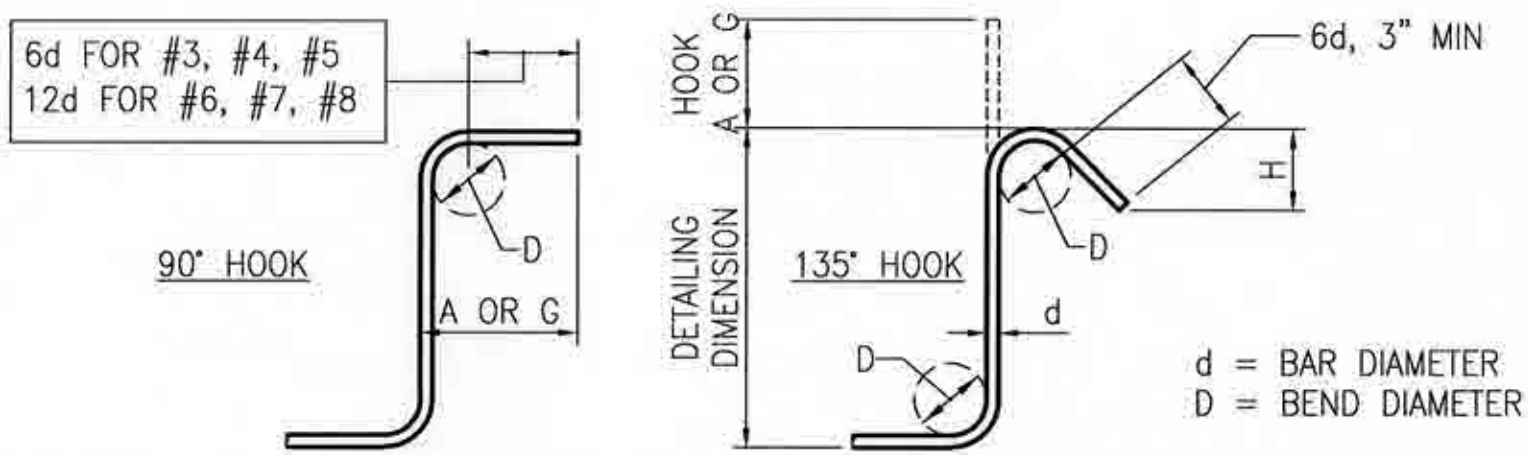


FILE: NAME\\v2652\\19th_avenue_combined_cfty_project\\2_Design\\working_drawings\\EME\\current_aws\\Structural_drawings\\2652_19thAve-S15.dwg

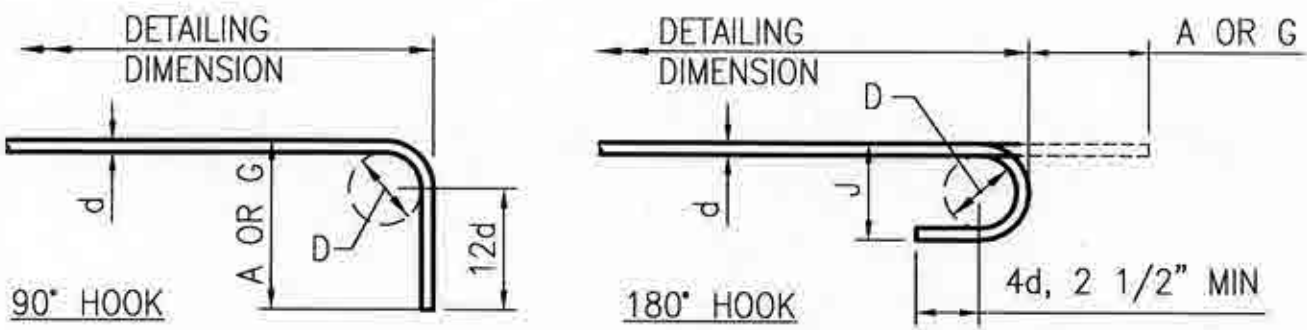
SAVE\\Monday, December 17, 2018 8:55:27 AM

