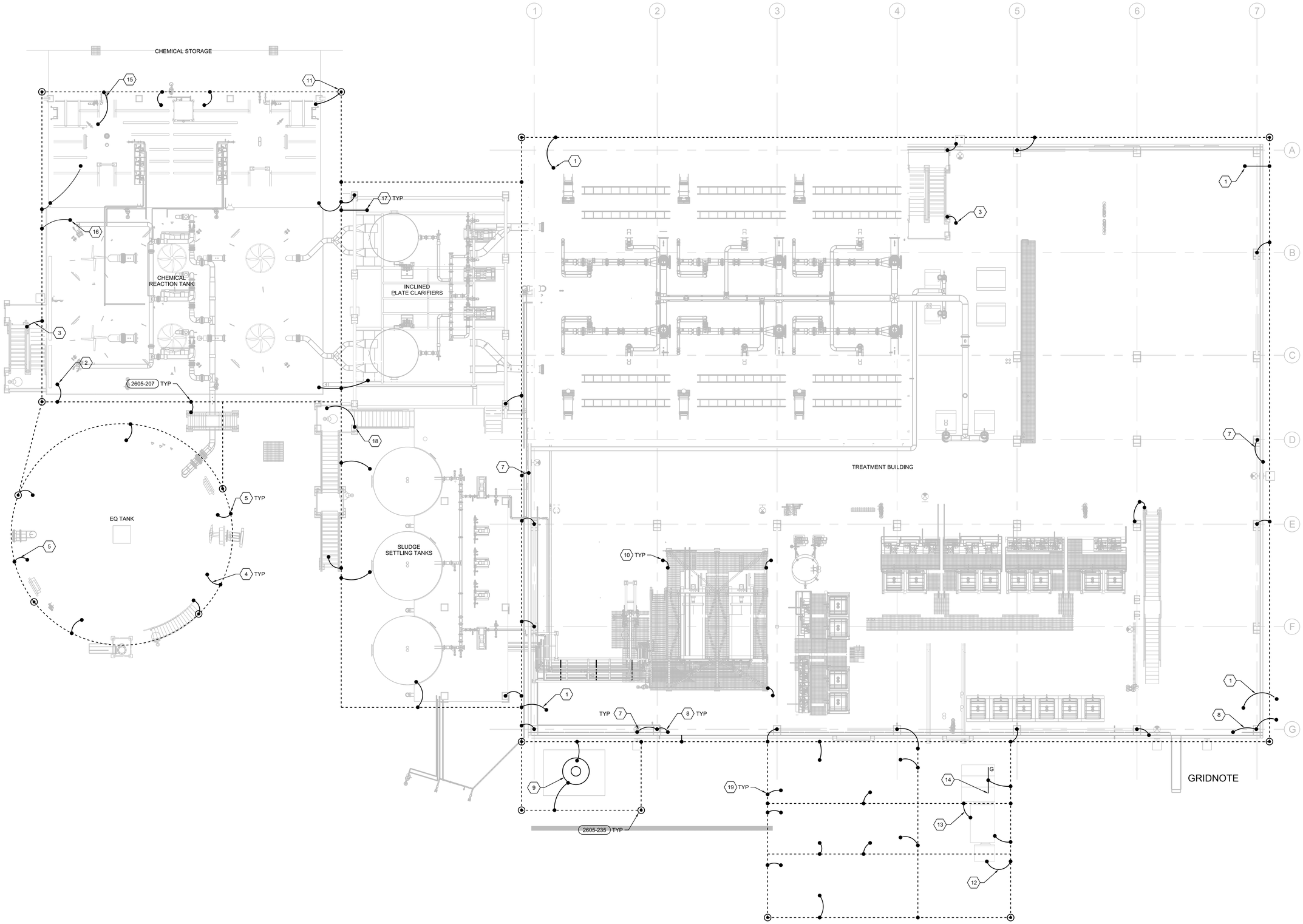

N

OVERALL GROUNDING PLAN

1/8"=1'-0"

GENERAL NOTES

A. FOR BONDING CONNECTIONS TO REINFORCING STEEL, USE 4/0 AWG BARE COPPER WIRE. EXCEPT AS NOTED. USE 2/0 AWG (MINIMUM) COPPER WIRE FOR ALL OTHER CONNECTIONS.

B. USE EXOTHERMIC WELDING FOR ALL BURIED OR CONCRETE-ENCASED CONNECTIONS. FOR ALL OTHER CONNECTIONS, USE BOLTED CONNECTIONS WITH COMPRESSION WIRE LUGS OR EXOTHERMIC WELDING.

