

PERMIT NO.	DATE ISSUED
88-11516	11/2/08
ADDRESS	BLOG DEPT. FIRE DEPT.
156 Front St. NE	
APPROVED	

- NOTES:
- INSTALL/REVISE AUTOMATIC FIRE SPRINKLERS TO PROVIDE COVERAGE AS SHOWN.
 - PIPING AND SPACING PER N.F.P.A. 13 AND CITY OF SALEM OREGON.
 - SPRINKLERS:
 - 200" BRASS UPRIGHT 1/2" ORIFICE.
 - 155" CHROME SEMI-RECESSED 1/2" ORIFICE.
 - SEE "COMPLETE BUILDING" HEAD COUNT.
 - PIPING:
 - SCD. 40 BLACK 1"-2"
 - SCD. 10 BLACK 2 1/2"-UP
 - C.P.V.C. PIPING AND FITTINGS RESIDENTIAL AREAS.
 - HANGERS:
 - 3/8" A.T.R. AND PIPE RINGS TO STRUCTURE WITH HILTI HDL-P
 - APPROVED C.P.V.C. HANGERS.
 - SYSTEM DESIGN:
 - HYDRAULIC DESIGN SEE G.P.M. CALCULATIONS SQ. FT.
 - PIPE SCHEDULE
 - TENANT IMPROVEMENT (RELOCATE EXIST)
 - SWAY BRACE PER CODE.
 - DEFLECTOR DISTANCE PER CODE.
 - UNDERGROUND:
 - BY OTHERS WORK TO START 6" +/- A.F.F.
 - 5'-0" STUB-OUT ONLY.
 - EXISTING

Sprinkler system shall be installed in accordance with NFPA 13

Design Area No. 1 - OH I
Density .15 Area 1950
Flow 607.46 gpm @ 61.095 psi
Includes 250 gpm Hose allowance

PARKING GARAGE
134 (1/2",K=5.6) VIC V27 BR UP 155 SR
1 (1/2",K=5.6) VIC V27 HSW BR 155 SR
TOTAL: 135 HEADS

COMPLETE BUILDING
1 (3/4",K=8.0) VIC V34 BR EC HSW 155 OR
290 (1/2",K=5.6) TYCD LFII WH 155 OR PD (on Drop)
134 (1/2",K=5.6) VIC V27 BR UP 155 SR
55 (1/2",K=5.6) VIC V27 CH PD 155 OR (on Drop)
1 (1/2",K=5.6) VIC V27 HSW BR 155 SR
81 (3/4",K=8.0) VIC V34 CH PD 155 OR (ON 1X% BUSHING)
TOTAL: 562 HEADS

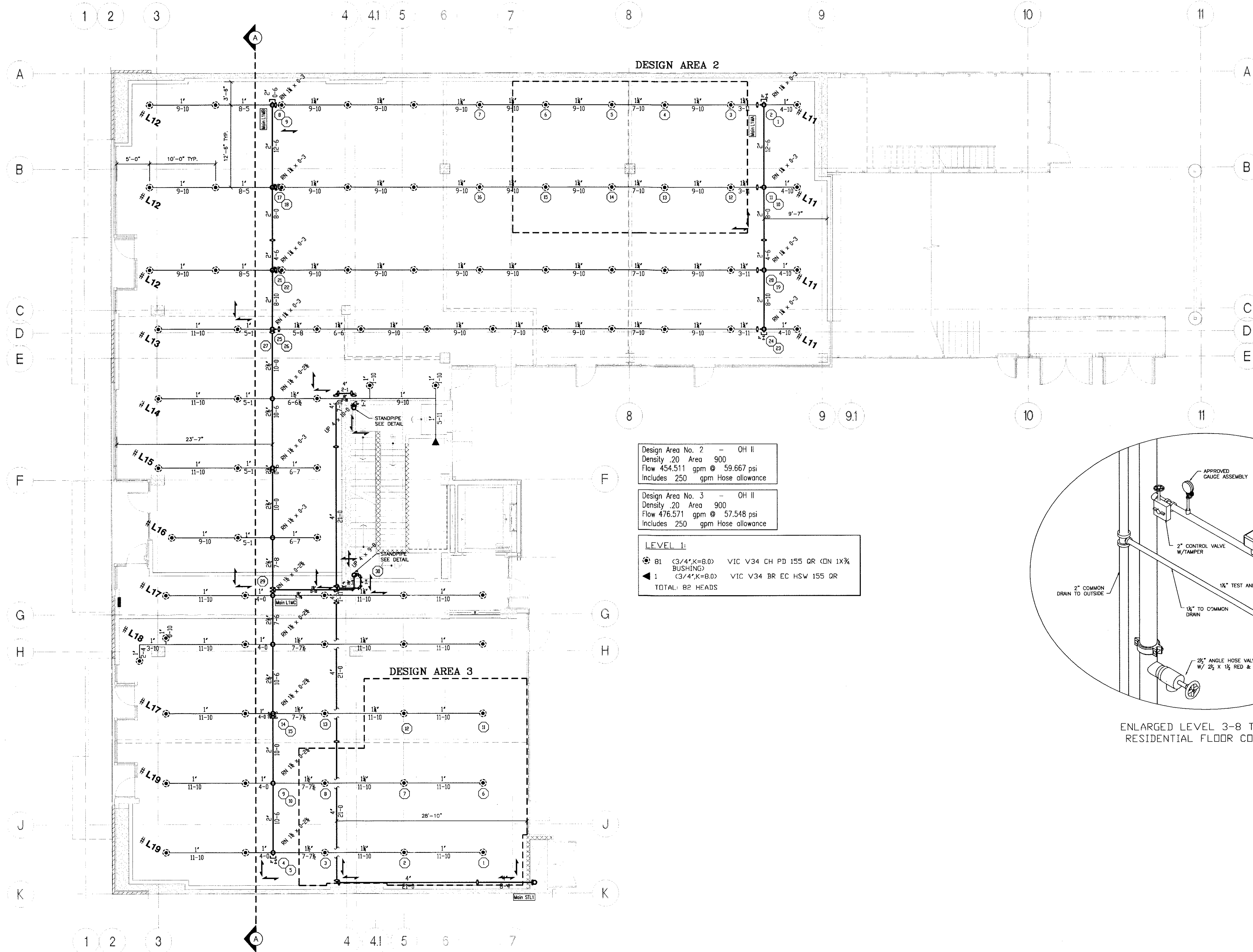
HANGER LEGEND	STANDARD SYMBOLS	STANDARD SYMBOLS	SPRINKLER HEAD SYMBOLS
#4 HOOKS LENGTH AS DESIGNATED	POST INDICATOR VALVE	ALARM CHECK VALVE	UPRIGHT ON 1/2" OUTLET
#5 FIG. 116 CEILING FLG. ROD & RING	KEY VALVE	RISER W/ ALARM VALVE	PENDENT ON 1/2" OUTLET
#6 FIG. 153 CEILING FLG. ROD & RING	FIRE HYDRANT	RISER W/ DRY VALVE	UPRIGHT ON 1" STUBB-UP
#7 COACH SCREW, ROD & RING	FIRE DEPT. CONNECTION	RISER W/ ELEC. FLOW SWITCH	PENDENT ON 1" DROP
#8 CONC. INSERT, ROD & RING	O.S. & Y GATE VALVE	RISER W/ LOSS VALVE	FLUSH SPR. ON 1" DROP
#9 EXPANSION CASE, ROD & RING	SWING CHECK VALVE	WATER MOTOR BELL	DRY PENDENT ON 1" DROP
#10 EYE ROD & RING	NEW UNDERGROUND	ELECTRIC RING	SIDEWALL ON 1/2" OUTLET
#11 "C" CLAMP, ROD & RING	EXIST UNDERGROUND	FLUSH FIRE DEPT. CONN.	UP & ON AT SAME LOCATION
#12 "J" ROD ANGLE CLIP, ROD & RING			
#13 ANGLE IRON CLIP, ROD & RING			

Jet
FIRE PROTECTION
HEATING
ELECTRICAL
PLUMBING
MAINTENANCE
WOOD PRODUCTS
"Solutions for a streamlined project"
JET FIRE PROTECTION
A DIVISION OF JET INDUSTRIES

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1935 SILVERTON RD. SALEM, OR 97301
TEL: (503) 363-2334 FAX: (503) 364-2204
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Rivers Condos
156 FRONT AVENUE NE
SALEM, OREGON
PARKING GARAGE PIPING PLAN

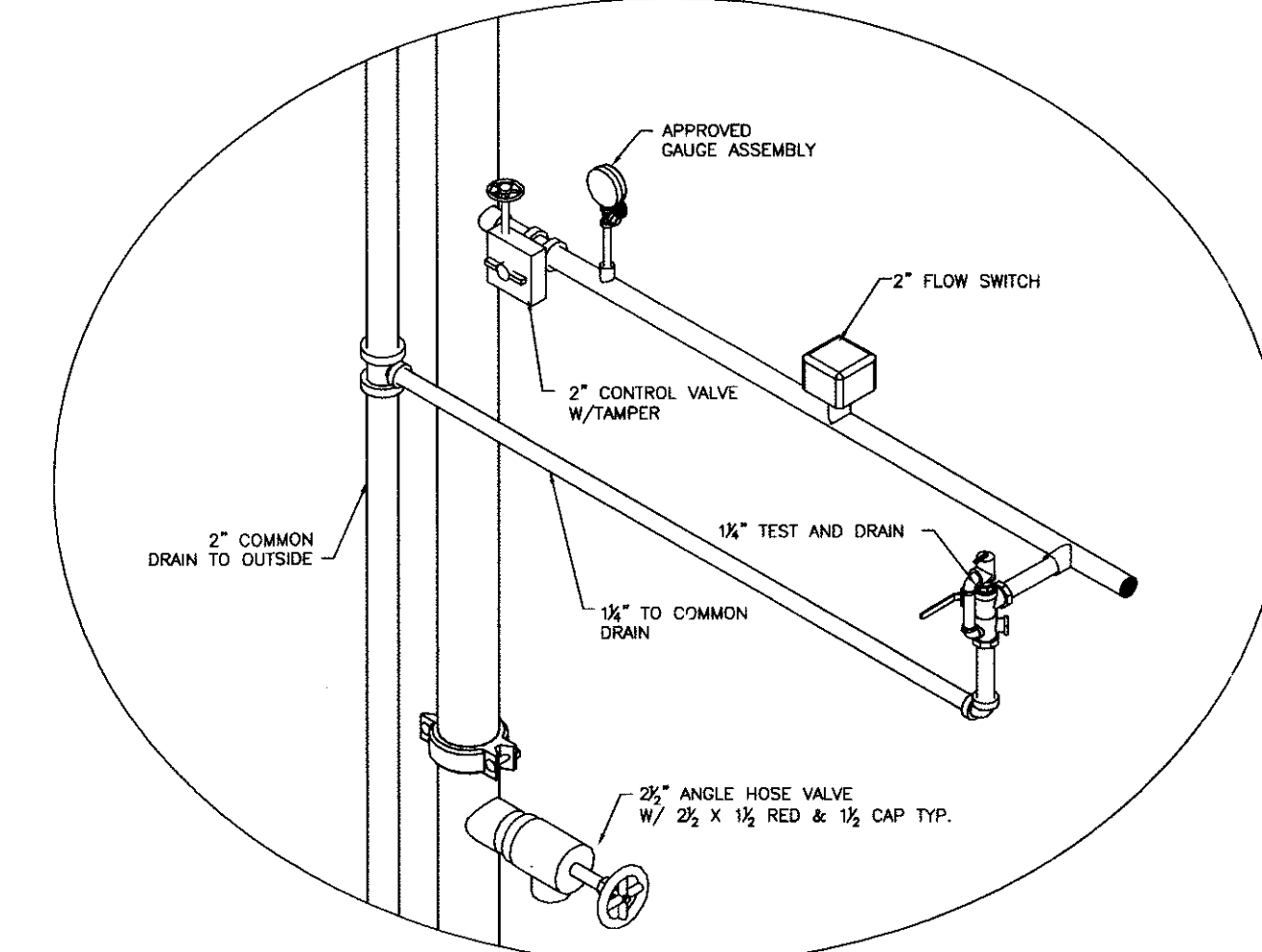
REV. #	DATE
1	7/26/08 CDV
2	10/10/08 BJD
DATE:	07/07/2008
JOB:	08-0176-F
DESIGN BY:	RICH ROHR
DRAWN BY:	CHRIS VALENTINE
CONTACT:	TOM MARSHALL
TEL. #:	503-363-2334
FP-1	
PAGE 1 OF 6	



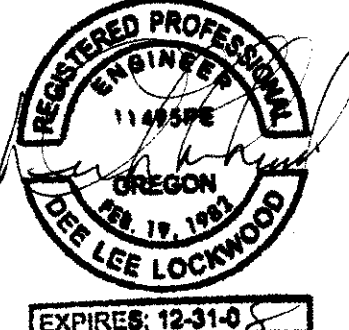
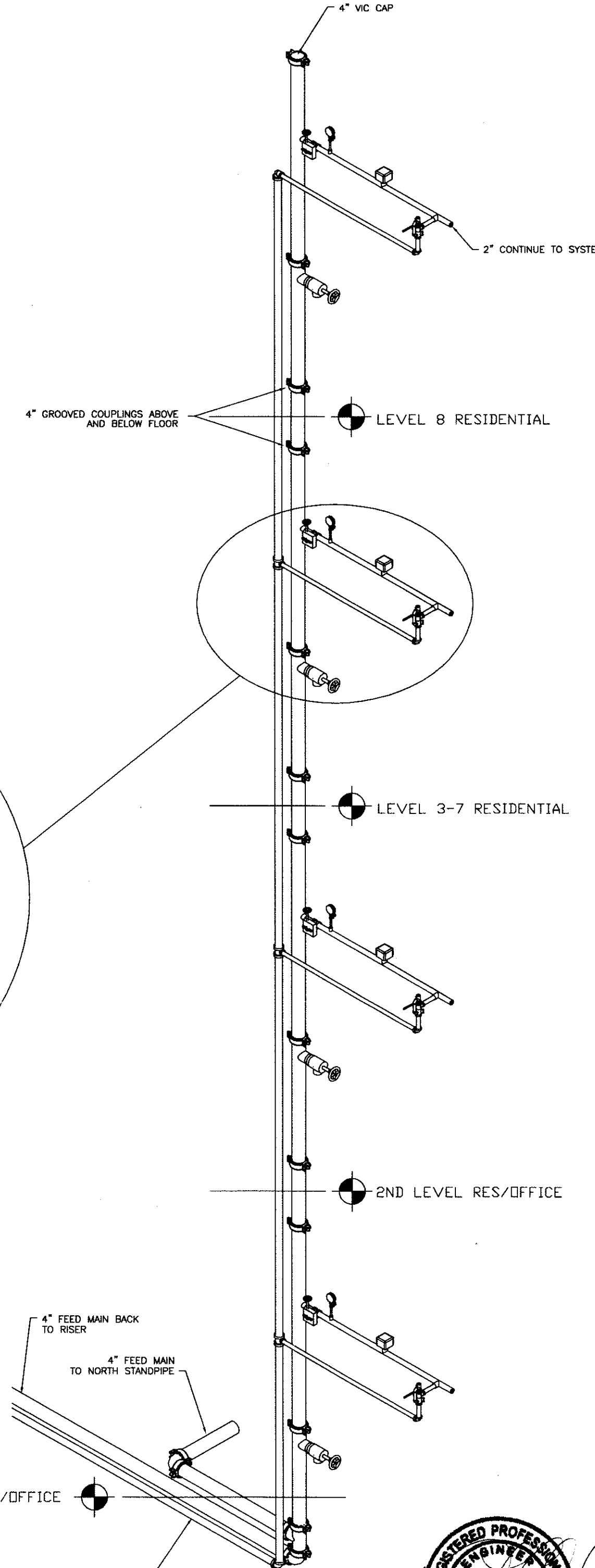
Design Area No. 2 - OH II
Density .20 Area 900
Flow 454.511 gpm @ 59.667 psi
Includes 250 gpm Hose allowance

Design Area No. 3 - OH II
Density .20 Area 900
Flow 476.571 gpm @ 57.548 psi
Includes 250 gpm Hose allowance

LEVEL 1:
B1 (3/4", K=8.0) VIC V34 CH PD 155 QR (DN 1X 1/2 BUSHING)
1 (3/4", K=8.0) VIC V34 BR EC HSW 155 QR
TOTAL: 82 HEADS



ENLARGED LEVEL 3-8 TYPICAL RESIDENTIAL FLOOR CONTROL



1 LEVEL:1 PIPING PLAN FUTURE RETAIL
SCALE = 1/8" = 1'-0"
*LEVEL 1 PIPING ALL STEEL

2 COMBO STANDPIPE
NOT TO SCALE *SEE PIPING PLANS FOR FLOOR CONTROL SIZING

City of Salem
Bldg & Safety Div

HANGER LEGEND	STANDARD SYMBOLS	STANDARD SYMBOLS	SPRINKLER HEAD SYMBOLS
#4 HOOKS LENGTH AS DESIGNATED FIG. 116 CEILING FIG. ROD & RING	POST INDICATOR VALVE	ALARM CHECK VALVE	UPRIGHT ON 1/2" OUTLET
#5 KEY VALVE	FIRE HYDRANT	RISER W/ ALARM VALVE	PENDENT ON 1/2" OUTLET
#6 COACH SCREW, ROD & RING	FIRE DEPT. CONNECTION	RISER W/ DRY VALVE	UPRIGHT ON 1" STUBS-UP
#7 CONC. INSERT, ROD & RING	O.S. & Y GATE VALVE	RISER W/ ELEC. FLOW SWITCH	PENDENT ON 1" DROP
#8 EXPANSION CASE, ROD & RING	SWING CHECK VALVE	RISER W/ DISCLOSE VALVE	FLUSH SPR. ON 1" DROP
#9 EYE ROD & RING	NEW UNDERGROUND	WATER MOTOR BELL	FLUSH SPR. ON 1" DROP
#10 "C" CLAMP, ROD & RING	EXIST UNDERGROUND	ELECTRIC BELL	DRY PENDENT ON 1" DROP
#11 "J" ROD ANGLE CLIP, ROD & RING		FLUSH FIRE DEPT. CONN.	SIDEWALL ON 1/2" OUTLET
#12 ANGLE IRON CLIP, ROD & RING			UP & DN AT SAME LOCATION

JET FIRE PROTECTION
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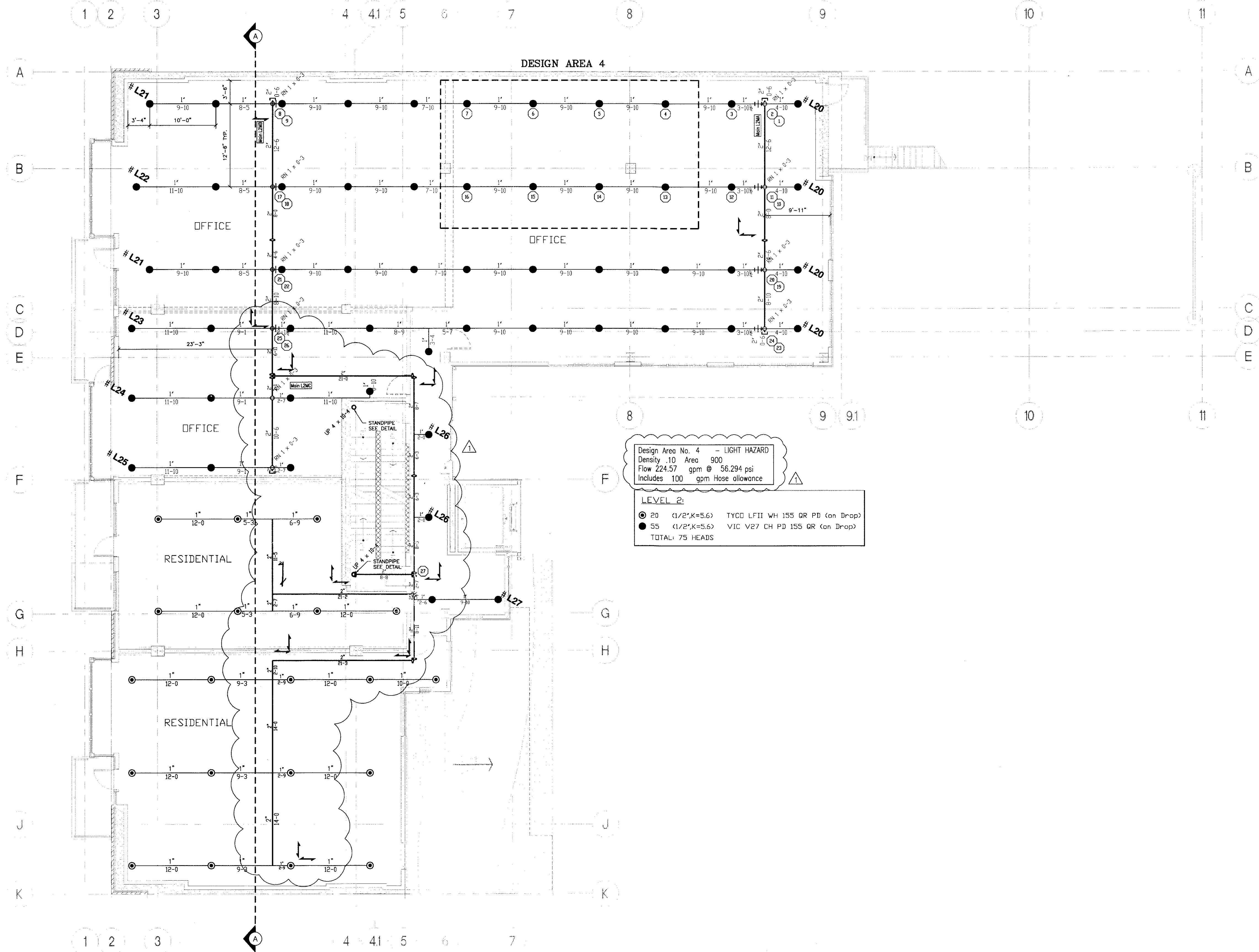
Rivers Condos
156 FRONT AVENUE NE
SALEM, OREGON

LEVEL 1: PIPING PLAN

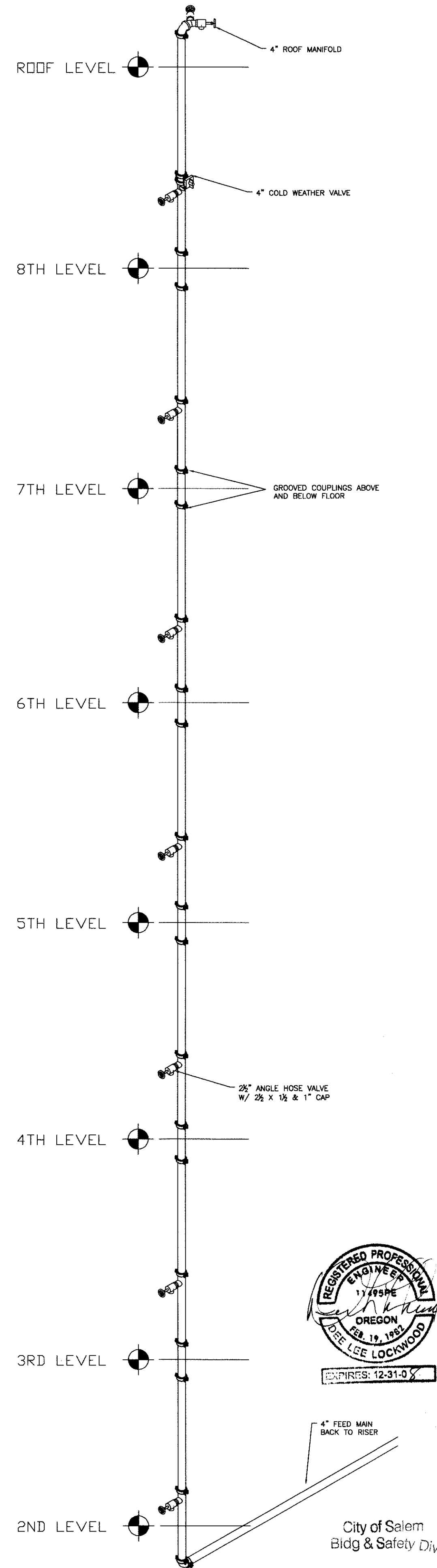
REV. # DATE

DATE: 07/07/2008
JOB: 08-0176-F
DESIGN BY: RICH ROHR
DRAFTER: CHRIS VALENTINE
CONTACT: TOM MARSHALL
TEL. #: 503-363-2334

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1 LEVEL 2 PIPING PLAN FUTURE OFFICE/RESIDENTIAL
 SCALE = 1/8" = 1'-0"
 *LEVEL 2 COMBINATION STEEL & C.P.V.C.



2 STANDPIPE DETAIL

HANGER LEGEND	STANDARD SYMBOLS	STANDARD SYMBOLS	SPRINKLER HEAD SYMBOLS
# 4 HOOKS LENGTH AS DESIGNATED	POST INDICATOR VALVE	ALARM CHECK VALVE	UPRIGHT ON 1/2" OUTLET
# 5 FIG. 116 CEILING FLG. ROD & RING	KEY VALVE	RISER W/ ALARM VALVE	PENDENT ON 1/2" OUTLET
# 6 FIG. 153 CEILING FLG. ROD & RING	FIRE HYDRANT	RISER W/ DRY VALVE	UPRIGHT ON 1" STUBB-UP
# 7 COACH SCREW, ROD & RING	FIRE DEPT. CONNECTION	RISER W/ ELEC. FLOW SWITCH	PENDENT ON 1" DROP
# 8 CONC. INSERT, ROD & RING	O.S. & Y GATE VALVE	RISER W/ DELUGE VALVE	FLUSH SPR. ON 1" DROP
# 9 EXPANSION CASE, ROD & RING	SWING CHECK VALVE	WATER MOTOR BELL	DRY PENDENT ON 1" DROP
# 10 EYE ROD & RING	NEW UNDERGROUND	ELECTRIC BELL	SIDEWALL ON 1/2" OUTLET
# 11 "C" CLAMP, ROD & RING	EXIST UNDERGROUND	FLUSH FIRE DEPT. CONN.	UP & DN AT SAME LOCATION
# 12 "J" ROD ANGLE CLIP, ROD & RING			
# 13 ANGLE IRON CLIP, ROD & RING			

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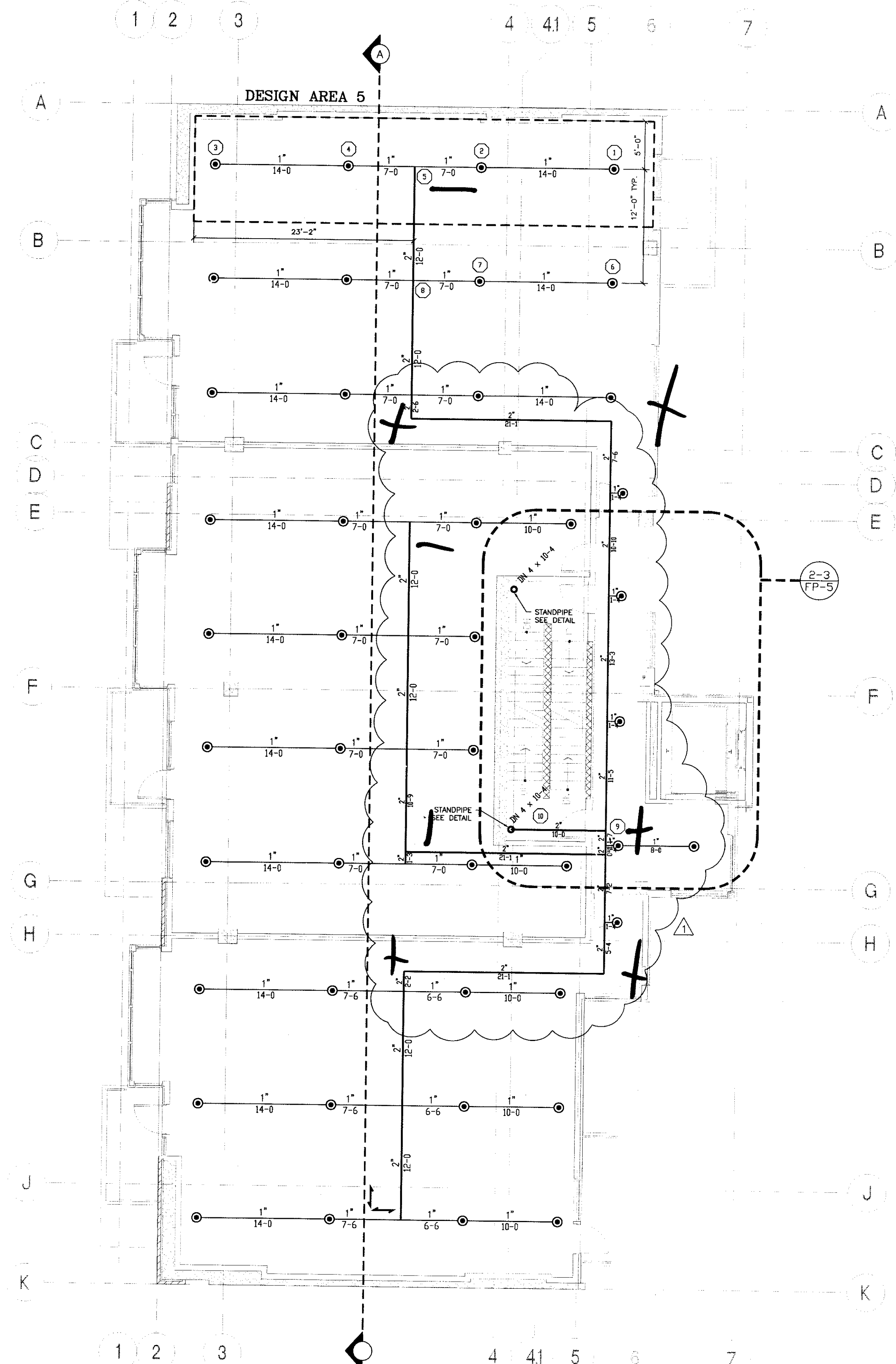
Rivers Condos
 156 FRONT AVENUE NE
 SALEM, OREGON

LEVEL 2: PIPING PLAN

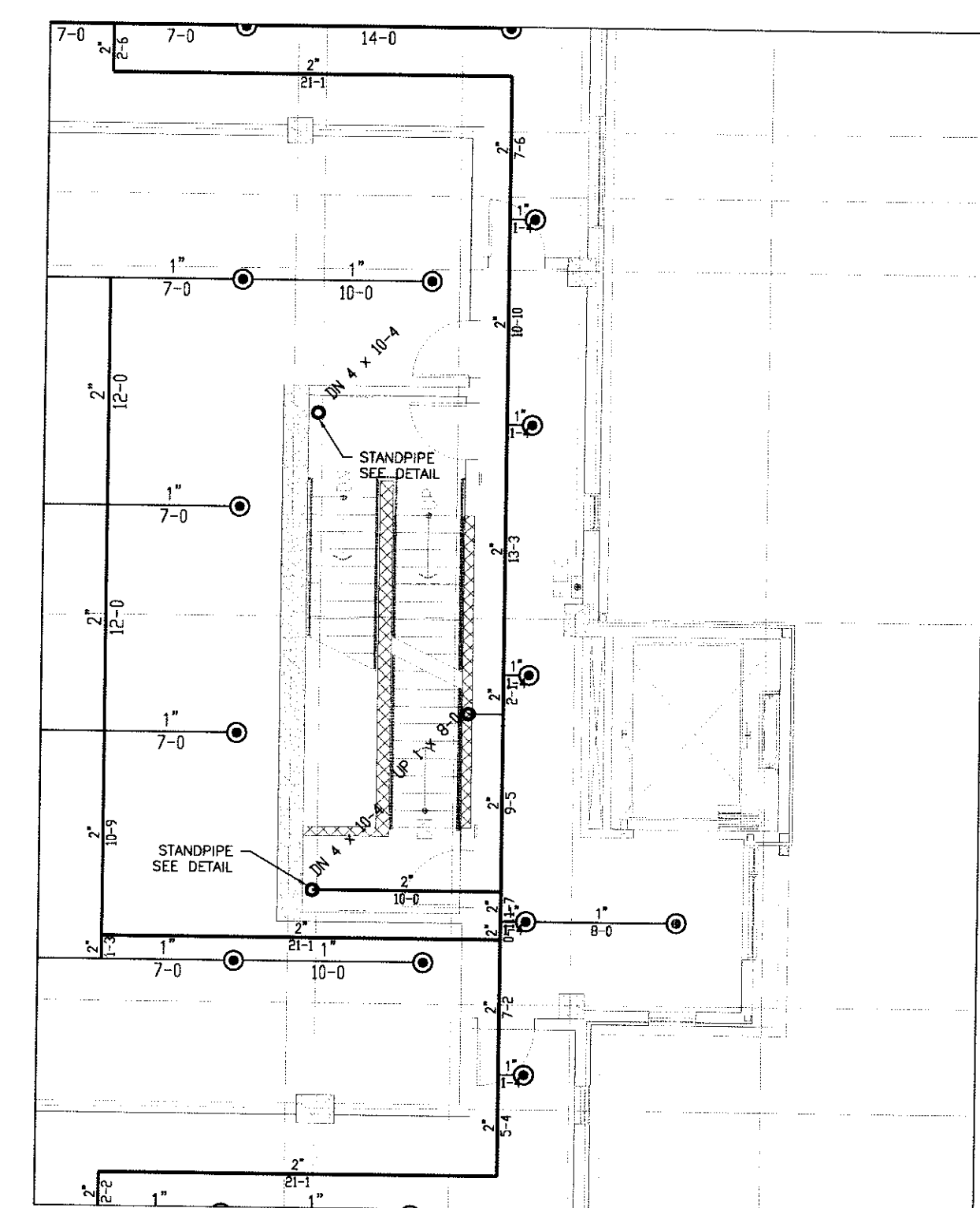
REV. #	DATE
1	7/26/08 CDV

DATE: 07/07/2008
 JOB: 08-0176-F
 DESIGN BY: RICH ROHR
 DRAFTER: CHRIS VALENTINE
 CONTACT: TOM MARSHALL
 TEL. #: 503-363-2334

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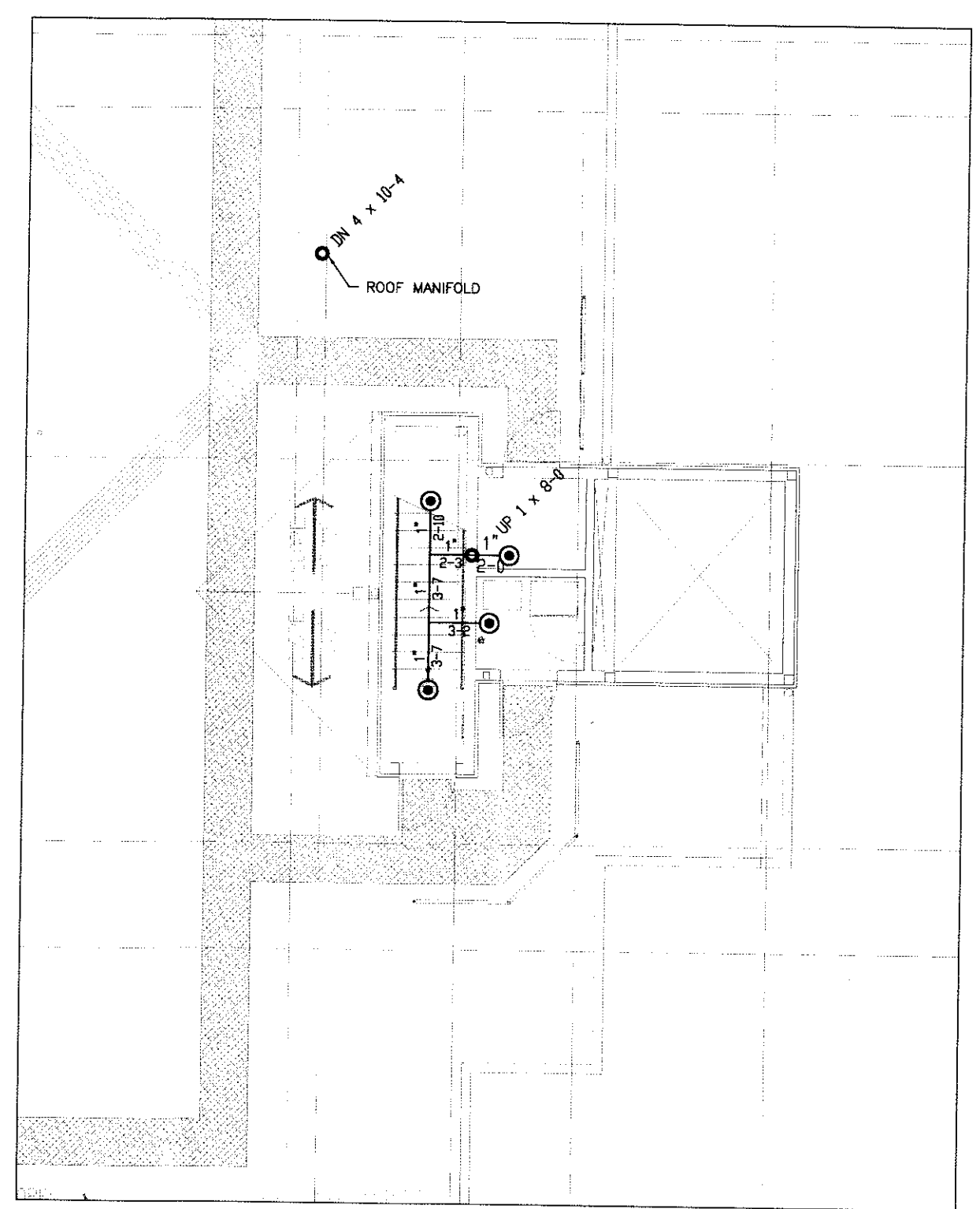
1 LEVEL 7-8: PIPING PLAN FUTURE RESIDENTIAL
SCALE = 1/8" = 1'-0"
*LEVEL 7-8 ALL C.P.V.C.



2 LEVEL 8: STAIR DETAIL
SCALE = 1/8" = 1'-0"

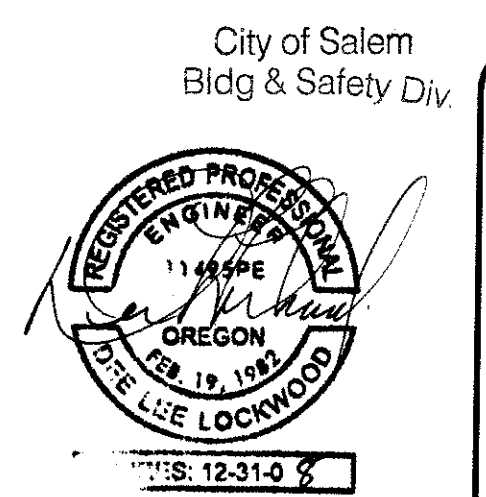
Design Area No. 5 - LIGHT HAZARD
Density 10 Area 4 HEADS
Flow 158.87 gpm @ 61.23 psi
Includes 100 gpm Hose allowance

LEVEL 7-ROOF:
L7 @ 44 (1/2"K=5.6) TYCO LFII WH 155 QR PD (on Drop)
L8 @ 46 (1/2"K=5.6) TYCO LFII WH 155 QR PD (on Drop)
RF @ 4 (1/2"K=5.6) TYCO LFII WH 155 QR PD (on Drop)
TOTAL: 94 HEADS



3 ROOF: PIPING PLAN
SCALE = 1/8" = 1'-0"

HANGER LEGEND	STANDARD SYMBOLS	STANDARD SYMBOLS	SPRINKLER HEAD SYMBOLS
#4 HOOKS LENGTH AS DESIGNATED	# POST INDICATOR VALVE	# ALARM CHECK VALVE	# UPRIGHT ON 1/2" OUTLET
#5 FIG. 118 CEILING FLG. ROD & RING	# KEY VALVE	# RISER W/ ALARM VALVE	# PENDENT ON 1/2" OUTLET
#6 FIG. 153 CEILING FLG. ROD & RING	# FIRE WYFRONT	# RISER W/ DRY VALVE	# UPRIGHT ON 1" STUBB-UP
#7 COACH SCREW, ROD & RING	# FIRE DEPT. CONNECTION	# RISER W/ ELEC. FLOW SWITCH	# PENDENT ON 1" DROP
#8 CONC. INSERT, ROD & RING	# O.S. & Y GATE VALVE	# RISER W/ DELUGE VALVE	# FLUSH SPR. ON 1" DROP
#9 EXPANSION CASE, ROD & RING	# SWING CHECK VALVE	# WATER MOTOR BELL	# DRY PENDENT ON 1" DROP
#10 EYE ROD & RING	# NEW UNDERGROUND	# ELECTRIC BELL	# SIDEWALL ON 1/2" OUTLET
#11 "C" CLAMP, ROD & RING	# EXIST UNDERGROUND	# FLUSH FIRE DEPT. CONN.	# UP & ON AT SAME LOCATION
#12 "J" ROD ANGLE CLIP, ROD & RING			
#13 ANGLE IRON CLIP, ROD & RING			



City of Salem
Bldg & Safety Div.

REV. # DATE
7/26/08 CDV

DATE: 07/07/2008
JOB: 08-0176-F

DESIGN BY: RICH ROHR
DRAFTER: CHRIS VALENTINE
CONTACT: TOM MARSHALL
TEL. #: 503-363-2334

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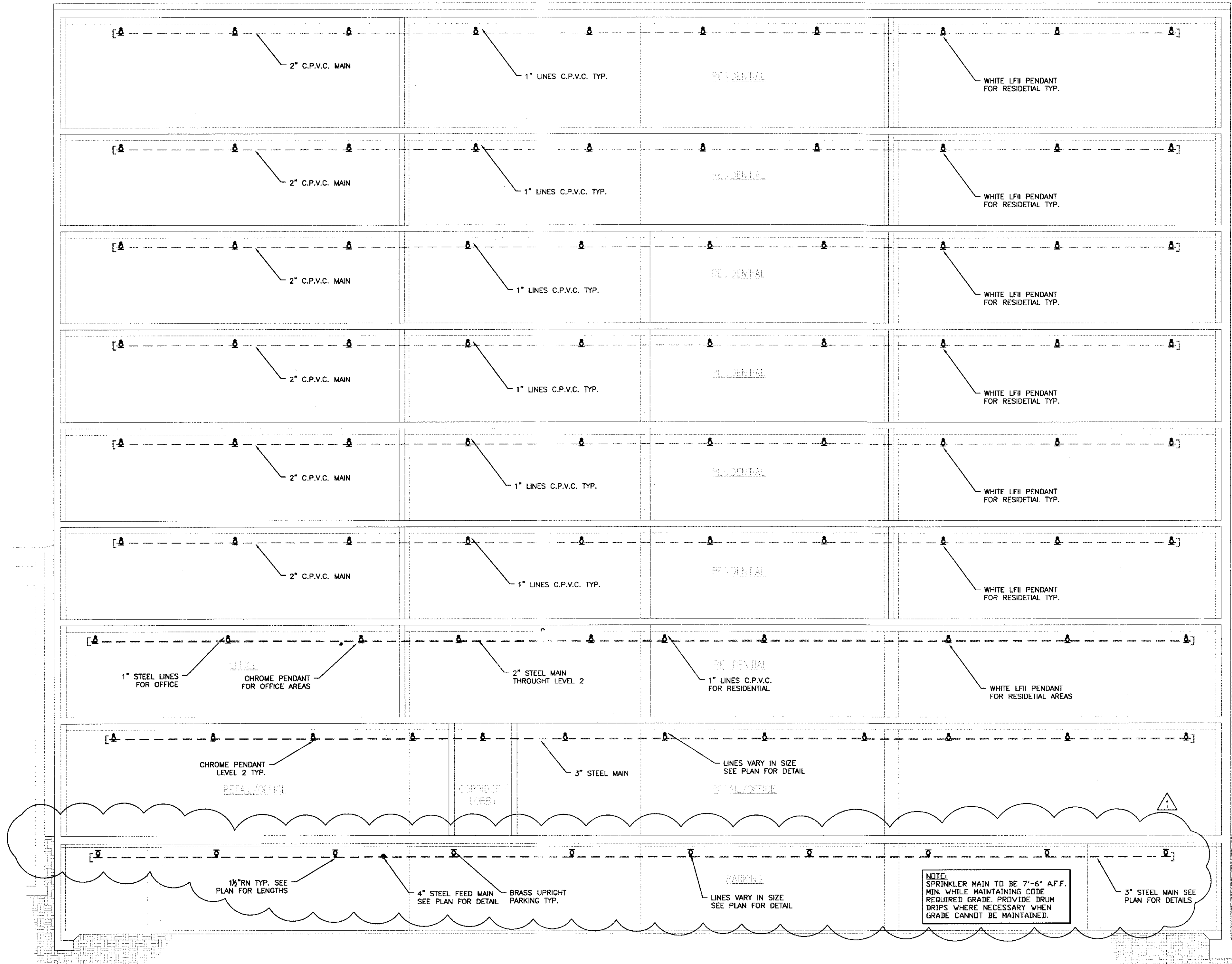
Jet Fire Protection
A DIVISION OF JET INDUSTRIES

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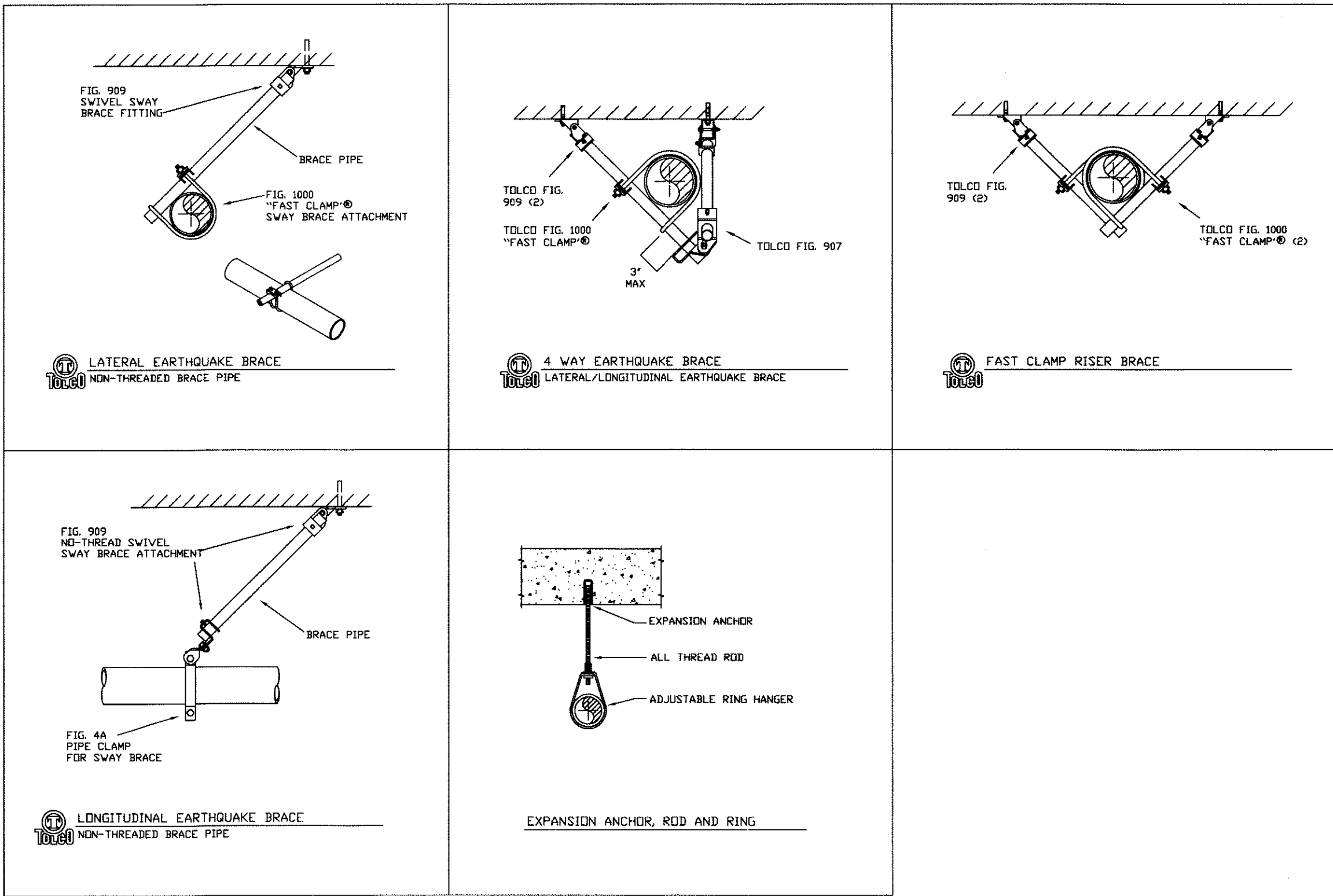
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Rivers Condos
156 FRONT AVENUE NE
SALEM, OREGON

LEVEL 7-ROOF: PIPING PLAN



A TYPICAL SECTION
SCALE = 1/8" = 1'-0"



HANGER LEGEND		STANDARD SYMBOLS		STANDARD SYMBOLS		SPRINKLER HEAD SYMBOLS	
# 4	HOOKS LENGTH AS DESIGNATED		POST INDICATOR VALVE		ALARM CHECK VALVE		UPRIGHT ON 12" OUTLET
# 5	FIG. 116 CEILING FLG. ROD & RING		KEY VALVE		RISER W/ ALARM VALVE		PENDENT ON 12" OUTLET
# 6	FIG. 163 CEILING FLG. ROD & RING		FIRE HYDRANT		RISER W/ DRY VALVE		UPRIGHT ON 1" STUB-UP
# 7	COACH SCREW, ROD & RING		FIRE DEPT. CONNECTION		RISER W/ E.L.C. FLOW SWITCH		PENDENT ON 1" DROP
# 8	CONC. INSERT, ROD & RING		O.S. & Y GATE VALVE		RISER W/ DELUGE VALVE		FLUSH SPR. ON 1" DROP
# 9	EXPANSION CHAM, ROD & RING		SWING CHECK VALVE		WATER MOTOR BELL		PENDENT ON 1" DROP
# 10	EYE ROD & RING		ELECTRIC BELL		RISER W/ DELUGE VALVE		SIDEWALL ON 12" OUTLET
# 11	"C" CLAMP, ROD & RING		NEW UNDERGROUND		FLUSH FIRE DEPT. CONN.		UP & DN AT SAME LOCATION
# 12	"J" ROD ANGLE CLIP, ROD & RING		EXIST UNDERGROUND				
# 13	ANGLE IRON CLIP, ROD & RING						