

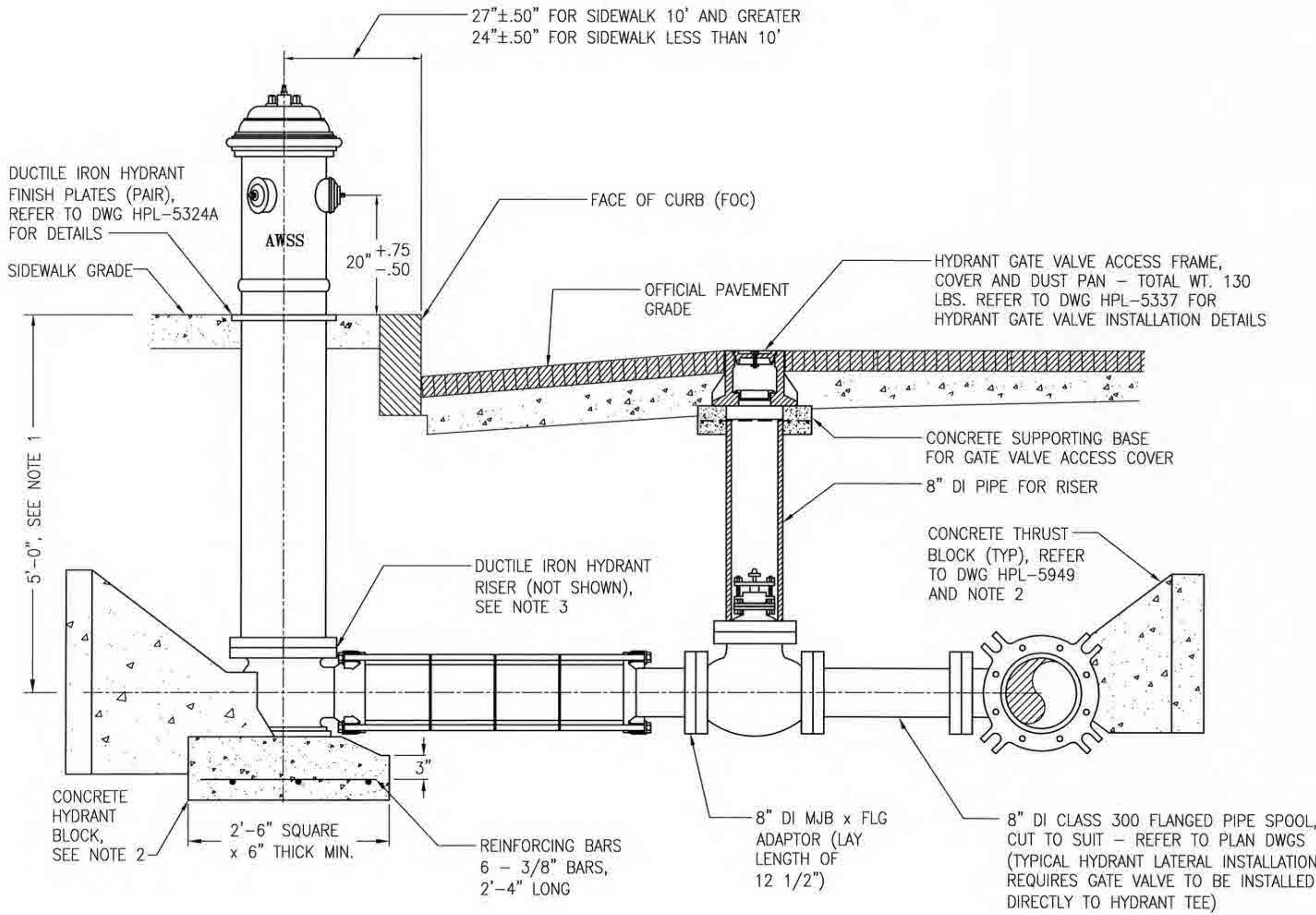
FILE: NAME\\va2652j\_19th\_avenue\_combined\_city\_project\\2\_design\\working\_drawings\\EME\\current\_awsa2652j\_LAWSS\_MA-D08.dwg  
SAVE\\Monday, December 10, 2018 1:48:22 PM  
PLOT: EXTENTS  
SCALE: 1:1  
BORDER:  
22.34  
COLOR: No.  
RED 0.70MM  
YELLOW 0.20MM  
GREEN 0.25MM  
CYAN 0.40MM  
BLUE 0.50MM  
MAGENTA 0.20MM  
WHITE 0.35MM  
GRAY 0.15MM  
9 0.15MM  
10 1.00MM  
100 0.50MM  
210 0.50MM

