

FILE NAME: v:\2652\19th\_avenue\_combined\_city\_project\2\_design\working\_drawings\EME\current\_aws\2652\_L\_AWSS\_MA-G05.dwg  
SAVE Wednesday, October 31, 2018 12:018 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

GENERAL NOTES

- IN ACCORDANCE WITH THE PROVISIONS OF THE CALIFORNIA PUBLIC CONTRACT CODE, SECTION 3300, A BID SUBMITTED TO A PUBLIC AGENCY BY A CONTRACTOR WHO IS NOT LICENSED IN ACCORDANCE WITH CHAPTER 9 OF THE BUSINESS AND PROFESSIONS CODE SHALL BE CONSIDERED NON-RESPONSIVE AND SHALL BE REJECTED BY THE PUBLIC AGENCY.
- AT THE TIME THE CONTRACT IS AWARDED, THE CONTRACTOR SHALL POSSESS A CLASS A, GENERAL ENGINEERING CONTRACTOR'S LICENSE.
- SINGLE LINE DIAGRAMS ARE PIPE CENTERLINES. MAXIMUM DEFLECTION ALLOWED AT EACH JOINT IS ONE (1) DEGREE UNLESS OTHERWISE SPECIFIED.
- HYDRANT VALVE SHALL BE AS CLOSE TO MAIN AS POSSIBLE.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTH OF THE EXISTING AWSS FACILITIES IN THE FIELD AND SHALL ACCORDINGLY ADJUST THE LOCATION AND DEPTH OF THE AWSS FACILITIES TO BE INSTALLED FOR THE REQUIRED CONNECTIONS.
- THE MINIMUM CLEARANCE BETWEEN THE AWSS PIPE, FITTING OR APPURTENANCE AS THE CASE MAY BE, AND OTHER FACILITIES SHALL BE NOT LESS THAN 12", UNLESS OTHERWISE SPECIFIED, OR APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SUPPLY ALL MATERIALS UNLESS OTHERWISE SPECIFIED.
- ALL NEW MATERIALS TO BE FURNISHED BY THE CONTRACTOR SHALL CONFORM TO REQUIREMENTS OF THE CITY AND COUNTY OF SAN FRANCISCO AWSS SPECS AND AWSS STANDARD DRAWINGS, UNLESS OTHERWISE INDICATED. DOCUMENTS ARE AVAILABLE UPON REQUEST TO CITY REPRESENTATIVE.
- THE CONTRACTOR SHALL FURNISH ALL FLANGE GASKETS, STAINLESS STEEL BOLTS, NUTS AND WASHERS; MJ GASKETS, GLANDS BOLTS AND NUTS.
- THE CONTRACTOR SHALL WELD DI COLLAR STOPS TO (N) PIPE.
- CONTRACTOR SHALL REMOVE (E) THRUST BLOCKS AND TIE RODS IN ORDER TO CONNECT TO (E) LINES, AS DIRECTED BY THE CITY REPRESENTATIVE.
- CONTRACTOR SHALL SUPPORT SEWERS AND SEWER FORCE MAINS, AND OTHER GOVERNMENTAL UTILITY FACILITIES AS INCIDENTAL WORK.
- REFER TO RELATED DRAWINGS IN THE CONTRACT PACKAGE FOR EXISTING AND NEW UTILITY AT THE LOCATION(S) OF WORK.
- CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) TO REQUEST THAT MEMBER COMPANIES LOCATE AND MARK THEIR UNDERGROUND SERVICE LINES AND EQUIPMENT AT LEAST 48 HRS PRIOR TO TRENCH EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR RELATED FEES FOR THEIR COORDINATION EFFORT INCLUDING BUT NOT LIMITED TO FEES REQUIRED BY MEMBER COMPANIES. CONTRACTOR SHALL PAY FOR DPW STREET OPENING PERMIT PRIOR TO EXCAVATION.

AWSS FACILITIES MONITORING NOTES (WHERE SHOWN ON THE DWGS)

- SEE DWG MA-G06 FOR SETTLEMENT MONITORING AND PIPE SUPPORT NOTES AND LEGEND.

SPECIAL INSTRUCTIONS

THE CONTRACTOR SHALL PERFORM PRELIMINARY EXCAVATIONS OF ALL ROUTES OF THE NEW AWSS WORK. THE EXCAVATIONS SHALL BE PERFORMED AT A MINIMUM OF EVERY 10 FEET WITH A WRITTEN REPORT SUMMARIZING ANY CONFLICTS AT EACH LOCATION. THIS REPORT SHALL BE SUBMITTED TO THE CITY REPRESENTATIVE FOR APPROVAL PRIOR TO BEGINNING TRENCH EXCAVATION. EXCAVATIONS SHALL BE A MINIMUM 18-INCHES SQUARE.

THESE PRELIMINARY EXCAVATIONS SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE CITY.

THE CONTRACTOR SHALL INSTALL DUCTILE IRON AWSS HYDRANT FINISH PLATES (PAIR PER HYDRANT) AT ALL (E) AWSS HYDRANTS IN THIS CONTRACT WHERE THE (E) SIDEWALK IS SHOWN TO BE REMOVED AND REPLACED, DUE TO ADJACENT WORK. THE DUCTILE IRON FINISH PLATES ARE THE SAME AS THE FINISHED PLATES CALLED OUT TO BE FURNISHED AND INSTALLED FOR AWSS HYDRANTS SHOWN TO BE REMOVED AND REPLACED IN THE CONTRACT WORK. REFER TO RELATED DRAWINGS FOR DETAILS OF THE DUCTILE IRON FINISH PLATES AND THE INSTALLATION AT ALL (E) AND (N) HYDRANTS.

TEMPORARY SHORING OF TRENCH EXCAVATION(S) ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SHORING DESIGN(S) SHALL BE PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SHALL BE SUBMITTED TO THE CITY REPRESENTATIVE FOR REVIEW AND APPROVAL. SHORING DESIGN(S) SHALL INCLUDE SURCHARGE LOADS DUE TO ADJACENT TRAFFIC LOADS, INCLUDING, BUT NOT LIMITED TO, MUNI LIGHT RAIL VEHICLES AND VEHICULAR TRAFFIC (HS20). THIS REQUIREMENT SHALL SUPERSEDE ANY OTHER LANGUAGE IN THE SPECIFICATIONS AND/OR DRAWINGS. THE EARTH WORK FOR REMOVAL AND INSTALLATION OF AWSS FACILITIES SHALL INCLUDE ALL TRENCHING, SHORING, BACKFILLING, COMPACTION AND PAVEMENT/CONCRETE ROADWAY RESTORATION, ALL TO CONFORM TO THE APPLICABLE REQUIREMENTS OF AGENCIES HAVING JURISDICTION OVER THE CONSTRUCTION LOCATION.

THE CONTRACTOR SHALL COMPLY WITH ALL SFMTA REQUIREMENTS, INCLUDING TRAINING AND CERTIFICATION OF EMPLOYEES, WHEN WORK IS IN THE VICINITY OF MUNI'S LIGHT RAIL VEHICLE TRACKWAYS.

CONSTRUCTION SEQUENCING

REFER TO DWG MA-G02, INDIVIDUAL DRAWINGS, AND THE SPECIFICATIONS FOR CONSTRUCTION SEQUENCING REQUIREMENTS.

THE AWSS REMOVAL AND NEW WORK AS SHOWN ON THE DWGS SHALL BE COMPLETED PRIOR TO THE (N) PAVING WORK AND CONSTRUCTION OF PUBLIC/PRIVATE UTILITIES AS SHOWN ON RELATED DWGS IN THE CONTRACT PACKAGE UNLESS OTHERWISE NOTED ON OTHER DWGS AND THE SPECIFICATIONS OF THIS CONTRACT PACKAGE.

REMOVAL AND NEW WORK AT EACH INTERSECTION AND AS SHOWN ON EACH PLAN DWGS SHALL BE PERFORMED IN A CONTINUOUS SEQUENCE DUE TO SFFD OPERATIONAL REQUIREMENTS FOR FIREFIGHTING WATER IN THE VICINITY OF THE CONSTRUCTION AREA. COORDINATE WITH SFWD FOR MAIN LINE AND/OR HYDRANT SHUT DOWN PRIOR TO BEGINNING ANY WORK. REFER TO THE SPECIFICATIONS FOR ADDITIONAL DETAILS.

REFER TO NEW WORK PLAN DWGS FOR SPECIFIC CONSTRUCTION SEQUENCING RELATED TO EACH LOCATION WHEN APPLICABLE.

AWSS LEGEND

(THIS IS A STANDARD AWSS LEGEND -- NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT)

	CENTERLINE OF AWSS TO BE REMOVED (REMOVAL WORK) AND/OR INSTALLED (NEW WORK)
	EXISTING PIPE (TO REMAIN IN PLACE)
	EXISTING PIPE TO BE ABANDONED IN PLACE
	GATE VALVE IN VALVE VAULT/DIRECT BURIED -- PLAN
	GATE VALVE IN VALVE VAULT -- ELEVATION
	DIRECT BURIED GATE VALVE WITH EQUIPMENT PAD AND VALVE BOX (ES)-- ELEVATION
	PRECAST VALVE BOX, FRAME, COVER, DUST PAN -- ELEVATION
	DI FLANGED GATE VALVE
	CI GATE VALVE
	HIGH PRESSURE HYDRANT ASSEMBLY -- PLAN
	HIGH PRESSURE HYDRANT ASSEMBLY -- ELEVATION
	HYDRANT RISER -- ELEVATION
	AIR VALVE ASSEMBLY -- ELEVATION
	CONCRETE THRUST BLOCK
	DI BELL AND SPIGOT PUSH-ON RESTRAINT JOINT (PIPE) OR MECHANICAL JOINT (FITTINGS)
	CI BELL AND SPIGOT OR FITTING LEAD JOINT
	DI FLANGED
	DI AND CI ELBOW -- PLAN AND ELEVATION (INTO SHEET)
	DI AND CI TEE -- PLAN
	DI AND CI TEE -- ELEVATION
	DI SLEEVE
	DI PIPE LINE ACCESS POINT ASSEMBLY

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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>Evanth</i> 12/17/18	DRAWN MM/WC	01/2019	
DEPUTY BUREAU MANAGER <i>Thomas</i> 12/19/18	DESIGNED MBS	01/2019	
BUREAU MANAGER <i>Robert</i> 12/29/18	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 MECHANICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES			
APPROVED <i>[Signature]</i> ENGINEERING MANAGER	APPROVED <i>[Signature]</i> MANAGER, CITY DISTRIBUTION DIVISION	SCALE AS NOTED	DATE 01/2019
SHEET 245 OF 356	PLAN NO. MA-G05	FILE NO. 111,543	REVISION NO. 0