PLOT: EXTENTS
SCALE: 1:1
BORDER:
22,34
COLOR: No.
RED 0.70MM
YELLOW 0.20MM
GREEN 0.25MM
CYAN 0.40MM
BLUE 0.50MM
MAGENTA 0.20MM
WHITE 0.35MM
GRAY 0.15MM
9 0.15MM
10 1.00MM
100 0.50MM
210 0.50MM



STIRRUP / TIE HOOK				
BAR SIZE	D	90° HOOKS		135° HOOKS
		A OR G	A OR G	APPROX H
#3	1 1/2"	4"	4 1/4"	3"
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	1'-0"	8"	4 1/2"
#7	5 1/4"	1'-2"	9"	5 1/4"
#8	6"	1'-4"	10 1/2"	6"

TYPICAL REINFORCEMENT BAR HOOKS AND BENDS
SCALE: N.T.S.



MAIN REBAR HOOK				
BAR SIZE	D	90° HOOKS		180° HOOKS
		A OR G	J	A OR G
#3	2 1/4"	6"	3"	5"
#4	3"	8"	4"	6"
#5	3 3/4"	10"	5"	7"
#6	4 1/2"	1'-0"	6"	8"
#7	5 1/4"	1'-2"	7"	10"
#8	6"	1'-4"	8"	11"
#9	9 1/2"	1'-7"	11 1/4"	1'-3"
#10	10 3/4"	1'-10"	1'-1 1/4"	1'-5"
#11	1'-0"	2'-0"	1'-2 1/4"	1'-7"
#14	1'-6 1/4"	2'-7"	1'-9 3/4"	2'-3"
#18	2'-0"	3'-5"	2'-4 1/2"	3'-0"

