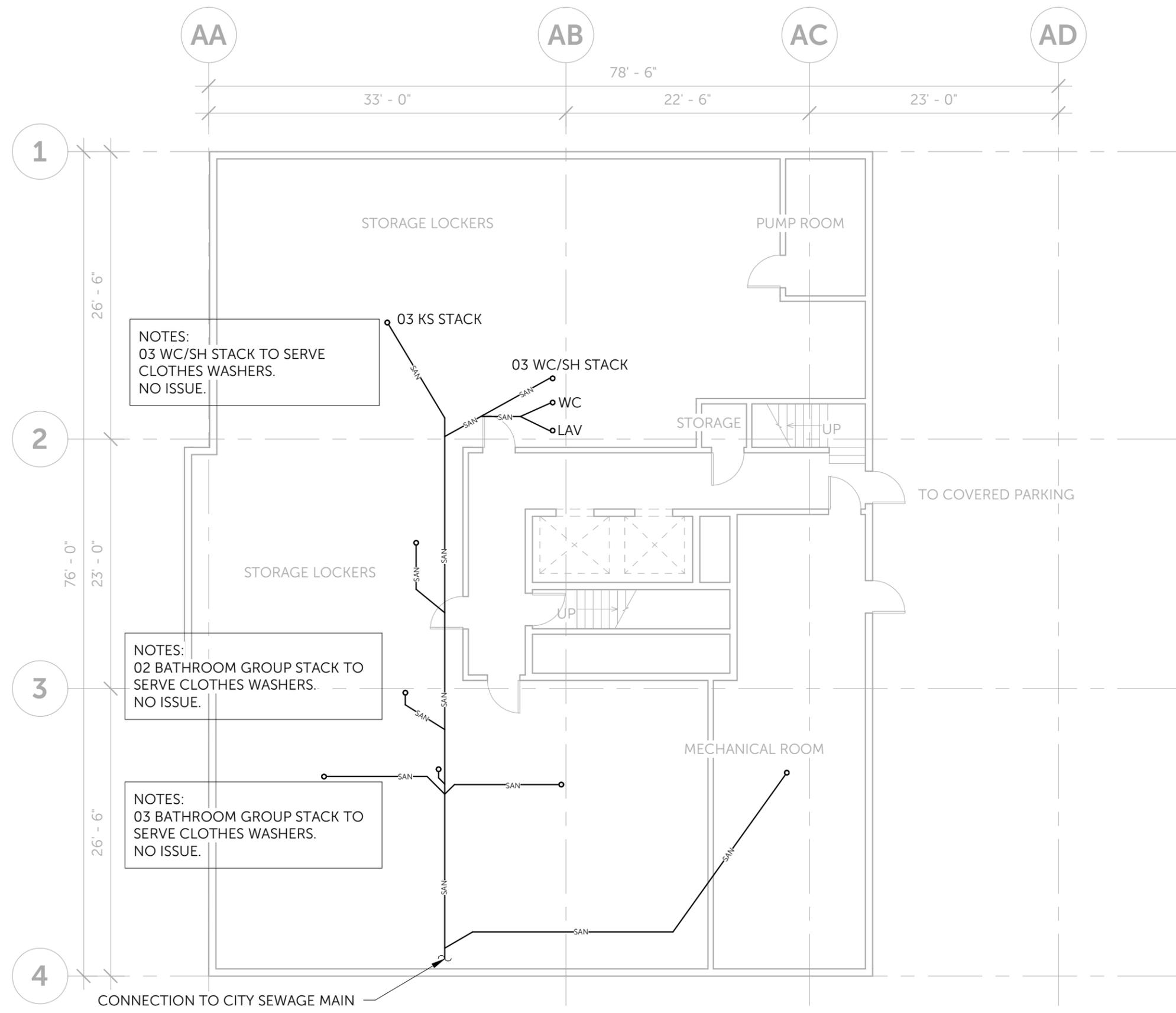
CHECKED BY **JM**
DRAWN BY **LC** DATE **2023/12/04**

SCALE **12" = 1'-0"**

DRAWING TITLE
PLUMBING LEGEND

PROJECT NUMBER 2302.017	SHEET NO. M-002	REVISION NO. 2
-----------------------------------	---------------------------	--------------------------

NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS



NOTES:
03 WC/SH STACK TO SERVE
CLOTHES WASHERS.
NO ISSUE.

NOTES:
02 BATHROOM GROUP STACK TO
SERVE CLOTHES WASHERS.
NO ISSUE.

NOTES:
03 BATHROOM GROUP STACK TO
SERVE CLOTHES WASHERS.
NO ISSUE.



