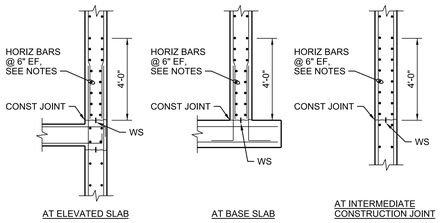


NOTES:

1. PROVIDE HORIZONTAL BARS AT 6" SPACING EACH FACE IN THE FIRST 4'-0" ABOVE ALL HORIZONTAL WALL CONSTRUCTION JOINTS IN LIQUID CONTAINING AND BELOW-GRADE STRUCTURES. WHERE TYPICAL WALL HORIZONTAL BARS ARE AT 12" SPACING, PROVIDE ADDITIONAL BARS FOR 6" SPACING.
2. HORIZONTAL BAR SIZE FOR THE 4'-0" ZONE SHALL BE THE TYPICAL WALL HORIZONTAL BAR SIZE SHOWN ON THE DRAWINGS OR THE MINIMUM BAR SIZE IN THE TABLE BELOW, WHICHEVER IS GREATER.

WALL THICKNESS (INCHES)	MINIMUM BAR SIZE
10	#5
12, 14	#6
16, 18, 20	#7
≥22	#8

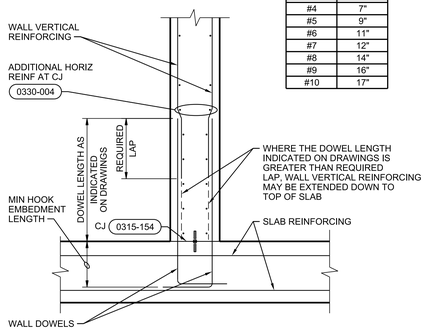
3. PROVIDE CORNER BARS AT 6" SPACING EACH FACE TO LAP WITH THE BARS SHOWN ABOVE, SEE 0330-003.

REINFORCING AT HORIZONTAL CONSTRUCTION JOINT

NTS

0330-004

ACI MINIMUM HOOK EMBEDMENT LENGTH	
BAR SIZE	MIN EMBED
#4	7"
#5	9"
#6	11"
#7	12"
#8	14"
#9	16"
#10	17"



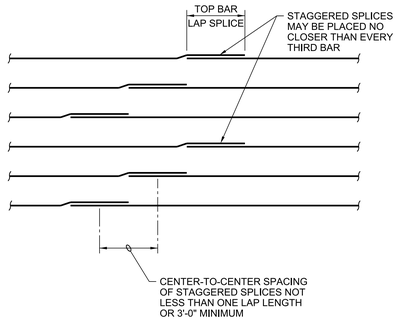
NOTE:

UNLESS NOTED OTHERWISE, ALL DOWEL HOOKS SHALL EXTEND TO AND BE TIED OFF TO BOTTOM MAT OF SLAB REINFORCING.

VERTICAL WALL REINFORCING / DOWEL PLACEMENT

NTS

0330-005



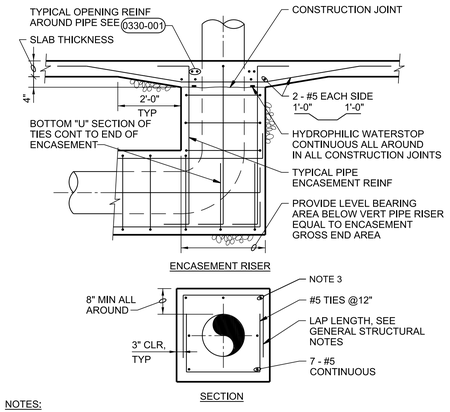
NOTE:

1. VERTICAL BARS NOT SHOWN FOR CLARITY.
2. SPLICES AT EACH FACE OF WALL MAY OCCUR AT SAME LOCATION.

CIRCULAR TANK HORIZONTAL WALL REINFORCING STAGGERED SPLICES

NTS

0330-006



NOTES:

1. SECTION APPLIES TO PIPES W/ DIAMETERS 18" AND SMALLER. FOR 20" DIAMETER PIPES AND LARGER, SEE 0330-017
2. WHEN PIPE ENCASEMENT IS CLOSER THAN 4" TO SLAB ABOVE, TIE SLAB & ENCASEMENT TOGETHER. SEE 0330-018
3. WHERE ENCASEMENT CONNECTS TO A CONCRETE WALL, LAP AND HOOK ALL PERIMETER BARS TO FAR SIDE OF WALL.