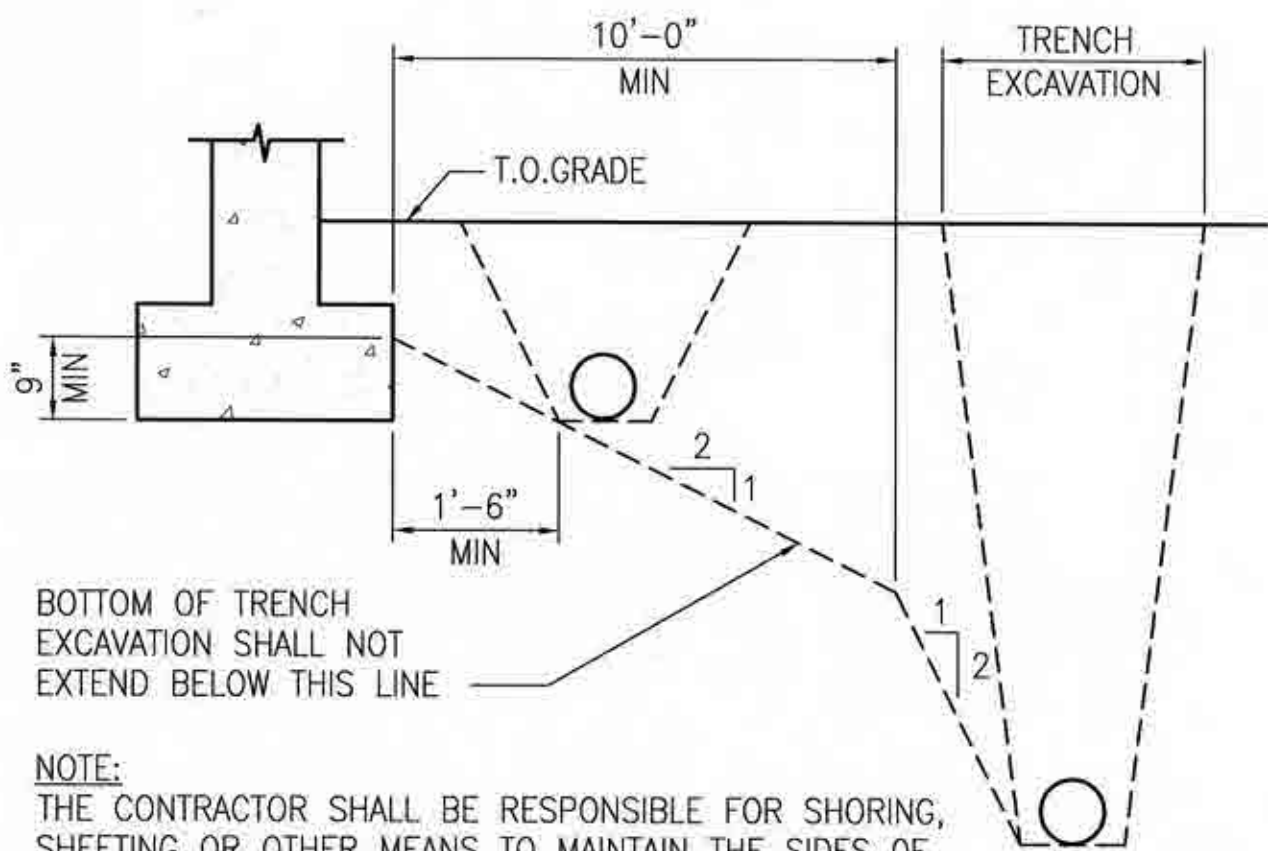
2
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BAR SIZE	f'c = 4,000 PSI				
	MIN DEVELOPMENT LENGTH		MIN LAP SPlice LENGTH		
	STRAIGHT	HOKED	TOP	OTHER	
#3	1'-7"	1'-3"	0'-8"	2'-0"	1'-7"
#4	2'-1"	1'-7"	0'-10"	2'-8"	2'-1"
#5	2'-7"	2'-0"	1'-0"	3'-5"	2'-7"
#6	3'-1"	2'-5"	1'-3"	4'-1"	3'-1"
#7	4'-6"	3'-6"	1'-5"	5'-11"	4'-8"
#8	5'-2"	4'-0"	1'-7"	6'-9"	5'-2"
#9	5'-10"	4'-6"	1'-10"	7'-7"	5'-10"
#10	6'-7"	5'-1"	2'-1"	8'-6"	6'-7"
#11	7'-3"	5'-7"	2'-3"	9'-5"	7'-3"

- ALL REINFORCING BARS SHALL BE DEVELOPED OR LAP SPICED AS SHOWN, U.O.N.
- LAP SPICE LOCATIONS SHALL BE STAGGERED WHENEVER POSSIBLE.
- TOP BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST BELOW THE LAP SPICE.

DEVELOPMENT LENGTH & LAP SPICE SCHEDULE
SCALE: N.T.S.