#200 - 3999 HENNING DRIVE, BURNABY, BC, V5C 6P9
PHONE: 604-255-0992 / FAX: 604-255-1054

ONLY VALID FOR
PERMIT WHEN
SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC):
1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT
HORIZON TOWERS HOLDINGS LTD.
5050 SANDERS STREET,
BURNABY, BC V5H 1T1

PROJECT TITLE
SANITARY PIPE RE-ROUTE
HORIZON TOWERS
4960 SANDERS STREET,
BURNABY, BC, V5H 1S9

CHECKED BY **JM**

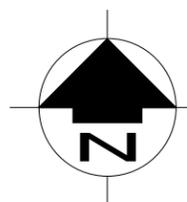
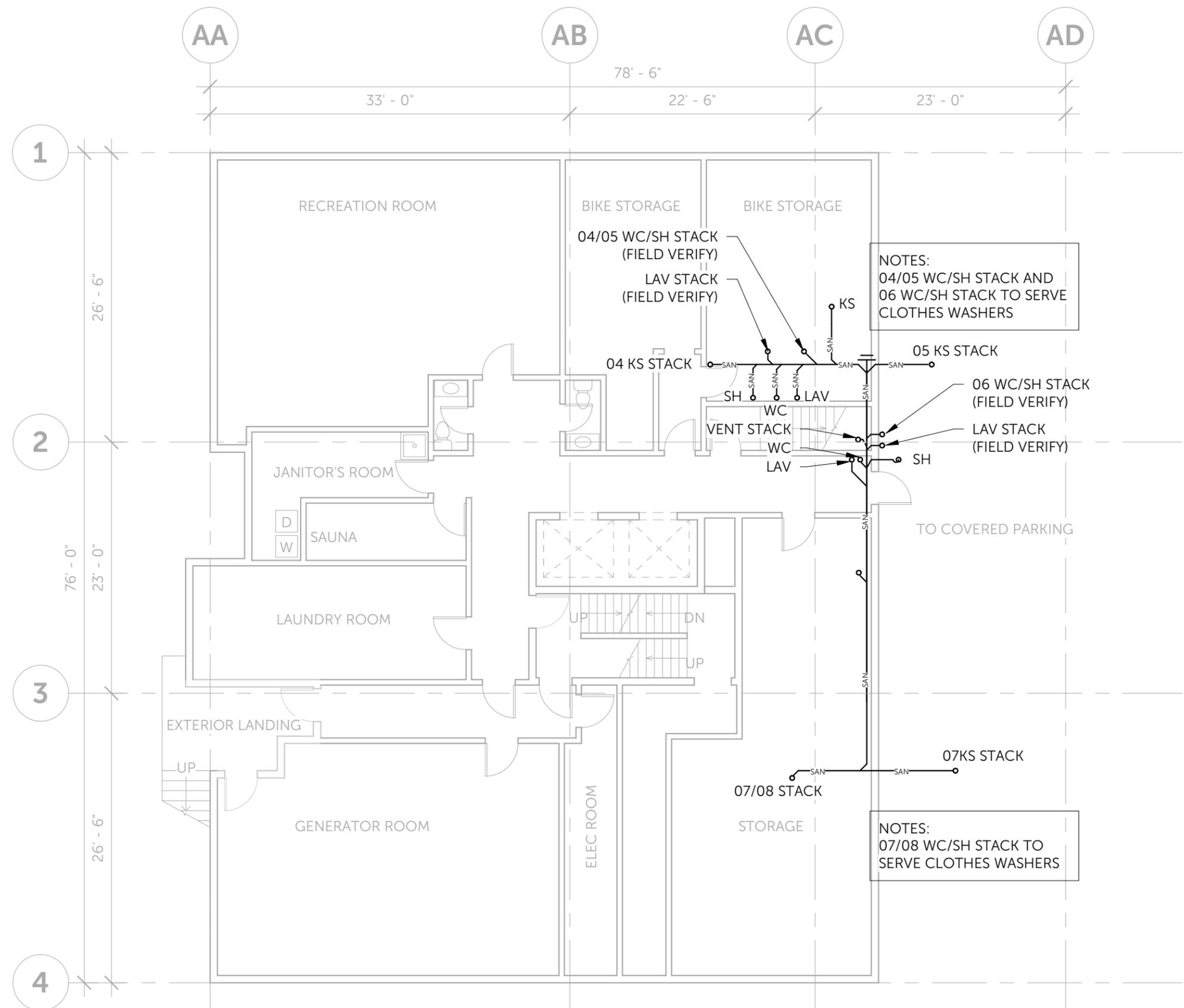
DRAWN BY **LC** DATE **2024/05/14**

SCALE **1" = 10'-0"**

DRAWING TITLE
LEVEL P2 EXISTING SANITARY PIPE PLAN

PROJECT NUMBER 2302.017	SHEET NO. M-101	REVISION NO. 2
-----------------------------------	---------------------------	--------------------------

NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS



#200 - 3999 HENNING DRIVE, BURNABY, BC, V5C 6P9
 PHONE: 604-255-0992 / FAX: 604-255-1054

ONLY VALID FOR PERMIT WHEN SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC): 1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT
HORIZON TOWERS HOLDINGS LTD.
 5050 SANDERS STREET,
 BURNABY, BC V5H 1T1