MINIMUM HYDRANT LATERAL LAY LENGTHS

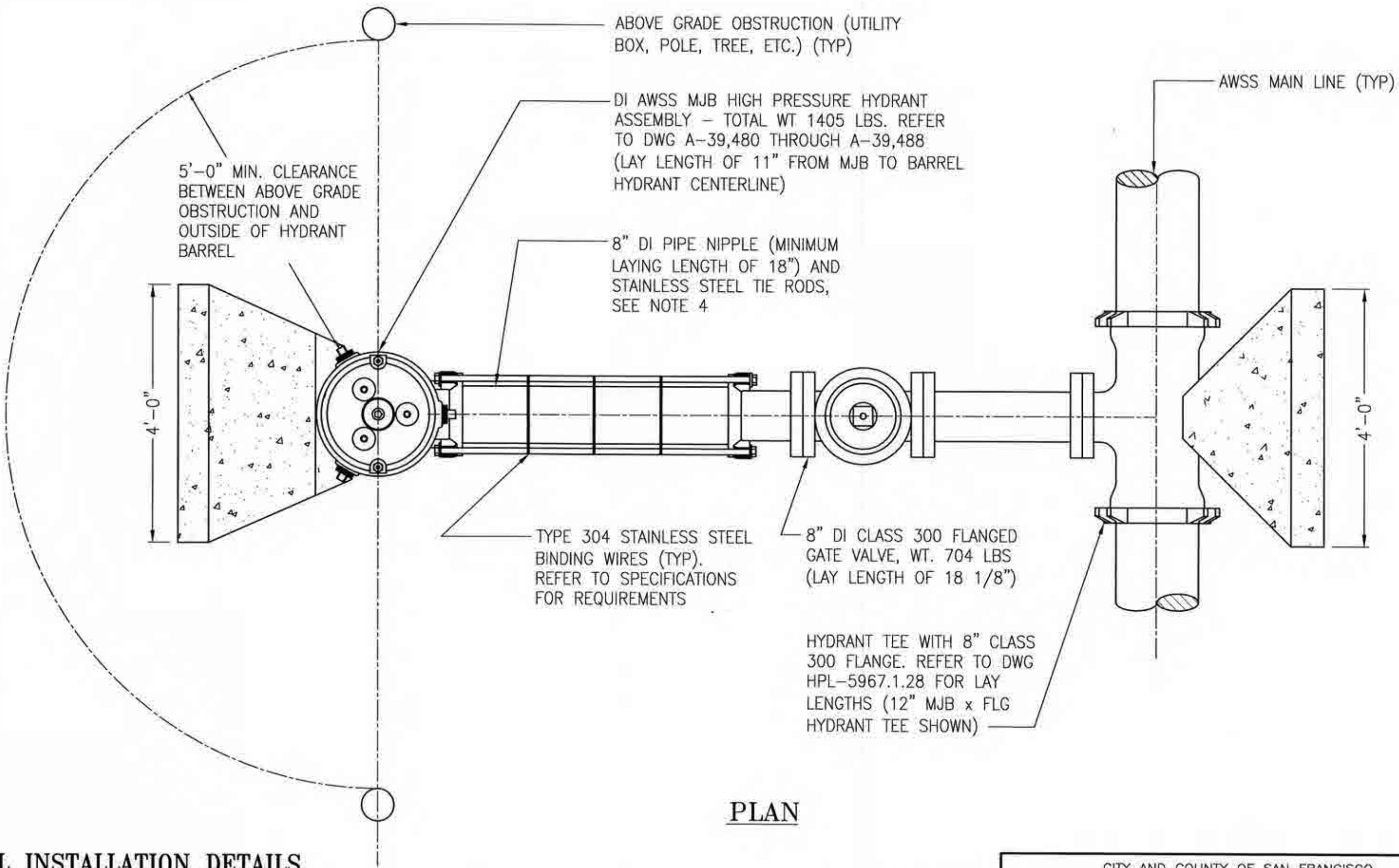
MAIN PIPE DIAMETER	MINIMUM LAY LENGTH CL MAIN TO CL OF HYDRANT
10"	72 1/2"
12"	73 3/8"
14"	75 1/4"
16"	76 7/8"
18"	77 1/2"
20"	79 1/8"