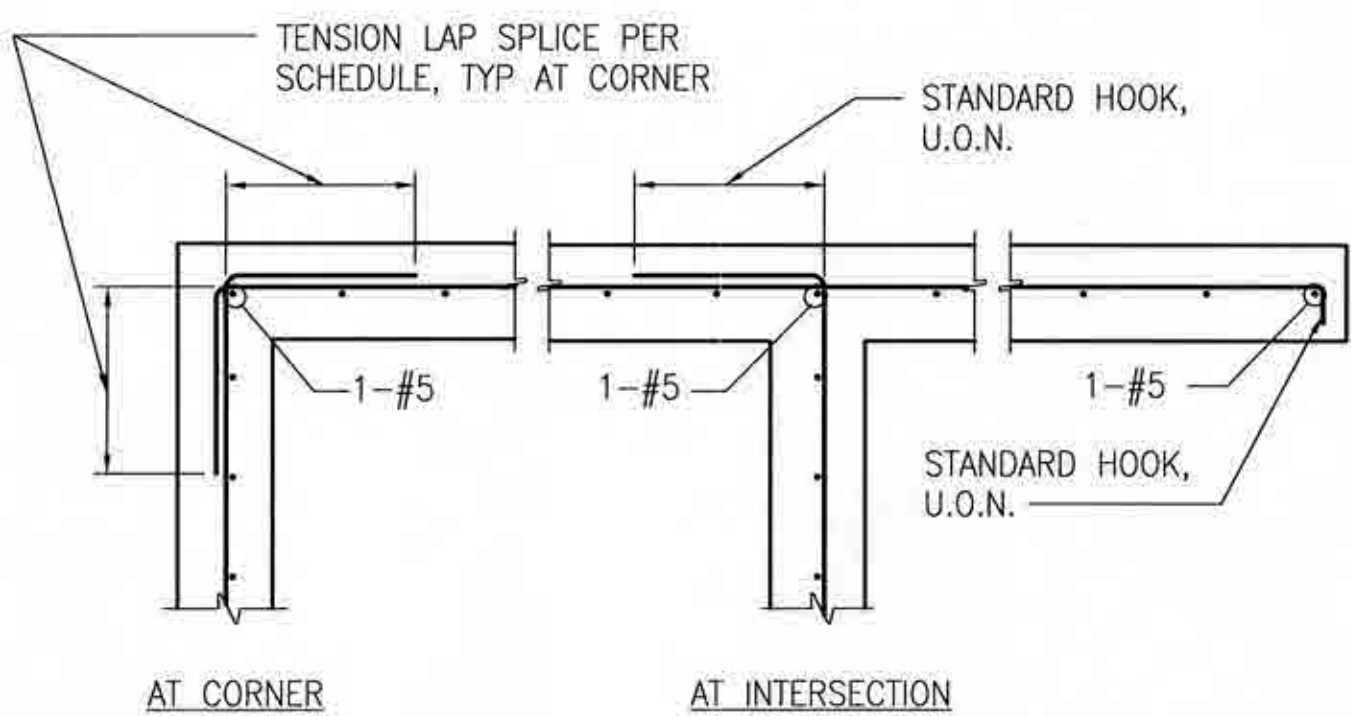
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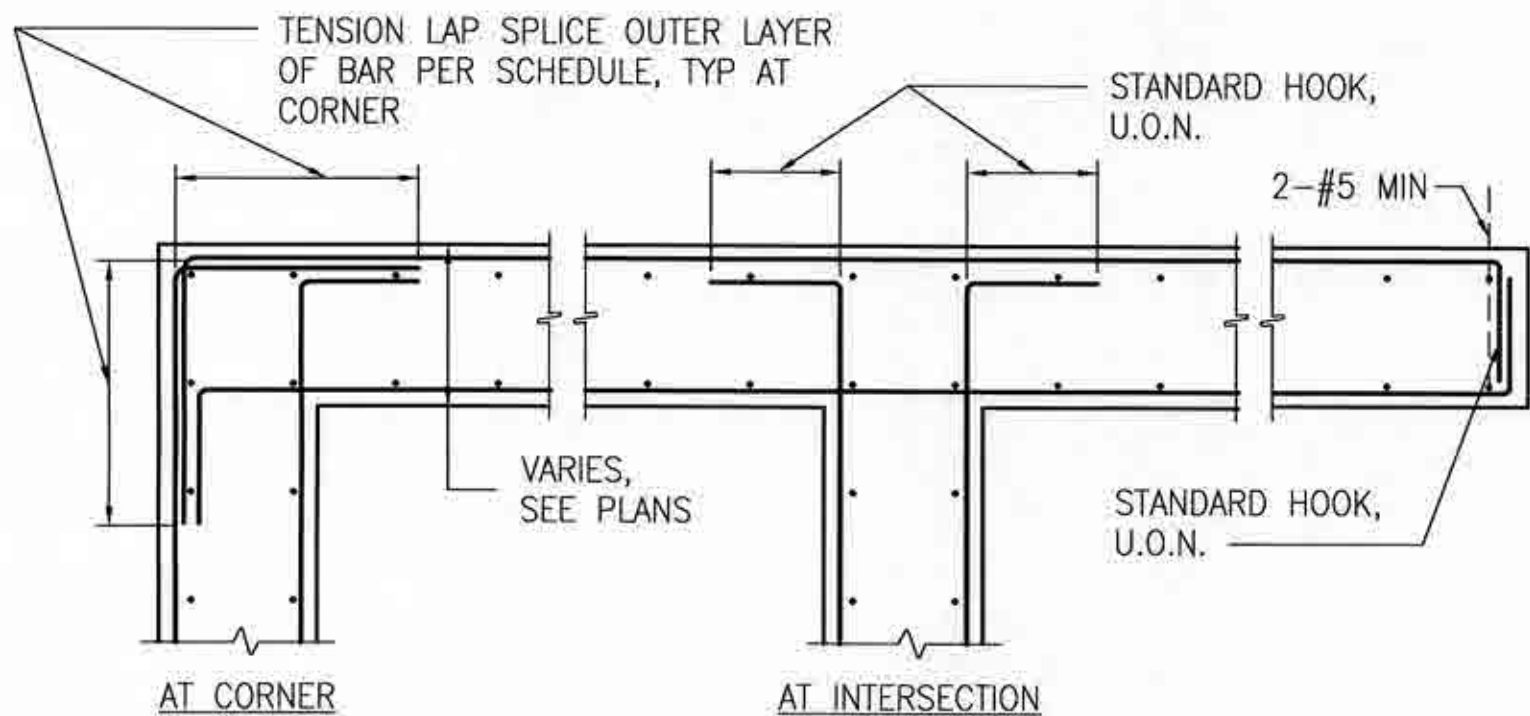
NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING, SHEETING OR OTHER MEANS TO MAINTAIN THE SIDES OF THE EXCAVATION FROM CAVE-IN UNTIL ALL BACKFILL IS COMPLETED PER SPECIFICATIONS.