PROJECT TITLE
SANITARY PIPE RE-ROUTE
 HORIZON TOWERS
 4960 SANDERS STREET,
 BURNABY, BC, V5H 1S9

CHECKED BY **JM**

DRAWN BY **LC** DATE **2024/05/14**

SCALE **1" = 10'-0"**

DRAWING TITLE
LEVEL P1 EXISTING SANITARY PIPE PLAN

PROJECT NUMBER 2302.017	SHEET NO. M-102	REVISION NO. 2
-----------------------------------	---------------------------	--------------------------

NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS



#200 - 3999 HENNING DRIVE, BURNABY, BC, V5C 6P9
 PHONE: 604-255-0992 / FAX: 604-255-1054

ONLY VALID FOR
 PERMIT WHEN
 SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC):
 1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT
HORIZON TOWERS HOLDINGS LTD.
 5050 SANDERS STREET,
 BURNABY, BC V5H 1T1

PROJECT TITLE
SANITARY PIPE RE-ROUTE
 HORIZON TOWERS
 4960 SANDERS STREET,
 BURNABY, BC, V5H 1S9

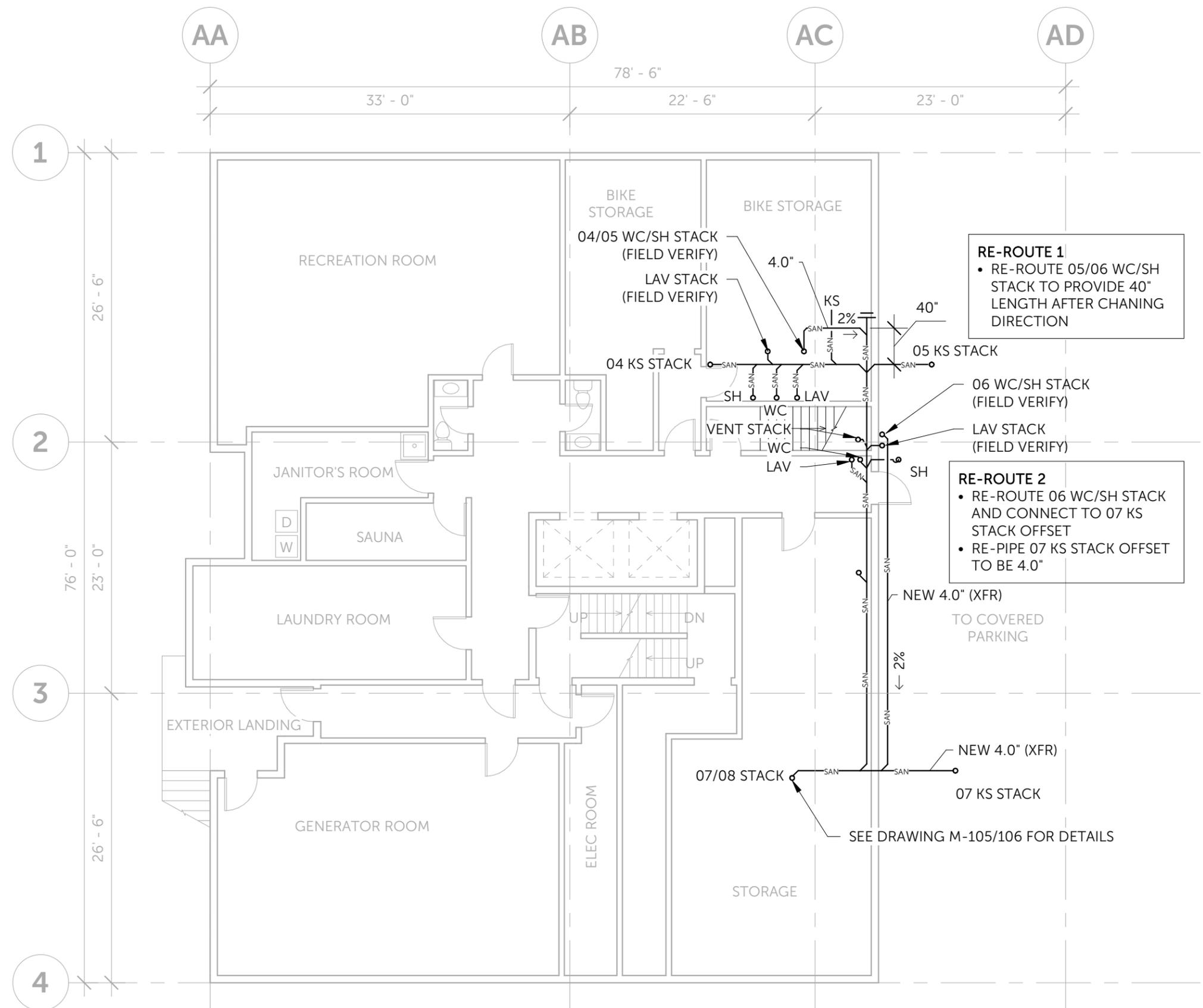
CHECKED BY **JM**

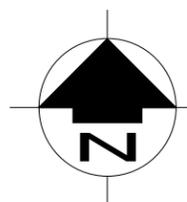
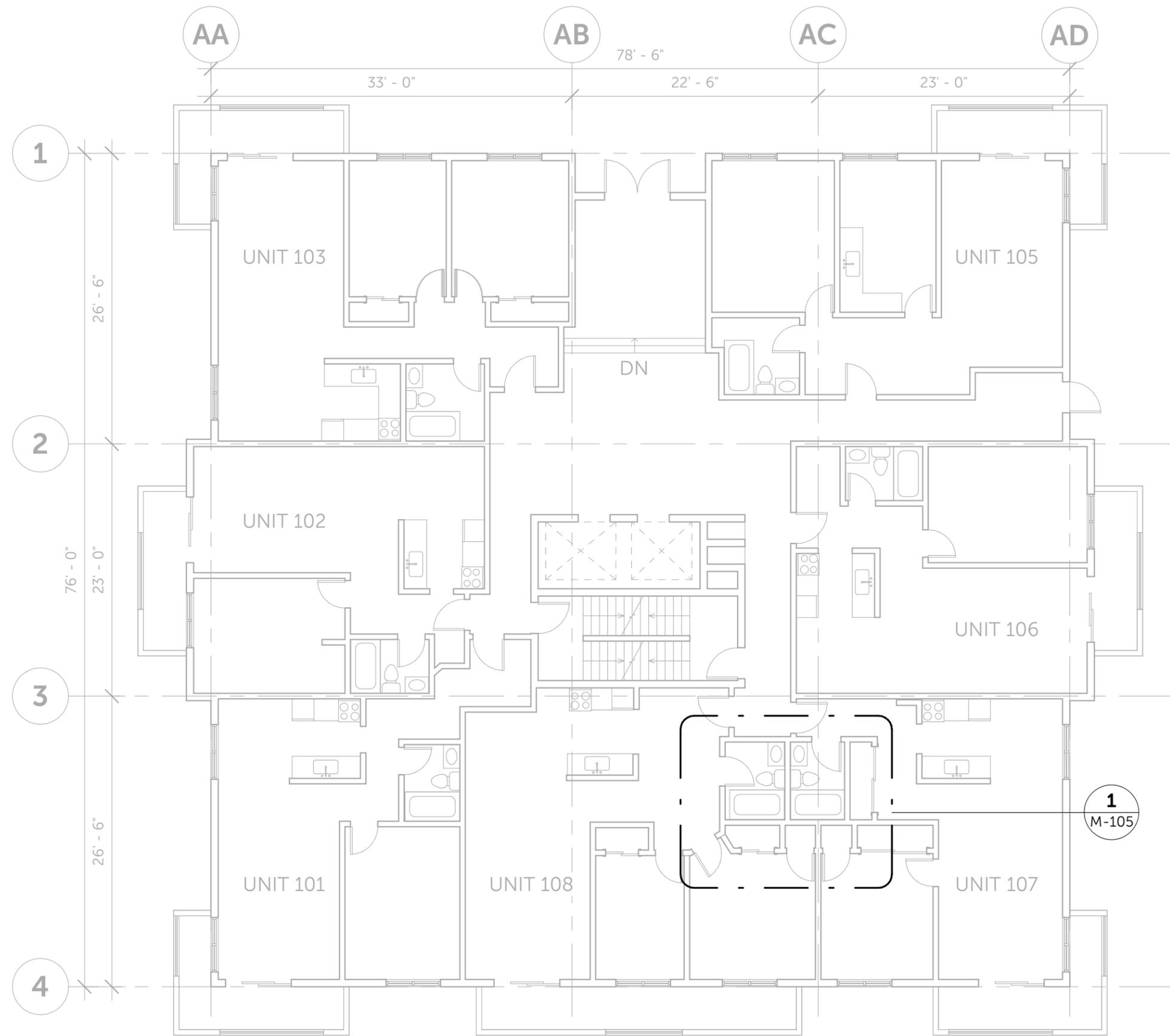
DRAWN BY **LC/MS** DATE **2024/05/27**

SCALE **1" = 10'-0"**

DRAWING TITLE
LEVEL P1 SANITARY PIPE RE-ROUTE PLAN

PROJECT NUMBER 2302.017	SHEET NO. M-103	REVISION NO. 2
-----------------------------------	---------------------------	--------------------------





#200 - 3999 HENNING DRIVE, BURNABY, BC, V5C 6P9
 PHONE: 604-255-0992 / FAX: 604-255-1054

ONLY VALID FOR PERMIT WHEN SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC): 1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT
HORIZON TOWERS HOLDINGS LTD.
 5050 SANDERS STREET,
 BURNABY, BC V5H 1T1