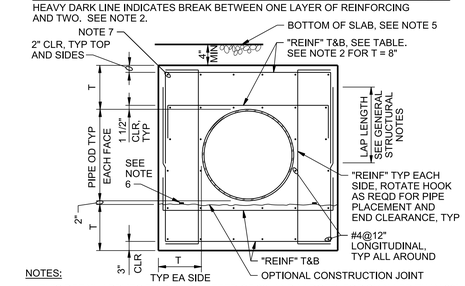
PIPE ENCASEMENT

NTS

0330-016

PIPE ENCASEMENT TABLE								
PIPE DIA (IN.)	H=10 FEET		H=20 FEET		H=30 FEET		H=40 FEET	
	T (in)	REINF	T (in)	REINF	T (in)	REINF	T (in)	REINF
20 THRU 30	8	#5@12"	10	#5@12"	10	#5@12"	10	#6@12"
36 THRU 42	10	#5@12"	10	#6@12"	10	#7@12"	10	#6@6"
48 THRU 54	10	#6@12"	10	#7@12"	10	#7@6"	12	#7@6"
UP TO 60	10	#6@12"	10	#6@6"	14	#7@6"	14	#7@6"

HEAVY DARK LINE INDICATES BREAK BETWEEN ONE LAYER OF REINFORCING AND TWO. SEE NOTE 2.



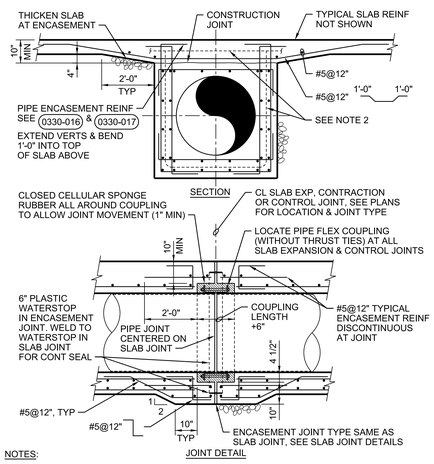
NOTES:

1. THIS DETAIL APPLIES TO PIPE DIAMETER OF 20" AND LARGER. FOR SMALLER THAN 20", SEE DETAIL 0330-016
2. FOR T=8" REINFORCING SHALL BE ONE LAYER AND CENTERED IN SLABS OR WALLS. SIM 0330-016.
3. FOR ENCASEMENT AT PIPE RISER, SEE 0330-016.
4. "H" IS FILL HEIGHT OR WATER DEPTH OR COMBINATION ABOVE PIPE.
5. WHEN PIPE ENCASEMENT CLOSER THAN 4" TO SLAB ABOVE, TIE SLAB & ENCASEMENT TOGETHER. SEE 0330-018.
6. HYDROPHILIC WATERSTOP CONTINUOUS ALL AROUND IN ALL CONSTRUCTION JOINTS.
7. WHERE ENCASEMENT CONNECTS TO A CONCRETE WALL, LAP AND HOOK ALL PERIMETER BARS TO FAR SIDE OF WALL.

PIPE ENCASEMENT

NTS

0330-017



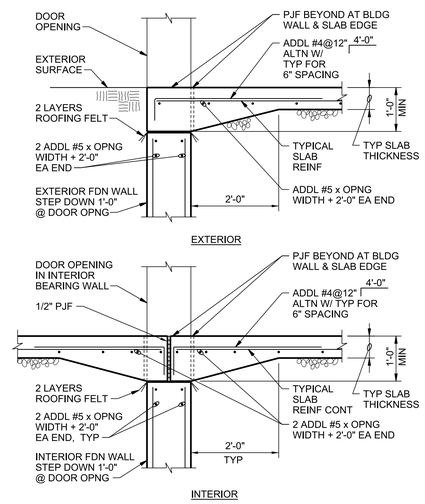
NOTES:

1. TIE PIPE ENCASEMENT TO SLAB AS SHOWN WHEN DISTANCE BETWEEN PIPE ENCASEMENT AND BOTTOM OF SLAB IS LESS THAN 4".
2. 6" PLASTIC WS IN ENCASEMENT JOINTS. WELD TO WS IN SLAB JOINTS.

