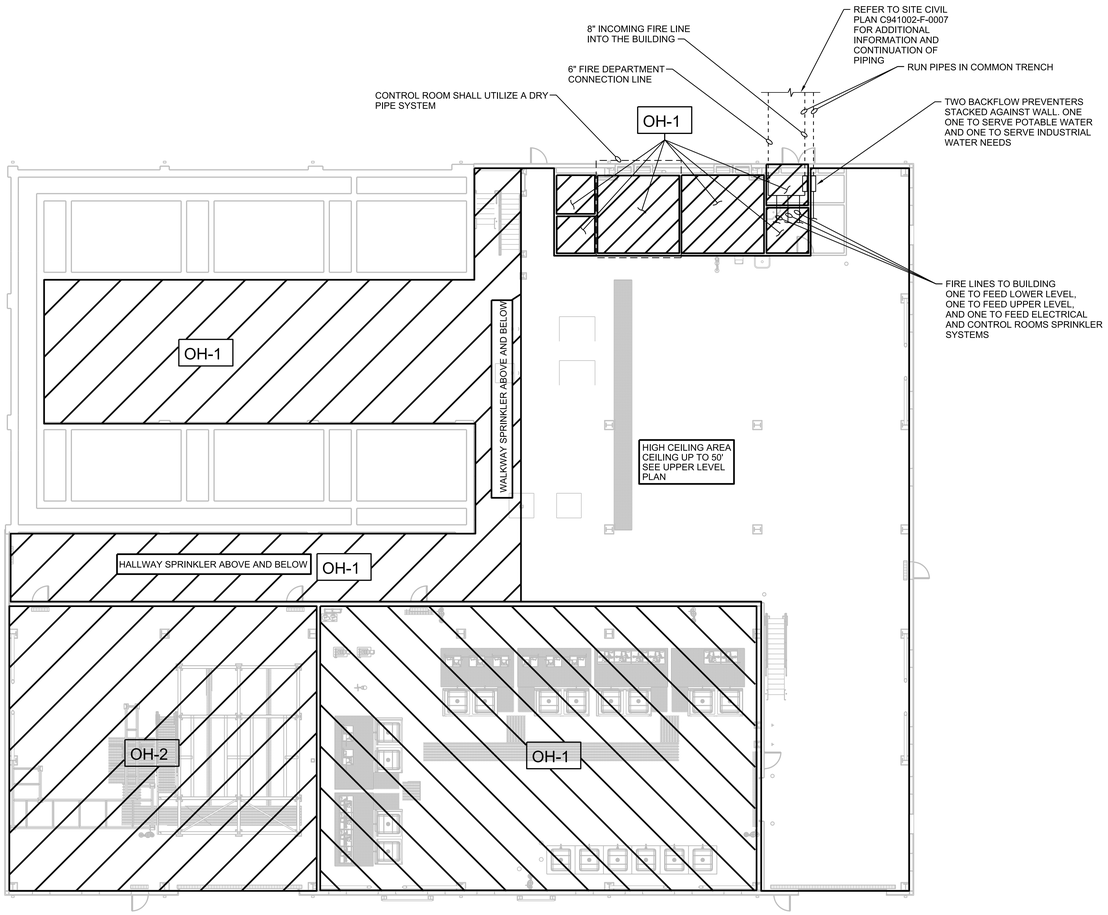
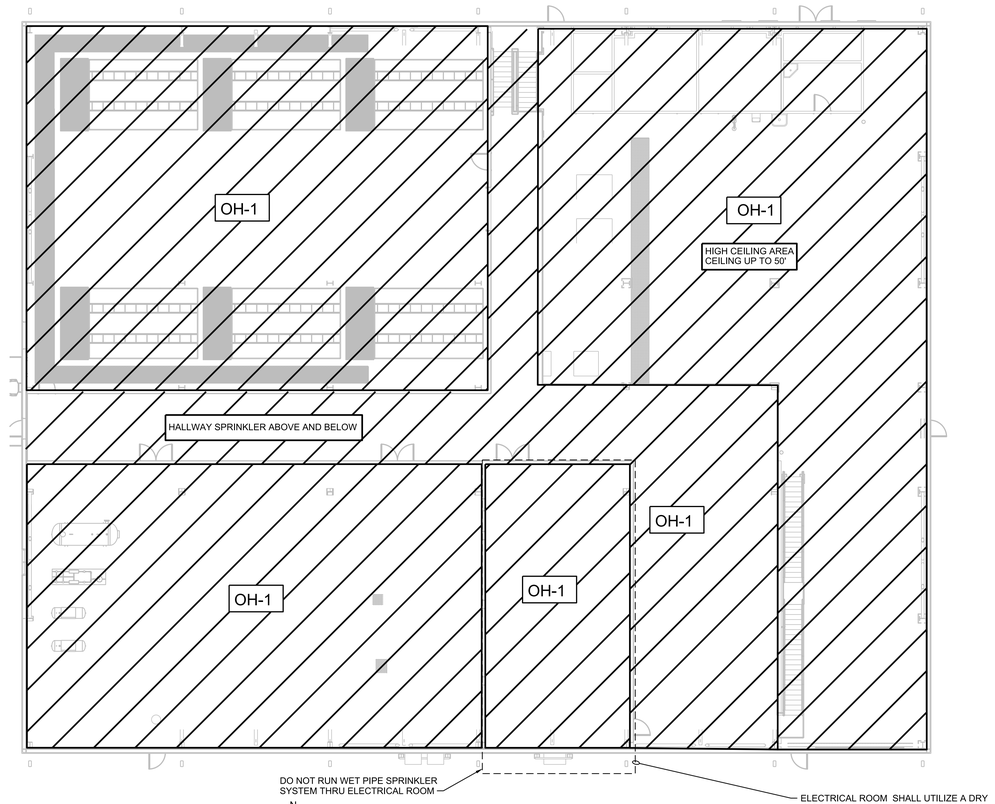