PROJECT TITLE
SANITARY PIPE RE-ROUTE
 HORIZON TOWERS
 4960 SANDERS STREET,
 BURNABY, BC, V5H 1S9

CHECKED BY **JM**

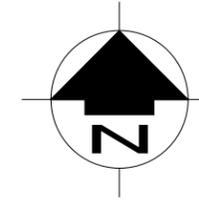
DRAWN BY **MS** DATE **2024/05/27**

SCALE **1" = 10'-0"**

DRAWING TITLE
LEVEL 1 FLOOR PLAN

PROJECT NUMBER 2302.017	SHEET NO. M-104	REVISION NO. 2
-----------------------------------	---------------------------	--------------------------

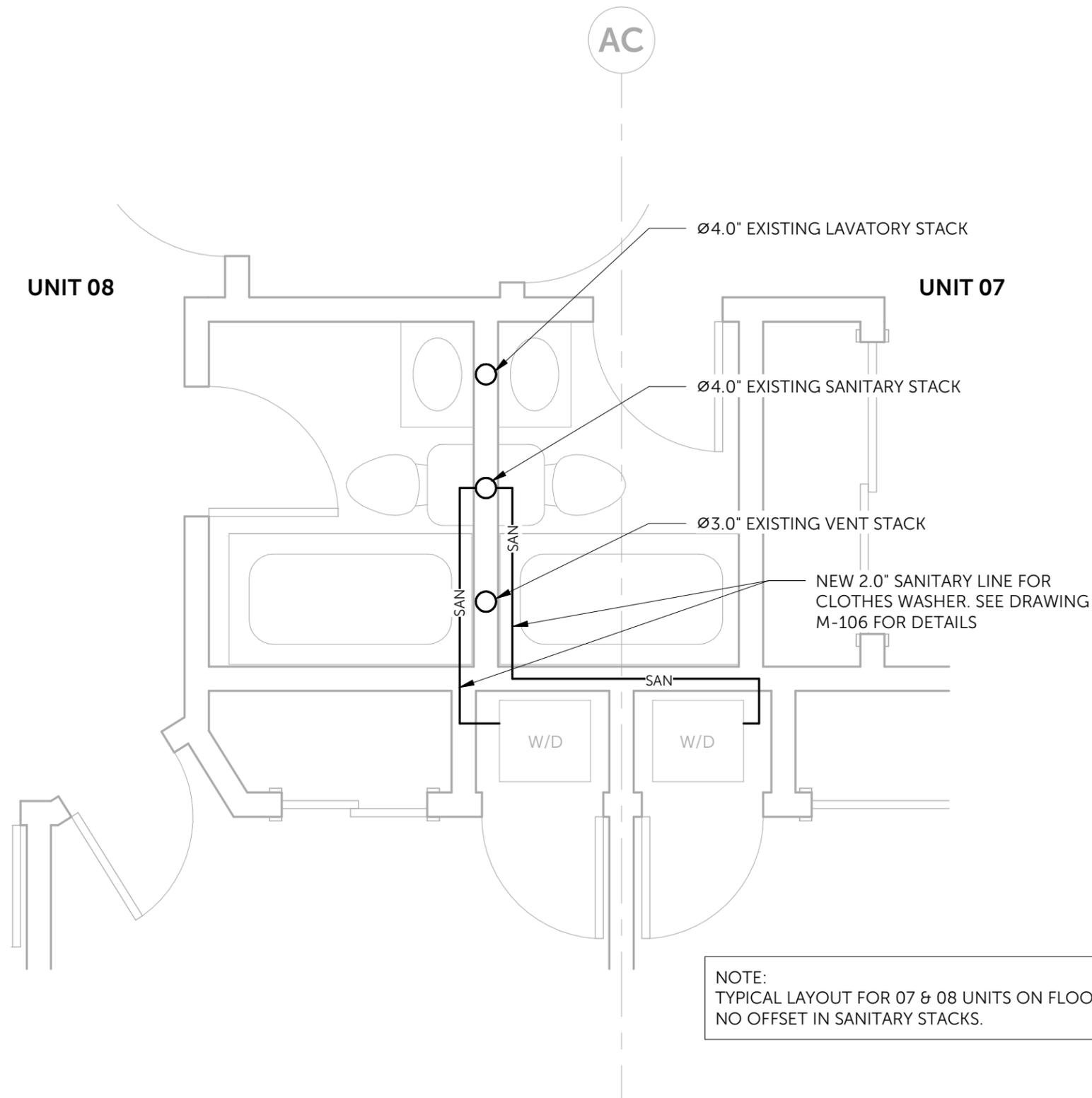
NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS



#200 - 3999 HENNING DRIVE, BURNABY, BC, V5C 6P9
PHONE: 604-255-0992 / FAX: 604-255-1054

ONLY VALID FOR
PERMIT WHEN
SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC):
1002833



NOTE:
TYPICAL LAYOUT FOR 07 & 08 UNITS ON FLOOR 1-12.
NO OFFSET IN SANITARY STACKS.

