

SANITRY PIPE RE-ROUTE

HORIZON TOWERS

5050 SANDERS ST, BURNABY, BC V5H 1T1

PROJECT TEAM

CLIENT

BC HOUSING

1700 - 4555 KINGSWAY, BURNABY, BC V5H 4T8

CONSULTANT

MCCUAIG & ASSOCIATES ENGINEERING LTD.

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

PROJECT DATA

GENERAL PROPERTY INFORMATION:

CIVIC ADDRESS: 5050 SANDERS STEET, BURNABY, BC V5H 1T1

PID: 002-671-824

LOT: 128

DISTRICT LOT: 32

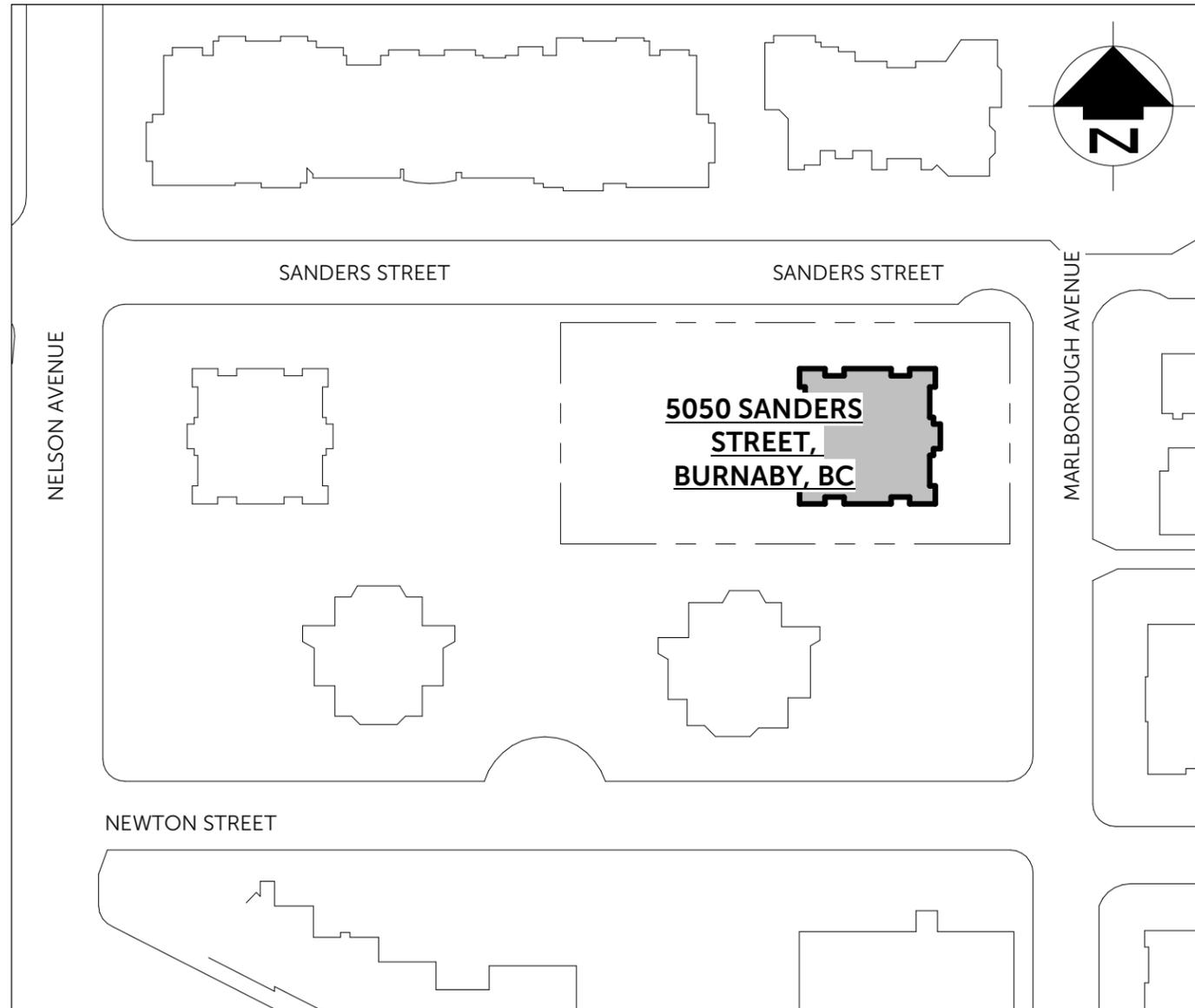
PLAN: NWP36340

AHJ: CITY OF BURNABY

APPLICABLE CODE: BCBC 2018

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	FIRESTOPPING DETAILS



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



#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	RE-ISSUED FOR PERMIT	2023/12/04
1	ISSUED FOR PERMIT	2023/11/22

CLIENT
HORIZON TOEWRS HOLDINGS LTD.
5050 SANDERS ST,
BURNABY, BC V5H 1T1

PROJECT TITLE
SANITRY PIPE RE-ROUTE
HORIZON TOWERS
5050 SANDERS ST,
BURNABY, BC V5H 1T1

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

SCALE **As indicated**

DRAWING TITLE
SITE PLAN / COVER SHEET

PROJECT NUMBER 2302.017	SHEET NO. M-001	REVISION NO. 2
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NOTE: FIELD VERIFY ALL MEASUREMENTS: DO NOT SCALE OFF DRAWINGS

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



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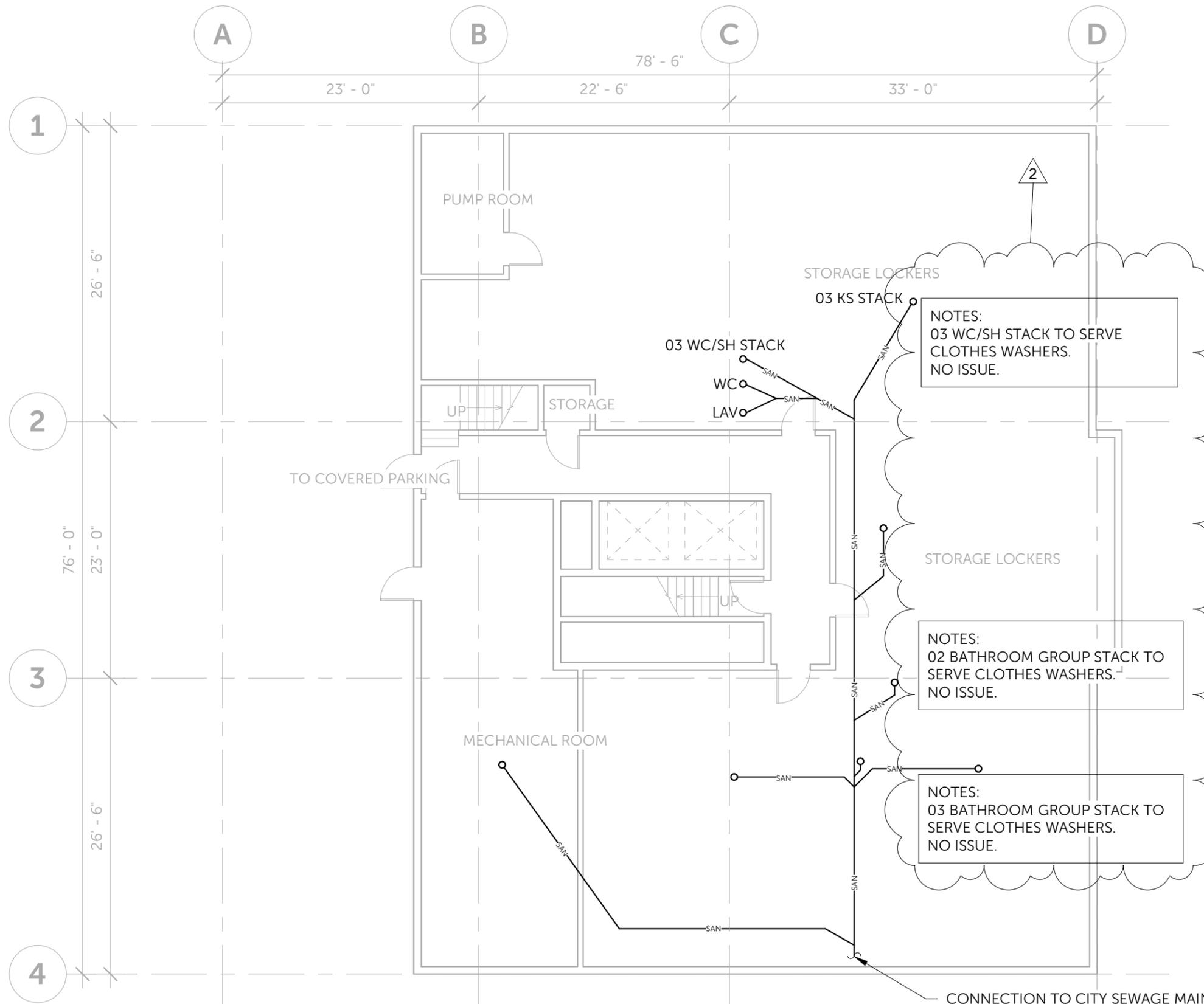
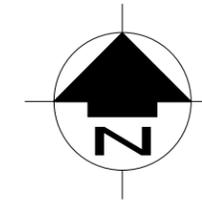
DRAWN BY **LC** DATE **2023/12/04**

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

DRAWING TITLE
PLUMBING LEGEND

PROJECT NUMBER 2302.017	SHEET NO. M-002	REVISION NO. 2
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 HORIZON TOWERS
 5050 SANDERS ST,
 BURNABY, BC V5H 1T1

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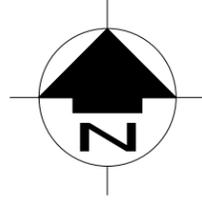
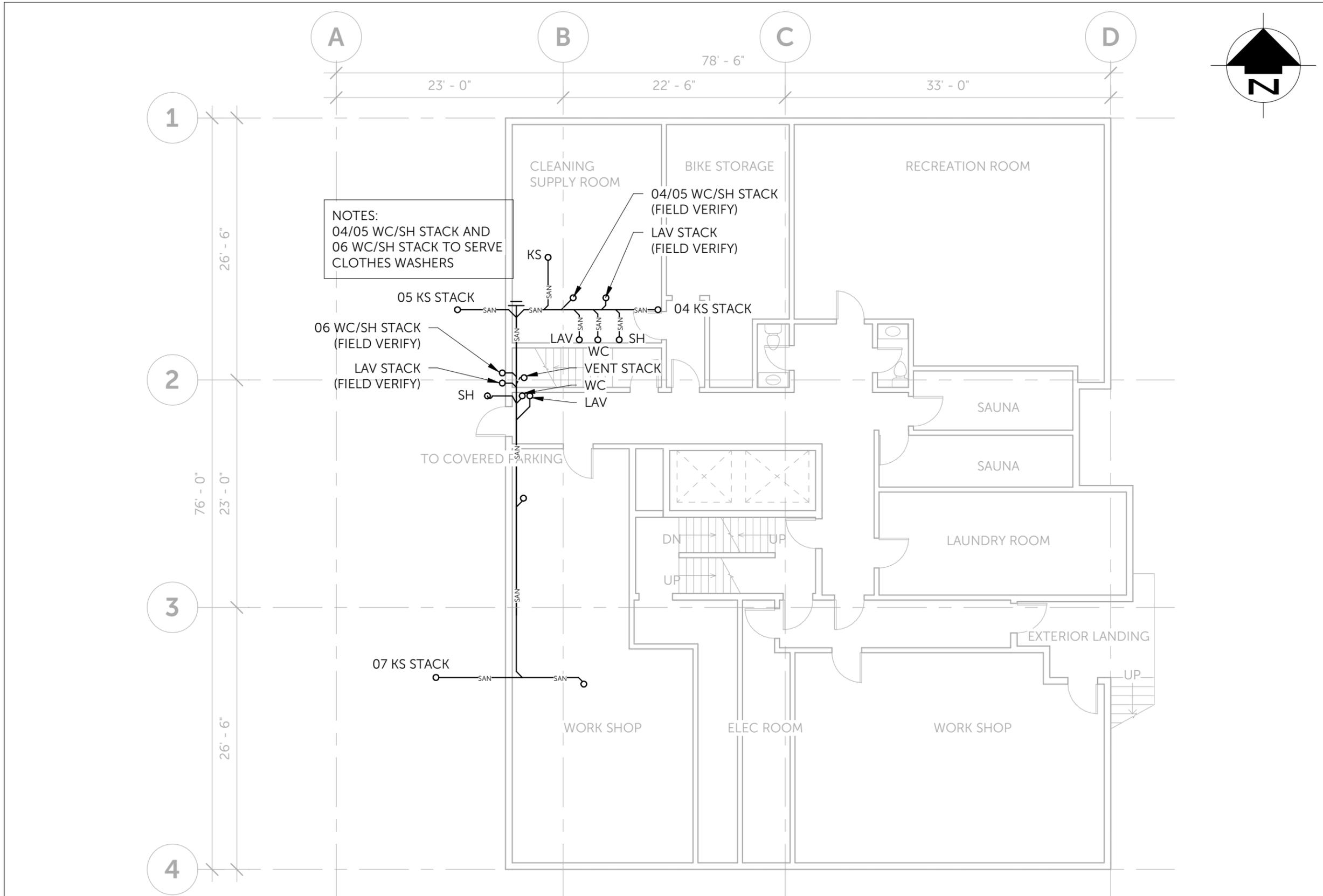
SCALE **1" = 10'-0"**

DRAWING TITLE
LEVEL P2 EXISTING SANITARY PIPE PLAN

PROJECT NUMBER 2302.017	SHEET NO. M-101	REVISION NO. 2
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1 LEVEL P2 EXISTING SANITARY PIPE PLAN
 M-101 SCALE: 1" = 10'-0"

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PROJECT TITLE
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 HORIZON TOWERS
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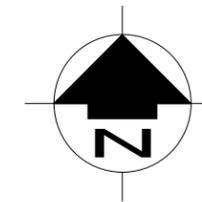
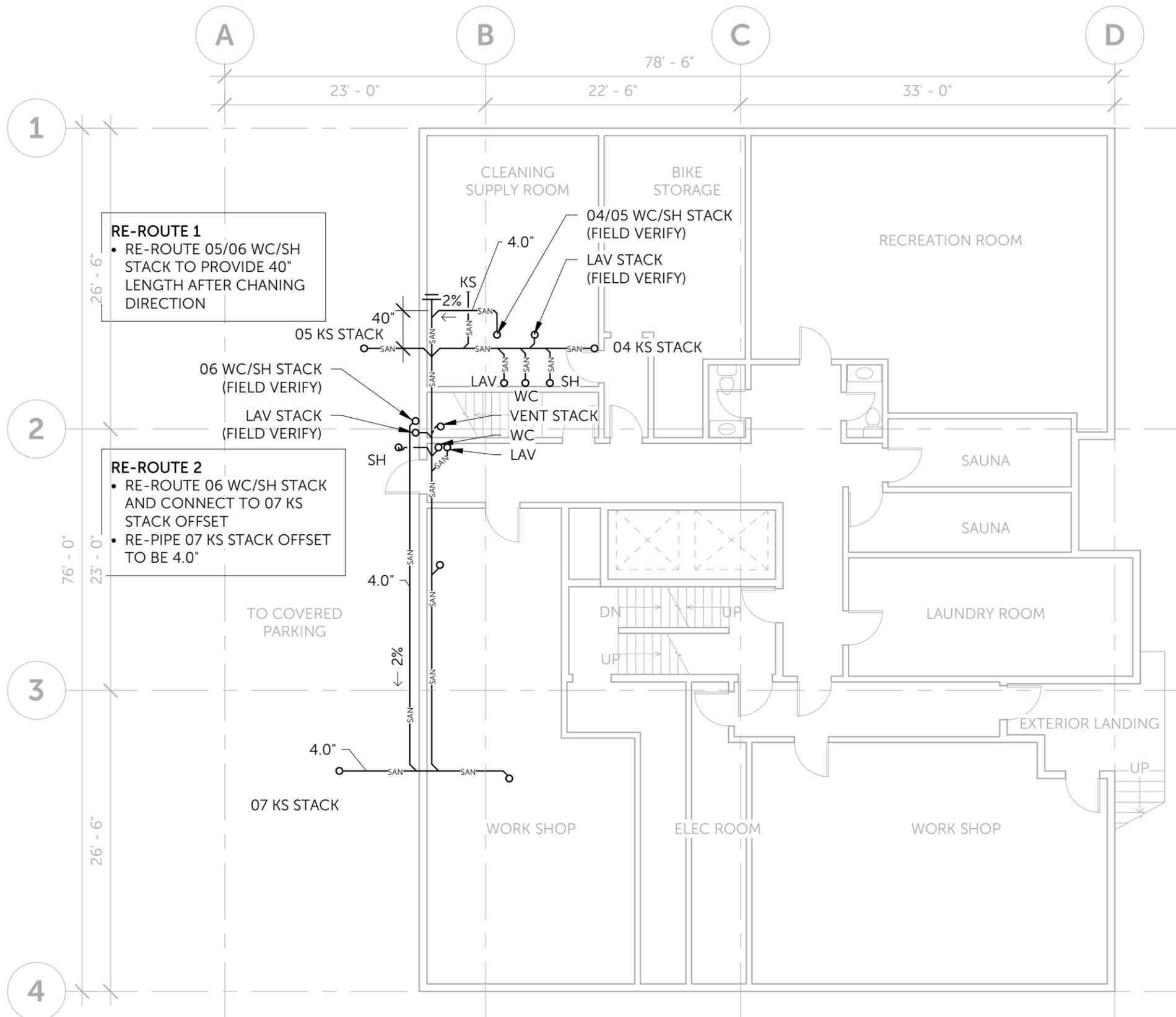
SCALE **1" = 10'-0"**

DRAWING TITLE
LEVEL P1 EXISTING SANITARY PIPE PLAN

PROJECT NUMBER 2302.017	SHEET NO. M-102	REVISION NO. 2
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1 LEVEL P1 EXISTING SANITARY PIPE PLAN
 M-102 SCALE: 1" = 10'-0"

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 HORIZON TOWERS
 5050 SANDERS ST,
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SCALE **1" = 10'-0"**

DRAWING TITLE
LEVEL P1 SANITARY PIPE RE-ROUTE PLAN

PROJECT NUMBER 2302.017	SHEET NO. M-103	REVISION NO. 2
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1 LEVEL P1 SANITARY PIPE RE-ROUTE PLAN
 M-103 SCALE: 1" = 10'-0"

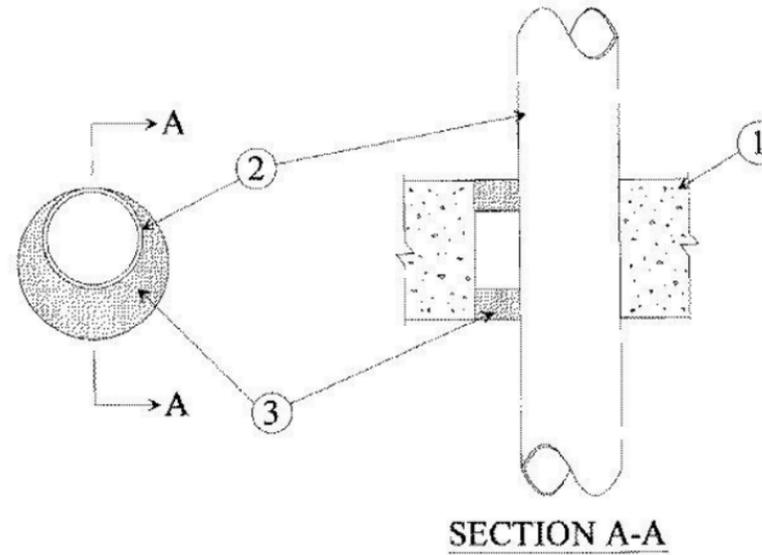
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UL Product iQ™ **METALLIC FIRESTOPPING (CONCRETE) DETAILS** 

XHEZ7.C-AJ-1201 - Through-penetration Firestop Systems Certified for Canada

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.



SECTION A-A

- 1. Floor or Wall Assembly** — Min 3-3/4 in. (95 mm) and 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete for 1 and 2 hr rated assemblies, respectively. Wall may also be constructed of any UL Classified **Concrete Blocks***. Floor may also be constructed of any min 6 in. thick UL Classified hollow-core **Precast Concrete Units***. Max diam of opening is 6 in. (152 mm). See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.
- 2. Through-Penetrant** — One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. (0 mm, point contact) to max 1-1/2 in. (38 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types of pipe, conduit or tubing may be used:
 - A. **Steel Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
 - B. **Iron Pipe** — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. **Copper Tubing** — Nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - D. **Copper Pipe** — Nom 3 in. (76 mm) diam (or smaller) Regular (or heavier) copper pipe.
 - E. **Conduit** — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or steel conduit.
T Rating is 1/4 hr Items A, B and E, 0 hr for Items C and D.
- 3. Fill, Void or Cavity Material* — Sealant** — Min 5/8 and 1-1/4 in. (16 and 32 mm) thickness of fill material for 1 and 2 hr rated assemblies, respectively, applied within the annulus, flush with both surfaces of floor or wall.
NUCO INC — SelfSeal GG-200, Self Seal GG-266

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2013-04-01

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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[See General Information for Through-penetration Firestop Systems](#)

[See General Information for Through-penetration Firestop Systems Certified for Canada](#)

System No. C-AJ-1201

April 01, 2013

ANSI/UL1479 (ASTM E814)		CAN/ULC S115	
F Ratings — 1 and 2 Hr (See Item 1)		F Rating - 1 and 2 Hr (See Item 1)	
T Ratings — 0 and 1/4 Hr (See Item 2)		FT Rating - 0 and 1/4 Hr (See Item 2)	
L Rating at Ambient — Less Than 1 CFM/sq ft		FH Rating - 1 and 2 Hr (See Item 1)	
L Rating at 400 F — 3 CFM/sq ft		FTH Rating - 0 and 1/4 Hr (See Item 2)	
		L Rating at Ambient — Less Than 1 CFM/sq ft	
		L Rating at 400 F — 3 CFM/sq ft	

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SCALE

DRAWING TITLE
FIRESTOPPING DETAILS

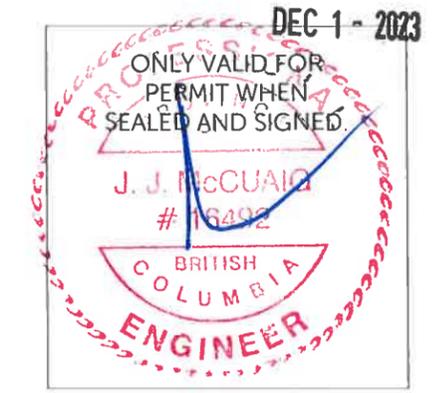
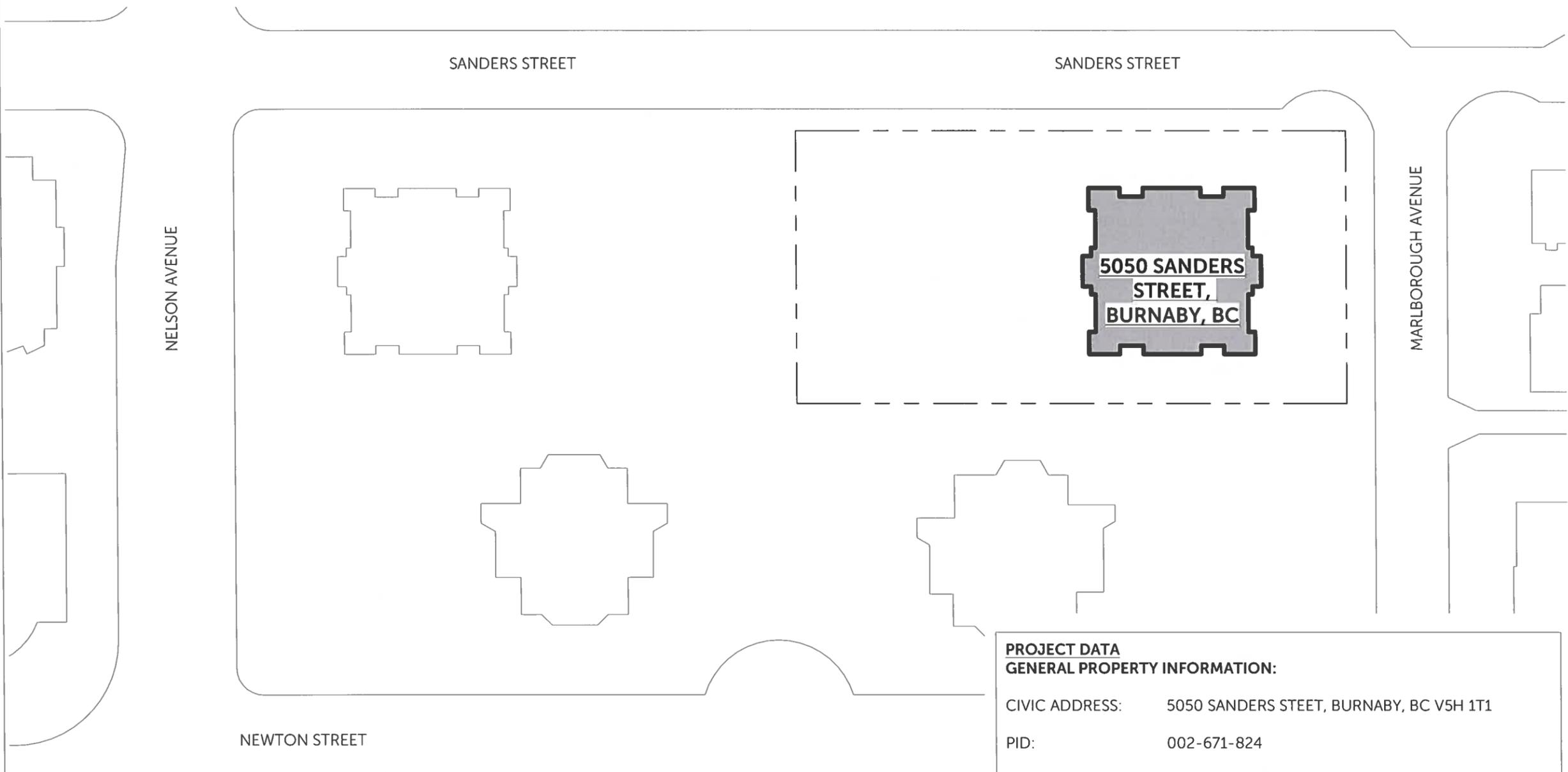
PROJECT NUMBER 2302.017	SHEET NO. M-104	REVISION NO. 2
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SANITARY PIPE RE-ROUTE

HORIZON TOWERS
5050 SANDERS STEET, BURNABY, BC V5H 1T1



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PERMIT TO PRACTICE NO. (BC):
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2	RE-ISSUED FOR PERMIT	2023/11/27
1	ISSUED FOR PERMIT	2023/08/03

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

PROJECT TITLE
SANITARY PIPE RE-ROUTE
HORIZON TOWERS
5050 SANDERS STREET, BURNABY, BC V5H 1T1

CHECKED BY **JM**
DRAWN BY **SH** DATE **2023/11/27**

SCALE **As indicated**

DRAWING TITLE
COVER SHEET

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

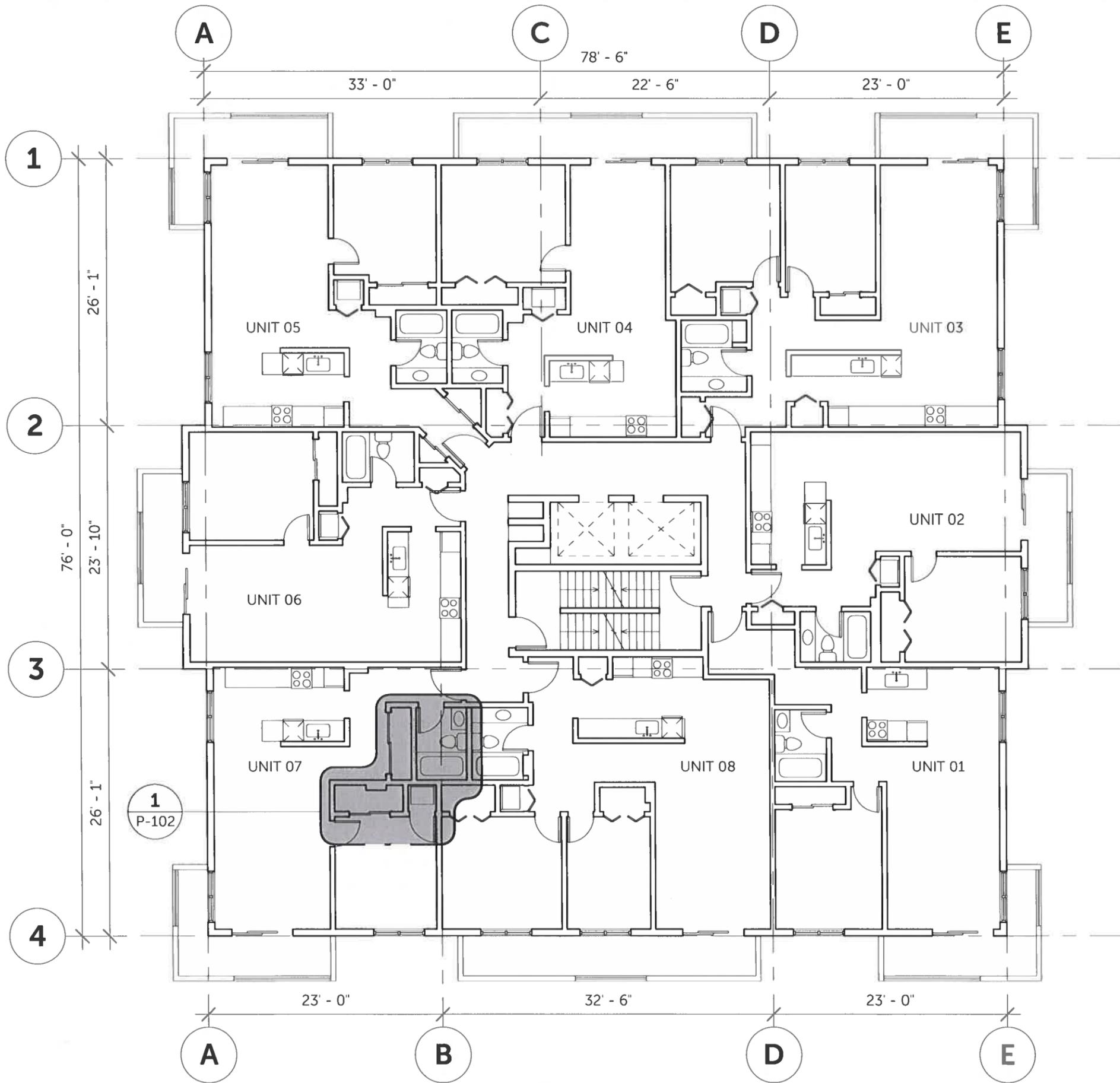
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GENERAL PROPERTY INFORMATION:

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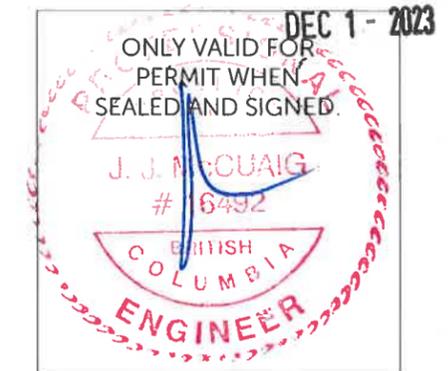
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DRAWING LIST	
SHEET NO.	SHEET TITLE
P-001	COVER SHEET
P-101	TYPICAL FLOOR PLAN
P-102	UNIT 07 SANITARY SYSTEM LAYOUT
P-103	SANITARY STACK SCHEMATIC

1 **SITE PLAN**
P-001 SCALE: 1" = 60'-0"



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SCALE **3/32"=1'-0"**

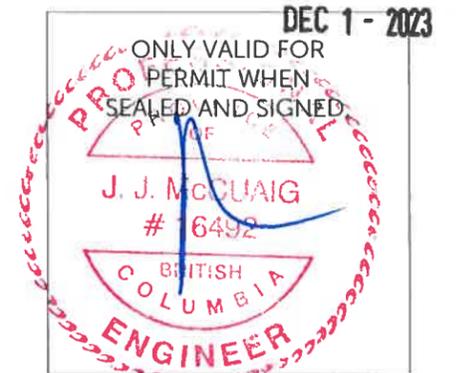
DRAWING TITLE
TYPICAL FLOOR PLAN

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

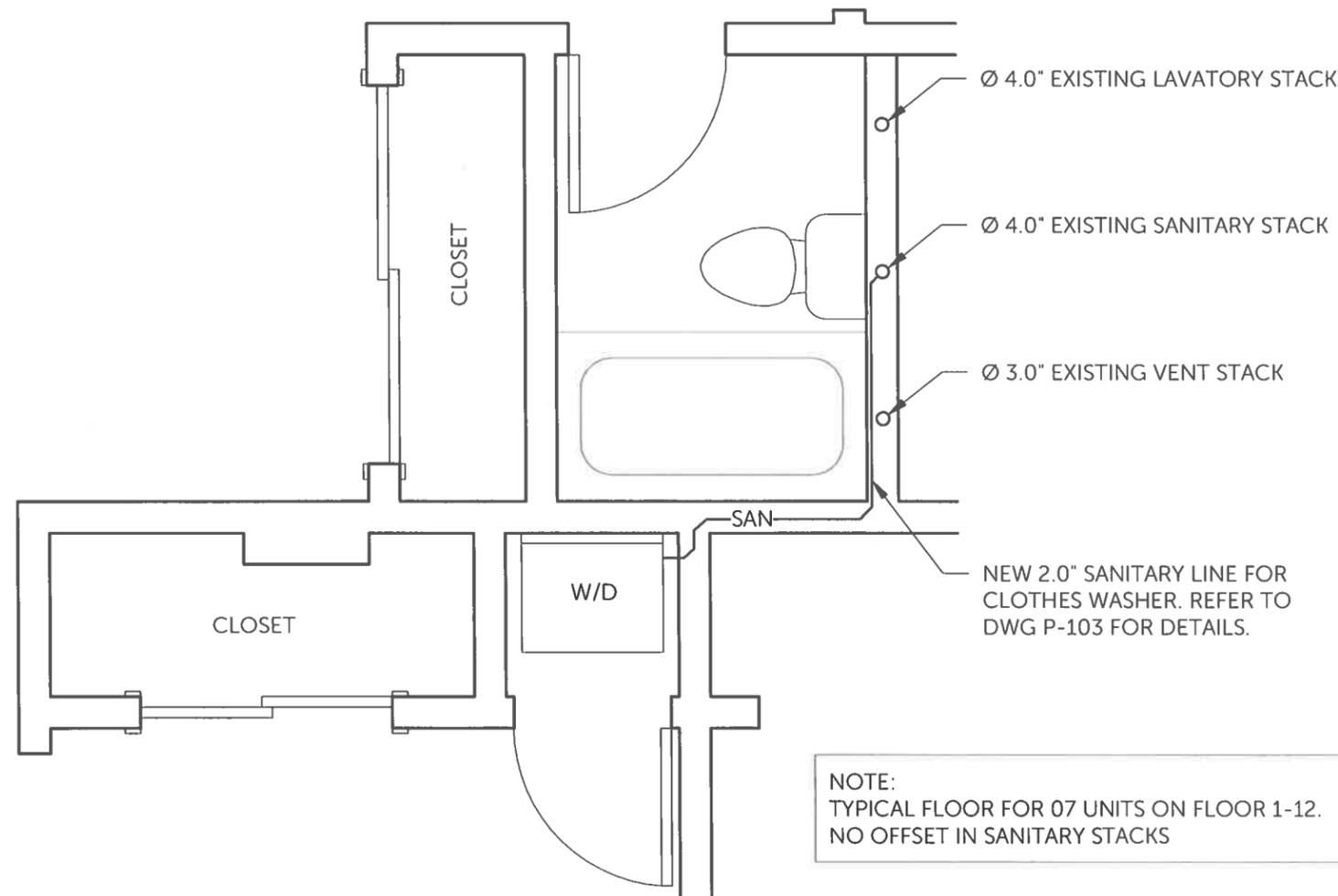
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NOTE:
TYPICAL FLOOR FOR 07 UNITS ON FLOOR 1-12.
NO OFFSET IN SANITARY STACKS

1 UNIT 07 SANITARY SYSTEM LAYOUT
P-102 SCALE: 3/8" = 1'-0"

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

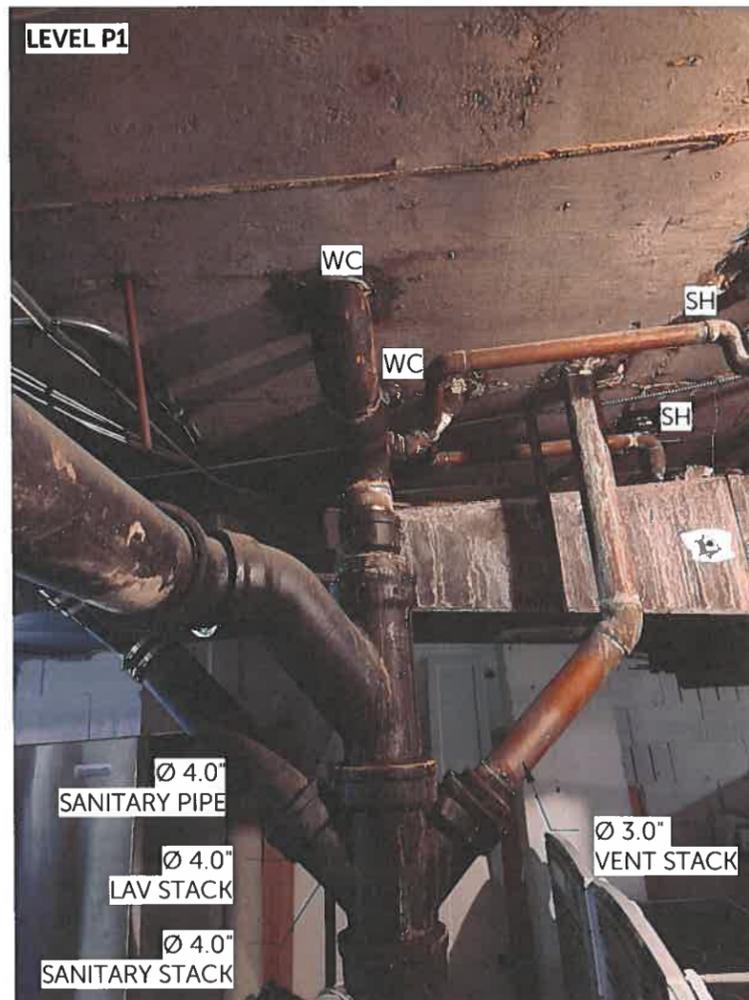
DRAWING TITLE
UNIT 07 SANITARY SYSTEM LAYOUT

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

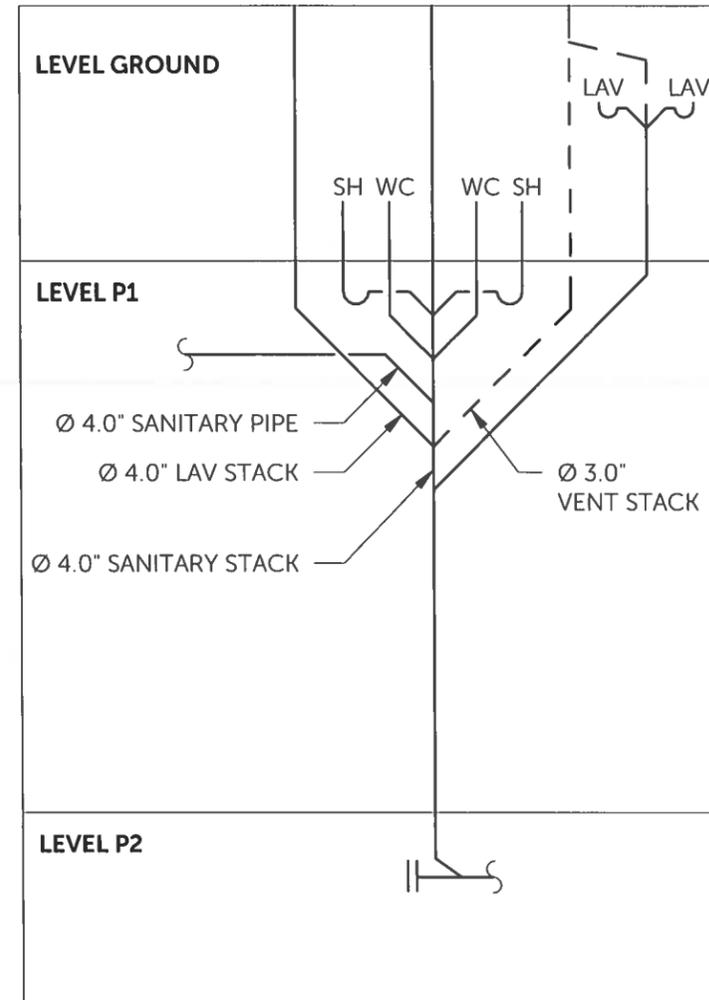
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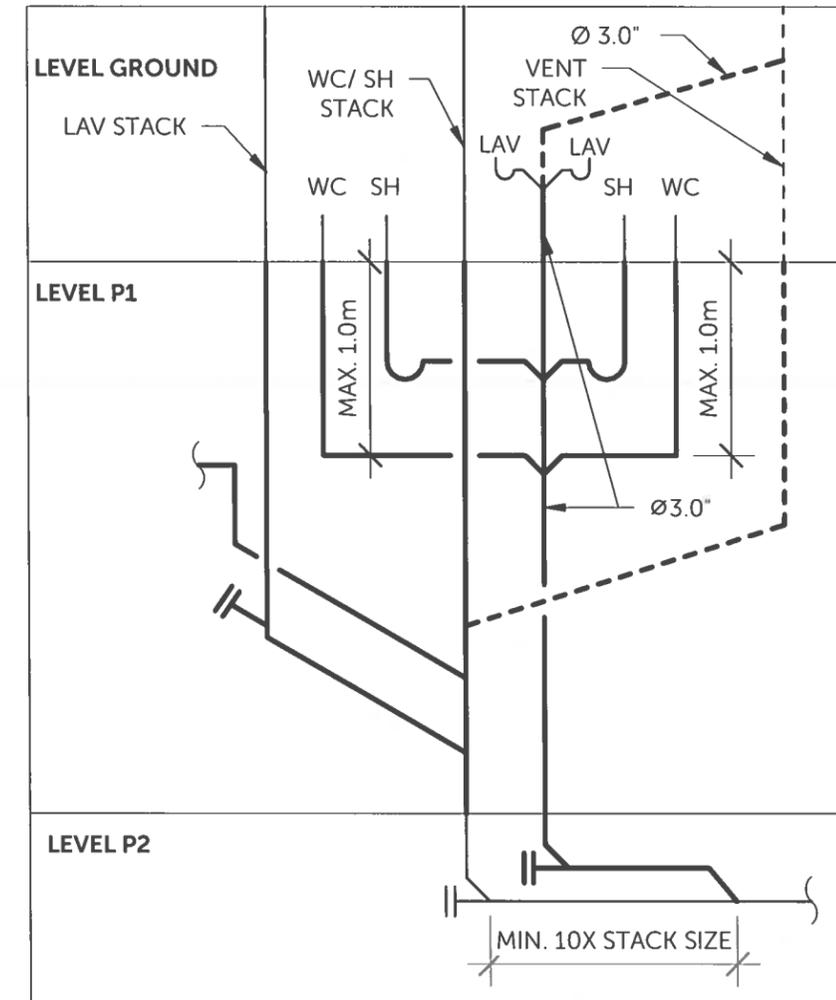
PERMIT TO PRACTICE NO. (BC):
1002833



EXISTING SANITARY STACK



1 EXISTING SCHEMATIC
P-103 SCALE: N.T.S.



2 PROPOSED SCHEMATIC
P-103 SCALE: N.T.S.

- 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

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DRAWING TITLE
SANITARY STACK SCHEMATIC

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