TYPICAL DETAIL AT PIPES PARALLEL TO FOOTING
SCALE: N.T.S.

4
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SINGLE CURTAIN REINF. DETAILS

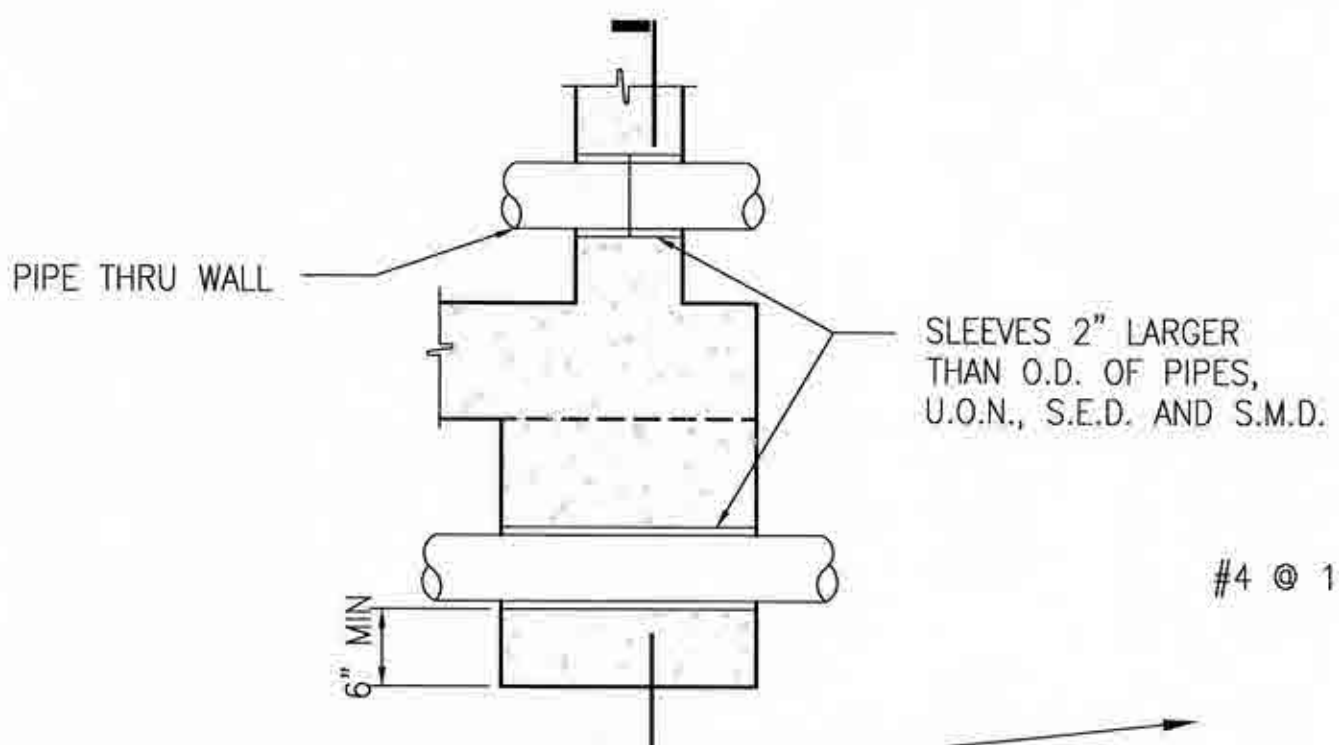


DOUBLE CURTAIN REINF. DETAILS

NOTE:
REINFORCEMENT SHOWN ON FOUNDATION DETAILS, WALL ELEVATIONS, AND OTHER SPECIFICALLY REFERENCED DETAILS TAKE PRECEDENCE OVER REINFORCEMENT SHOWN HERE.

TYPICAL CONCRETE REINFORCEMENT AT CORNERS AND INTERSECTIONS
SCALE: N.T.S.