PIPE ENCASEMENT AT SLAB

NTS

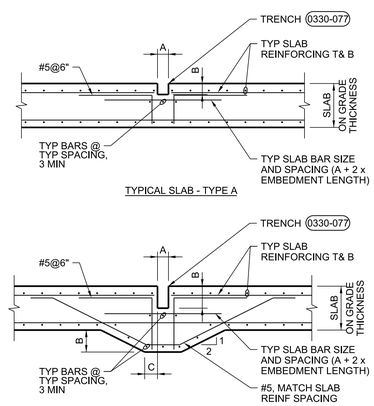
0330-018



SLAB AT DOOR OPENING

NTS

0330-041



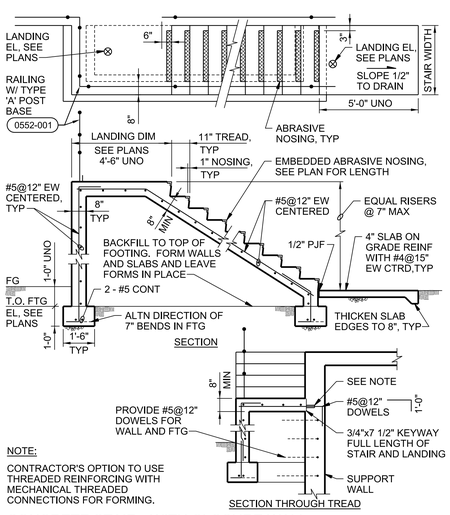
DIMENSIONS:

A = TRENCH WIDTH:	SEE PLANS
B = TRENCH DEPTH:	SEE PLANS
C = 6" WHEN:	A < 1'-0"
C = 1'-0" WHEN:	A ≥ 1'-0"

TRENCH REINFORCING

NTS

0330-043



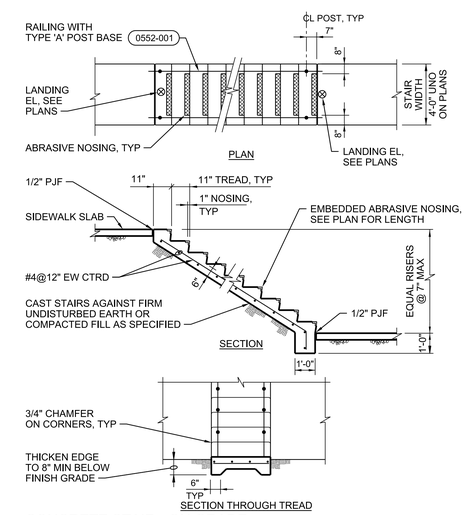
NOTE:

CONTRACTOR'S OPTION TO USE THREADED REINFORCING WITH MECHANICAL THREADED CONNECTIONS FOR FORMING.

CONCRETE STAIR - WITH CLOSURE WALL

NTS

0330-048



CONCRETE STAIR - ON GRADE

NTS

0330-049

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PART	REV	DESCRIPTION	DRW	CHKR	DE	DVR	DM	DATE
	Ø	ISSUED FOR CONSTRUCTION	RM	AF	HE		LE	06/2017

REVISION OR ISSUE PURPOSE

REVISION APPROVALS: PE, DATE

SQUAD CHECK: WE, AR, CV, ST, HV, EM, FP, PD, EE, IE, M, NP

RPE: Jennifer William Wright, Registered Professional Engineer, State of Tennessee, 6/30/17

DRW	R MARKEN	06/16/17
CHKR	A FIRTH	06/16/17
DE	H ELLIOTT	06/16/17
DVR		
DM	L ELLIS	06/16/17
PE	Teresa J. Pierce, P.E.	

REV. DATE — DRAWING APPROVALS — DATE

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

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PROJECT NAME: OF200 MERCURY TREATMENT FACILITY

STRUCTURAL
STANDARD DETAILS - SHEET 3 OF 12

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

SH.	OF	TYPE		PART	REV
3	12	DD	S941002-F-0047	000	0

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