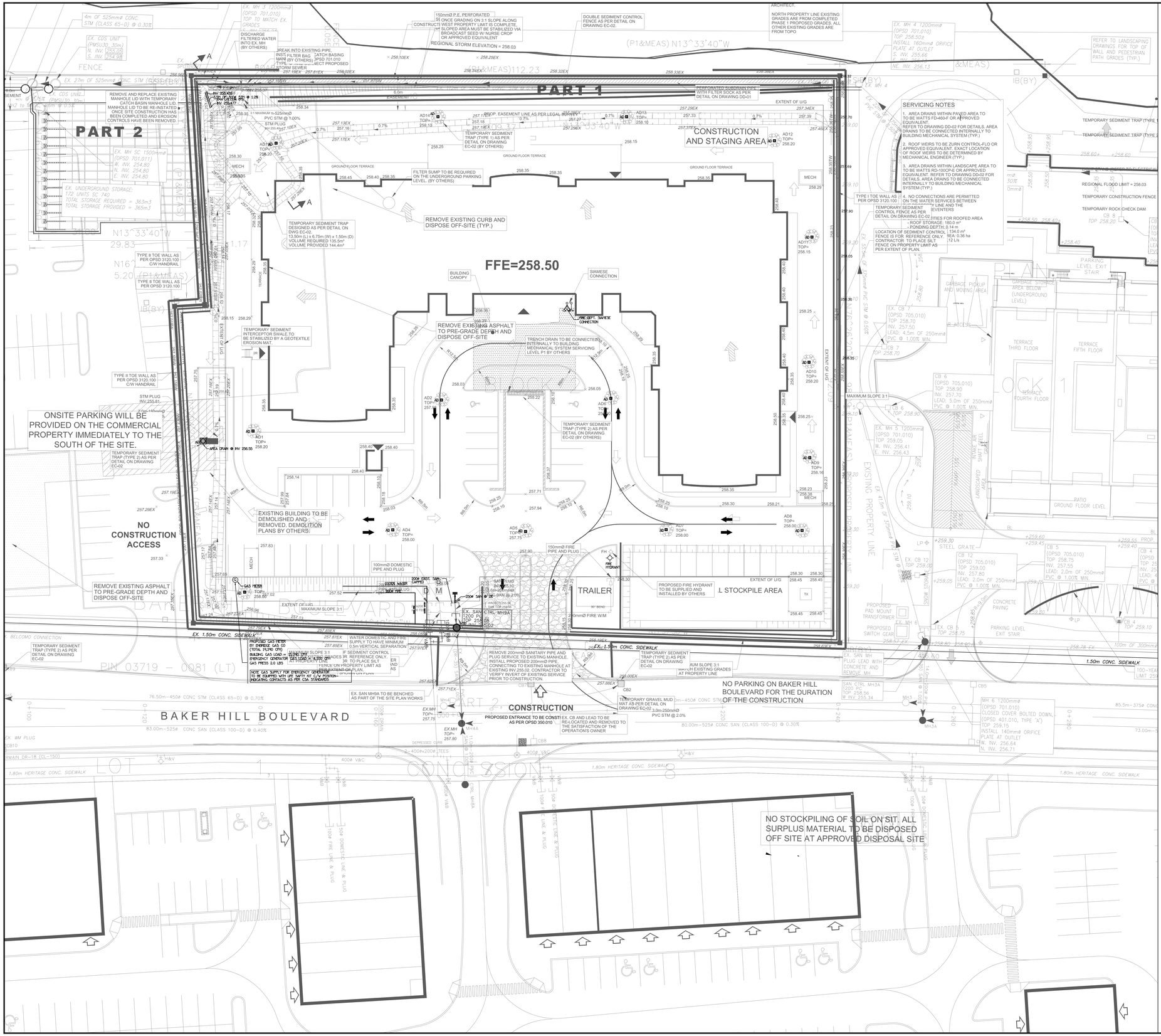
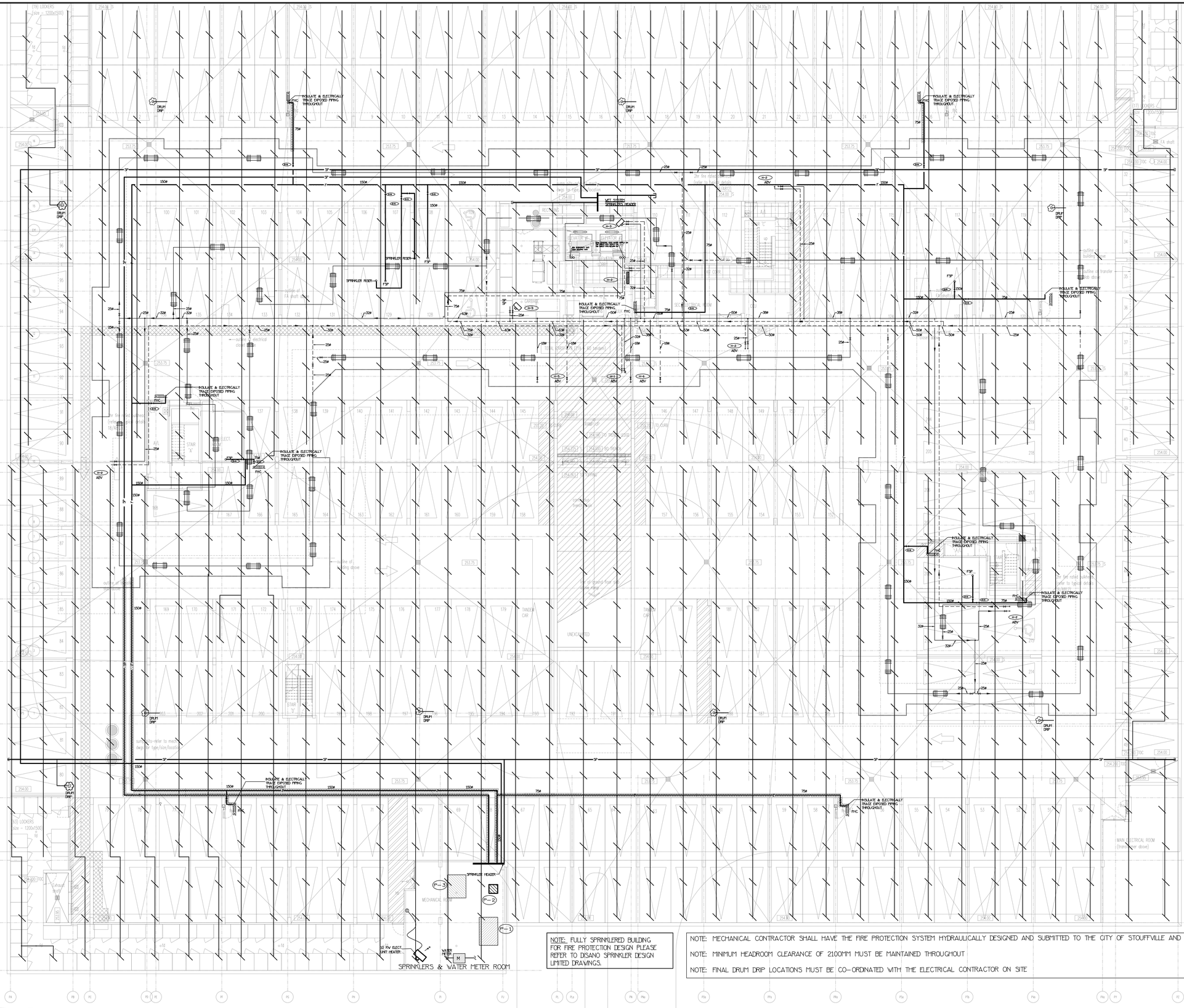

PART 1
PART 2
CONSTRUCTION AND STAGING AREA
FFE=258.50
SERVICING NOTES
1. AREA DRAINS WITHIN PAVED AREA TO BE WATTS FD-940-CP OR APPROVED EQUIVALENT. REFER TO DRAWING DD-02 FOR DETAILS. AREA DRAINS TO BE CONNECTED INTERNALLY TO BUILDING MECHANICAL SYSTEM (TYP.).
2. ROOF WEIRS TO BE ZURN CONTROL-FLO OR APPROVED EQUIVALENT. EXACT LOCATION OF ROOF WEIRS TO BE DETERMINED BY MECHANICAL ENGINEER (TYP.)
3. AREA DRAINS WITHIN LANDSCAPE AREA TO TO BE WATTS RD-100CP-C OR APPROVED EQUIVALENT. REFER TO DRAWING DD-02 FOR DETAILS. AREA DRAINS TO BE CONNECTED INTERNALLY TO BUILDING MECHANICAL SYSTEM (TYP.)
4. NO CONNECTIONS ARE PERMITTED ON THE WATER SERVICES BETWEEN THE MAIN LINE AND THE INVENTERS
TYPE I TOE WALL AS PER OPSD 3120.100
TEMPORARY SEDIMENT CONTROL FENCE AS PER DETAIL ON DRAWING EC-02
QUANTITIES FOR ROOFED AREA
- ROOF STORAGE: 180.0 m³
- PONDING DEPTH: 0.14 m
LOCATION OF SEDIMENT CONTROL FENCE IS FOR REFERENCE ONLY. CONTRACTOR TO PLACE SILT FENCE ON PROPERTY LIMIT AS PER EXTENT OF PLAN
TOTAL AREA: 134.0 m²
REAL: 0.36 ha
Q: 12 L/s
REMOVE EXISTING CURB AND DISPOSE OFF-SITE (TYP.)
TEMPORARY SEDIMENT TRAP DESIGNED AS PER DETAIL ON DWG EC-02.
13.50m (L) x 6.75m (W) x 1.50m (D)
VOLUME REQUIRED 135.5m³
VOLUME PROVIDED 144.4m³
TEMPORARY SEDIMENT TRAP (TYPE 1) AS PER DETAIL ON DRAWING EC-02 (BY OTHERS)
FILTER SUMP TO BE REQUIRED ON THE UNDERGROUND PARKING LEVEL. (BY OTHERS)
REMOVE EXISTING ASPHALT TO PRE-GRADE DEPTH AND DISPOSE OFF-SITE
TRENCH DRAIN TO BE CONNECTED INTERNALLY TO BUILDING MECHANICAL SYSTEM SERVICING LEVEL P1 BY OTHERS
TEMPORARY SEDIMENT TRAP (TYPE 2) AS PER DETAIL ON DRAWING EC-02 (BY OTHERS)
TEMPORARY SEDIMENT INTERCEPTOR SWALE TO BE STABILIZED BY A GEOTEXTILE EROSION MAT.
TEMPORARY SEDIMENT TRAP (TYPE 2) AS PER DETAIL ON DRAWING EC-02
ONSITE PARKING WILL BE PROVIDED ON THE COMMERCIAL PROPERTY IMMEDIATELY TO THE SOUTH OF THE SITE.
NO CONSTRUCTION ACCESS
EXISTING BUILDING TO BE DEMOLISHED AND REMOVED. DEMOLITION PLANS BY OTHERS.
REMOVE AND REPLACE EXISTING MANHOLE LID WITH TEMPORARY CATCH BASIN MANHOLE LID. MANHOLE LID TO BE RE-INSTATED ONCE SITE CONSTRUCTION HAS BEEN COMPLETED AND EROSION CONTROLS HAVE BEEN REMOVED.
REMOVE 200mmØ SANITARY PIPE AND PLUG SERVICE TO EXISTING MANHOLE. INSTALL PROPOSED 200mmØ PIPE CONNECTING TO EXISTING MANHOLE AT EXISTING INV.255.02. CONTRACTOR TO VERIFY INVENT OF EXISTING SERVICE PRIOR TO CONSTRUCTION.
NO PARKING ON BAKER HILL BOULEVARD FOR THE DURATION OF THE CONSTRUCTION
NO STOCKPILING OF SOIL ON SIT. ALL SURPLUS MATERIAL TO BE DISPOSED OFF SITE AT APPROVED DISPOSAL SITE
CONSTRUCTION
PROPOSED ENTRANCE TO BE CONST AS PER OPSD 350.010
EX. CB AND LEAD TO BE RE-LOCATED AND REMOVED TO THE SATISFACTION OF THE OPERATION'S OWNER
TEMPORARY GRAVEL MUD MAT AS PER DETAIL ON DRAWING EC-02
BAKER HILL BOULEVARD
PROPOSED FIRE HYDRANT TO BE SUPPLIED AND INSTALLED BY OTHERS
TRAILER
L STOCKPILE AREA
PROPOSED SUBDRAIN PIPE WITH FILTER SOCK AS PER DETAIL ON DRAWING DD-01
EXTENT OF U/G
TEMPORARY SEDIMENT TRAP (TYPE 1) AS PER DETAIL ON DRAWING EC-02 (BY OTHERS)
TEMPORARY SEDIMENT TRAP (TYPE 2) AS PER DETAIL ON DRAWING EC-02
TEMPORARY SEDIMENT TRAP (TYPE 1)
TEMPORARY CONSTRUCTION FENCE
TEMPORARY ROCK CHECK DAM
REGIONAL FLOOD LIMIT = 258.03
PROPOSED PRECAST TACTICAL PAVING
PROPOSED PAD MOUNT TRANSFORMER
PROPOSED SWITCH GEAR
EX. SAN MH PLUG LEAD WITH CONCRETE AND REMOVE MH.
EX. SAN CTRL MH3A
EX. SAN MH3A
EX. MH 4
EX. MH 5
EX. MH 7
EX. MH 8
EX. MH 9
EX. MH 10
EX. CB 6
EX. CB 7
EX. CB 8
EX. CB 12
EX. CB 13
CB 4
CB 5
CB 6
CB 7
CB 8
CB 9
CB 10
CB 11
CB 12
CB 13
CB 14
CB 15
CB 16
CB 17
CB 18
CB 19
CB 20
CB 21
CB 22
CB 23
CB



NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

REVISIONS

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TITLE
PARKING LEVEL PLAN FIRE PROTECTION

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-2
		OF 42

100ø PERFORATED PIPE

100ø SAN @ 1%

100ø STM @ 1%

150ø STM @ 1%

CO

CB

FD

12200ø X 2,400 DEEP SAN SUMP PIT C/W PUMP P-8 (DUPLEX)

12200ø X 2,400 DEEP STORM SEGMENT PIT

12200ø X 2,400 DEEP STORM SUMP PIT C/W PUMP P-9 (DUPLEX)

75ø SANITARY DISCHARGE UP INSULATE & ELECTRICALLY TRACE EXPOSED PIPE THROUGH OUT

100ø STORM DISCHARGE UP INSULATE & ELECTRICALLY TRACE EXPOSED PIPE THROUGH OUT

*600ø X 2,400 ELEVATOR SUMP PIT C/W PUMP P-10 (SIMPLEX)

EMV PIT 100ø

CONNECT ONSITE

ELEVATOR PIT

ELEVATOR CAR

ELEVATOR MACHINE ROOM

STAIR 'C'

STAIR 'A'

STAIR 'B'

EXIT RAMP

SEC. ELECTRICAL ROOM

SEC. ELEVATOR ROOM

BULK

CCU

A.H.U.

MECHANICAL ROOM

TANDEM CAR

UNEXCAVATED

continuous trench drain

100ø WEEPING TILE TYPICAL FOR ALL

FUNNEL DRAIN @ FLOOR

10 KW ELECT. UNIT HEATER

WATER HEATER

P-1

P-2

P-3

M

outline of building above

outline of transfer slab above

outline of FA shaft above

outline of electrical closet above

for opening see shop drawings

for opening see structural

ALL EXPOSED TRAPS IN UNHEATED AREAS TO BE ELECTRICALLY TRACED & INSULATED

NOTE
UNDERFLOOR WEEPING TILE SUPPLIED AND INSTALLED BY GENERAL DIVISION, REFER TO SOILS REPORT PREPARED EXP SERVICES INC

NO.	BY	DESCRIPTION	DATE
8	LB	REVISED AS PER SITE INSTRUCTION M-12	DEC/13/2017
7	LB	REVISED AS PER SITE INSTRUCTION M-11	DEC/11/2017
6	LB	REVISED AS PER SITE INSTRUCTION M-9	OCT/19/2017
5	LB	REVISED AS PER SITE INSTRUCTION M-5	SEP/20/2017
4	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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TITLE
UNDERGROUND PARKING MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-3
		OF 42

INV 255.477
INV 256.980±

BACKFLOW PREVENTER

ROUTE OF EXISTING 525ø CITY AREA STORM

250ø STM @ 0.5%

300ø STM @ 1.2%

200X200 f/d

INV255.700±

296 CFM

100ø STM @ 1%

400X250 TRANSFER GRILLE C/W F/D AT LOW LEVEL

90,000 CFM

F-11

AD ABOVE

TD ABOVE

3500X200 EXHAUST GRILLE C/W F/D

F-12

200ø STM @ 0.7%

150ø STM @ 1%

INV257.450±

150ø STM @ 1%

400X250 TRANSFER GRILLE C/W F/D AT LOW LEVEL

1500X2500 INTAKE AIR LOUVER C/W F/D

3000X2500 INTAKE AIR LOUVER C/W F/D

65ø GAS EMERGENCY
100ø GAS PIPING
100ø DOMESTIC COLD WATER SUPPLY
75ø DIRECT HEATING WATER SUPPLY
75ø DIRECT HEATING WATER RETURN

CONDENSING UNIT INSTALLED AT HIGH LEVEL TO MATCH FGU AT GROUND FLR ABOVE

700X200 EXHAUST AIR LOUVRE C/W FD

F-8

F-10

F-9

300X300

300X250

600X250

20ø NON FREEZE HOSE BIBB

600X250

150ø RWL UP & DN

500X250 S/A DUCT UP C/W F/D @ SLAB

F/D ON GROUND FLOOR SLAB

400X250

500X250

FD ADV

100ø RWL UP

FGU AT HIGH LEVEL

F-5

150 L/S 1500X150

150 L/S 1500X125

150 L/S 700X300

30ø INV & C/V

F-3

F-4

F-6

F-7

F-15

900X400 INTAKE AIR LOUVRE C/W FD AT LOW LEVEL

150 L/S 900X600

400X400 EXHAUST AIR LOUVRE C/W FD

100ø SAN @ 1%

150ø SAN @ 1%

200ø SAN @ 0.5%

GENERATOR GAS PIPE IN BASEMENT IN 2HR FIRE RATED ENCLOSURE

CONDENSING UNIT INSTALLED AT HIGH LEVEL TO MATCH FGU AT GARBAGE ROOF

CONDENSING UNIT INSTALLED AT HIGH LEVEL TO MATCH FGU AT GROUND FLR ABOVE

350X300 PRESS AIR DUCT UP THRU FLR C/W 2 HR FIRE RATED ENCLOSURE

FUNNEL DRAIN @ FLOOR

500X300

F-13

F-14

CONDENSING UNIT INSTALLED AT HIGH LEVEL TO MATCH FGU AT GAS/ ROOM ABOVE

150X250

150X450

PRESS DUCT AT HIGH LEVEL

PRESS FAN AT LOW LEVEL (TYP. OF 3)

INV257.950±

150ø RWL UP

150ø SAN @ 1%

90,000 CFM GARAGE EXHAUST AIR

outline of building above

outline of transfer slab above

outline of elevator pit below

outline of f.f. shaft above

outline of closet above

outline of transfer slab above

outline of building above

sump pits-refer to mech. dwgs for type/size/location

continuous tripench drain

UNEXCAVATED

TANDEM CAR

STAIR UP

STAIR DN

MECHANICAL ROOM

MAIN ELECTRICAL ROOM (transformer above)

FD ø

75ø SANITARY DISCHARGE FROM BELOW INSULATE & ELECTRICALLY TRACE EXPOSED PIPE THROUGH OUT

100ø STORM DISCHARGE FROM BELOW INSULATE & ELECTRICALLY TRACE EXPOSED PIPE THROUGH OUT

CONNECT CEMENT

GENERATOR GAS PIPE IN BASEMENT IN 2HR FIRE RATED ENCLOSURE

700X300 EXHAUST AIR LOUVER C/V F/D

700X300 INTAKE AIR LOUVER C/V F/D AT LOW LEVEL

3000X250 EXHAUST AIR LOUVER C/V F/D

400X250 INTAKE AIR LOUVER C/W F/D AT LOW LEVEL

1500X4200 INTAKE AIR LOUVRE C/W F/D AT LOW LEVEL

INV257.750±

ISOLATE & ELECTRICALLY TRACE INDICATED RUN

P-1

P-2

P-3

WATER SOFTENER

WATER METER

10 KW ELECT. UNIT HEATER

200ø PIPE

300X300 WATER

NV ELEV 257.40

NV ELEV 257.31

NV ELEV 257.25

NOTES:
- ALL FLOOR DRAINS SHALL BE TRAPPED, PRIMED AND VENTED IN ACCORDANCE WITH PART #7 OF O.B.C.
- CLEANOUTS SHALL BE INSTALLED AT INTERVALS NOT EXCEEDING 15M ON 100ø DRAINAGE PIPE AND THE BASE OF ALL SOIL/WASTE STACKS.
- ALL PLUMBING FIXTURES SHALL BE VENTED IN ACCORDANCE WITH PART # 7 OF O.B.C.
- ELECTRICALLY TRACE & INSULATE ALL EXPOSED TRAPS IN GARAGE

NO.	BY	DESCRIPTION	DATE
11	LB	REVISED AS PER SITE INSTRUCTION M-22	AUG/03/2018
10	LB	REVISED AS PER SITE INSTRUCTION M-17	JUN/04/2018
9	LB	REVISED AS PER SITE INSTRUCTION M-13	FEB/01/2018
8	LB	REVISED AS PER SITE INSTRUCTION M-12	DEC/13/2017
7	LB	REVISED AS PER SITE INSTRUCTION M-11	DEC/11/2017
6	LB	REVISED AS PER SITE INSTRUCTION M-9	OCT/19/2017
5	LB	REVISED AS PER SITE INSTRUCTION M-7	SEP/11/2017
4	LB	ISSUED FOR SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