C. COORDINATE LOCATIONS OF BONDING PIGTAILS WITH LOCATION AND ARRANGEMENT OF STRUCTURES, EQUIPMENT, AND LIKELY ROUTES OF PERSONNEL TRAVEL. RE-ROUTE OR REPLACE GROUNDING CONNECTIONS THAT PRESENT TRIPPING HAZARDS.

SHEET KEYNOTES

1. AT THE TREATMENT BUILDING, BOND THE GROUND RING TO FOUNDATION REINFORCING BAR AT FOUR PLACES AS INDICATED.
2. BOND TO STRUCTURAL ELEMENT (COLUMN, ETC.) AS INDICATED.
3. BOND TO STAIRWAY STRINGERS (TYP. FOR ALL STAIRWAYS).
4. AT THE EQUALIZATION TANK, RUN 4/0 AWG BARS WIRE TO BOTTOM OF PILE REINFORCING CAGE AT 4 LOCATIONS. BOND TO REINFORCING STEEL AT BOTTOM. BOND TO GROUND RING.
5. BOND TO THE EQUALIZATION TANK WALL AT TWO LOCATIONS ON OPPOSITE SIDES OF THE TANK.
6. NOTE NOT USED
7. BOND PERSONNEL DOOR FRAME TO NEARBY STRUCTURAL STEEL ELEMENT (TYP. FOR ALL EXTERIOR DOORWAYS).
8. BOND ROLL-UP DOOR FRAME TO NEARBY STRUCTURAL STEEL ELEMENT AT BOTH SIDES OF DOOR (TYP. FOR ALL ROLL-UP DOORS).
9. BOND VENT STACK AT TWO LOCATIONS ON OPPOSITE SIDES OF THE STACK.
10. BOND FROM FOUNDATION REINFORCING BAR TO CORNER SUPPORT COLUMN OF FILTER PRESS PLATFORM (TYP AT ALL FOUR CORNERS).
11. AT THE CHEMICAL TANK PAD, BOND THE GROUND RING TO FOUNDATION REINFORCING BAR AT TWO DIAGONALLY OPPOSITE CORNERS.
12. BOND TO THE 15KV PRIMARY SWITCH. USE 4/0 AWG BARE COPPER WIRE.
13. BOND TO THE TWO TRANSFORMER GROUNDING PADS. USE 4/0 AWG BARE COPPER WIRE.
14. BOND TO THE SWITCHGEAR GROUNING TERMINAL. USE 4/0 BARE COPPER WIRE.
15. BOND TO THE SULFURIC ACID TANK AT TWO LOCATIONS ON OPPOSITE SIDES OF THE TANK.
16. AT THE TREATMENT TANK PAD, BOND THE GROUND RING TO FOUNDATION REINFORCING BAR AT TWO DIAGONALLY OPPOSITE CORNERS.
17. AT THE CLARIFIER PAD, BOND THE GROUND RING TO FOUNDATION REINFORCING BAR AT TWO DIAGONALLY OPPOSITE CORNERS.
18. AT THE SLUDGE TANK PAD, BOND THE GROUND RING TO FOUNDATION REINFORCING BAR AT TWO DIAGONALLY OPPOSITE CORNERS.
19. BOND TO PAD-MOUNTED HVAC EQUIPMENT AT DIAGONALLY OPPOSITE CORNERS.

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 •

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PROJECT NAME: OF200 MERCURY TREATMENT FACILITY

ELECTRICAL
TREATMENT FACILITY
GROUNDING PLAN – LOWER LEVEL

USE	DISC	DT	DC	CM	SYSTEM	STAT	SIZE	BLDG	FL	CLASS
3	E	G	L	NC	FAC	AR	E	9410-02	A	U

SH.	OF	TYPE		PART	REV
1	1	DD	E941002-F-0003	000	0

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PART	REV	DESCRIPTION (REVISION OR ISSUE PURPOSE)	DRW	CHKR	DE	DVR	DM	DATE	PE	DATE
	0	ISSUED FOR CONSTRUCTION	KB	BW	GK		LE	06/2017		

REVISION APPROVALS: WE, AR, CV, ST, HV, EM, FP, PD, EE, IE, M, NP

SQUAD CHECK

DRAWING APPROVALS: REV. DATE

DATE

ISSUED FOR CONSTRUCTION

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