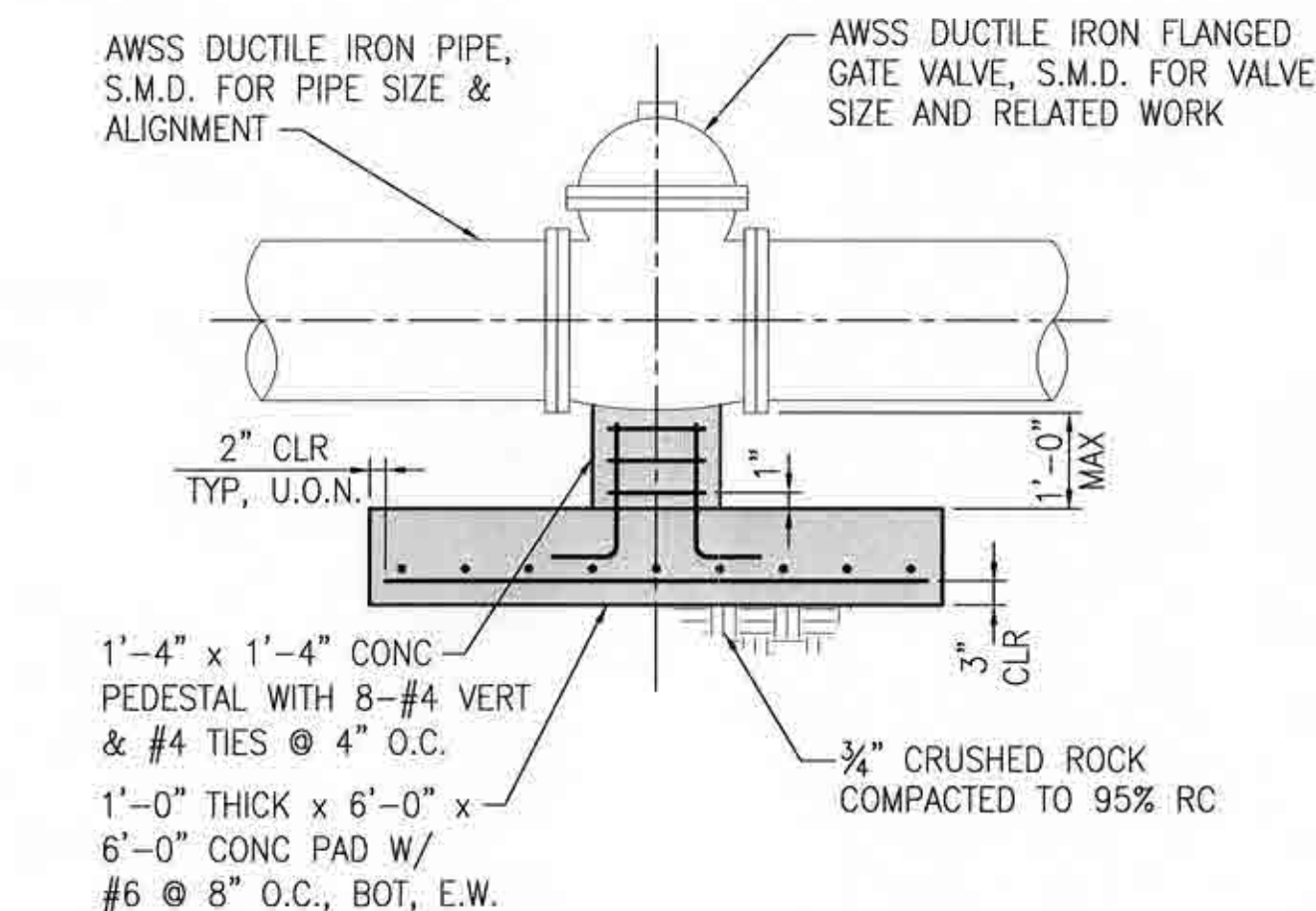
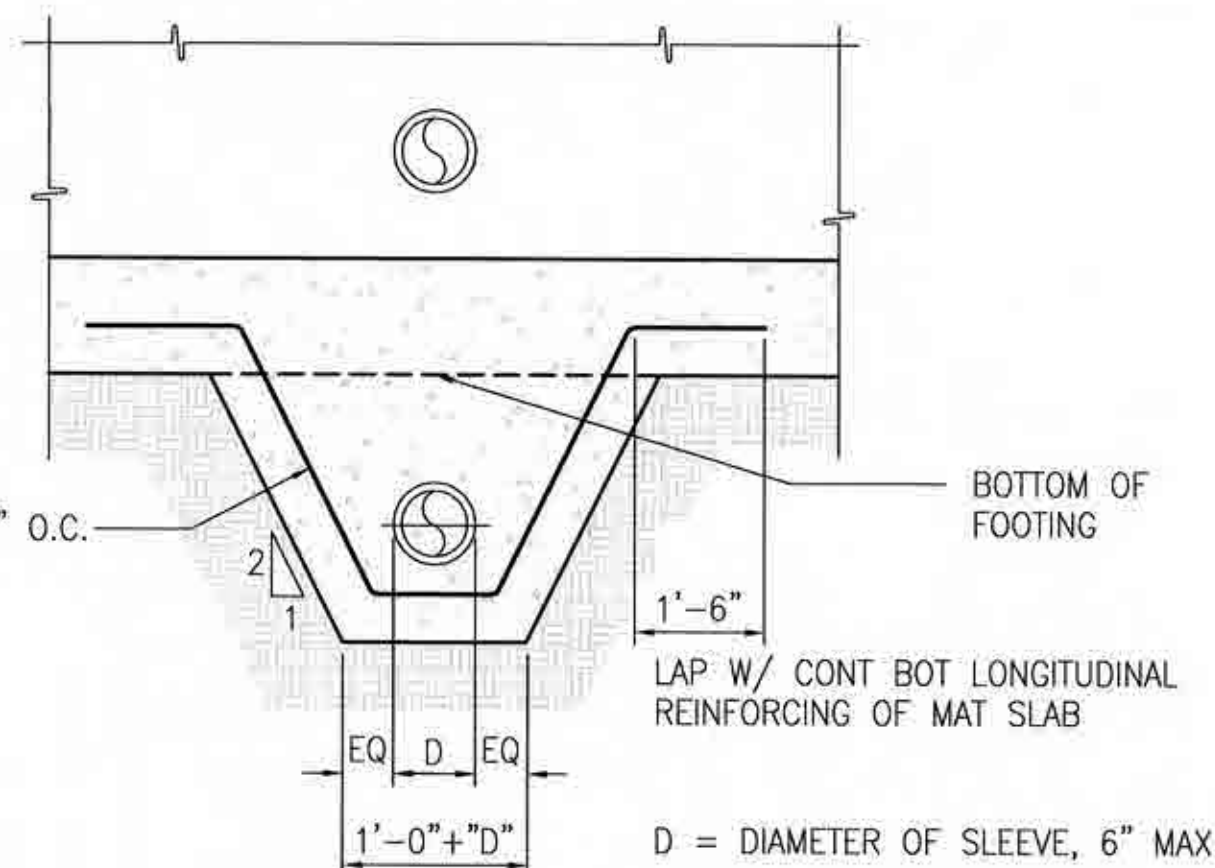
6
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- NOTE:
- FOR PIPES 3'-0" OR LESS BELOW BOTTOM OF FOOTING, PROVIDE SLEEVE AND CONCRETE AS SHOWN; FOR PIPES MORE THAN 3'-0" BELOW BOT OF FOOTING, COMPACT BACKFILL OVER PIPE TO 95% RELATIVE COMPACTION.