REVISIONS

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TITLE
PARKING LEVEL PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-4
		OF 42

TYPICAL SUITE NOTES:

- LAST 1.8M OF EXHAUST DUCTWORK C/W INSULATION & VAPOUR BARRIER (TYPICAL)
- VENTILATION CONTRACTOR SHALL SUPPLY & INSTALL THE FLEXIBLE DRYER HOSE FROM DRYER TO THE RIGID EXHAUST DUCT UNLESS OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL MAKE ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER (C/W SHUT-OFF VALVE & COPPER SUPPLY PIPE)

NOTE: FULLY SPRINKLERED BUILDING FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
10	LB	REVISED AS PER SITE INSTRUCTION M-20	JUN/22/2018
9	LB	REVISED AS PER SITE INSTRUCTION M-17	JUN/04/2018
8	LB	REVISED AS PER SITE INSTRUCTION M-14	MAR/14/2018
7	LB	REVISED AS PER SITE INSTRUCTION M-10	OCT/31/2017
6	LB	REVISED AS PER SITE INSTRUCTION M-7	SEP/11/2017
5	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	GP	REVISED AS PER SITE INSTRUCTION M-3	MAR/02/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/23/2016

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TITLE
1ST FLOOR LEVEL MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-5
		OF 42

NOTE: FULLY SPRINKLERED BUILDING. FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
6	LB	REVISED AS PER SITE INSTRUCTION 11-7	SEP/11/2017
5	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	OP	REVISED AS PER SITE INSTRUCTION 11-3	MAR/02/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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TITLE
1ST FLOOR LEVEL MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-6
		OF 42

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 002 ON THIS DRAWING

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 001 ON THIS DRAWING

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 003 ON THIS DRAWING

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 005 ON THIS DRAWING

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 009 ON THIS DRAWING

Dashed line indicates extent of transfer slab below

NOTE: FULLY SPRINKLERED BUILDING FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION M-17	JUN/04/2018
6	LB	REVISED AS PER SITE INSTRUCTION M-7	SEP/11/2017
5	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	GP	REVISED AS PER SITE INSTRUCTION M-3	MAR/02/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/23/2016

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TITLE
1ST FLOOR LEVEL MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-7
		OF 42

- LAST 1.8M OF EXHAUST DUCTWORK C/W INSULATION & VAPOUR BARRIER (TYPICAL)
- VENTILATION CONTRACTOR SHALL SUPPLY & INSTALL THE FLEXIBLE DRYER HOSE FROM DRYER TO THE RIGID EXHAUST DUCT UNLESS OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL MAKE ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER (C/W SHUT-OFF VALVE & COPPER SUPPLY PIPE)

NOTE: FULLY SPRINKLERED BUILDING FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION M-20	JUN/22/2018
6	LB	REVISED AS PER SITE INSTRUCTION M-17	JUN/04/2018
5	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/04/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	OP	REVISED AS PER SITE INSTRUCTION M-3	MAR/02/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/23/2016

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TITLE
1ST FLOOR LEVEL MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-8
		OF 42

NOTE: FULLY SPRINKLERED BUILDING FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION M-14	MAR/14/2018
6	LB	REVISED AS PER SITE INSTRUCTION M-7	SEP/11/2017
5	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	OP	REVISED AS PER SITE INSTRUCTION M-3	MAR/02/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

REVISIONS

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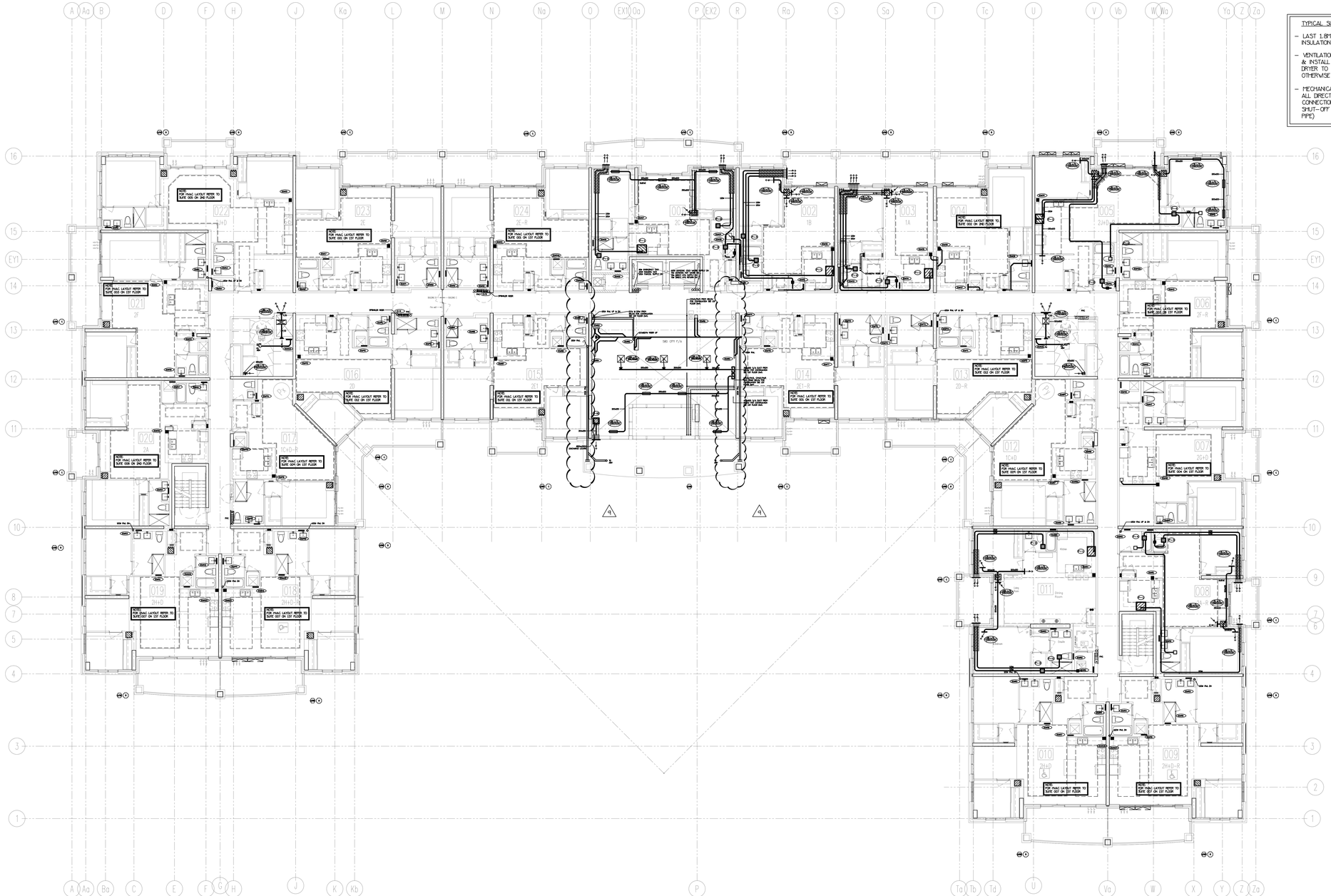
TITLE
1ST FLOOR LEVEL MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-9
		OF 42



TYPICAL SUITE NOTES:

- LAST 1.8M OF EXHAUST DUCTWORK C/W INSULATION & VAPOUR BARRIER (TYPICAL)
- VENTILATION CONTRACTOR SHALL SUPPLY & INSTALL THE FLEXIBLE DRYER HOSE FROM DRYER TO THE RIGID EXHAUST DUCT UNLESS OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL MAKE ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER (C/W SHUT-OFF VALVE & COPPER SUPPLY PIPE)

NOTE: FULLY SPRINKLERED BUILDING FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
9	LD	ISSUED FOR SITE INSTRUCTION M-19R	APR/23/2018
8	LD	REVISED AS PER SITE INSTRUCTION M-15	APR/06/2018
7	LD	REVISED AS PER SITE INSTRUCTION M-14	MAR/14/2018
6	LD	REVISED AS PER SITE INSTRUCTION M-10	OCT/31/2017
5	LD	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LD	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LD	ISSUED AS PER SITE INSTRUCTION M-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

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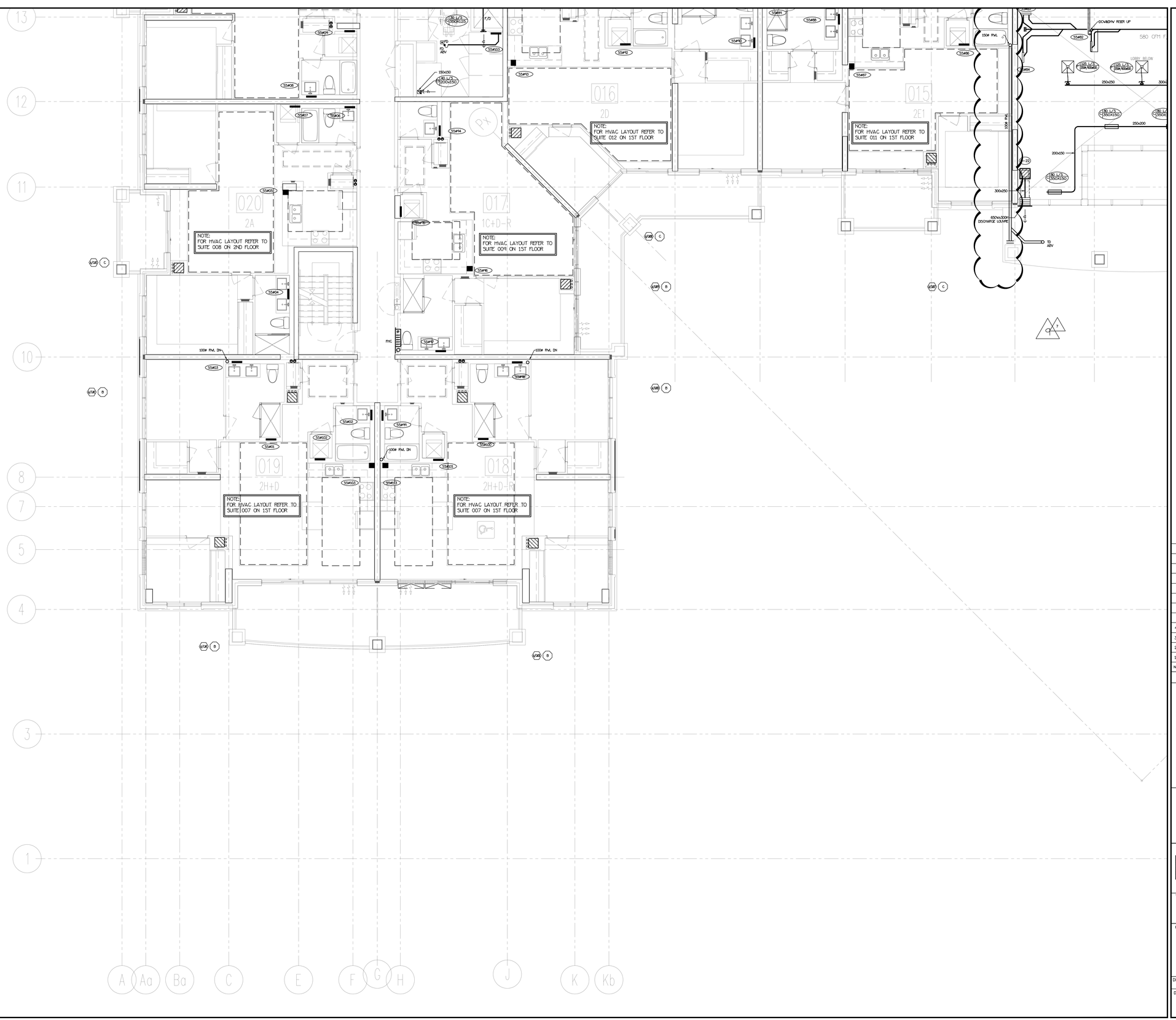
TITLE
2ND FLOORS PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-10
		OF 42



NOTE: FULLY SPRINKLERED BUILDING
FOR FIRE PROTECTION DESIGN PLEASE
REFER TO DISANO SPRINKLER DESIGN
LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

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TITLE
2ND FLOORS PLAN
MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-11
		OF 42

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 005 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 001 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 001 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 003 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 012 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 008 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 009 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO

NOTE:
FOR HVAC LAYOUT REFER TO

NOTE: FULLY SPRINKLERED BUILDING.
FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
7	LB	ISSUED FOR SITE INSTRUGTON M-15R	APR/23/2018
6	LB	ISSUED FOR SITE INSTRUGTON M-15	APR/06/2018
5	LB	ISSUED FOR SITE INSTRUGTON M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUGTON	JUL/18/2017
3	LB	ISSUED AS PER SITE INSTRUCTION M-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/23/2016

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TITLE
2ND FLOORS PLAN MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-12
		OF 42

TYPICAL SUITE NOTES:

- LAST 1.8M1 OF EXHAUST DUCTWORK INSULATION & VAPOUR BARRIER (T
- VENTILATION CONTRACTOR SHALL & INSTALL THE FLEXIBLE DRYER HO DRYER TO THE RIGID EXHAUST DUC OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER SHUT-OFF VALVE & COPPER SUPP PIPE)

NOTE: FULLY SPRINKLERED BUILDING. FOR FIRE PROTECTION DESIGN PLEASE REFER TO DSANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
5	LB	ISSUED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LB	ISSUED AS PER SITE INSTRUCTION 11-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

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TITLE
2ND FLOORS PLAN MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-13
		OF 42

NOTE: FULLY SPRINKLERED BUILDING FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
5	LB	ISSUED AS PER SITE INSTRUCTION M-14	MAR/14/2018
4	LB	ISSUED FOR SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

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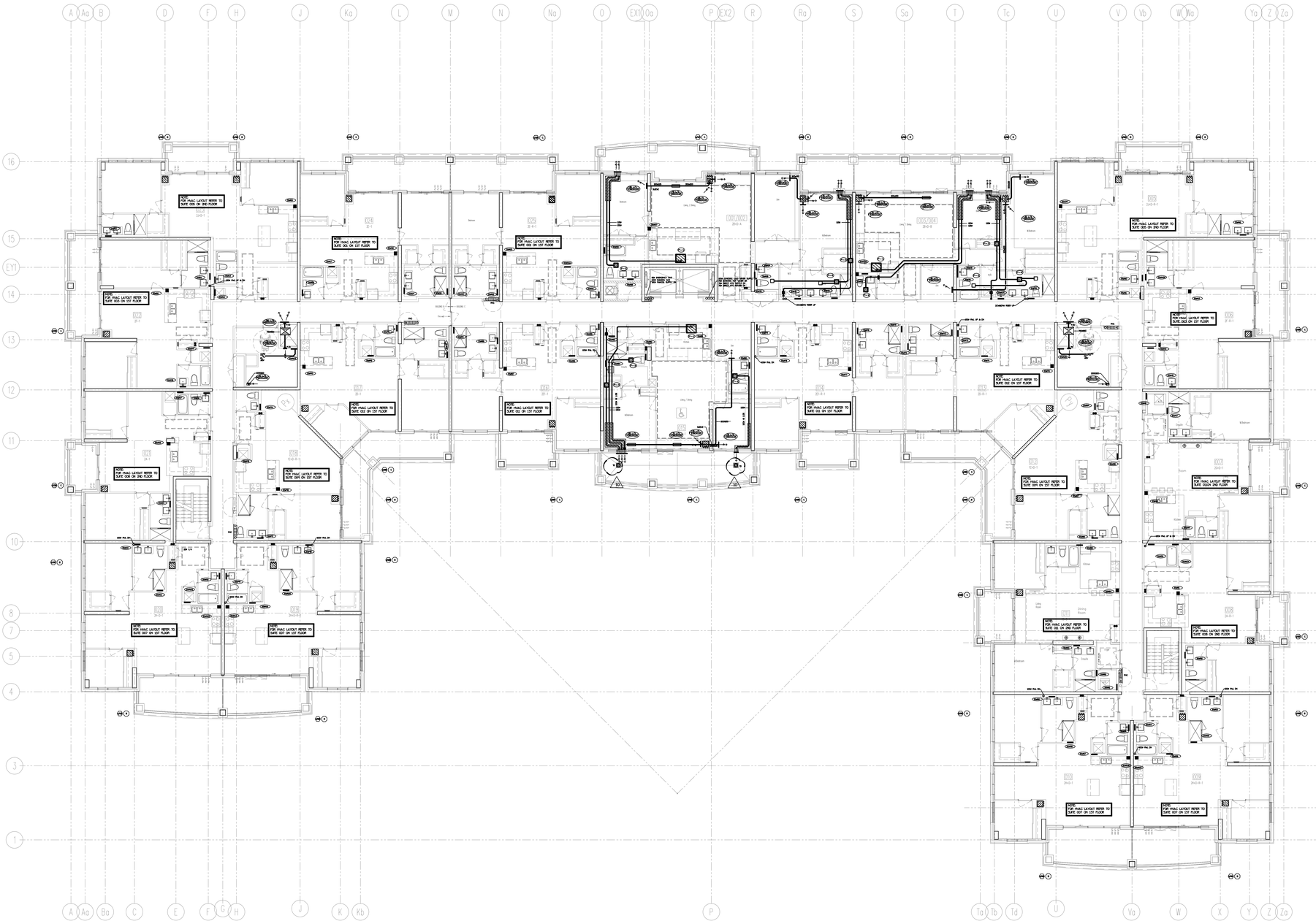
TITLE
2ND FLOORS PLAN MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-14
		OF 42



TYPICAL SUITE NOTES:

- LAST 1.8M OF EXHAUST DUCTWORK C/V INSULATION & VAPOUR BARRIER (TYPICAL)
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NO.	BY	DESCRIPTION	DATE
10	LB	ISSUED FOR SITE INSTRUCTION M-15R	APR/23/2018
9	LB	REVISED AS PER SITE INSTRUCTION M-15	APR/06/2018
8	LB	REVISED AS PER SITE INSTRUCTION M-14	MAR/14/2018
7	LB	REVISED AS PER SITE INSTRUCTION M-10	OCT/31/2017
6	LB	REVISED AS PER SITE INSTRUCTION M-6	AUG/25/2017
5	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LB	ISSUED AS PER SITE INSTRUCTION M-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/23/2016

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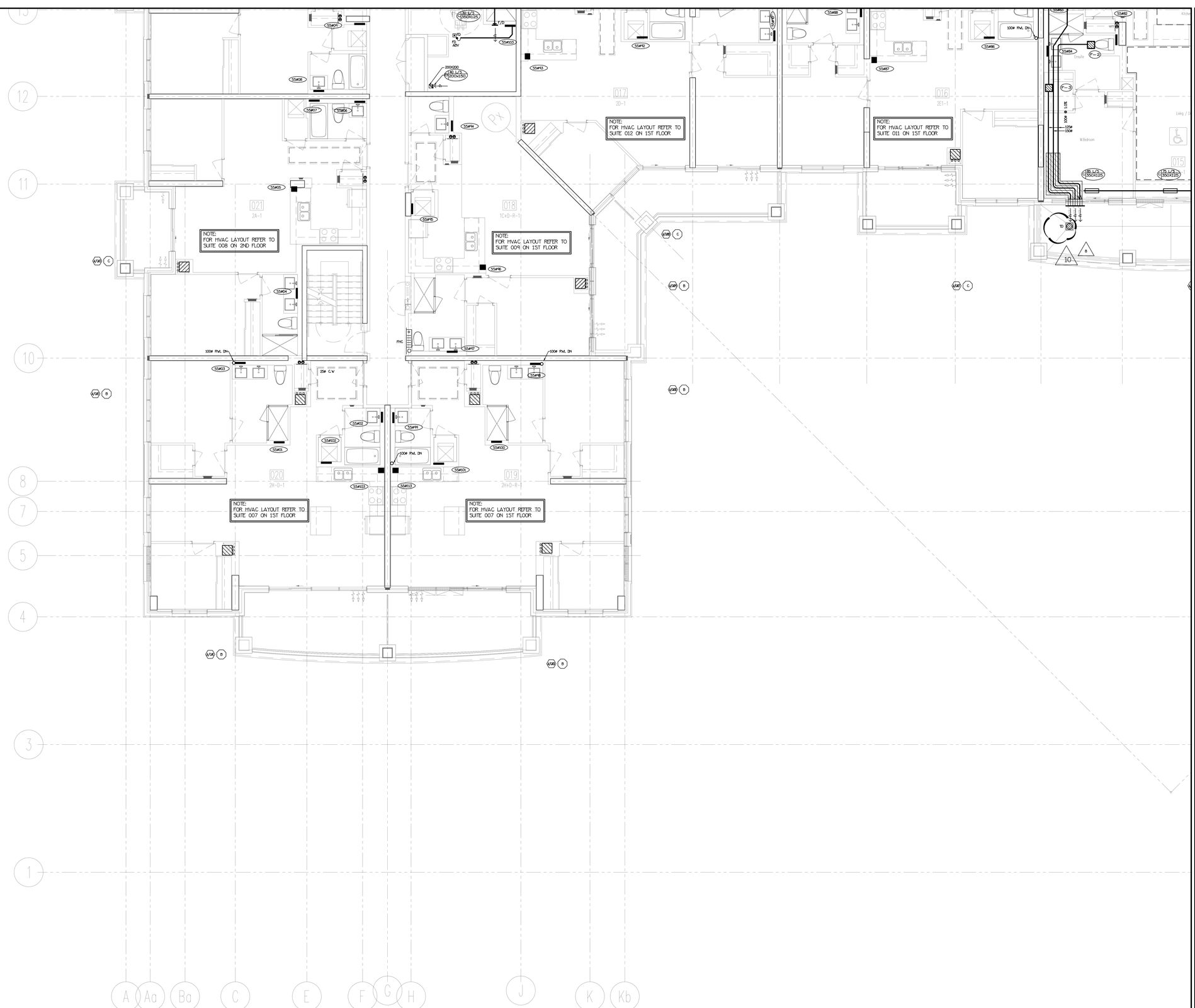
TITLE
3RD AND 4TH FLOORS MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-15
		OF 42



NO.	BY	DESCRIPTION	DATE
5	LB	REVISED AS PER SITE INSTRUCTION 11-6	AUG/25/2017
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

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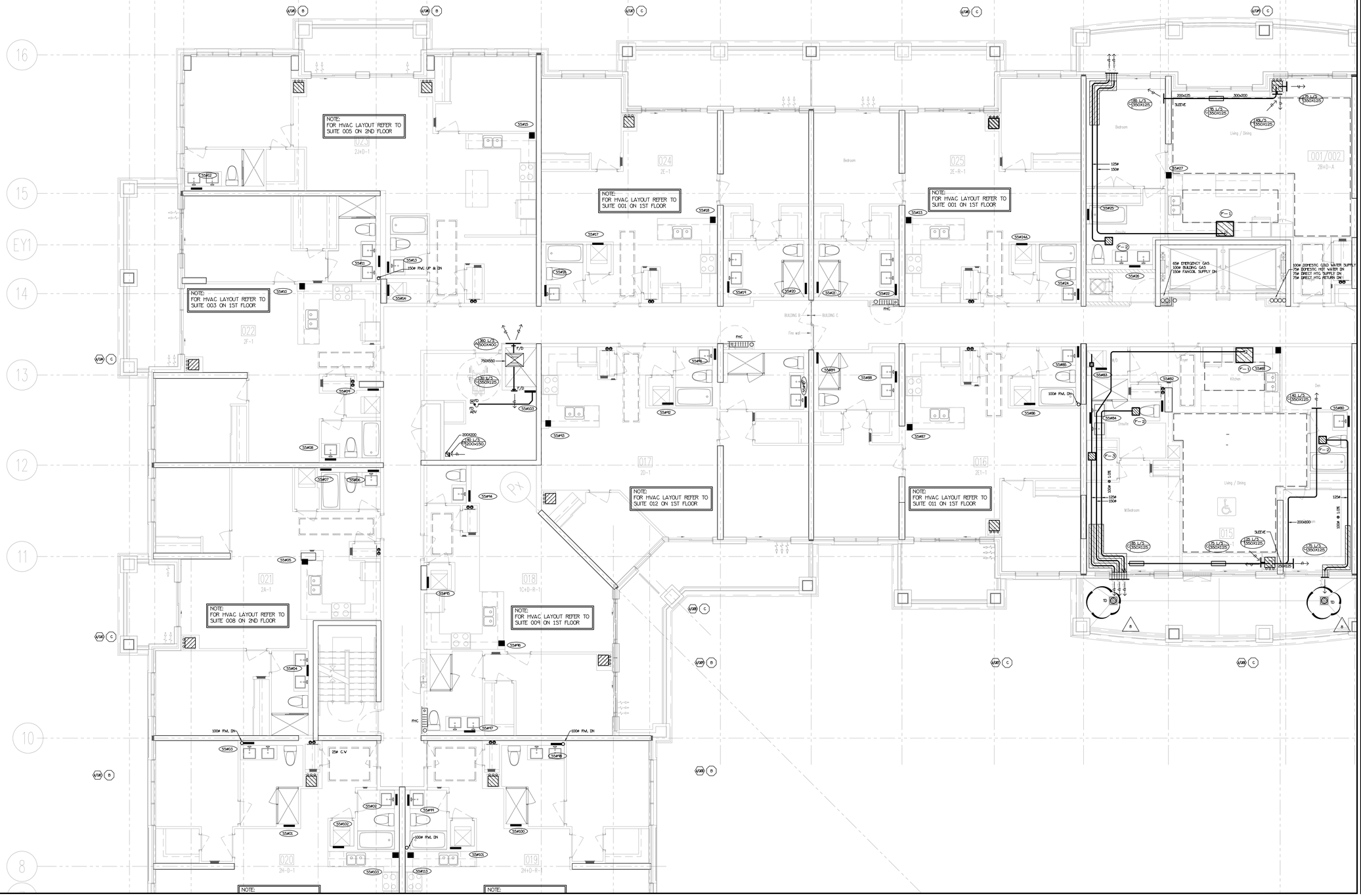
TITLE
3RD AND 4TH FLOORS MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-16
		OF 42


NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 005 ON 2ND FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 003 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 001 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 001 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 012 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 011 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 008 ON 2ND FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 009 ON 1ST FLOOR
100ø RVL UP & DN
100ø RVL DN
100ø RVL DN
100ø RVL DN
65ø EMERGENCY GAS
100ø BUILDING GAS
150ø FANCOIL SUPPLY DN
100ø DOMESTIC COLD WATER SUPPLY
75ø DOMESTIC HOT WATER DN
75ø DIRECT HTG SUPPLY DN
75ø DIRECT HTG RETURN DN
SLEEVE
SLEEVE
SLEEVE

- LAST 1.8M OF EXHAUST DUCTWORK C/
  INSULATION & VAPOUR BARRIER (TYPICA
- VENTILATION CONTRACTOR SHALL SUPP
  & INSTALL THE FLEXIBLE DRYER HOSE F
  DRYER TO THE RIGID EXHAUST DUCT UN
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- MECHANICAL CONTRACTOR SHALL MAKE
  ALL DIRECT PLUMBING & DRAINAGE
  CONNECTIONS TO THE DISHWASHER (C/
  SHUT-OFF VALVE & COPPER SUPPLY
  PIPE)

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 005 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 003 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 012 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 009 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 2ND FLOOR

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
6	LB	REVISED AS PER SITE INSTRUCTION 11-6	AUG/25/2017
5	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LB	ISSUED AS PER SITE INSTRUCTION 11-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/23/2016

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TITLE
3RD AND 4TH FLOORS MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-18
		OF 42

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 011 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 009 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 011ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 011 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 008 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 007 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 007 ON 1ST FLOOR

NO.	BY	DESCRIPTION	DATE
6	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
5	LB	REVISED AS PER SITE INSTRUCTION 11-6	AUG/25/2017
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

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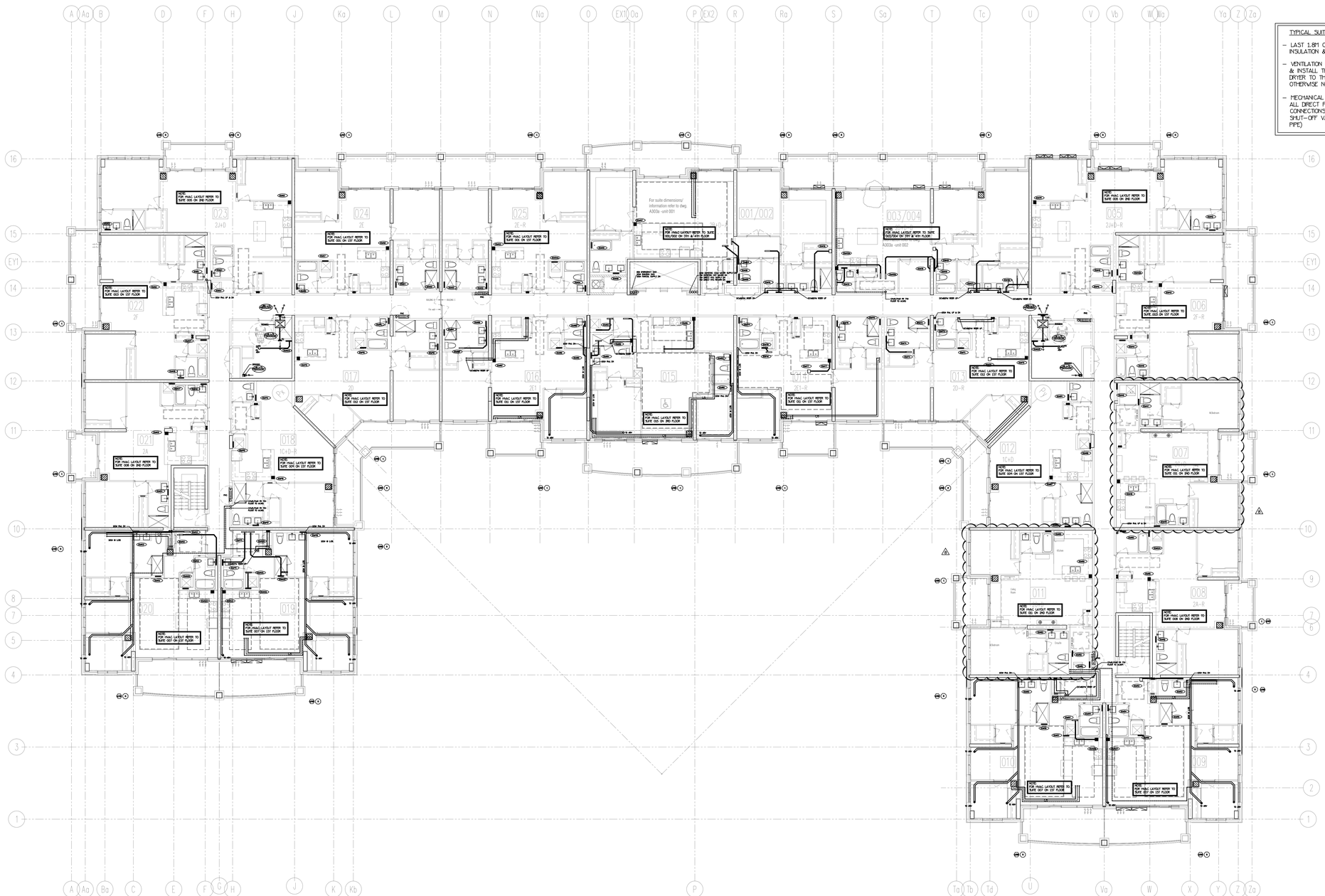
TITLE
3RD AND 4TH FLOORS MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-19
		OF 42



NOTE: FULLY SPRINKLERED BUILDING. FOR FIRE PROTECTION DESIGN PLEASE REFER TO DSANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
8	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
7	LB	REVISED AS PER SITE INSTRUCTION 11-10	OCT/31/2017
6	LB	REVISED AS PER SITE INSTRUCTION 11-6	AUG/25/2017
5	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LB	REVISED AS PER SITE INSTRUCTION 11-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
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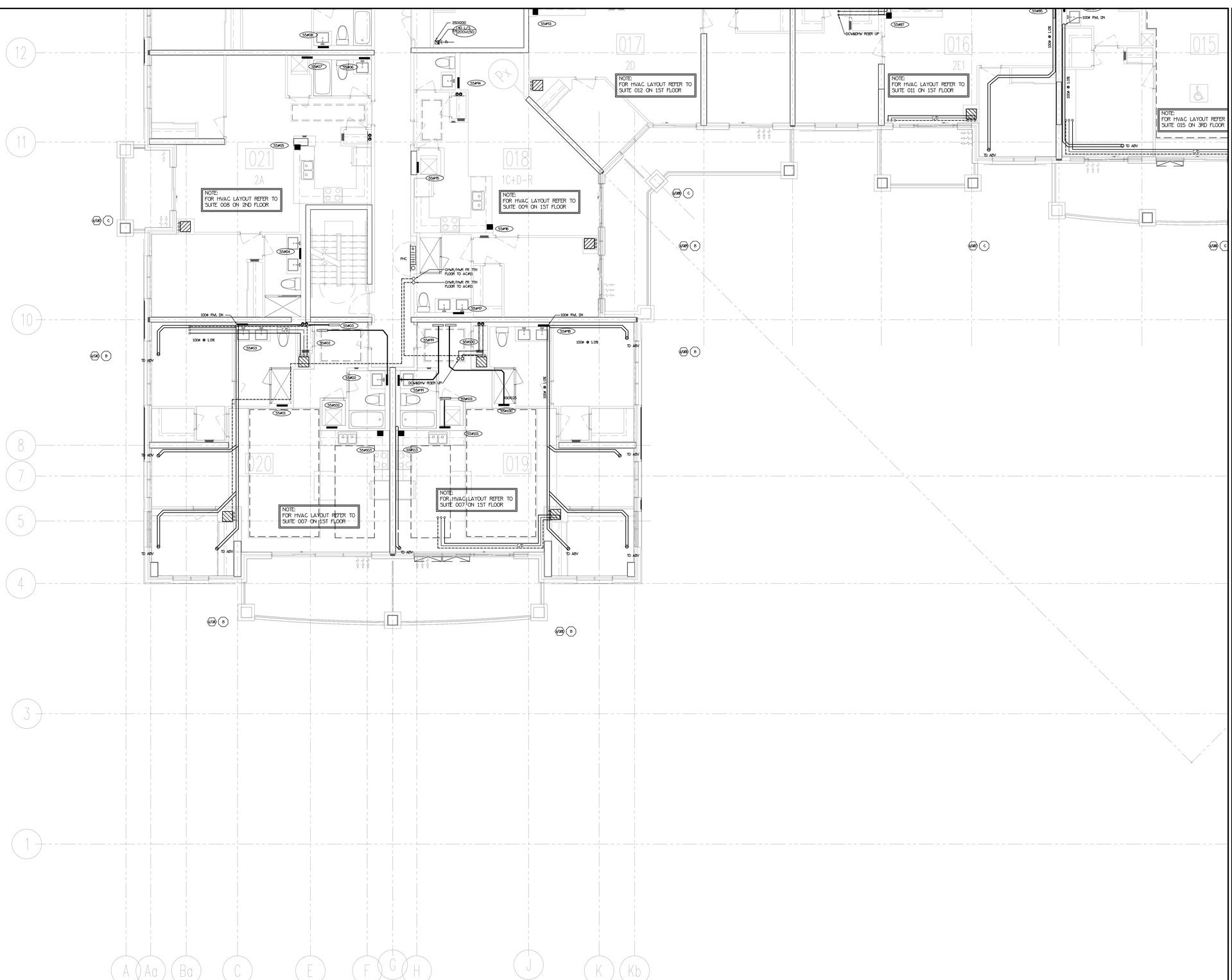
TITLE
5TH FLOORS PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-20
		OF 42


021
2A
018
1C+D-R
017
2D
016
2E1
015
020
019
NOTE:
FOR HVAC LAYOUT REFER TO SUITE 008 ON 2ND FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO SUITE 009 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO SUITE 012 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER SUITE 015 ON 3RD FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO SUITE 007 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO SUITE 007 ON 1ST FLOOR
250X200
RG &GRL
600X250
DCV/MDHV RISER UP
100ø RVL DN
100ø @ 1.0%
TD ADV
C/D
FHC
OHVR/HVR FR 7TH FLOOR TO ACAU
S5AP05
S5AP07
S5AP06
S5AP04
S5AP08
S5AP09
S5AP10
S5AP11
S5AP12
S5AP13
S5AP14
S5AP15
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S5AP39
S5AP40
S5AP41
S5AP42
S5AP43
S5AP44
S5AP45
S5AP46
S5AP47

NOTE: FULLY SPRINKLERED BUILDING
FOR FIRE PROTECTION DESIGN PLEASE
REFER TO DISANO SPRINKLER DESIGN
LIMITED DRAWINGS.

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 005 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 003 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 008 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 001 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 012 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 009 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 001 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 011 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 015 ON 3RD FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO
001/002 ON 3TH & 4TH

For suite dimensions/
information refer to dwg.
A303a -unit 001

NO.	BY	DESCRIPTION	DATE
6	LB	REVISED AS PER SITE INSTRUCTION M-6	AUG/25/2017
5	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LB	ISSUED AS PER SITE INSTRUCTION M-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

REVISIONS

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LICENCED PROFESSIONAL ENGINEER
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100117097
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3645 Keele Street, Suite 105,
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Tel: (416) 398 1999, Fax: (416) 398 1933

TITLE
5TH FLOORS PLAN
MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-22
		OF 42

TYPICAL SUITE NOTES:

- LAST 1.8M OF EXHAUST DUCTWORK C/W INSULATION & VAPOUR BARRIER (TYPICAL)
- VENTILATION CONTRACTOR SHALL SUPPLY & INSTALL THE FLEXIBLE DRYER HOSE FROM DRYER TO THE RIGID EXHAUST DUCT UNLESS OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL MAKE ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER (C/W SHUT-OFF VALVE & COPPER SUPPLY PIPE)

001/002
2D+D-R
003/004
2D+D-R
A303a -unit 002
005
2J+D-R
006
2F-R
007
2B+D
008
013
2D-R
012
1C+D
011
Living Room
014
2E1-R
Kitchen
Dining Room
M.Bedroom
Ensuite
Foyer

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 003/004 ON 3TH & 4TH FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 005 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 003 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 012 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 004 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 2ND FLOOR

DCV/EXTV RISER DN
DCV/EXTV RISER UP
OVER/FAN FR 7TH FLOOR TO AC#11
150ø RVL UP & DN
100ø RVL DN
100ø RVL UP
R.O. 1200X1200
R.O. 2100X1200
R.O. 2500X1200
R.O. 1200X1500
R.O. 2500X1500
R.O. 1200X1200
R.O. 600X600
F/D
FPC
TO ABV
C/D

NOTE: FULLY SPRINKLERED BUILDING. FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
		REVISIONS	
7	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
6	LB	REVISED AS PER SITE INSTRUCTION 11-6	AUG/25/2017
5	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LB	ISSUED AS PER SITE INSTRUCTION 11-4	MAY/16/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/25/2016

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TITLE
5TH FLOORS PLAN MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-23
		OF 42

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 015 ON 3RD FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 009 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 011 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 008 ON 2ND FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 007 ON 1ST FLOOR

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 007 ON 1ST FLOOR

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FOR FIRE PROTECTION DESIGN PLEASE REFER TO DSANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
6	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
5	LB	REVISED AS PER SITE INSTRUCTION 11-6	AUG/25/2017
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
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1	LM	ISSUED FOR TENDER	MAR/25/2016

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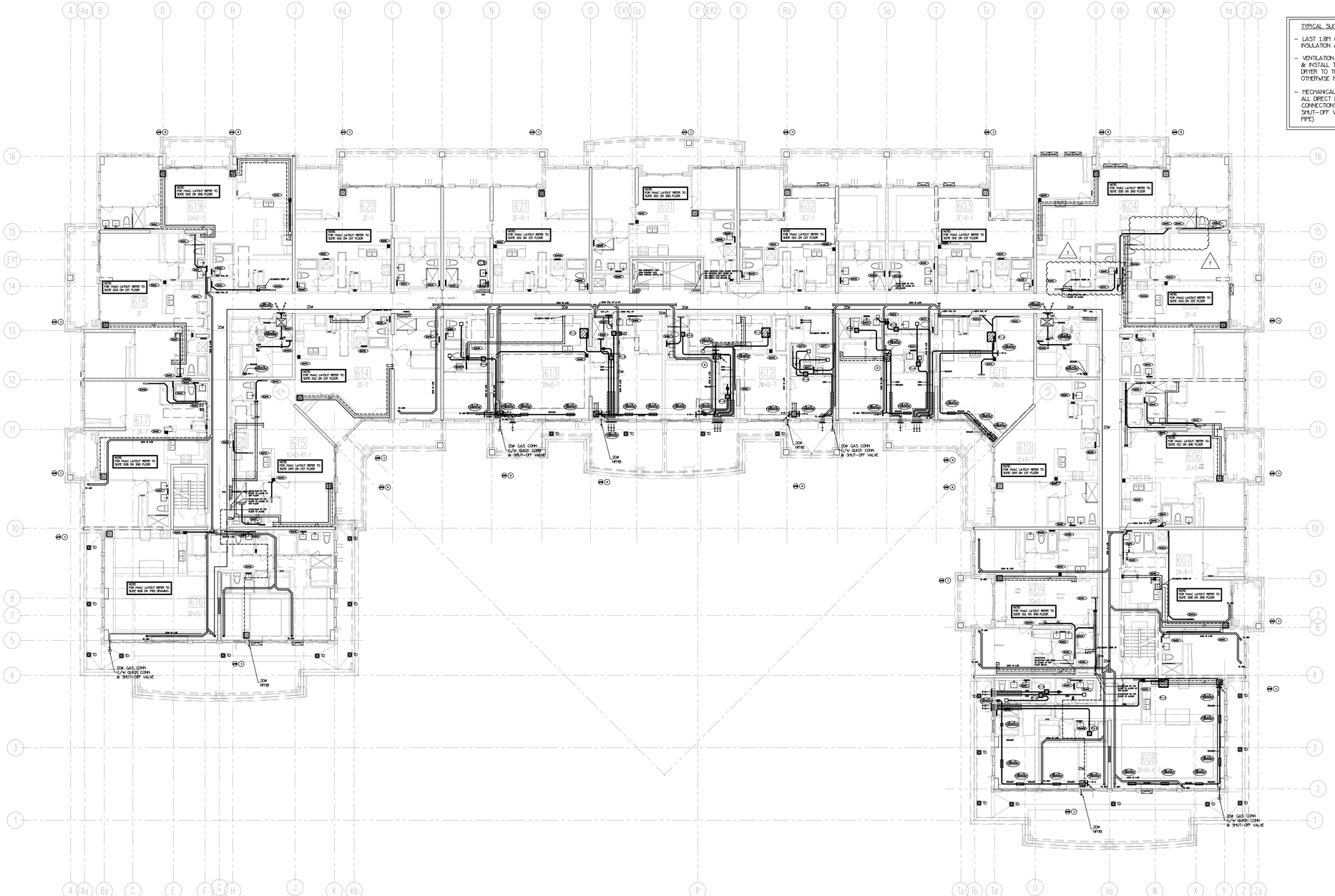
TITLE
5TH FLOORS PLAN MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-24
		OF 42