1
M-105

UNIT 07/08 SANITARY SYSTEM LAYOUT

SCALE: 3/8" = 1'-0"

NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT
HORIZON TOWERS HOLDINGS LTD.
5050 SANDERS STREET,
BURNABY, BC V5H 1T1

PROJECT TITLE
SANITARY PIPE RE-ROUTE
HORIZON TOWERS
4960 SANDERS STREET,
BURNABY, BC, V5H 1S9

CHECKED BY **JM**

DRAWN BY **MS** DATE **2024/05/27**

SCALE **3/8" = 1'-0"**

DRAWING TITLE
UNIT 07/08 SANITARY SYSTEM LAYOUT

PROJECT NUMBER	SHEET NO.	REVISION NO.
2302.017	M-105	2

ONLY VALID FOR PERMIT WHEN SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC): 1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT
HORIZON TOWERS HOLDINGS LTD.
5050 SANDERS STREET,
BURNABY, BC V5H 1T1

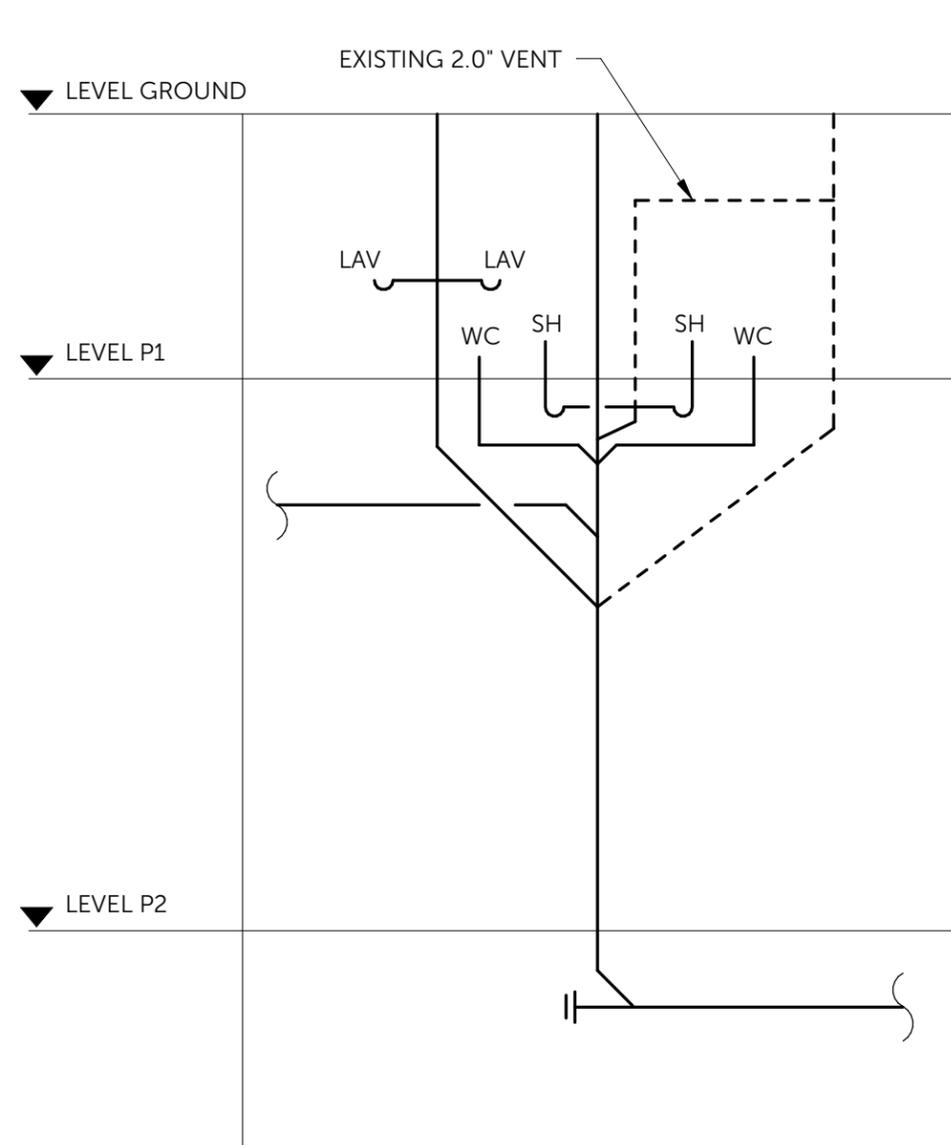
PROJECT TITLE
SANITARY PIPE RE-ROUTE
HORIZON TOWERS
4960 SANDERS STREET,
BURNABY, BC, V5H 1S9