TYPICAL DETAIL AT PIPES PERPENDICULAR TO FOOTING
SCALE: N.T.S.

8
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TYPICAL CONCRETE EQUIPMENT PAD
N.T.S.

9
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PERMISSION OF THE SFPUC.

REFERENCES
GATE BOOK PAGES, PLANS,
SURVEY NOTES, ETC., USED



CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO PUBLIC WORKS BUREAU OF DESIGN AND ENGINEERING			
SECTION MANAGER	12/18/18	DRAWN	BH 01/2019
DEPUTY BUREAU MANAGER	12/19/18	DESIGNED	WY 01/2019
BUREAU MANAGER	12/21/18	CHECKED	WL 01/2019
NO.	DATE	DESCRIPTION	BY
REVISIONS			

CITY AND COUNTY OF SAN FRANCISCO PUBLIC UTILITIES COMMISSION WATER ENTERPRISE CITY DISTRIBUTION DIVISION 19TH AVENUE (STATE ROUTE 1) COMBINED CITY PROJECT			
AUXILIARY WATER SUPPLY SYSTEM WORK			
TYPICAL CONCRETE DETAILS			
APPROVED	APPROVED	SCALE	AS NOTED
ENGINEERING MANAGER	MANAGER, CITY DISTRIBUTION DIVISION	DATE	01/2019
PLAN NO.	FILE NO.	REVISION NO.	
294 OF 356	MA-S1.5	111,592	0

PLAN APPROVAL DATE	CONTRACT No.	PROJECT ID	DISTRICT	COUNTY	ROUTE	POST MILES TOTAL PROJECT
	04-0G3501	0400000325	04	SF	1	R0.94/4.05

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

FILE: 294 OF 356

SPW JOB ORDER NO. 2652J