NOTES:

1. TYPICAL DEPTH OF HYDRANT LATERAL PIPING IS 5'-0" FROM FINISHED STREET GRADE TO CENTERLINE OF PIPE. WHERE PIPE DEPTH IS GREATER, INSTALL DUCTILE IRON HYDRANT RISER(S) PER NOTE 3.
2. CONCRETE HYDRANT BLOCK SHALL BE POURED/CURED PRIOR TO THE INSTALLATION OF THE HYDRANT ASSEMBLY AND THE POURING OF THE CONCRETE THRUST BLOCK. CONCRETE HYDRANT BLOCK AND THRUST BLOCKS SHALL BE POURED AGAINST SOLID/UNDISTURBED SOIL.
3. HYDRANT RISER(S) (MAXIMUM OF 24" AND THREE RISERS TOTAL) TO BE INSTALLED AS REQUIRED TO MEET THE HYDRANT DIMENSION OF 20" FROM CENTERLINE OF OUTLET FACING STREET TO FINISHED SIDEWALK LOCATION. REFER TO DWGS HPL-39,417A AND HPL-39,417B FOR HYDRANT RISER FABRICATION DETAILS.
4. MAXIMUM LENGTH OF TIE RODS IS 5'-5". WHERE THE LENGTHS OF TIE RODS WOULD EXCEED 5'-5", REFER TO PIPING PLAN DWG FOR INSTALLATION OF STOP COLLARS AND COLLAR STOPS. REFER TO DWG 49,102 FOR DETAILS OF THE STAINLESS STEEL TIE RODS, NUTS, WASHERS, AND DWG HPL-A-5975.1 FOR COLLAR STOPS.
5. ALL FLANGES, BOLTS, NUTS, AND WASHERS SHALL BE MANUFACTURED FROM TYPE 316 STAINLESS STEEL. FOR CLARITY NOT ALL TIE RODS, BOLTS, NUTS, WASHERS, ARE SHOWN ON THIS DWG.
6. REFER TO TABLE ON THIS SHEET FOR THE MINIMUM LAYING LENGTH BETWEEN THE CENTERLINES OF THE HYDRANT TEE AND THE HYDRANT BARREL.
7. REFER TO DWG HPL-5142.1 WHEN HIGH PRESSURE HYDRANT IS TO BE INSTALLED OVER A SIDEWALK BASEMENT AND IN A HYDRANT AREA WAY.
8. REFER TO SPECIFICATIONS FOR ADDITIONAL MATERIAL AND INSTALLATION INFORMATION, INCLUDING TRENCHING, SHORING, BACKFILLING AND TESTING OF THE INSTALLED HYDRANT LATERAL.
9. REFER TO THE SPECIFICATIONS FOR PAINTING OF HYDRANT. BONNET AND OUTLET CAPS SHALL BE PAINTED TO THE COLORS AS DIRECTED BY THE CITY REPRESENTATIVE.



PROFILE



PLAN

HIGH PRESSURE HYDRANT LATERAL INSTALLATION DETAILS  
SCALE: NONE

REFERENCES:  
AWSS DWGS NUMBERS:  
HPL-5324 CH1 REV. 2, DATED MARCH 1934  
HPL-5950 REV. 2, DATED MARCH 2005  
HPL-5324 CH3 REV. 2, DATED OCTOBER 2008

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

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

GATE BOOK PAGES  
NO.



CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO PUBLIC WORKS BUREAU OF DESIGN AND ENGINEERING			
SECTION MANAGER <i>Angela Roberts</i>	DRAWN MM/WC	01/2019	
DEPUTY BUREAU MANAGER <i>Angela Roberts</i>	DESIGNED MBS	01/2019	
BUREAU MANAGER <i>Angela Roberts</i>	CHECKED EL	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 DETAILS II			
APPROVED <i>Angela Roberts</i> ENGINEERING MANAGER	APPROVED <i>Michael R. Smith</i> MANAGER, CITY DISTRIBUTION DIVISION	SCALE NONE	DATE 01/2019
SHEET 285 OF 356	PLAN NO. MA-D08	FILE NO. 111,583	REVISION NO. 0