N

FIRE SUPPRESSION - LOWER LEVEL

3/32"=1'-0"



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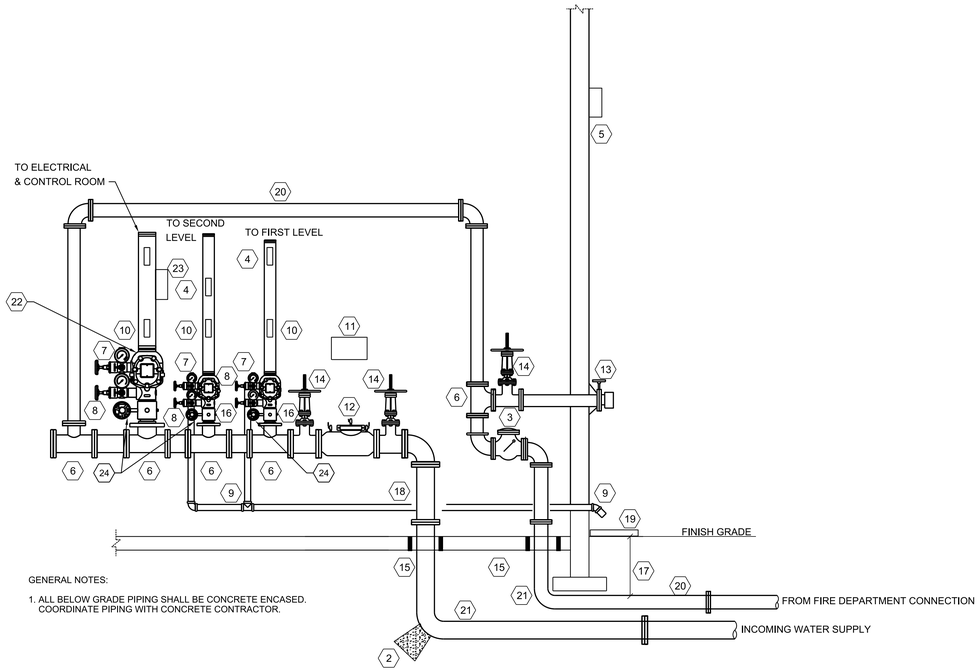
FIRE SUPPRESSION - UPPER LEVEL

3/32"=1'-0"

ITEM	DESCRIPTION
1	NOT USED
2	CONCRETE THRUST BLOCK PER NFPA
3	CHECK VALVE
4	WATER FLOW SWITCH
5	ELECTRIC HORN\STROBE
6	TEE CONNECTION
7	WATER PRESS. GAUGE
8	MAIN DRAIN VALVE
9	MAIN DRAIN
10	SYSTEM ID. SIGN
11	SPARE SPRINKLER HEAD CABINET
12	DOUBLE CHECK BACKFLOW PREVENTER ASSEMBLY. BACFLOW PREVENTER SHALL BE APPROVED BY Y-12 AND THE STATE OF TENNESSEE.
13	BFP FORWARD FLOW TEST HEADER (FLUSH TYPE) PROVIDE SIGN "BFP TEST"
14	OS&Y VALVE W/ TAMPER SWITCH
15	2" ANNULAR SPACE FILLED W/ MINERAL WOOL AND SEALED WITH WATER PROOF SEALANT
16	WET PIPE RISER CHECK VALVE
17	MINIMUM 42" OF COVER
18	PROVIDE REDUCER IF REQUIRED
19	18"x18"x4" CONCRETE SPLASH BLOCK (OMIT WHERE DISCHARGE IS ABOVE A PAVED SURFACE)
20	TO FIRE DEPARTMENT CONNECTION AND FOR FLOW.
21	STAINLESS STEEL FIRE RISER INTO BUILDING.
22	DRY PIPE PRE-ACTION VALVE
23	1/3 HP AIR COMPRESSOR EQUIVILENT TO A GENERAL AIR PRODUCTS OL25033AC
24	SUPEVISED BUTTERFLY VALVE



GENERAL NOTES:

1. ALL BELOW GRADE PIPING SHALL BE CONCRETE ENCASED. COORDINATE PIPING WITH CONCRETE CONTRACTOR.

1 FIRE SPRINKLER RISER SCHEMATIC

NTS

FIRE PROTECTION REQUIREMENTS		
HAZARD / DESCRIPTION	OH-1 ORDINARY HAZARD GROUP-I OCCUPANCIES	OH-2 ORDINARY HAZARD GROUP-II OCCUPANCIES
DESIGN DENSITY	0.15 GPM/SF	0.20 GPM/SF
MINIMUM RESIDUAL PRESSURE	20 PSI	20 PSI
DISCHARGE TIME	60 MIN	60 MIN
SPRINKLER TYPE	STANDARD RESPONSE TYPE	STANDARD RESPONSE TYPE
COVERAGE PER SPRINKLER	130 SF	130 SF
HOSE STREAM	500 GPM	500 GPM
DESIGN AREA	2,500 SF	2,500 SF
SPRINKLER TEMP RATING	ORDINARY TEMPERATURE RATING	INTERMEDIATE TEMPERATURE RATING
SPACE BETWEEN SPRINKLERS	15 FT MAX	15 FT MAX
FLOOR AREA THROUGH ONE RISER	52,000 SF/SYSTEM	52,000 SF/SYSTEM
K-FACTOR OF SPRINKLER NOZZLE	5.6	8.0
"C" FACTOR	120	120

THIS DRAWING IS LOANED FOR SOLE USE OF THE INTENDED RECIPIENT AND ONLY FOR THE LIMITED PURPOSES FOR WHICH IT WAS PROVIDED. USE BY OTHER ENTITIES OR FOR OTHER PURPOSES IS PROHIBITED AND AT THE USER'S OWN RISK. DRAWINGS ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING RECIPIENT.

PART	REV	DESCRIPTION	DRW	CHKR	DE	DVR	DM	DATE
	Ø	ISSUED FOR CONSTRUCTION	JP	JM	TP		LE	06/2017

REVISION OR ISSUE PURPOSE

PE	DATE	WE	AR	CV	ST	HV	EM	FP	PD	EE	IE	M	NP

REVISION APPROVALS — SQUAD CHECK

RPE: THEODORE J. PIERCE, REGISTERED ENGINEER, COMMERCE, No. 107,739, STATE OF TENNESSEE — 03 JUL 2017

REV.	DATE

DRAWING APPROVALS

		DATE
DRW	J PIGMAN	06/16/17
CHKR	J McMURREN	06/16/17
DE	T PRICE	06/16/17
DVR		
DM	L ELLIS	06/16/17
PE	Teresa J. Pierce, P.E.	

UCOR URS | CH2M Oak Ridge LLC

OF200 Mercury Treatment Facility

Designed by URS|CH2M Oak Ridge LLC (UCOR) for the Department of Energy Oak Ridge Office of Environmental Management under U. S. Government contract DE-SC-0004645

Y-12 National Security Complex managed and operated by Consolidated Nuclear Security, LLC for the Department of Energy under U.S. Government contract DE-NA0001942 • Oak Ridge, Tennessee •

PROJECT NAME: OF200 MERCURY TREATMENT FACILITY

PLUMBING
TREATMENT FACILITY
FIRE SUPRESSION

USE	DISC	DT	DC	CM	SYSTEM	STAT	SIZE	BLDG	FL	CLASS
3	P	F	X	NC	FAC	AR	E	9410-02	X	U

SH.	OF	TYPE		PART	REV
1	1	DD	P941002-F-0010	000	0

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ISSUED FOR CONSTRUCTION

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