CHECKED BY **JM**
DRAWN BY **MS** DATE **2024/05/27**

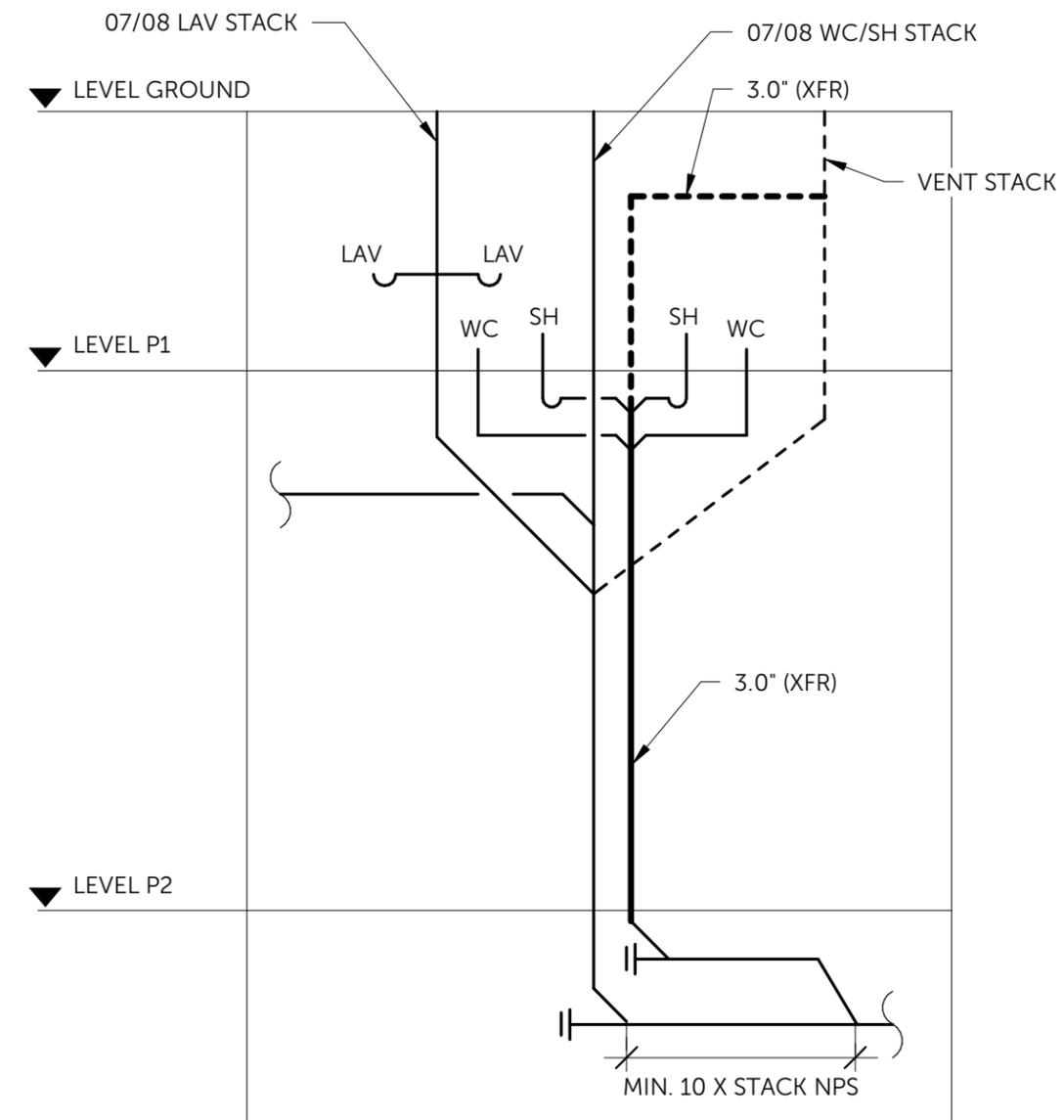
SCALE **As indicated**

DRAWING TITLE
SANITARY STACK SCHEMATIC

PROJECT NUMBER 2302.017	SHEET NO. M-106	REVISION NO. 2
-----------------------------------	---------------------------	--------------------------



1 EXISTING SCHEMATIC
M-106 SCALE: 1" = 1'-0"



2 PROPOSED SCHEMATIC
M-106 SCALE: 1" = 1'-0"

- NOTES:**
1. VENT PLUMBING FIXTURES AS REQUIRED BY CODE.
 2. PROVIDE CLEANOUTS ON SANITARY PIPES AS REQUIRED BY CODE.
 3. APPLY FIRE-STOPPING AT ALL PENETRATIONS AS REQUIRED BY CODE.

LEGEND	
	EXISTING PIPE
	PROPOSED DESIGN

NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS



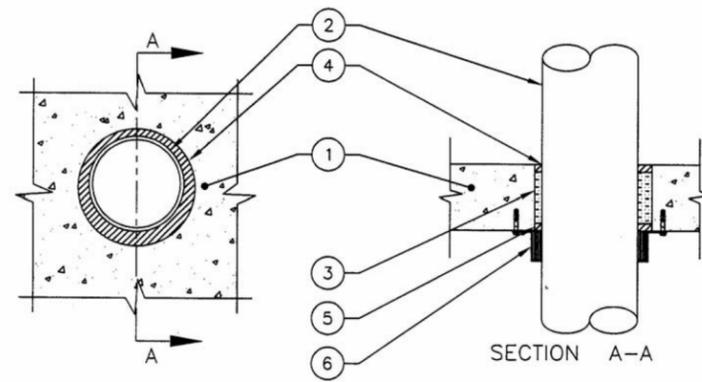
3600EX PPC

PPF/PHV 120-27

Single Penetrations

Horizontal (floor/ceiling) or Vertical (wall)
Test Standards: ASTM E-814, UL 1479, ULC S115-M11
Test Furnace Internal Positive Pressure Differential – 50 Pa (0.2 in. of water)
CSI Code: 07 84 13 Penetration Firestopping