NOTE: FULLY SPRINKLERED BUILDING FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION 11-18	JUN/06/2018
6	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
5	LB	REVISED AS PER SITE INSTRUCTION 11-10	OCT/31/2017
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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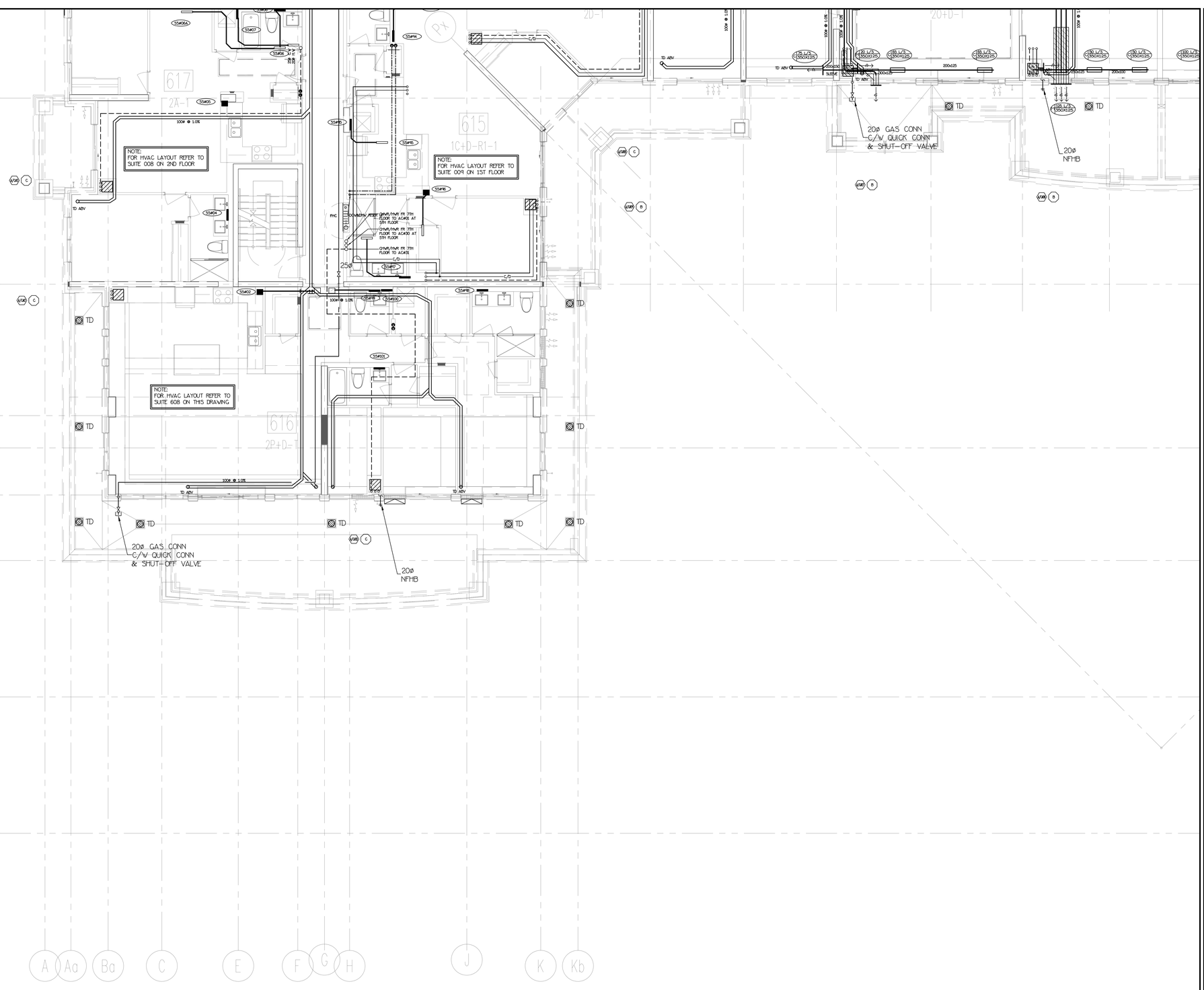
TITLE
6TH FLOORS PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-25
		OF 42


617
2A-1
615
1C+D-R1-1
616
2P+D-1
20+D-1
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 008 ON 2ND FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 009 ON 1ST FLOOR
NOTE:
FOR HVAC LAYOUT REFER TO
SUITE 608 ON THIS DRAWING
TD
TD ABV
100Ø @ 1.0%
25Ø
20Ø GAS CONN
C/W QUICK CONN
& SHUT-OFF VALVE
20Ø
NFHB
200x125
300x125
250x100
SS4W01
SS4W02
SS4W03
SS4W04
SS4W05
SS4W06
SS4W07
SS4W08
SS4W09
SS4W10
SS4W11
SS4W12
SS4W13
SS4W14
SS4W15
SS4W16
SS4W17
SS4W18
SS4W19
SS4W20
SS4W21
SS4W22
SS4W23
SS4W24
SS4W25
SS4W26
SS4W27
SS4W28
SS4W29
SS4W30
SS4W31
SS4W32
SS4W33
SS4W34
SS4W35
SS4W36
SS4W37
SS4W38
SS4W39
SS4W40

NOTE: FULLY SPRINKLERED BUILDING. FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NOTE: FOR HVAC LAYOUT REFER TO SUITE 005 ON 2ND FLOOR

NOTE: FOR HVAC LAYOUT REFER TO SUITE 003 ON 1ST FLOOR

NOTE: FOR HVAC LAYOUT REFER TO SUITE 008 ON 2ND FLOOR

NOTE: FOR HVAC LAYOUT REFER TO SUITE 608 ON THIS DRAWING

NOTE: FOR HVAC LAYOUT REFER TO SUITE 001 ON 1ST FLOOR

NOTE: FOR HVAC LAYOUT REFER TO SUITE 012 ON 1ST FLOOR

NOTE: FOR HVAC LAYOUT REFER TO SUITE 009 ON 1ST FLOOR

NOTE: FOR HVAC LAYOUT REFER TO SUITE 001 ON 1ST FLOOR

NOTE: FOR HVAC LAYOUT REFER TO SUITE 001 ON 2ND FLOOR

619 2J+D-1 | 620 2E-1 | 621 2E-R-1 | 601 2C | 618 2F | 617 2A-1 | 614 2D-1 | 615 1C+D-R1-1 | 613 2D+D-T

20Ø GAS CONN C/W QUICK CONN & SHUT-OFF VALVE

20Ø NFHB

65ø EMERGENCY GAS
100ø BUILDING GAS
150ø FANCOIL SUPPLY DN

DCW/HDHW RISER UP

DCW/HDHW DRWR/RMR FR 7TH FLOOR TO ACU#35 AT 5TH FLOOR

DCW/HDHW DRWR/RMR FR 7TH FLOOR TO ACU#30 AT 5TH FLOOR

DCW/HDHW DRWR/RMR FR 7TH FLOOR TO ACU#31

NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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Tel: (416) 398 1999, Fax: (416) 398 1933

TITLE
6TH FLOORS PLAN MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-27
		OF 42

TYPICAL SUITE NOTES:

- LAST 1.8M OF EXHAUST DUCTWORK C/W INSULATION & VAPOUR BARRIER (TYPICAL)
- VENTILATION CONTRACTOR SHALL SUPPLY & INSTALL THE FLEXIBLE DRYER HOSE FROM DRYER TO THE RIGID EXHAUST DUCT UNLESS OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL MAKE ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER (C/W SHUT-OFF VALVE & COPPER SUPPLY PIPE)

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NO.	BY	DESCRIPTION	DATE
6	LB	REVISED AS PER SITE INSTRUCTION 11-18	JUN/06/2018
5	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
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TITLE
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PROJECT
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ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-28
		OF 42

NOTE: FULLY SPRINKLERED BUILDING
FOR FIRE PROTECTION DESIGN PLEASE
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LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
5	LB	REVISED AS PER SITE INSTRUCTION 11-14	MAR/14/2018
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LH	ISSUED FOR PERMIT	DEC/28/2016
1	LH	ISSUED FOR TENDER	MAR/23/2016

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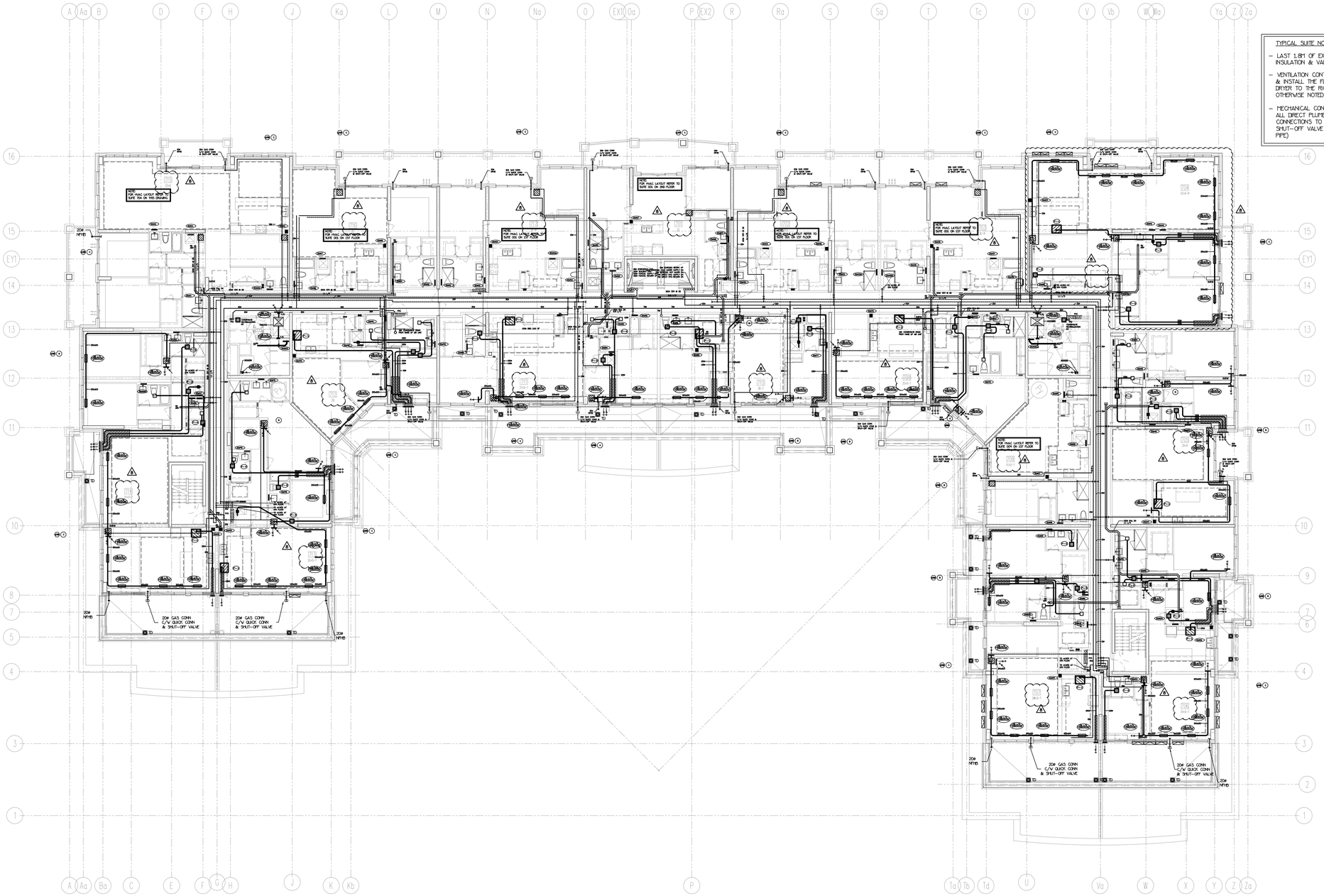
MECHANICAL-PART

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-29
		OF 42



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NO.	BY	DESCRIPTION	DATE
8	LB	REVISED AS PER SITE INSTRUCTION PS-18	JUN/06/2018
7	LB	REVISED AS PER SITE INSTRUCTION PS-16	APR/19/2018
6	LB	REVISED AS PER SITE INSTRUCTION PS-10	OCT/31/2017
5	LB	REVISED AS PER SITE INSTRUCTION PS-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LM	ISSUED FOR PERMIT	DEC/28/2016
2	OP	REVISED AS PER SITE INSTRUCTION PS-2	AUG/16/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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TITLE
PART 7TH FLOOR PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-30
		OF 42

NOTE: FULLY SPRINKLERED BUILDING
FOR FIRE PROTECTION DESIGN PLEASE
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LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION PS-18	JUN/06/2018
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4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LM	ISSUED FOR PERMIT	DEC/28/2016
2	OP	REVISED AS PER SITE INSTRUCTION PS-2	AUG/16/2016
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TITLE
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PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-31
		OF 42

TYPICAL SUITE NOTES:

- LAST 1.8M OF EXHAUST DUCTWORK C/W INSULATION & VAPOUR BARRIER (TYPICAL)
- VENTILATION CONTRACTOR SHALL SUPPLY & INSTALL THE FLEXIBLE DRYER HOSE FROM DRYER TO THE RIGID EXHAUST DUCT UNLESS OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL MAKE ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER (C/W SHUT-OFF VALVE & COPPER SUPPLY PIPE)

NOTE: FULLY SPRINKLERED BUILDING. FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION #1-18	JUN/06/2018
6	LB	REVISED AS PER SITE INSTRUCTION #1-16	APR/19/2018
5	LB	REVISED AS PER SITE INSTRUCTION #1-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LM	ISSUED FOR PERMIT	DEC/28/2016
2	OP	REVISED AS PER SITE INSTRUCTION #1-2	AUG/16/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

REVISIONS

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Tel: (416) 398 1999, Fax: (416) 398 1933

TITLE
PART 7TH FLOORS PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-32
		OF 42

NOTE: FULLY SPRINKLERED BUILDING.
FOR FIRE PROTECTION DESIGN PLEASE REFER TO DISANO SPRINKLER DESIGN LIMITED DRAWINGS.

NOTE:
FOR HVAC LAYOUT REFER TO SUITE 009 ON 1ST FLOOR

15ø CONDENSATE DRAIN FROM MAKE UP AIR UNIT

NEUTRALIZATION KIT

150 L/S 1350X125

75 L/S 1350X125

80 L/S 1350X125

180 L/S 1350X125

200 L/S 1350X125

80 L/S 1200X150

200 L/S 1350X100

RD ADV

F/D

TD

20ø NFHB

20ø GAS CONN C/W QUICK CONN & SHUT-OFF VALVE

150ø RVL DN 11 L/S

TO AC#25 AT 5TH FLOOR

TO AC#20 AT 6TH FLOOR

FHC 30ø

SUITE 710 2R+1

SUITE 709 2R+D+1

SUITE 708 1C+D+1

SUITE 707 2M+D+1

SUITE 706 2M+D+1

SUITE 705 2M+D

20ø GAS CONN C/W QUICK CONN & SHUT-OFF VALVE

20ø NFHB

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION PI-18	JUN/06/2018
6	LB	REVISED AS PER SITE INSTRUCTION PI-16	APR/19/2018
5	LB	REVISED AS PER SITE INSTRUCTION PI-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LM	ISSUED FOR PERMIT	DEC/28/2016
2	OP	REVISED AS PER SITE INSTRUCTION PI-2	AUG/16/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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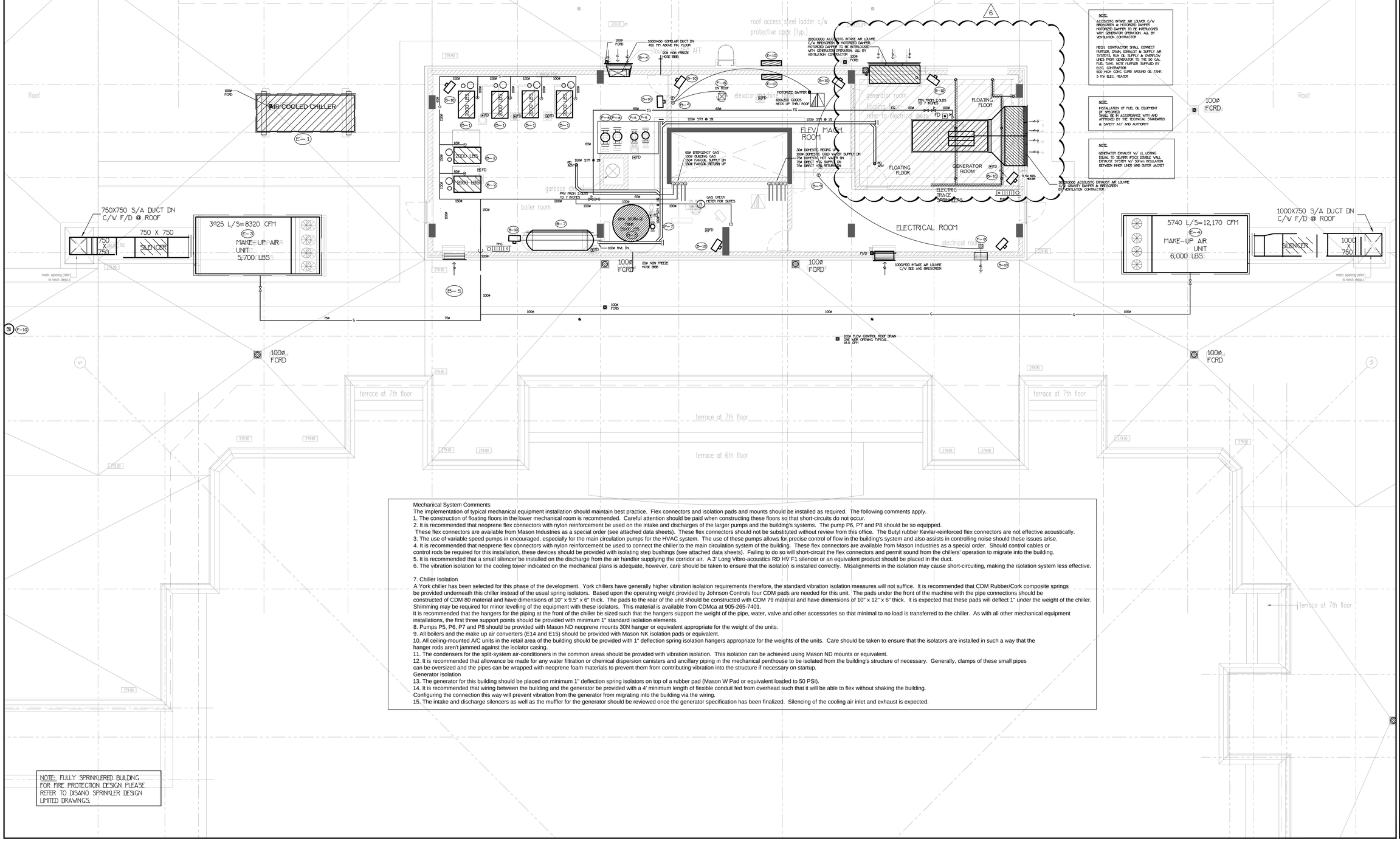
TITLE
PART 7TH FLOOR PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-33
		OF 42



Mechanical System Comments

The implementation of typical mechanical equipment installation should maintain best practice. Flex connectors and isolation pads and mounts should be installed as required. The following comments apply.

1. The construction of floating floors in the lower mechanical room is recommended. Careful attention should be paid when constructing these floors so that short-circuits do not occur.
2. It is recommended that neoprene flex connectors with nylon reinforcement be used on the intake and discharges of the larger pumps and the building's systems. The pump P6, P7 and P8 should be so equipped. These flex connectors are available from Mason Industries as a special order (see attached data sheets). These flex connectors should not be substituted without review from this office. The Butyl rubber Kevlar-reinforced flex connectors are not effective acoustically.
3. The use of variable speed pumps in encouraged, especially for the main circulation pumps for the HVAC system. The use of these pumps allows for precise control of flow in the building's system and also assists in controlling noise should these issues arise.
4. It is recommended that neoprene flex connectors with nylon reinforcement be used to connect the chiller to the main circulation system of the building. These flex connectors are available from Mason Industries as a special order. Should control cables or control rods be required for this installation, these devices should be provided with isolating step bushings (see attached data sheets). Failing to do so will short-circuit the flex connectors and permit sound from the chillers' operation to migrate into the building.
5. It is recommended that a small silencer be installed on the discharge from the air handler supplying the corridor air. A 3' Long Vibro-acoustics RD HV F1 silencer or an equivalent product should be placed in the duct.
6. The vibration isolation for the cooling tower indicated on the mechanical plans is adequate, however, care should be taken to ensure that the isolation is installed correctly. Misalignments in the isolation may cause short-circuiting, making the isolation system less effective.

7. Chiller Isolation

A York chiller has been selected for this phase of the development. York chillers have generally higher vibration isolation requirements therefore, the standard vibration isolation measures will not suffice. It is recommended that CDM Rubber/Cork composite springs be provided underneath this chiller instead of the usual spring isolators. Based upon the operating weight provided by Johnson Controls four CDM pads are needed for this unit. The pads under the front of the machine with the pipe connections should be constructed of CDM 80 material and have dimensions of 10" x 9.5" x 6" thick. The pads to the rear of the unit should be constructed with CDM 79 material and have dimensions of 10" x 12" x 6" thick. It is expected that these pads will deflect 1" under the weight of the chiller. Shimming may be required for minor levelling of the equipment with these isolators. This material is available from CDMca at 905-265-7401.

It is recommended that the hangers for the piping at the front of the chiller be sized such that the hangers support the weight of the pipe, water, valve and other accessories so that minimal to no load is transferred to the chiller. As with all other mechanical equipment installations, the first three support points should be provided with minimum 1" standard isolation elements.

8. Pumps P5, P6, P7 and P8 should be provided with Mason ND neoprene mounts 30N hanger or equivalent appropriate for the weight of the units.
9. All boilers and the make up air converters (E14 and E15) should be provided with Mason NK isolation pads or equivalent.
10. All ceiling-mounted A/C units in the retail area of the building should be provided with 1" deflection spring isolation hangers appropriate for the weights of the units. Care should be taken to ensure that the isolators are installed in such a way that the hanger rods aren't jammed against the isolator casing.
11. The condensers for the split-system air-conditioners in the common areas should be provided with vibration isolation. This isolation can be achieved using Mason ND mounts or equivalent.
12. It is recommended that allowance be made for any water filtration or chemical dispersion canisters and ancillary piping in the mechanical penthouse to be isolated from the building's structure of necessary. Generally, clamps of these small pipes can be oversized and the pipes can be wrapped with neoprene foam materials to prevent them from contributing vibration into the structure if necessary on startup.

Generator Isolation

13. The generator for this building should be placed on minimum 1" deflection spring isolators on top of a rubber pad (Mason W Pad or equivalent loaded to 50 PSI).
14. It is recommended that wiring between the building and the generator be provided with a 4' minimum length of flexible conduit fed from overhead such that it will be able to flex without shaking the building. Configuring the connection this way will prevent vibration from the generator from migrating into the building via the wiring.
15. The intake and discharge silencers as well as the muffler for the generator should be reviewed once the generator specification has been finalized. Silencing of the cooling air inlet and exhaust is expected.

NO.	BY	DESCRIPTION	DATE
6	LB	REVISED AS PER SITE INSTRUCTION 11-19	JUN/25/2018
5	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LM	ISSUED FOR PERMIT	DEC/28/2016
2	OP	REVISED AS PER SITE INSTRUCTION 11-2	AUG/16/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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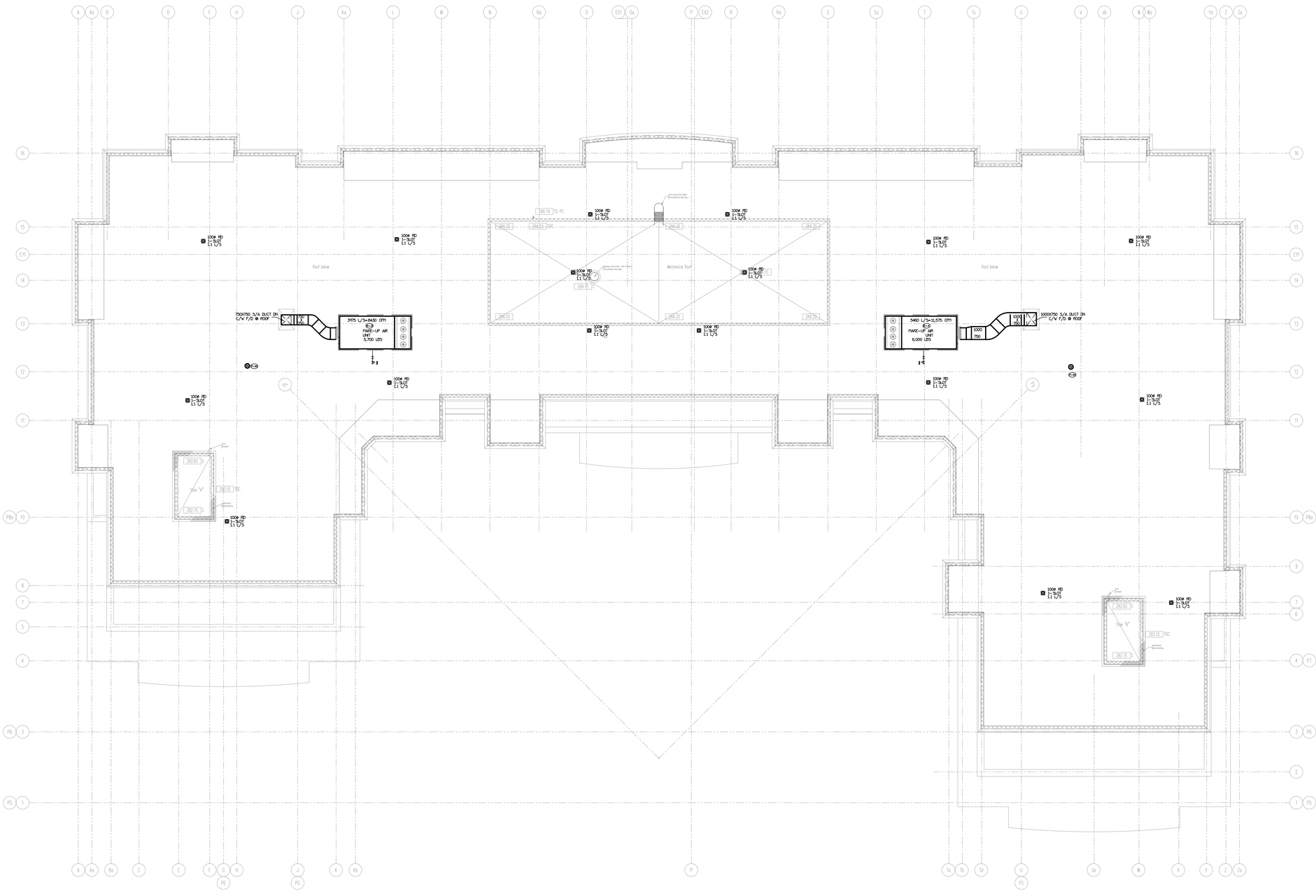
TITLE
PENTHOUSE FLOOR PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:50
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-34
		OF 42



NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION #5-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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TITLE
ROOF PLAN MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	1:100
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-35
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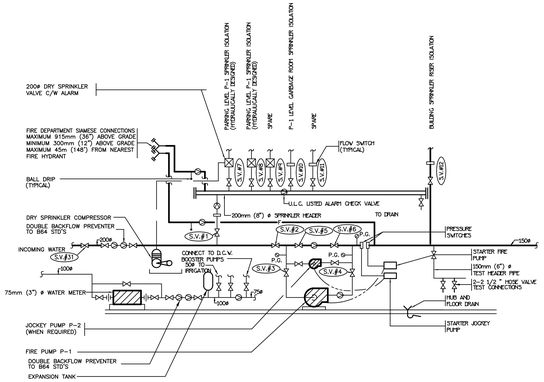
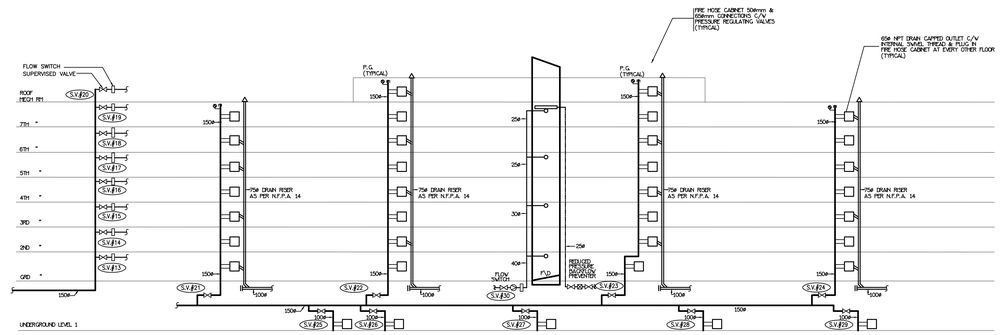
FIRE PROTECTION NOTES

1. SPRINKLER SYSTEMS HAVE BEEN DESIGNED AND MUST BE INSTALLED IN ACCORDANCE WITH N.F.P.A. REGULATION #13 ORDINARY HAZARD.
2. SPRINKLER SYSTEM TO BE GRADED TO ALLOW DRAINAGE IN ACCORDANCE WITH N.F.P.A. #13.
3. ALL FIRE LINES , WET SPRINKLER SYSTEM PIPES , DOMESTIC COLD WATER PIPING AND DRUM DRIPS EXPOSED IN GARAGE TO BE ELECT. TRACED AND INSULATED WITH 25MM THICK PREFORMED INSULATION.
4. MINIMUM HEAD ROOM OF 2000MM TO BE MAINTAINED THROUGHOUT GARAGE.
5. ALL VALVES FOR SPRINKLERS ON STANDPIPES SHALL BE O.S.& Y. TYPE & ELECTRICALLY SUPERVISED. COMPLETE VALVES & CONTROLS BY PLUMBING CONTRACTOR. O.B.C. 3.2.9.6.(11 TO 13).
6. SIAMESE CONNECTIONS TO BE INSTALLED AS PER O.B.C. 3.2.9.5.(1 TO 9).
7. STANDPIPE SYSTEM TO BE INSTALLED AS PER O.B.C. 3.2.9.(1 TO 7)
8. PLUMBING CONTRACTOR TO CO-ORDINATE ALL LOCATIONS OF DRUM DRIPS WITH ELECTRICAL CONTRACTOR BEFORE SPRINKLER INSTALLATION.
9. PROVIDE TEST CONNECTIONS FOR ALL SPRINKLER SYSTEMS AS PER N.F.P.A. #13.
10. CONTRACTOR TO PROVIDE DEFLECTORS ON ELECT. ROOMS SPRINKLERS.
11. WIRE PRESSURE SWITCH FROM EACH DRY SPRINKLER ZONE TO ANNUNICATOR PANEL.
12. MECHANICAL CONTRACTOR SHALL HAVE THE SPRINKLER LAYOUT HYDRAULICALLY DESIGNED, WORKING DRAWINGS & CALCULATIONS SHOULD BE PRESENTED TO THE ENGINEER FOR REVIEW AND SUBMITTED TO THE CITY OF STOUFFVILLE BUILDING DEPARTMENT FOR APPROVAL



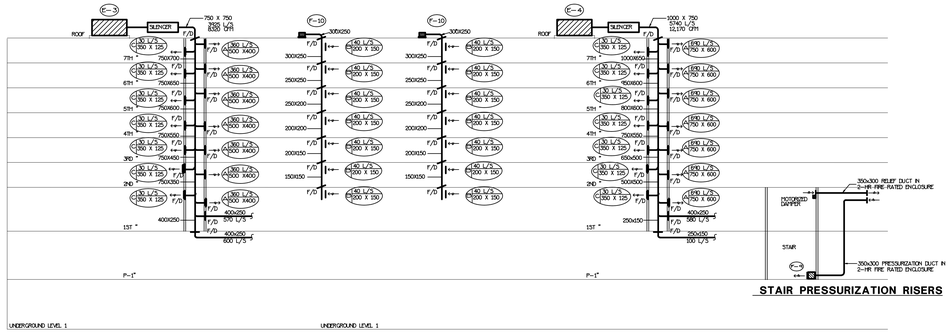
FIRE PROTECTION DIAGRAM



GARBAGE CHUTE

BUILDING FIRE STANDPIPE RISERS

NOTE: 3 INCH DRAIN RISER PROVIDED ADJACENT TO STANDPIPE RISER DISCHARGE INTO STORM DRAINAGE SYSTEM NEARBY



MAKE-UP AIR RISERS

STAIR PRESSURIZATION RISERS

NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION PI-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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TITLE
RISERS MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	NTS
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-36
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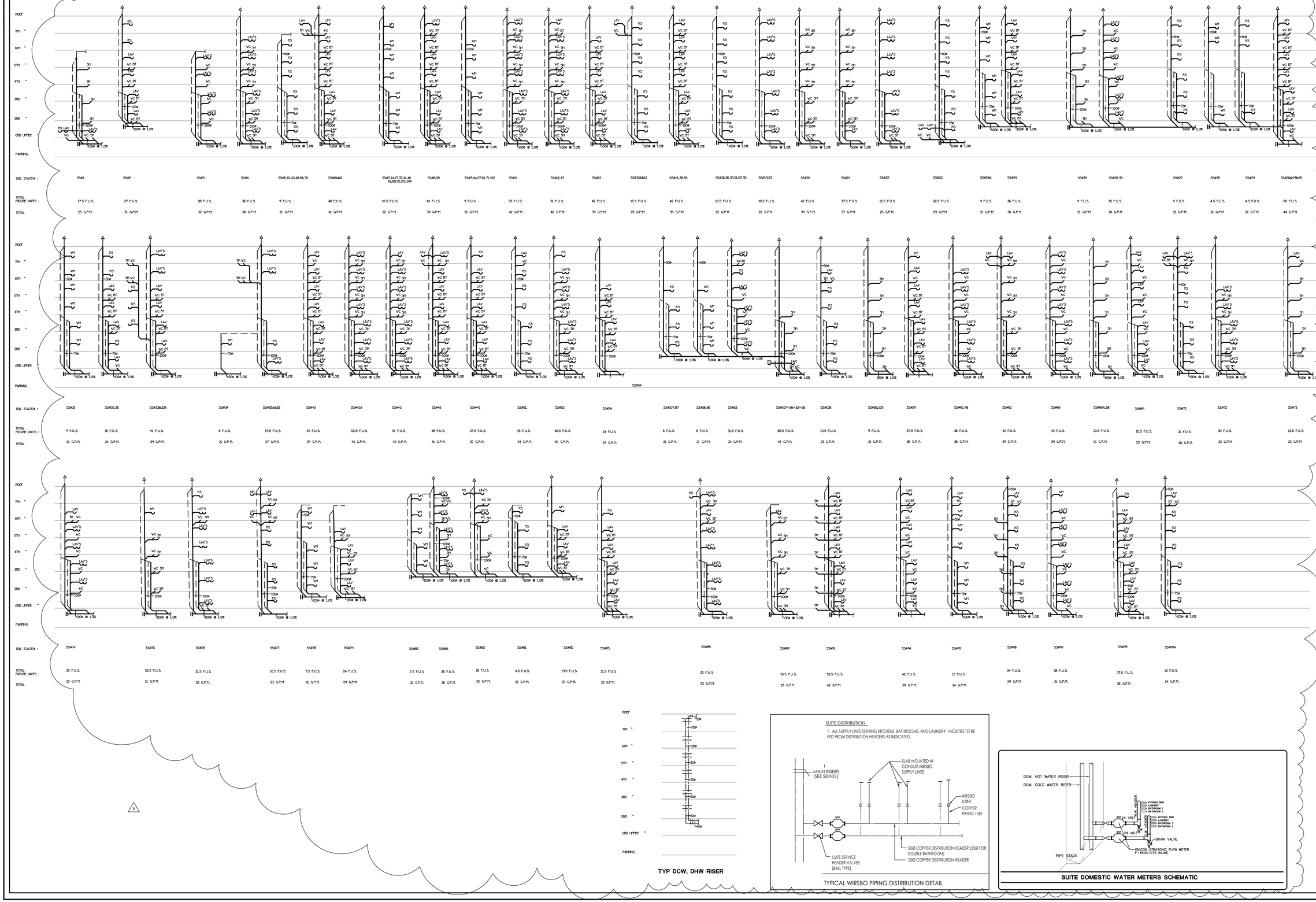

TYP DCW, DHW RISER

SUITE DISTRIBUTION

1. ALL SUPPLY LINES SERVING KITCHENS, BATHROOMS, AND LAUNDRY FACILITIES TO BE FED FROM DISTRIBUTION HEADERS AS INDICATED.

TYPICAL WIRSBO PIPING DISTRIBUTION DETAIL

SUITE DOMESTIC WATER METERS SCHEMATIC

NO.	BY	DESCRIPTION	DATE
5	LB	REVISED AS PER SITE INSTRUCTION M-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
4	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
3	LB	ISSUED AS PER SITE INSTRUCTION M-4	MAY/16/2017
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TITLE
PLUMBING RISERS MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	NTS
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-37
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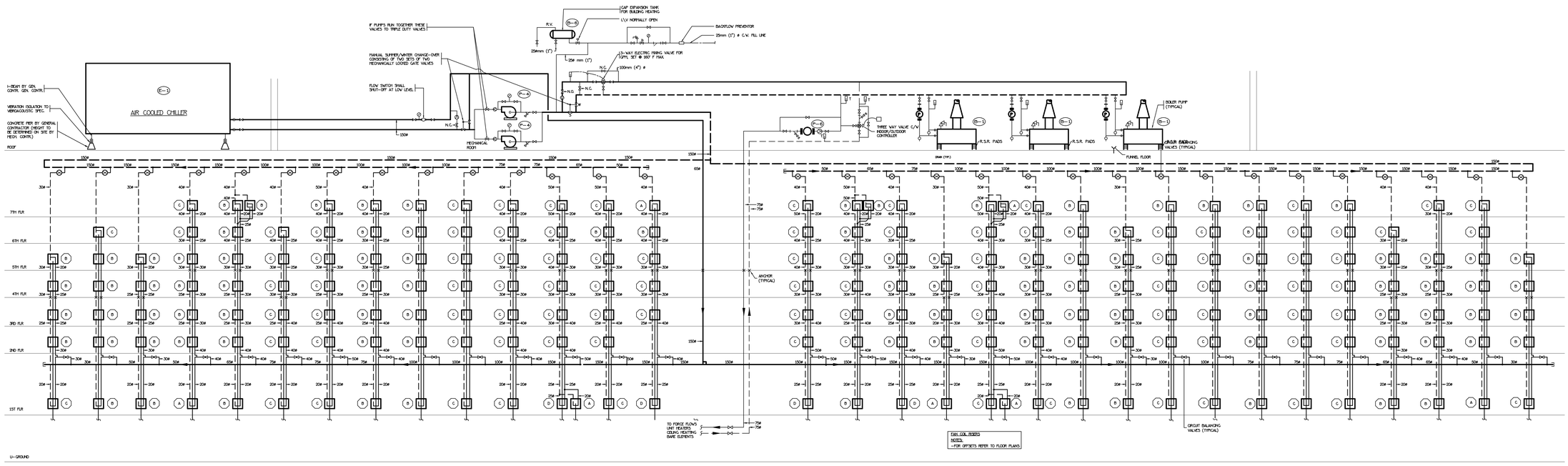

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TITLE
FAN COIL RISERS MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
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DATE	PROJECT	DRAWING
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CONDENSATE NEUTRALIZATION KIT

BOILER ROOM EQUIPMENT SCHEDULE

NO.	TYPE	LOCATION	HEATING OUTPUT	CAPACITY	QUANTITY SIZE	H.P. K.W.	MAKE	MODEL	REMARKS
B-1	HEATING BOILER	BOILER ROOM-1	1990 MBH		4		RAYPAK	RAYPAK H-2005	C/W 3006 STAINLESS STEEL HEAT EXCHANGER, 304SS CUPRO NICKEL TUBE SHELL, 304SS TUBE SHEET, 316SS TUBE SUPPORT, 316SS BAFFLES, 316SS TIE ROD, 316SS WATER BOX, INSTRUMENTATION & NEUTRALIZATION KIT
B-2	CDN HOT WATER HEATING BOILER	BOILER ROOM			2		RAYPAK	RAYPAK H-1005	1006 SIZE STAINLESS STEEL HEAT EXCHANGER, 304SS CUPRO NICKEL TUBE SHELL, 304SS TUBE SHEET, 316SS TUBE SUPPORT, 316SS BAFFLES, 316SS TIE ROD, 316SS WATER BOX, INSTRUMENTATION & NEUTRALIZATION KIT
B-3	DOMESTIC HOT WATER TANK	BOILER ROOM		2915 U.S. GALLONS	1 2100 ø X 2700 H		CLEMFER		C/W 1400 P.S.I. SUBSTRATE & INSULATION, WEIGHT 25,000 LBS
B-4	COMBUSTION AIR	BOILER ROOM			1000 W X 600 D				LOCATED 150mm (6") BELOW SLAB C/W SWEEPERS AND DUCTED TO LOW LEVEL C/W INSULATION
B-5	RELIEF AIR	BOILER ROOM			1000 W X 600 D				LOCATED AT UNDERSIDE OF BOILER ROOM ROOF SLAB C/W SWEEPERS
B-6	EMERGENCY GAS SHUT-OFF VALVE	BOILER ROOM							
B-7	HEATING SYSTEM EXPANSION TANK	BOILER ROOM-1		487 U.S. GALLONS	900 ø X 3000 L		CLEMFER		MOUNTED AS HIGH AS POSSIBLE WEIGHT 5500 LBS
B-8									
B-9	REVERSE ACTING THERMOSTAT	ELEV MACH RM & ELECT RM							INTERLOCK WITH VENT AU & C/C MOTORS TO STOP UNIT IN EVENT OF GAS DETECTION IN UNIT SYSTEM
B-10	ELECTRIC UNIT HEATER	ELEV MACH RM & MECH RMS		5 KW					C/W THERMOSTAT

HEATING UNIT SCHEDULE

UNIT No	DESCRIPTION	LOCATION	HEATING K.W. M.B.H.	HEATING L/S C.F.M.	H.P. K.W.	ELECTRICAL CHARACTERISTICS	MAKE	MODEL	REMARKS
H-1	RTV-2A	VESTIBULES & MOVING ROOM	16.7 57	0.360 5.71	1/6 H.P.	120/1/60	ENGINEER-AIR	CUH-8	C/W THERMOSTAT, SPEED SWITCH & LOCKABLE TAMPERPROOF GUARD
H-2	RTV-2A	STAIRS & CORRIDORS	8.6 29.5	0.086 2.95	1/6 H.P.	120/1/60	ENGINEER-AIR	CUH-4	C/W THERMOSTAT, SPEED SWITCH & LOCKABLE TAMPERPROOF GUARD
H-3	MODEL 11	GARBAGE ROOM	11.7 40	0.252 4.0	1/25 H.P.	120/1/60	ENGINEER-AIR	H-1	C/W THERMOSTAT & STARTER
H-4	BARE ELEMENT 3'-0"	BASEMENT	0.95 3.24	.02 .324				CU/AL 1-1/4X4A	TO RUN CONTINUOSLY
H-5	BASEBOARD 2800WENCLOSURE 2800ELEMENT		9.36	0.936			ENGINEER-AIR	WF-4	1000MM HIGH FREE STANDING (STAINLESS STEEL) ENDS, FRONT C/W STEAM TUBE 4"x4"x1/4" ALUMINUM ENCLOSURE
H-6	BASEBOARD 2800WENCLOSURE 2800ELEMENT		9.36	0.936			ENGINEER-AIR	WF-4	1000MM HIGH FREE STANDING (STAINLESS STEEL) ENDS, FRONT C/W STEAM TUBE 4"x4"x1/4" ALUMINUM ENCLOSURE
H-7									

NOTE: FOR SUPPLEMENTAL HEATING IN COMMON AREAS AND SUITES REFER TO CORRESPONDING ELECTRICAL DRAWINGS.

FAN COIL UNIT SCHEDULE

UNIT No	TYPE	LOCATION	HEATING K.W. M.B.H.	HEATING L/S C.F.M.	COOLING TOTAL K.W. M.B.H.	COOLING TOTAL L/S C.F.M.	L/S G.P.M.	EXTERNAL S.P. K.P.A. INS.	POWER K.W. AMPS/ØS	ELECTRICAL CHARACTERISTICS	MAKE	MODEL	OPERATING CONDITIONS	REMARKS
A	VERTICAL FANCOIL	TYPICAL SUITES	4.69 16000	0.113 1.80	2.49 8500	175 350	1.8	.2	2.8	120/1/60	UNILUX	L-350 F27I-X13 MOTOR	SUPPLY: ENTERING AIR 75ºF/67ºF WB (24ºC/20ºC WB) ENTERING WATER 45ºF(7ºC)	UNITS C/W ECM HIGH EFFICIENT MOTORS UNITS C/W FIELD INSTALLED MODELS, 2 WAY VALVES, ALL DUCT EXTENSIONS AND REMOTE GRILLES BY VENTILATION CONTRACTOR C/W VOLUME DAMPERS
B	VERTICAL FANCOIL	TYPICAL SUITES	5.71 19500	0.152 2.40	3.31 11300	225 450	2.4	.2	3.53	120/1/60	UNILUX	L-450 F27I-X13 MOTOR		
C	VERTICAL FANCOIL	TYPICAL SUITES	7.71 26500	0.227 3.60	4.69 16000	310 620	3.6	.2	4.3	120/1/60	UNILUX	L-600 F27I-X13 MOTOR	WATER: ENTERING AIR 65ºF(18ºC)	
D	VERTICAL FANCOIL	TYPICAL SUITES	12.89 44000	0.305 4.80	6.65 22400	400 800	4.8	.2	5.5	120/1/60	UNILUX	L-800 F27I-X13 MOTOR	ENTERING WATER 160ºF(71ºC)	
E	HORIZONTAL FANCOIL	GROUND FLOOR	1 ROW HTG COIL 24000	3.0	18000	3.5		.2	1/6 HP	120/1/60	CARRIER	42QD06 A00079		
F	HORIZONTAL FANCOIL	GROUND FLOOR	1 ROW HTG COIL 3600	4.8	24000	400 800		.2	1/6 HP	120/1/60	CARRIER	42QD06 A00079	4	

NOTE: ALL FANCOIL UNITS SHALL BE C/W ELECTRIC HEATERS - SUITES WITH ONE FANCOIL UNIT SHALL BE C/W 1000 WATT ELECTRIC HEATERS - SUITES WITH MULTIPLE FANCOIL UNITS SHALL BE C/W 750 WATT ELECTRIC HEATERS EACH

✱ NOTE: MOTORS FOR SPECIFIED EQUIPMENT TO BE HIGH EFFICIENCY, TO ASHRA 90.1 STANDARDS (JULY,1,1992 EFFICIENCY LEVELS)

EQUIPMENT SCHEDULE

UNIT No	DESCRIPTION	LOCATION	HEATING K.W. M.B.H.	HEATING L/S C.F.M.	COOLING TOTAL K.W. M.B.H.	COOLING TOTAL L/S C.F.M.	L/S G.P.M.	EXTERNAL S.P. K.P.A. INS.	POWER K.W. AMPS/ØS	R.P.M.	ELECTRICAL CHARACTERISTICS	MAKE	MODEL	WEIGHT KGS LBS	OPERATING CONDITIONS	REMARKS
✱ C-1	CHILLER	ROOF			230 TONS		430 EWP		245 KW		600/3/60 350 MCA	AIR COOLED SCREW CHILLER	YCAV0075A08	20,000	42ºF/54ºF	40% ETHYLENE GLYCOL OPTIMIZED BY OWNER ENGINEER AND CONTRACTOR. SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS.
✱ C-2																
✱ C-3	MAKE-UP AIR UNIT	ROOF	ROOFTOP INPUT 8320	ROOFTOP INPUT 8320	245 MBH	8320		1.0"	PFA 55.06 10 HP	876	600/3/60	ENG AIR	FMD83/DJA100	5700		90 % EFFICIENCY C/W 3000PSI HIGH PROF. CORE HEATING CAPABILITY BASE WITH 150 FLOOR OPENING, ROOFTOP CONFIGURATION, C/W GAS HEAT EXCHANGER, MODULATING GAS BURNER, MODULATING OUTSIDE AIR DAMPER, C/W ALL REQUIRED CONTROLS AND SAFETIES, C/W 2" PLEATED FILTERS
✱ C-4	MAKE-UP AIR UNIT	ROOF	ROOFTOP INPUT 12,170	ROOFTOP INPUT 12,170	345 MBH	12,170		1.0"	PFA 70.76 15.0 HP	761	600/3/60	ENG AIR	FMD285/DJA140	6000		90 % EFFICIENCY C/W 3000PSI HIGH PROF. CORE HEATING CAPABILITY BASE WITH 150 FLOOR OPENING, ROOFTOP CONFIGURATION, C/W GAS HEAT EXCHANGER, MODULATING GAS BURNER, MODULATING OUTSIDE AIR DAMPER, C/W ALL REQUIRED CONTROLS AND SAFETIES, C/W 2" PLEATED FILTERS, C/W ACCESS DOOR IN UNIT & INSULATED CABINET
C-5	SPLIT SYSTEM HORIZONTAL BLOWER & COIL	P-1 LEVEL GARBAGE PIT			24.0 MBH	800		0.5"	1/4 HP		208/1/60	LENNOX	CB29M1-26	125		C/W THERMOSTAT AND FILTER
	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE			24.0 MBH				MAX FUSE 15A PCA 14A		208/1/60	LENNOX	HS29-024			C/W EXPANSION VALVE KIT, LOW AMBIENT CONTROL KIT, RUN REFRIGERANT LINES FROM GARAGE TO BLOWER ON GARAGE ROOF
C-6	SPLIT SYSTEM HORIZONTAL BLOWER & COIL	P-1 LEVEL COMMON ROOMS			18.0 MBH	600		0.5"	1/4 HP		208/1/60	LENNOX	CB29M1-21	125		C/W THERMOSTAT AND FILTER
	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE			18.0 MBH				MAX FUSE 15A PCA14A		208/1/60	LENNOX	HS29-018			C/W EXPANSION VALVE KIT, LOW AMBIENT CONTROL KIT, RUN REFRIGERANT LINES FROM GARAGE TO BLOWER ON COMMON ROOM
C-7																
C-8	SPLIT SYSTEM HORIZONTAL BLOWER & COIL	GROUND FLOOR ANTENTY/LOBBY			24.0 MBH	800		0.5"	1/4 HP		208/1/60	LENNOX	CB29M1-26	125		C/W THERMOSTAT AND FILTER
	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE			24.0 MBH				MAX FUSE 15A PCA 14A		208/1/60	LENNOX	HS29-024			C/W EXPANSION VALVE KIT, LOW AMBIENT CONTROL KIT, RUN REFRIGERANT LINES FROM GARAGE TO BLOWER ON GROUND FLR
C-9																
C-10	SPLIT SYSTEM HORIZONTAL BLOWER & COIL	ELEVATOR RM MECH PENTHOUSE				1200			FAN FUSE 6A 1.0 HP		208/1/60	CARRIER	40 HPC036K-3			C/W REMOTE SYSTEM WIRING KIT INSIDE ROOF-TOP UNIT REMOTE MOUNTED CONDENSING UNIT TYPICAL OF 2 UNITS, C/W CONDENSATE PUMP TYPICAL OF 2 UNITS, C/W 2" THICK DOUBLE SKIN INSULATED CABINET, C/W ALL REQUIRED CONTROLS AND SAFETIES, C/W ACCESS DOOR IN UNIT & INSULATED CABINET
18.0 MBH	SPLIT SYSTEM HORIZONTAL BLOWER & COIL	MECH PENTHOUSE			36 MBH				FAN FUSE 15 PCA 15A		208/1/60	CARRIER	24ANA3A6A003			
C-11	SPLIT SYSTEM CONDENSING UNIT	GROUND FLOOR CACF			18.0 MBH	600		0.5"	1/4 HP		208/1/60	LENNOX	CB29M1-21			C/W THERMOSTAT AND FILTER
		P-1 LEVEL GARAGE			18.0 MBH				MAX FUSE 15A PCA14A		208/1/60	LENNOX	HS29-018			C/W EXPANSION VALVE KIT, LOW AMBIENT CONTROL KIT, RUN REFRIGERANT LINES FROM GARAGE TO BLOWER ON GROUND FLR

NOTE: ALL SUITE FANS SHOULD BE HM (2000) PERFORMANCE CERTIFIED

NOTE: DRYER FANS AND CONTROL DEVICES SHOULD BE ULC APPROVED FOR DRYER BOOSTER OPERATIONS

✱ NOTE: MOTORS FOR SPECIFIED EQUIPMENT TO BE HIGH EFFICIENCY, TO ASHRA 90.1 STANDARDS (JULY,1,1992 EFFICIENCY LEVELS)

FAN SCHEDULE (PHASE I AND II)

NO.	TYPE	LOCATION	CAPACITY L/S	CAPACITY C.F.M.	RPM	H.P. K.W.	ELECTRICAL CHARACTERISTICS	MAKE	MODEL	OPENING INCHES MM	REMARKS
F-1	EXHAUST	SUITE	100	30		2.04WPS	120/1/60	---	---		
F-2	EXHAUST	SUITE	100 50	30	1100	0.15WPS	120/1/60	GREENHECK SQUIRREL CAGE	SQ-100-VG SQ-100-VG		
F-3	DRYER EXHAUST	SUITE	100 50	4	2800	1.15WPS	120/1/60	GREENHECK SQUIRREL CAGE	SQ-100-VG SQ-100-VG		
F-4	EXHAUST	SUITE	200 100	30	2350	1.06WPS	120/1/60	GREENHECK SQUIRREL CAGE	SQ-150-VG SQ-150-VG		
F-5											
F-6	EXHAUST	ELEVATOR MACH ROOM (ROOF)	2000	125	1100	1/3 HP	120/1/60	PENN	DOMEX DX035	18 X 18	C/W REVERSE ACTING LINE VOLT THERMOSTAT
F-7											
F-8	EXHAUST	SUB ELECTRICAL ROOM ROOF	2000	125	1550	1/2 HP	120/1/60	PENN	P--16RA	22-3/8 X 22-3/8	C/W REVERSE ACTING LINE VOLT THERMOSTAT
F-9	LOWER STAIR PRESSURIZATION	P-1 LEVEL PARKING DRY	1000	375	880	1/2 HP	120/1/60	PENN	ZC-14		C/W GRAVITY B.D.D. IN INLET
F-10	EXHAUST	ROOF	560	50	1280	3/4 HP	120/1/60	PENN	DOMEX DX085	12 X 12	C/W ROOF CURB
F-11	EXHAUST	P--1 LEVEL PARKING DRY	30,000	0.125	810	5.0 HP	600/3/60	PENN	BIDH48	54"x54"	BIRDSCREEN & BACKDRAFT DAMPER C/W 3 PHASE MONITOR & LINE VOLT CONTROL UNIT
F-12	EXHAUST	LOCKERS P--1 LEVEL	250	125	1050	75 WATTS	120/1/60	PENN	ZB5		TO RUN CONTINUOSLY
F-13	EXHAUST	LOCKERS P--1 LEVEL	750	125	1050	89WATTS	120/1/60	PENN	ZB205		TO RUN CONTINUOSLY
F-14	EXHAUST	RECYCLING P--1 LEVEL	500	125	1050	83WATTS	120/1/60	PENN	ZB105		TO RUN CONTINUOSLY
F-15	EXHAUST	SEC. ELECT RM P--1 LEVEL	1500	125	1550	1 HP	120/1/60	PENN	ZB2H		C/W REVERSE ACTING LINE VOLT THERMOSTAT
F-16	EXHAUST	GARBAGE RM P--1 LEVEL	1500	125	1550	1 HP	120/1/60	PENN	ZB2H		TO RUN CONTINUOSLY
F-17	EXHAUST	MAIN ELECT ROOM P--1 LEVEL	4700	0.125	590	3/4 HP	120/1/60	PENN	BIDH36		C/W REVERSE ACTING LINE VOLT THERMOSTAT
F-18	EXHAUST	AMENITY 1ST FLOOR	350	125	1050	130WATTS	120/1/60	PENN	ZB4		C/W LETROL SPEED CONTROLLER #LT-50
F-19	EXHAUST	AMENITY 1ST FLOOR	500	125	1050	153WATTS	120/1/60	PENN	ZB105		C/W LETROL SPEED CONTROLLER #LT-50
F-20	EXHAUST	AMENITY 1ST FLOOR	350	125	1050	130WATTS	120/1/60	PENN	ZB4		C/W LETROL SPEED CONTROLLER #LT-50
F-21	EXHAUST	PROP. MANAGEMENT 1ST FLOOR	200	125	1050	77WATTS	120/1/60	PENN	ZB5		C/W LETROL SPEED CONTROLLER #LT-50
F-22	EXHAUST	MAIN LOBBY 2ND FLOOR	700	125	1050	210WATTS	120/1/60	PENN	ZB2H		C/W LETROL SPEED CONTROLLER #LT-50
F-23	EXHAUST	ELECTRICAL ROOM 1ST FLOOR	200	125	1050	77WATTS	120/1/60	PENN	ZB5		C/W REVERSE ACTING LINE VOLT THERMOSTAT

BRANCH SIZES SCHEDULE

FOR DOMESTIC HOT AND COLD WATER

UNIT	HOT mm (inches)	COLD mm (inches)
SINGLE KITCHEN	13mm (1/2")	13mm (1/2")
DOUBLE KITCHEN	13mm (1/2")	13mm (1/2")
SINGLE BATHROOM	13mm (1/2")	13mm (1/2")
SINGLE BATHROOM/SINGLE KITCHEN	13mm (1/2")	13mm (1/2")
INDIVIDUAL WASHER	13mm (1/2")	13mm (1/2")
DOUBLE BATHROOM	13mm (1/2")	13mm (1/2")
DOUBLE BATHROOM/DOUBLE KITCHEN	19mm (3/4")	19mm (3/4")
THREE OR MORE BATHROOMS	19mm (3/4")	19mm (3/4")

GRILLE SCHEDULE

TYPE (BASIS OF DESIGN)	DESCRIPTION	DAMPER	MAKE	TYPE	NOTES
A	CORRIDOR FRESH AIR SUPPLY	YES	H & C	A47-2	NOTE: FIXED FRONT BLADES AT 45°
B	EXHAUST/ RETURN	YES	H & C	A70D	
C	SUPPLY	YES	H & C	AN647	
D	TRANSFER	NO	H & C	T987V	
E	PRESSURIZATION/ SUPPLY	NO (SEE NOTES)	H & C	OR 500	TWO DAMPER EQUIPT. TO BE MOUNTED ON FLOOR PLANS & RISERS)
F	DIFFUSER	YES	H & C	DAE	
G	LOUVRE	NO	---	MIN. 60% FREE AREA	C/W BIRDSCREEN
H	DOOR GRILLE	NO	H & C	T 980	
I	LINEAR DIFFUSER	YES	H & C	4000	
M	FANCOIL SUPPLY AIR GRILLE	YES	BY FANCOIL UNIT MANUFACTURER		

SPRINKLER PIPE

BRANCH SIZING CHART

NO. OF HEADS	PIPE SIZE mm (inches)
1-2	25mm (1")
3-	30mm (1-1/4")
4-5	40mm (1-1/2")
6-10	50mm (2")

NOTE:
WHEN THERE ARE NINE HEADS IN A BRANCH, THE TWO END LENGTHS ARE TO BE 25mm (1") ø & 30mm (1-1/4") & THE SIZE THERE AFTER AS PER STANDARD SCHEDULE

✱ NOTE: MOTORS FOR SPECIFIED EQUIPMENT TO BE HIGH EFFICIENCY, TO ASHRA 90.1 STANDARDS (JULY,1,1992 EFFICIENCY LEVELS)

PUMP SCHEDULE

NO.	TYPE	LOCATION	CAPACITY U.S.GPM L/S	PRESS.DIF FT KPA	RPM	H.P. K.W.	ELECTRICAL CHARACTERISTICS	MAKE	MODEL	REMARKS
P-1	FIRE PUMP	SPRINKLER ROOM	500	160	3500	60 HP	600/3/60	APPLETRONS	SERIES 4600PE 5x4x20F	C/W CONTROL PACKAGE & TRANSFER SWITCH ULC LISTED
P-2	JOCKEY PUMP	SPRINKLER ROOM	5	170	3500	1.0 HP	600/3/60	AURORA	MODEL #833 JP-175-5	C/W STARTER
P-3	DOMESTIC BOOSTER PUMP PACKAGE	SPRINKLER ROOM	50/110/130 SERIES 70H	105	3500	3/7/7	600/3/60	BELL & GOSSETT	1-1/4X1/2 1-1/4X1/2 1-1/4X1/2	C/W CONTROL PACKAGE TWO PUMP SYSTEM VARIABLE SPEED DRIVE
P-4	FAN COIL HTG/ COOLING PUMPS	BOILER ROOM	430	80	1750	15 HP	600/3/60	BELL & GOSSETT	SERIES 80 4 X 4 X 9-1/2	TWO PUMPS REQUIRED
P-5										
P-6	DIRECT HEATING PUMP	BOILER ROOM	60	60	1750	3 HP	600/3/60	BELL & GOSSET	SERIES 80 1-1/2 X1-/2 2 X 9-1/2B	
P-7	DOMESTIC RECIRC. PUMP	BOILER ROOM	10	20	1750	1/2 HP	120/1/60	BELL & GOSSET	HD-3	ALL BRONZE C/W TYPE GLOCK
P-8	SANITARY SUMP PUMP	PARKING LEVEL	70	40	1750	1 HP	600/3/60	HYDROMATIC	3P--100AH-3	DUPLEX C/W ALTERNATOR & HIGH WATER ALARM
P-9	STORM SUMP PUMP	PARKING LEVEL	100	40	1750	1 HP	600/3/60	HYDROMATIC	3P--100AH-3	DUPLEX C/W ALTERNATOR & HIGH WATER ALARM
P-10	ELEVATOR SUMP PUMP	PARKING LEVEL	50	20	1750	1/2 HP	120/1/60	HYDROMATIC	3P--40	SIMPLEX C/W HIGH WATER ALARM
P-11										
P-12										

NOTES:
-MECHANICAL CONTRACTOR MUST ASSUME COST FOR ANY INCREASE IN ELECTRICAL POWER REQUIREMENTS DUE TO SUBSTITUTION OF EQUIPMENT SPECIFIED
-ALL PUMP/FAN STARTERS & DISCONNECTS LOCATED IN PUBLIC AREAS SHALL BE C/W LOCKABLE TAMPERPROOF GUARDS SUPPLIED & INSTALLED BY PLUMBING & VENTILATION CONTRACTORS

ELECTRICALLY SUPERVISED VALVE SCHEDULE

SUPERVISED VALVE NO.	SYSTEM	LOCATION
S.V.#1	SPRINKLER SYSTEM ISOLATION	SPRINKLER ROOM
S.V.#2	STANDPIPE SYSTEM ISOLATION	SPRINKLER ROOM
S.V.#3	FIRE PUMP INLET ISOLATION	SPRINKLER ROOM
S.V.#4	FIRE PUMP OUTLET ISOLATION	SPRINKLER ROOM
S.V.#5	FIRE PUMP BYPASS CHECK VALVE ISOLATION	SPRINKLER ROOM
S.V.#6	FIRE PUMP BYPASS CHECK VALVE ISOLATION	SPRINKLER ROOM
S.V.#7	PARKING GARAGE LEVEL-1 SPRINKLER ISOLATION	SPRINKLER ROOM
S.V.#8	PARKING GARAGE LEVEL-1 SPRINKLER ISOLATION	SPRINKLER ROOM
S.V.#9	SPARE	SPRINKLER ROOM
S.V.#10	P-1 GARBAGE ROOM SPRINKLER ISOLATION	SPRINKLER ROOM
S.V.#11	SPARE	SPRINKLER ROOM
S.V.#12	BUILDING SPRINKLER ISOLATION	SPRINKLER ROOM
S.V.#13	GROUND FLOOR SPRINKLER ISOLATION	1ST FLOOR MECH. CLOSET
S.V.#14	SECOND FLOOR SPRINKLER ISOLATION	2ND FLOOR MECH. CLOSET
S.V.#15	THIRD FLOOR SPRINKLER(SUITES) ISOLATION	3RD FLOOR MECH. CLOSET
S.V.#16	4TH FLOOR SPRINKLER(SUITES) ISOLATION	4TH FLOOR MECH. CLOSET
S.V.#17	5TH FLOOR SPRINKLER(SUITES) ISOLATION	5TH FLOOR MECH. CLOSET
S.V.#18	6TH FLOOR SPRINKLER(SUITES) ISOLATION	6TH FLOOR MECH. CLOSET
S.V.#19	7TH FLOOR SPRINKLER(SUITES) ISOLATION	7TH FLOOR MECH. CLOSET
S.V.#20	MECH ROOM ROOFSPRINKLER(SUITES) ISOLATION	8TH FLOOR MECH. CLOSET
S.V.#21	STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#22	STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#23	STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#24	STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#25	GARAGE STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#26	GARAGE STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#27	GARAGE STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#28	GARAGE STANDPIPE RISER ISOLATION	P--1 LEVEL PARKING GARAGE
S.V.#29	GARBAGE CHUTE SPRINKLER ISOLATION	GARBAGE ROOM GROUND FLOOR
S.V.#30	INCOMING WATER ISOLATION	SPRINKLER ROOM
S.V.#31		
S.V.#32		
S.V.#33		

NO.	BY	DESCRIPTION	DATE
7	LB	REVISED AS PER SITE INSTRUCTION 11-23	AUG/14/2018
6	LB	REVISED AS PER SITE INSTRUCTION 11-21	JUL/06/2018
5	LB	REVISED AS PER SITE INSTRUCTION 11-11	DEC/11/2017
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

REVISIONS

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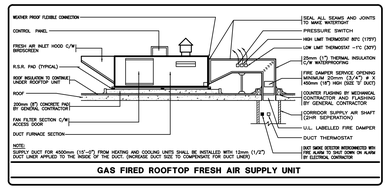
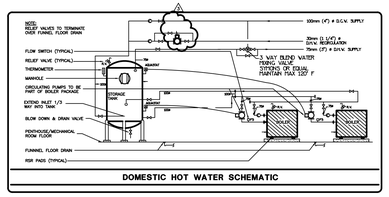
TITLE
EQUIPMENT SCHEDULE MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

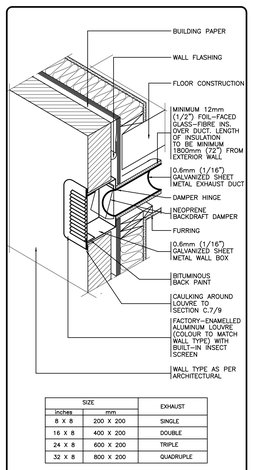
DRAWN	CHECKED	SCALE
GC	BT	NTS
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-39
		OF 42



GAS FIRED ROOFTOP FRESH AIR SUPPLY UNIT

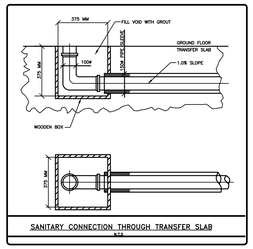


DOMESTIC HOT WATER SCHEMATIC

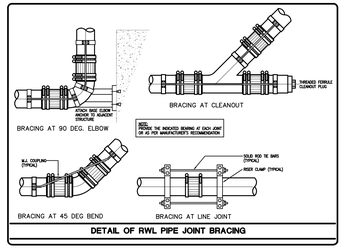


SIZE		EXHAUST
inches	mm	
8 X 8	200 X 200	SINGLE
16 X 8	400 X 200	DOUBLE
24 X 8	600 X 200	TRIPLE
32 X 8	800 X 200	QUADRUPLE

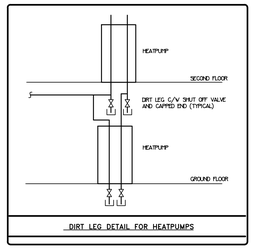
EXHAUST DISCHARGE WALL BOX



SANITARY CONNECTION THROUGH TRANSFER SLAB
N.T.S.

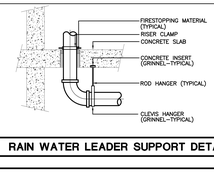


DETAIL OF RWL PIPE JOINT BRACING

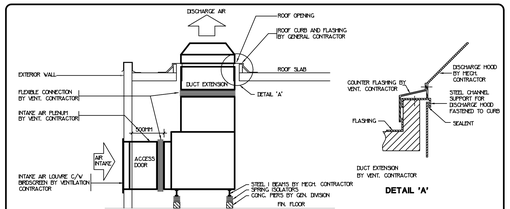


DIRT LEG DETAIL FOR HEATPUMPS

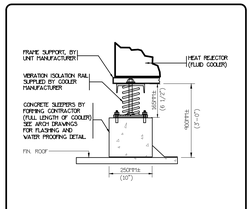
NOTE:
ASBESTOS-CEMENT PIPE IS SUPPORTED:
(i) AT INTERVALS NOT EXCEEDING 2000mm (6ft. 7in.) OR HAVE TWO SUPPORTS FOR EVERY 4m. (13ft. 1in.) LENGTH OF PIPE, AND
(ii) AT INTERVALS NOT EXCEEDING 1000mm (3ft. 3in.) WHERE THE LENGTH OF PIPE BETWEEN ADJACENT FITTINGS IS 300mm (11 3/4in.) OR LESS.



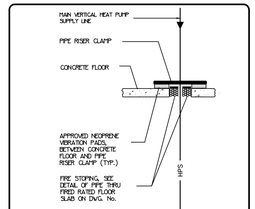
RAIN WATER LEADER SUPPORT DETAIL



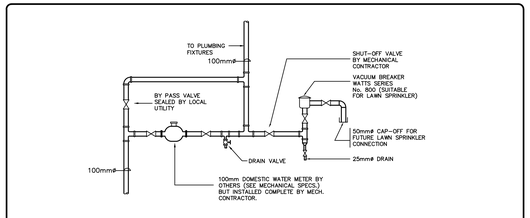
FLUID COOLER SECTION



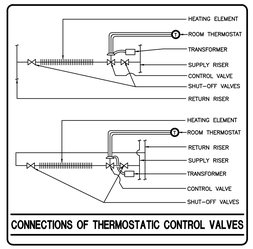
TYPICAL FLUID COOLER SUPPORT



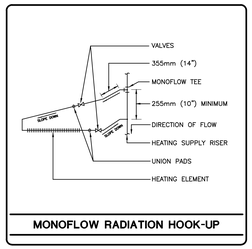
TYPICAL VERTICAL FAN COIL MAIN PIPE SUPPORT DETAIL



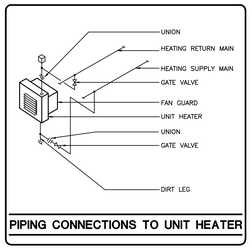
DOMESTIC WATER METER SCHEMATIC
N.T.S.



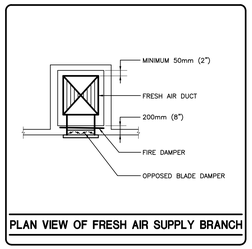
CONNECTIONS OF THERMOSTATIC CONTROL VALVES



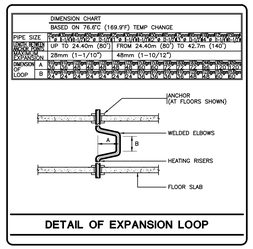
MONOFLOW RADIATION HOOK-UP



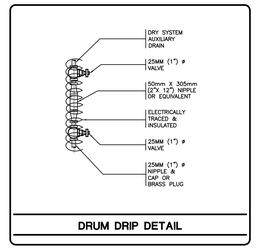
PIPING CONNECTIONS TO UNIT HEATER



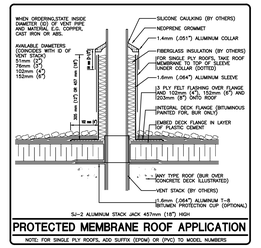
PLAN VIEW OF FRESH AIR SUPPLY BRANCH



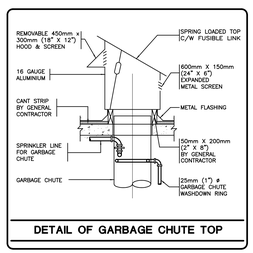
DETAIL OF EXPANSION LOOP



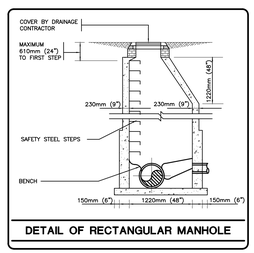
DRUM DRIP DETAIL



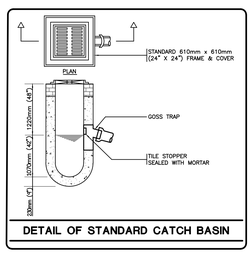
PROTECTED MEMBRANE ROOF APPLICATION
NOTE: FOR SINGLE PLY ROOFS, ADD SUFFIX (EPDM) OR (PVC) TO MODEL NUMBERS



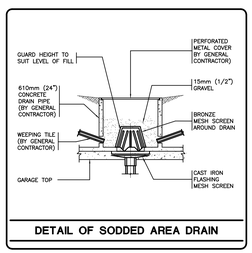
DETAIL OF GARBAGE CHUTE TOP



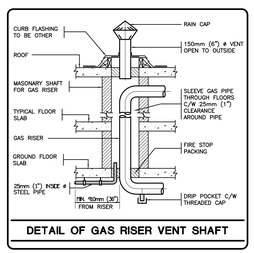
DETAIL OF RECTANGULAR MANHOLE



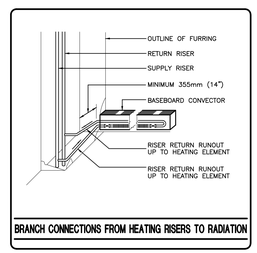
DETAIL OF STANDARD CATCH BASIN



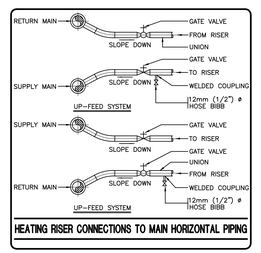
DETAIL OF SODDED AREA DRAIN



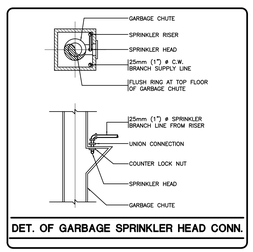
DETAIL OF GAS RISER VENT SHAFT



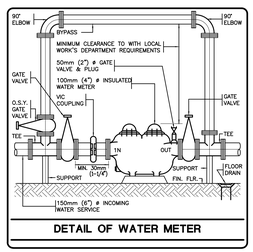
BRANCH CONNECTIONS FROM HEATING RISERS TO RADIATION



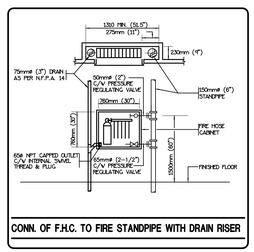
HEATING RISER CONNECTIONS TO MAIN HORIZONTAL PIPING



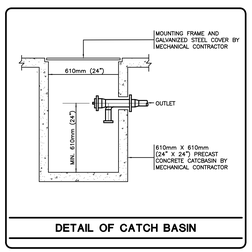
DET. OF GARBAGE SPRINKLER HEAD CONN.



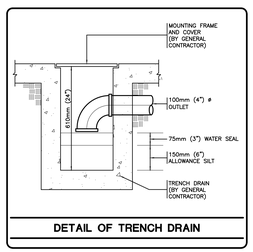
DETAIL OF WATER METER



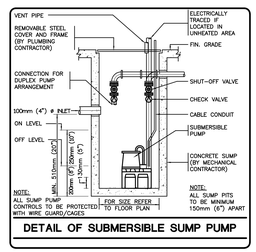
CONN. OF F.H.C. TO FIRE STANDPIPE WITH DRAIN RISER



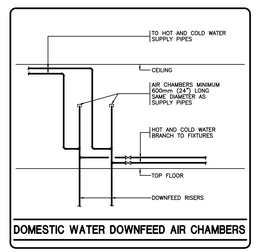
DETAIL OF CATCH BASIN



DETAIL OF TRENCH DRAIN



DETAIL OF SUBMERSIBLE SUMP PUMP



DOMESTIC WATER DOWNFEED AIR CHAMBERS

NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION 11-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

REVISIONS

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United Engineering Inc. is not responsible for the accuracy of Architectural, structural, interior design, etc. on this drawing.
Refer to the appropriate trade drawings before proceeding with any work. Installation must conform to all applicable codes and requirements of the authorities having jurisdiction.
This drawing is not to be scaled, all symbols are graphic representations only.

LICENSED PROFESSIONAL ENGINEER
Y. HOU
100117097
PROVINCE OF ONTARIO

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Mechanical Electrical Consulting Engineers
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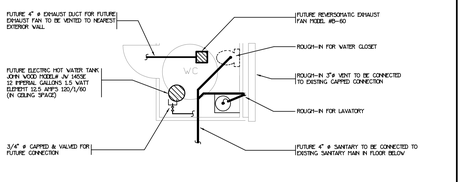
Tel: (416) 398 1999, Fax: (416) 398 1933

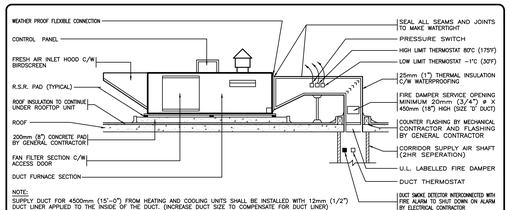
TITLE
DETAILS MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

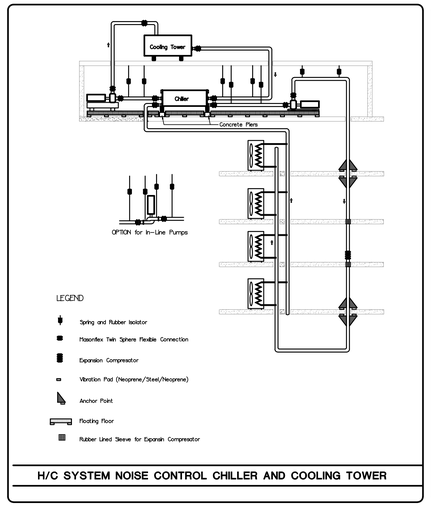
DRAWN	CHECKED	SCALE
GC	BT	NTS
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-40
		OF 42



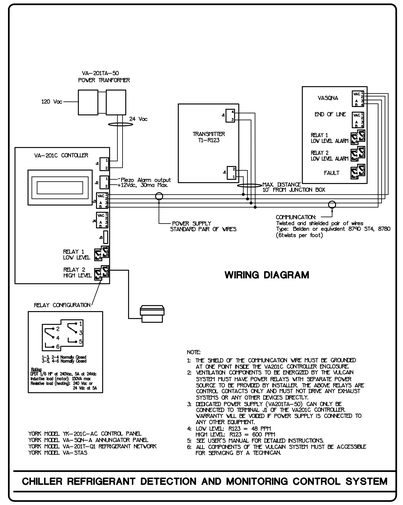
TYPICAL WASHROOM DETAIL (COMMERCIAL)



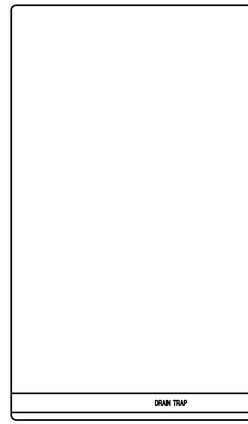
GAS FIRED ROOFTOP FRESH AIR SUPPLY UNIT



H/C SYSTEM NOISE CONTROL CHILLER AND COOLING TOWER



CHILLER REFRIGERANT DETECTION AND MONITORING CONTROL SYSTEM

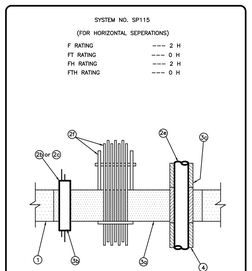


DRAIN TRAP

SYSTEM NO. SP115

(FOR HORIZONTAL SEPERATIONS)

F RATING	--- 2 H
FT RATING	--- 0 H
FH RATING	--- 2 H
FTH RATING	--- 0 H



1. FLOOR ASSEMBLY –

MINIMUM 114mm (54") THICK CONCRETE FLOOR OF 2380 KG/M DENSITY, 30 MPA CONCRETE. MAXIMUM SIZE OF OPENING, 420mm (23") BY 635mm (25").

2. PIPES, CABLES AND CABLE TRAYS –

(A) ONE 350 MCM CABLE MARKED "S RA90 XPLE HL FTA (400 30 1000 V 1988)", RELIABLY SUPPORTED ABOVE THE THROUGH OPENING. MINIMUM SPACE OF 25mm (1") REQUIRED BETWEEN CABLE AND PERIMETER OF THROUGH OPENING. 50mm (2") SPACE REQUIRED BETWEEN CABLE AND OTHER PENETRATING ITEMS.

(B) ONE 60mm (2-1/2") DIAMETER PVC PIPE, 5mm (1/5") WALL THICKNESS, MARKED "50mm (2") CAN-OUT RSGD PVC CONDUIT 75#. PIPE TO CAST IN PLACE IN "COMPOUND 1000" MORTAR (ITEM 3A) AND TO BE REMOVED FROM PIPE CAVITY. A MINIMUM OF ONE 114mm (54"). UNPC TO EXTEND 50mm (2") ABOVE TOP SURFACE OF FLOOR, MAY BE FLUSH WITH OR EXTEND UP TO 50mm (2"), BELOW BOTTOM SURFACE OF FLOOR. MINIMUM SPACE OF 25mm (1") REQUIRED BETWEEN PIPE AND EDGE OF THROUGH OPENING. MINIMUM SPACE OF 50mm (2") BETWEEN PIPES OF THIS TYPE. MINIMUM SPACE 50mm (2") BETWEEN PIPE AND CABLE TYPE 2A. MINIMUM SPACE OF 300mm (12") BETWEEN PIPE AND OTHER TYPES OF PIPE (2D AND E) OR CABLE TRAY (ITEM 2F).

(C) ONE 60mm (2-1/2") DIAMETER PVC PIPE (ITEM 2B). "COMPOUND 1000" MORTAR (ITEM 3A) TO BE REMOVED FROM PIPE CAVITY. A MAXIMUM OF ONE EACH OF THE FOLLOWING CABLE TYPES MAY THEN BE INSTALLED THROUGH THE PIPE OPENING, RELIABLY SUPPORTED ABOVE THE OPENING.

i) TYPE 300 MCM THW CABLE
ii) TYPE #16 AWG –2
iii) TYPE #12 AWG 7–C

CABLES TO BE SPACED EQUAL DISTNCE APART WITHIN THE PIPE OPENING AND FROM THE EDGE OF THE PIPE. PIPE SPACING AS PER ITEM 2B. VOIDS TO BE FILLED WITH "PUTTY 200", ITEM 3B.

(D) NOMINAL 75mm (3") DIAMETER (OR SMALLER) EMT STEEL PIPE, 2mm (1/10") (MINIMUM) WALL THICKNESS, RELIABLY SUPPORTED ABOVE THE THROUGH OPENING. A MINIMUM CLEARANCE OF 45mm (1-1/2") TO BE MAINTAINED BETWEEN PIPE AND PERIMETER OF THE OPENING, 115mm (4-1/2") MINIMUM BETWEEN PIPE AND PIPE TYPE 2A. 300mm (12") MINIMUM BETWEEN PIPES AND OTHER TYPES OF PIPE OR CABLE.

(E) 75mm (3") DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER STEEL PIPE) RELIABLY SUPPORTED ABOVE THE THROUGH OPENING. PIPE TO BE WRAPPED WITH PIPE INSULATION ITEMS 4 AND 3C, PRIOR TO POURING MORTAR (ITEM 3A).

(F) NOMINAL 600mm (24") BY 100mm (4") STEEL LADDER TYPE CABLE TRAY RELIABLY SUPPORTED ABOVE THE FLOOR, SPACED 115mm (4-1/2") MINIMUM FROM OTHER CABLE TRAYS AND 13mm (1/2") FROM PERIMETER OF OPENING. MAXIMUM CABLE LOADING NOT TO EXCEED 40% BY AREA OF CABLE TRAY. THE FOLLOWING CABLE GROUPINGS MAY BE USED.

(i) A MAXIMUM OF 18 300 MCM TYPE THW CABLES
(ii) A MAXIMUM OF 164 16 AWG 600 V 90C UL–FR–1 CABLES
(iii) A MAXIMUM OF 29 12 AWG TYPE TC XHHW CDRS CABLES

TYPE OF PENETRATING ITEM(S)	FT AND FTH RATINGS, H
–NO PENETRATIONS "COMPOUND 1000" MORTAR ONLY	2
–2A)	1/2
–2B)	2
–2C) i)	1/2
–2C) ii)	1
–2C) iii)	1–1/2
–2D) — NO CABLES, "PUTTY 200" (ITEM 3B) ONLY	1–1/2
–2D)	1/2
–2E)	1–1/2
–2F) i)	1/2
–2F) ii)	1
–2F) iii)	1
–2F) — CABLE TRAY ONLY	1–1/2

3. FIRESTOP SYSTEM COMPONENTS (GUIDE NO. 40 U19.13) –

(A) "COMPOUND 1000" MORTAR, POURED TO A MINIMUM DEPTH OF 114mm (4–1/2"). VIBRATED TO ENSURE THAT ALL VOIDS BETWEEN CABLES, ETC. ARE FILLED.

(B) "PUTTY 200" USED WITH PIPE AND CABLES, ITEM 2C. PRESSED FIRMLY BY HAND TO FILL ALL VOIDS BETWEEN CABLES AND PERIMETER PIPE. MINIMUM DEPTH OF PUTTY 114mm (4–1/2").

(C) TYPE "P1" PIPE INSULATION 25mm (1") THICK, WRAPPED AROUND PIPE, ITEM 2A, WHERE PIPE PENETRATES FLOOR. INSULATION SHALL EXTEND 50mm (2") ABOVE AND BELOW SURFACES OF FLOOR. AT JOINTS WITH PIPE INSULATION, ITEM 4, MATERIALS TO BE BUTTED FIRMLY TOGETHER AND WRAPPED WITH JOINT TAPE.

4. PIPE INSULATION –

PIPE, ITEM 2A, TO BE WRAPPED WITH 25mm (1") (MINIMUM) THICK ULC LABELLED PIPE INSULATION (GUIDE NO. UL15.13) TO WITHIN 50mm (2") OF EACH SIDE OF FLOOR ASSEMBLY. BUTTED FIRMLY AGAINST TYPE "P1" INSULATION, ITEM 3C, AND JOINT WRAPPED WITH TAPE.

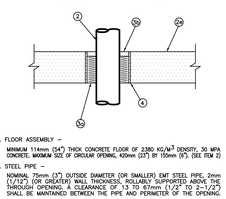
5. FORMING MATERIALS –

POLYSTYRENE BOARDS AND/OR POLYETHYLENE FOAM FITTED TIGHTLY AGAINST PENETRATING ITEMS ON UNDERSIDE OF SYSTEM. IF LEFT IN PLACE, WILL NOT DETRACT FROM ASSIGNED RATINGS.

SYSTEM NO. SP115

(FOR HORIZONTAL SEPERATIONS)

F RATING	--- 2 H
FT RATING	--- 0 H
FH RATING	--- 2 H
FTH RATING	--- 0 H



1. FLOOR ASSEMBLY –

MINIMUM 114mm (54") THICK CONCRETE FLOOR OF 2380 KG/M^3 DENSITY, 30 MPA CONCRETE. MAXIMUM SIZE OF CIRCULAR OPENING, 420mm (23") BY 159mm (6"). (SEE ITEM 2)

2. STEEL PIPE –

NOMINAL 75mm (3") OUTSIDE DIAMETER (OR SMALLER) EMT STEEL PIPE, 2mm (1/12") (OR GREATER) WALL THICKNESS, ROLLABLY SUPPORTED ABOVE THE THROUGH OPENING. A CLEARANCE OF 13 TO 67mm (1/2" TO 2–1/2") SHALL BE MAINTAINED BETWEEN THE PIPE AND PERIMETER OF THE OPENING.

3. FIRESTOP SYSTEM COMPONENTS – (GUIDE NO. 40U19.13).

A) "TYPE MW" INSULATION TO BE FIRMLY PACKED BY HAND (50:± 10% COMPRESSION) TO A MINIMUM DEPTH OF 95mm. (3–1/2"). MINIMUM 13mm (1/2") DEEP SPACE TO BE LEFT ABOVE INSULATION FOR ITEM 3B.

B) "TYPE 305 SL" FIRESTOP MATERIAL TO BE APPLIED OVER INSULATION (ITEM 3A) TO MINIMUM DEPTH OF 13mm (1/2")

INSTANT FIRESTOP INC.

2. SLEEVE (OPTIONAL) –

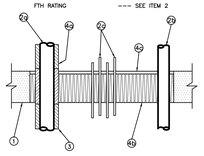
NOMINAL 150mm (6") OUTSIDE DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE SLEEVE, CAST IN PLACE IN CONCRETE FLOOR, FLUSH WITH TOP AND BOTTOM SURFACES OF FLOOR

LISTED BY UNDERWRITERS' LABORATORIES OF CANADA FOR USE AS A COMPONENT WITHIN THE APPROPRIATE DESIGN

SYSTEM NO. SP116

(FOR HORIZONTAL SEPERATIONS)

F RATING	--- 2 H
FT RATING	--- SEE ITEM 2
FH RATING	--- 2 H
FTH RATING	--- SEE ITEM 2



1. FLOOR ASSEMBLY –

MINIMUM 114mm (54") THICK CONCRETE FLOOR OF 2380 KG/M DENSITY, 30 MPA CONCRETE. MAXIMUM SIZE OF OPENING, 180mm (7") BY 635mm (25").

2. STEEL PIPE OR CABLES–

A) 90mm (3–1/2") OUTSIDE DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE, ROLLABLY SUPPORTED ABOVE THROUGH–OPENING. WRAPPED WITH PIPE INSULATIONS, ITEMS 4A AND 3. MINIMUM 33mm (1/3") SPACE BETWEEN PIPES. MINIMUM 38mm (1–1/2") SPACE BETWEEN PIPE AND PERIMETER OF THROUGH–OPENING.

B) NOMINAL 75mm (3") DIAMETER (OR SMALLER) EMT PIPE, 2mm (1/10") (OR GREATER) WALL THICKNESS, ROLLABLY SUPPORTED ABOVE THE THROUGH–OPENING. MINIMUM 33mm (1/3") SPACE BETWEEN PIPES. MINIMUM 25mm (1") SPACE BETWEEN PIPE AND PERIMETER OF THROUGH OPENING.

C) CABLES, TYPE TC TO AWG#4/0, 600V, ROLLABLY SUPPORTED ABOVE THROUGH–OPENING. MAXIMUM FOUR CABLES PER GROUP, MINIMUM 13mm (1/2") SPACE REQUIRED BETWEEN INDIVIDUAL CABLES. MINIMUM 150mm (6") SPACE REQUIRED BETWEEN CABLES AND PIPE OR OTHER CABLE GROUPS.

PIPE OR CABLE TYPE	FT AND FTH RATINGS, H
PIPE TYPE 2A(INSULATED)	1–1/2
PIPE TYPE 2B)	0
PIPE TYPE 2C)	1–1/2
NO PENETRATIONS	2

3. PIPE INSULATION –

PIPE, TYPE 2A, TO BE WRAPPED WITH MINIMUM 25mm (1") THICK, ULC LABELLED PIPE INSULATION (GUIDE NO. 40 U8.15.13). TO WITHIN 50mm (2") OF FLOOR, BOTH ABOVE AND BELOW FLOOR. LENGTH OF PIPE THROUGH OPENING TO BE WRAPPED WITH TYPE "P1" FIRESTOP COMPONENT (ITEM 4A).

4. FIRESTOP SYSTEM COMPONENTS–(GUIDE NO. 40U19.13)

A) "TYPE P1" PIPE INSULATION, 25mm (1") THICK, APPLIED TO PIPE WHERE IT PENETRATES OPENING. INSULATION TO EXTEND 50mm (2") ABOVE AND BELOW FLOOR SURFACES. AT JOINTS BETWEEN PIPE INSULATIONS, ITEMS 4A AND 3, MATERIALS TO BE BUTTED FIRMLY AND WRAPPED WITH JOINT TAPE.

B) "TYPE MW" INSULATION INSTALLED TO A MINIMUM DEPTH OF 95mm. (3–1/2"), LEAVING 13mm (1/2") DEEP SPACE BETWEEN TOP OF INSULATION AND TOP SURFACE OF FLOOR. UNCOMPRESSED TOTAL WIDTH OF MATERIAL TO BE 50:± 10% WIDER THAN WIDTH OF OPENING TO BE FILED (I.E. 270mm (11") WIDE FOR 150mm (7") WIDE OPENING). LENGTH OF INDIVIDUAL PIECES TO MATCH LENGTH OF OPENING SO AS TO AVOID END JOINTS WHERE POSSIBLE. WHERE END JOINTS ARE UNAVOIDABLE, BUTT ENDS OF MINERAL FIBRE CABLES TO BE FIRMLY PACKED BY HAND (50:± 10% COMPRESSION) WITH INSULATION.

C) TYPE "305 SL" SEALANT APPLIED OVER INSULATION (ITEM 4B) ON BOTH SIDES OF OPENING, TO MINIMUM DEPTHS OF 10mm (1/2") AND FLUSH WITH TOP OF FLOOR.

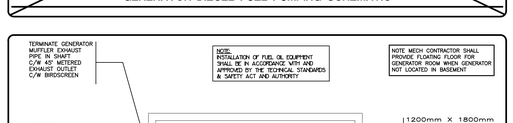
OR

TYPE"344 GS" CAULK TO BE APPLIED OVER INSULATION (ITEM 4B) ON BOTH SIDES OF OPENING, TO MINIMUM DEPTHS OF 13mm (1/2").

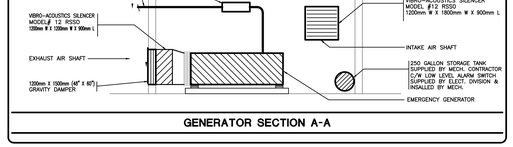
INSTANT FIRESTOP INC.

LISTED BY UNDERWRITERS' LABORATORIES OF CANADA FOR USE AS A COMPONENT WITHIN THE APPROPRIATE DESIGN

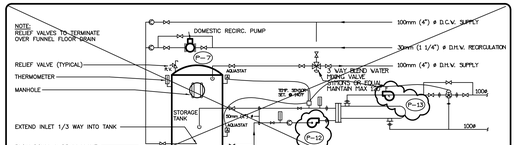
FIRE STOP DETAILS



GENERATOR ROOM CROSS SECTION

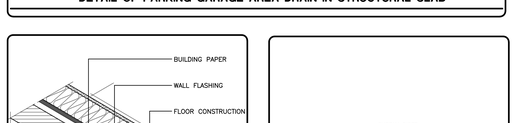


GENERATOR DIESEL FUEL PUMPING SCHEMATIC

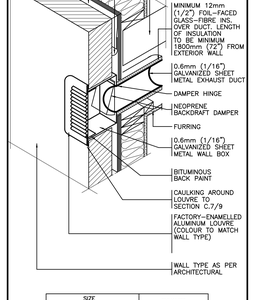


GENERATOR SECTION A-A

VERTICAL DOMESTIC HOT WATER SCHEMATIC ROOF

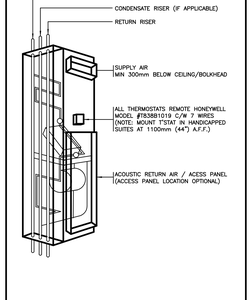


DETAIL OF PARKING GARAGE AREA DRAIN IN STRUCTURAL SLAB



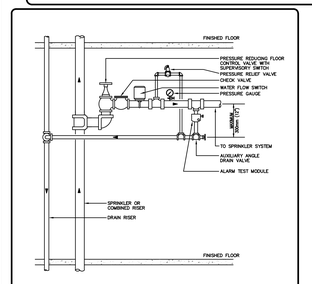
SIZE		EXHAUST
inches	mm	
8 X 8	200 X 200	SINGLE
16 X 8	400 X 200	DOUBLE
24 X 8	600 X 200	TRIPLE

EXHAUST DISCHARGE WALL BOX



FAN COIL DETAIL

NEUTRAPAL CONDENSATE NEUTRALIZATION KIT



SPRINKLER PRESSURE REDUCING STATION

NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION PI–5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

REVISIONS

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Mechanical Electrical Consulting Engineers
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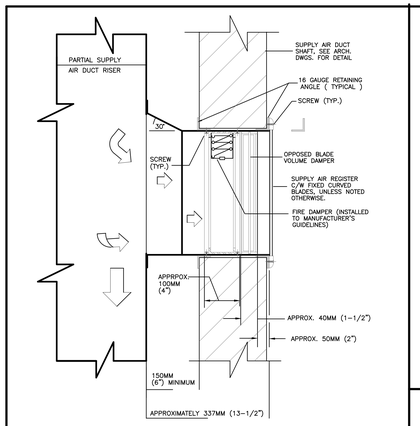
Toronto, Ontario, M3J 1M6
Tel: (416) 398 1999, Fax: (416) 398 1933

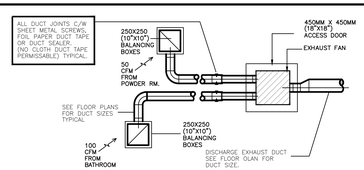
TITLE
DETAILS MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

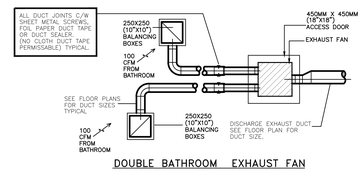
DRAWN	CHECKED	SCALE
GC	BT	NTS
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-41
		OF 42



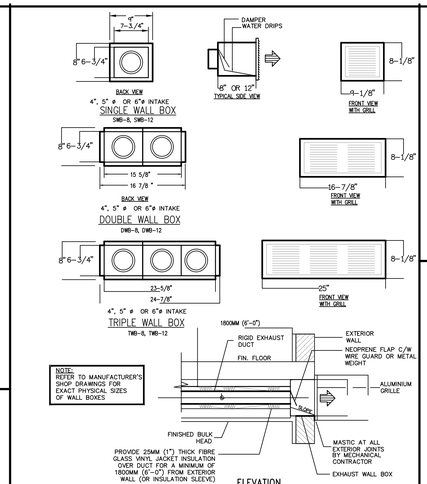
TYPICAL DETAIL OF CORRIDOR
SUPPLY AIR DUCT SHAFT



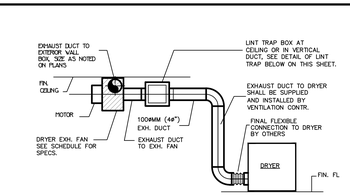
BATHROOM/ POWDER ROOM EXHAUST FAN
N.T.S



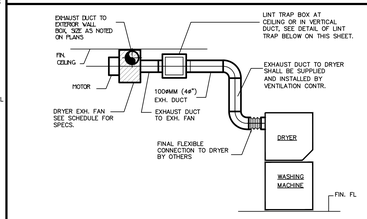
DOUBLE BATHROOM EXHAUST FAN
N.T.S



EXHAUST WALL BOX DETAIL
N.T.S



TYPICAL DRYER EXHAUST
DUCT CONNECTION IN LAUNDRY ROOM
N.T.S



TYPICAL STACKED DRYER EXHAUST
DUCT CONNECTION IN LAUNDRY ROOM
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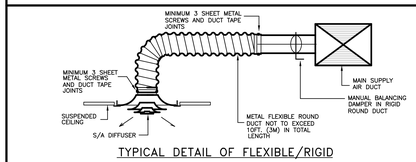
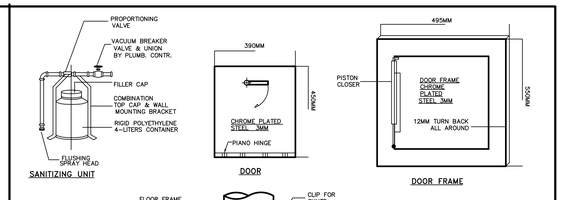
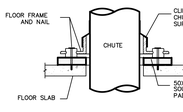


TYPICAL DETAIL OF FLEXIBLE/RIGID
DUCT CONNECTION TO DIFFUSER
N.T.S

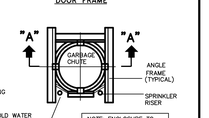


LIST OF EQUIPMENT:

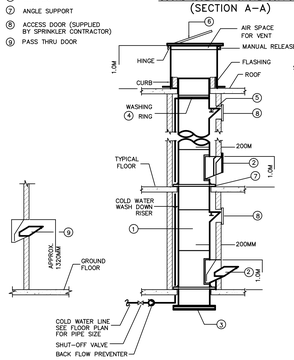
1. CHUTE RISER
2. INTAKE DOOR
3. FIRE DAMPER
4. WASH DOWN
5. SPRINKLER HEAD AT EVERY OTHER FLOOR
6. VENT CAP
7. ANGLE SUPPORT
8. ACCESS DOOR (SUPPLIED BY SPRINKLER CONTRACTOR)
9. PASS THRU DOOR

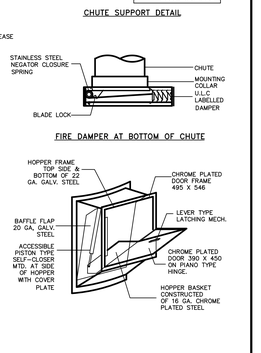


SOUND ISOLATING CHUTE SUPPORT
(SECTION A-A)

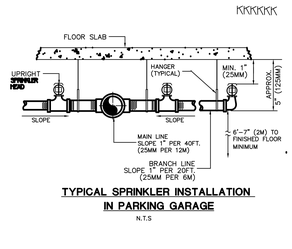


CHUTE SUPPORT DETAIL

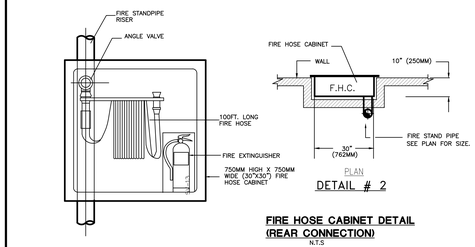




GARBAGE CHUTE DETAIL
(BASED ON YORK)
N.T.S

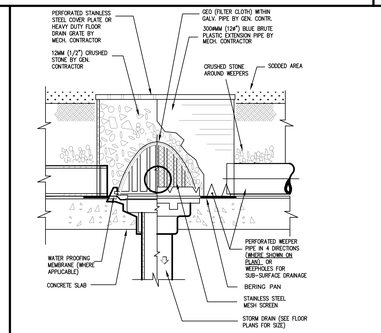


TYPICAL SPRINKLER INSTALLATION
IN PARKING GARAGE
N.T.S

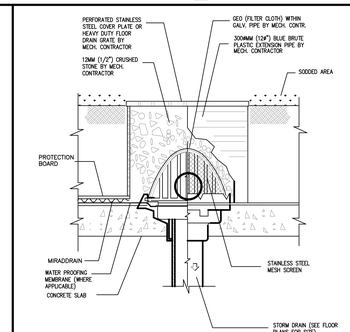


DETAIL # 2

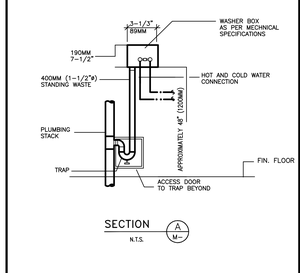
FIRE HOSE CABINET DETAIL
(REAR CONNECTION)
N.T.S



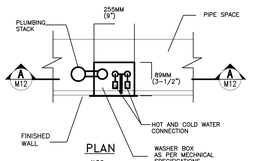
DETAIL OF COMBINATION SODDED AREA /SLAB DRAIN (SAD/SD)
N.T.S



DETAIL OF SODDED AREA DRAIN (SAD.)
N.T.S.

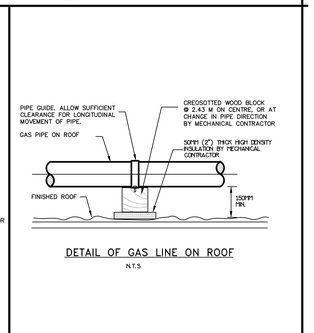


SECTION
N.T.S.

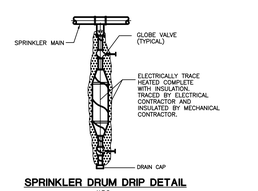


PLAN
N.T.S.

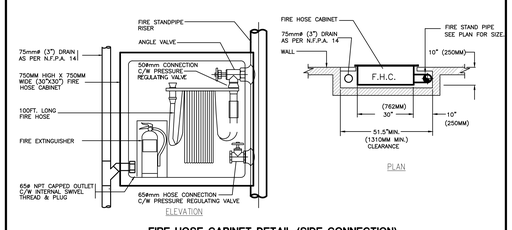
TYPICAL DETAIL OF SANITARY AND WATER
CONNECTION FOR WASHING MACHINE
N.T.S.



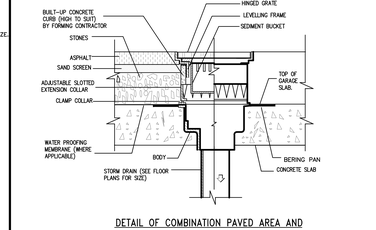
DETAIL OF GAS LINE ON ROOF
N.T.S



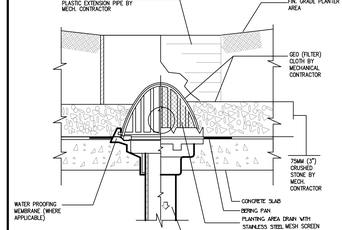
SPRINKLER DRUM DRIP DETAIL
N.T.S.



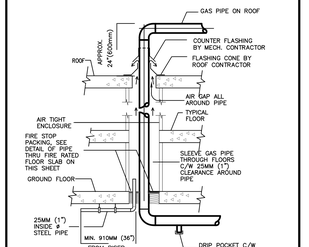
FIRE HOSE CABINET DETAIL (SIDE CONNECTION)



DETAIL OF COMBINATION PAVED AREA AND
SLAB DRAIN (PAD/SD) ABOVE PARKING GARAGE
N.T.S.



DETAIL OF PLANTER DRAIN (P.D.)
N.T.S.



DETAIL OF GAS RISER VENT SHAFT
N.T.S.

NO.	BY	DESCRIPTION	DATE
4	LB	REVISED AS PER SITE INSTRUCTION IS-5 ISSUED FOR CONSTRUCTION	AUG/09/2017
3	LB	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LM	ISSUED FOR PERMIT	DEC/28/2016
1	LM	ISSUED FOR TENDER	MAR/21/2016

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Y. HOU
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PROVINCE OF ONTARIO

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Tel: (416) 398 1999, Fax: (416) 398 1033

TITLE
DETAILS
MECHANICAL

PROJECT
25 BAKER HILL BLVD.
ROYAL PINE HOMES
STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	CHECKED	SCALE
GC	BT	NTS
DATE	PROJECT	DRAWING
JUNE 2015	14-016	M-42
		OF 42