Penetrating Material & Size	Max Hole Size	Annular Space	Fire "F" Rating	Fire/Hose "FH" Rating	Temp Rating "FTH" Rating
PVC Plastic Pipe 1-1/2" – 6"	8"	1/2" – 1"	Up to 2 Hr	Up to 2 Hr	Up to 2 Hr
CPVC Plastic Pipe 1-1/2" – 6"	8"	1/2" – 1"	Up to 2 Hr	Up to 2 Hr	Up to 2 Hr
ccPVC Plastic Pipe 1-1/2" – 6"	8"	1/2" – 1"	Up to 2 Hr	Up to 2 Hr	Up to 2 Hr
XFR-PVC (IPEX) Plastic Pipe 1-1/2" – 6"	8"	1/2" – 1"	Up to 2 Hr	Up to 2 Hr	Up to 2 Hr



System Design Instructions

- Penetrating Item:** Centered or offset in hole, see table above. Single penetrations only, maximum hole size not to exceed table above.
- Floor or Wall Assembly:** Code conforming 2 hour rated floor or wall assembly having a min. nominal 4 1/2"(115mm) thick lightweight or normal weight concrete or hollow-core concrete. Wall may also be constructed of nominal 8"(203mm) thick concrete blocks (filled or unfilled).
Hole Core Concrete (Not Shown): Seal the annular space at pipe penetration on the floor side with a min 1/2" (13mm) thickness of PFP Partners – 3600EX*. Caulking is applied over min 2" (102mm) thickness of mineral wool
- Firestop System, Component 1:** Filler material, mineral rock wool insulation with a minimum density of 4-6 PCF (68 kg/m3) compressed a minimum of 25% into the annular space at a minimum depth of 2" (102mm) on each side of the floor or wall assembly. Recess filler material 1/2" (13mm) for sealant placement at top and bottom of floor assembly and on both sides of the wall assemblies.
- Firestop System, Component 2:** PFP Partners – 3600EX* installed at a minimum thickness of 1/2" (13mm) within the annulus on top surface of floor assembly or minimum thickness of 1/2" (13mm) on both sides of the wall assemblies.
- Firestop System, Component 3:** PFP Partners – 3600EX* installed at a minimum thickness of 1/4" (7 mm) within the annulus on bottom surface of floor assembly, or minimum thickness of 1/2" (13mm) on both sides of the wall assemblies.
- Firestop System, Component 4:** PFP Partners – Plastic Pipe Collar* (PPC) specifically sized for diameter of pipe. PPC secured to floor/ceiling assembly or wall assembly using 1/4"(6mm) diameter by 1-1/4"(32mm) long steel masonry anchors over fender washers. For walls, the system shall be symmetrical, with PPC installed on each side of the assembly and fixed in the manner as described for floor penetrations.

Continued ...

PPF/PHV 120-27

System Design Instructions Continued:

- Firestop System, Component 5: (Not Shown) – (Optional) – Metal Tab Extender Straps:** When anchoring holes in the PPC are to close to the edge of opening, steel extender straps may be added. Straps to be min 25mm (1 in.) wide 22 gauge or heavier galv. steel metal straps sized to extend from PPC anchor tabs to underside of concrete wall or floor assembly. Maximum three metal straps installed per PPC. Metal straps secured to PPC using 6mm (1/4 in.) diameter by 25mm (1 in.) long steel bolts with nuts over fender washers. Max length of straps to be 144mm (4-1/2 in.).

*WH Labeled Component

ONLY VALID FOR PERMIT WHEN SEALED AND SIGNED.

PERMIT TO PRACTICE NO. (BC): 1002833

REVISION	DESCRIPTION	DATE
2	ISSUED FOR PERMIT	2024/05/27
1	ISSUED FOR PERMIT	2024/05/14

CLIENT	HORIZON TOWERS HOLDINGS LTD.	
	5050 SANDERS STREET, BURNABY, BC V5H 1T1	
PROJECT TITLE	SANITARY PIPE RE-ROUTE	
	HORIZON TOWERS	
	4960 SANDERS STREET, BURNABY, BC, V5H 1S9	

CHECKED BY	JM	DATE	2024/05/14
DRAWN BY	LC		

SCALE	
-------	--

DRAWING TITLE	FIRESTOPPING DETAILS	
---------------	-----------------------------	--

PROJECT NUMBER	SHEET NO.	REVISION NO.
2302.017	M-701	2

NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS