

AHERN FIRE PROTECTION - ST. LOUIS

Contractor's Material and Test Certificate for ABOVE GROUND PIPING

PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by an owner's representative.
All defects shall be corrected and system left in service before contractor's personnel finally leave the job.

A certificate shall be filled out and signed by both representatives. Copies shall be prepared for approving authorities, owners, and contractor.
It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.

PROPERTY NAME:	WEBSTER UNIV - ISB				AFP # 461259			
ADDRESS:	8274 BIG BEND BLVD., WEBSTER GROVES, MO							
PLANS	ACCEPTED BY APPROVING AUTHORITIES (NAMES)							
	1 CITY OF WEBSTER GROVES							
	2							
	ADDRESS							
	1							
2								
INSTALLATION CONFORMS TO ACCEPTED PLANS				☒ YES		☐ NO		
EQUIPMENT USED IS APPROVED				☒ YES		☐ NO		
IF NO, EXPLAIN DEVIATIONS								
INSTRUCTIONS	HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO							
	LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF EQUIPMENT?				☒ YES		☐ NO	
	IF NO, EXPLAIN.							
	HAVE COPIES OF THE FOLLOWING BEEN LEFT ON THE PREMISES?				☒ YES		☐ NO	
	1. SYSTEM COMPONENTS INSTRUCTIONS							
2. CARE AND MAINTENANCE INSTRUCTIONS								
3. NFPA 25								
LOCATION OF SYSTEM	SYSTEM 1 (INCLUDING BASEMENT)							
SPRINKLERS	MAKE	MODEL		YEAR OF MANUFACTURE	ORIFICE SIZE/ K FACTOR	QTY.	TEMP.	
	VIKING	VK300 - BRZ UPR		2016	5.6	1	155	
	VIKING	VK350 - BRZ UPR		2016	8.0	62	200	
	VIKING	VK462 - CONCLD		2016	5.6	35	155	
	VIKING	VK634 - EC CONCLD		2016	8.0	66	155	
	VIKING	VK464 - CONCLD		2016	8.0	18	200	
	VIKING	VK532 - EC BRZ UPR		2016	11.2	15	200	
	RELIABLE	RA5114 - DRY PND CONCLD		2016	5.6	1	155	
PIPE AND FITTINGS	1-2.5" S40 BLK PIPE AND 3-6" S10 BLK PIPE, BLK GRVD FITTINGS, BLK DI THRD FITTINGS							
ALARM VALVE OR FLOW INDICATOR	ALARM DEVICE				MAXIMUM TIME TO OPERATE THROUGH TEST CONNECTION			
	TYPE	MAKE	MODEL	MIN.	SEC. 47			
	VANE TYPE	SYSTEM SENSOR		WFD				
TAMPER SWITCHES	TYPE	MAKE	MODEL	QTY.	DID TAMPER SWITCH / SWITCHES WORK?			
	BUTTERFLY	VICAULIC	705-W	1				
DRY PIPE OPERATING TEST	DRY VALVE				Q.O.D.			
	MAKE & MODEL		SERIAL NO.		MAKE & MODEL		SERIAL NO.	
		TIME TO TRIP TEST CONNECTION*	WATER PRESSURE	AIR PRESSURE	TRIP POINT AIR PRESSURE	TIME WATER REACHED TEST OUTLET *	ALARM OPERATED	
		MIN. SEC.	PSI	PSI	PSI	MIN. SEC.	YES / NO	
	WITHOUT Q.O.D.							
	WITH Q.O.D.							
	IF NO, EXPLAIN							

* MEASURED FROM TIME INSPECTOR'S TEST CONNECTION IS OPENED.

DELUGE & PREACTION VALVES	OPERATION: ☐ PNEUMATIC ☐ ELECTRIC ☐ HYDRAULIC								
	PIPING SUPERVISED ☐ YES ☐ NO				DETECTING MEDIA SUPERVISED ☐ YES ☐ NO				
	DOES VALVE OPERATE FROM THE MANUAL TRIP AND/OR REMOTE CONTROL STATIONS? ☐ YES ☐ NO								
	IS THERE AN ACCESSIBLE FACILITY IN EACH CIRCUIT FOR TESTING? ☐ YES ☐ NO								
	IF NO, EXPLAIN:								
	MAKE	MODEL		DOES EACH CIRCUIT OPERATE SUPERVISION LOSS ALARM?		DOES EACH CIRCUIT OPERATE VALVE RELEASE?		MAXIMUM TIME TO OPERATE RELEASE	
				YES	NO	YES	NO	MIN.	SEC.
PRESSURE REDUCING VALVE TEST	LOC. & FLOOR	MAKE	MODEL	SETTING	STATIC PRESSURE		RESIDUAL PRESSURE		FLOW
					INLET (PSI)	OUTLET (PSI)	INLET (PSI)	OUTLET (PSI)	RATE
TEST DESCRIPTION	HYDROSTATIC: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for two hours. Differential dry-pipe valve clappers shall be left open during test to prevent damage. All aboveground piping leakage shall be stopped. PNEUMATIC: Establish 40 psi (2.7 bars) air pressure and measure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours. Test pressure tanks normal water level and air pressure and measure air pressure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours.								
TESTS	ALL PIPING HYDROSTATICALLY TESTED AT: _____ 225 PSI FOR _____ 2 HRS.						IF NO, STATE REASON:		
	DRY PIPING PNEUMATICALLY TESTED: ☐ YES ☐ NO								
	EQUIPMENT OPERATES PROPERLY: ☐ YES ☐ NO								
	DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT ADDITIVES AND CORROSIVE CHEMICALS, SODIUM SILICATE OR DERIVATIVES OF SODIUM SILICATE, BRINE, OR OTHER CORROSIVE CHEMICALS WERE NOT USED FOR TESTING SYSTEMS OR STOPPING LEAKS? ☒ YES ☐ NO								
	DRAIN TEST: READING OF GAGE LOCATED NEAR WATER SUPPLY TEST CONNECTION: _____ PSI								
	RESIDUAL PRESSURE WITH VALVE IN TEST CONNECTION OPEN WIDE: _____ PSI								
HYDROSTATIC SIGNATURES	UNDERGROUND MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS FLUSHED BEFORE CONNECTION MADE TO SPRINKLER PIPING.								
	VERIFIED BY COPY OF THE U FORM NO. 85B: ☒ YES ☐ NO						IF NO, EXPLAIN:		
	FLUSHED BY INSTALLER OF UNDERGROUND SPRINKLER PIPING: ☒ YES ☐ NO								
	HYDROSTATIC TESTS WITNESSED BY:								
	FOR PROPERTY OWNER/REPRESENTATIVE (SIGNATURE)				TITLE		DATE		
FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE		DATE			
WELDING	WELDING PIPE: ☒ YES ☐ NO								
	IF YES:								
	1. DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT WELDING PROCEDURES COMPLY WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3?						☒ YES ☐ NO		
	2. DO YOU CERTIFY THAT THE WELDING WAS PERFORMED BY WELDERS QUALIFIED IN COMPLIANCE WITH THE REQUIREMENTS OF AT LEAST AWS D 10.9, LEVEL AR-3?						☒ YES ☐ NO		
CUTOUTS	3. DO YOU CERTIFY THAT WELDING WAS CARRIED OUT IN COMPLIANCE WITH A DOCUMENTED QUALITY CONTROL PROCEDURE TO INSURE THAT ALL DISCS ARE RETRIEVED, THAT OPENINGS IN PIPING ARE SMOOTH, THAT SLAG AND OTHER WELDING RESIDUE ARE REMOVED, AND THAT INTERNAL DIAMETERS OF PIPING ARE NOT PENETRATED:						☒ YES ☐ NO		
	DO YOU CERTIFY THAT YOU HAVE A CONTROL FEATURE TO ENSURE ALL CUTOUTS (DISCS) ARE RETRIEVED?						☒ YES ☐ NO		
HYDRAULIC DATA NAME PLATE	NAMEPLATE PROVIDED? ☒ YES ☐ NO								
REMARKS	IF NO, EXPLAIN:								
ALARM TEST/ FINALS SIGNATURES	DATE LEFT IN SERVICE WITH ALL CONTROL VALVES OPEN: _____								
	NAME OF SPRINKLER CONTRACTOR:								
	AHERN FIRE PROTECTION / 2675 Scott Ave. Suite C / St. Louis, MO 63103 / 314/535-4544								
	TESTS WITNESSED BY:								
	FOR PROPERTY OWNER (SIGNATURE)				TITLE		DATE		
	FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE		DATE		
Stave Summers Foreman									
ADDITIONAL EXPLANATION AND NOTES:									

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PLANS	ACCEPTED BY APPROVING AUTHORITIES (NAMES)							
	1 CITY OF WEBSTER GROVES							
	2							
	ADDRESS							
	1							
	2							
	INSTALLATION CONFORMS TO ACCEPTED PLANS				[x] YES	[] NO		
	EQUIPMENT USED IS APPROVED				[x] YES	[] NO		
	IF NO, EXPLAIN DEVIATIONS							
INSTRUCTIONS	HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO							
	LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF EQUIPMENT?				[x] YES	[] NO		
	IF NO, EXPLAIN.							
	HAVE COPIES OF THE FOLLOWING BEEN LEFT ON THE PREMISES?							
					[x] YES	[] NO		
	1. SYSTEM COMPONENTS INSTRUCTIONS							
	2. CARE AND MAINTENANCE INSTRUCTIONS							
	3. NFPA 25							
LOCATION OF SYSTEM	SYSTEM 2							
SPRINKLERS	MAKE	MODEL		YEAR OF MANUFACTURE	ORIFICE SIZE/ K FACTOR	QTY.	TEMP.	
	VIKING	VK300 - BRZ UPR		2016	5.6	-	155	
	VIKING	VK350 - BRZ UPR		2016	8.0	4	200	
	VIKING	VK462 - CONCLD		2016	5.6	22	155	
	VIKING	VK634 - EC CONCLD		2016	8.0	70	155	
	VIKING	VK464 - CONCLD		2016	8.0	8	200	
	VIKING	VK532 - EC BRZ UPR		2016	11.2	-	200	
	RELIABLE	RA5114 - DRY PND CONCLD		2016	5.6	22	155	
PIPE AND FITTINGS	1-2.5" S40 BLK PIPE AND 3-6" S10 BLK PIPE, BLK GRVD FITTINGS, BLK DI THRD FITTINGS							
ALARM VALVE OR FLOW INDICATOR	ALARM DEVICE				MAXIMUM TIME TO OPERATE THROUGH TEST CONNECTION			
	TYPE	MAKE	MODEL	MIN.	SEC.	43		
	VANE TYPE	SYSTEM SENSOR		WFD				
TAMPER SWITCHES	TYPE	MAKE	MODEL	QTY.	DID TAMPER SWITCH / SWITCHES WORK?			
	BUTTERFLY	VICAULIC	705-W	1				
DRY PIPE OPERATING TEST	DRY VALVE				Q. O. D.			
	MAKE & MODEL		SERIAL NO.		MAKE & MODEL		SERIAL NO.	
		TIME TO TRIP	WATER	AIR	TRIP POINT	TIME WATER REACHED	ALARM	
		TEST CONNECTION*	PRESSURE	PRESSURE	ATR PRESSURE	TEST OUTLET *	OPERATED	
		MIN.	SEC.	PSI	PSI	PSI	MIN.	SEC.
							YES / NO	
	WITHOUT Q. O. D.							
WITH Q. O. D.								
	IF NO, EXPLAIN:							

* MEASURED FROM TIME INSPECTOR'S TEST CONNECTION IS OPENED

DELUGE & PREACTION VALVES	OPERATION: ☐ PNEUMATIC ☐ ELECTRIC ☐ HYDRAULIC								
	PIPING SUPERVISED ☐ YES ☐ NO				DETECTING MEDIA SUPERVISED ☐ YES ☐ NO				
	DOES VALVE OPERATE FROM THE MANUAL TRIP AND/OR REMOTE CONTROL STATIONS? ☐ YES ☐ NO								
	IS THERE AN ACCESSIBLE FACILITY IN EACH CIRCUIT FOR TESTING? ☐ YES ☐ NO								
	IF NO, EXPLAIN:								
	MAKE	MODEL		DOES EACH CIRCUIT OPERATE SUPERVISION LOSS ALARM?		DOES EACH CIRCUIT OPERATE VALVE RELEASE?		MAXIMUM TIME TO OPERATE RELEASE	
				YES	NO	YES	NO	MIN.	SEC.
PRESSURE REDUCING VALVE TEST	LOC. & FLOOR	MAKE	MODEL	SETTING	STATIC PRESSURE		RESIDUAL PRESSURE		FLOW
					INLET (PSI)	OUTLET (PSI)	INLET (PSI)	OUTLET (PSI)	RATE
TEST DESCRIPTION	HYDROSTATIC: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for two hours. Differential dry-pipe valve clappers shall be left open during test to prevent damage. All aboveground piping leakage shall be stopped. PNEUMATIC: Establish 40 psi (2.7 bars) air pressure and measure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours. Test pressure tanks normal water level and air pressure and measure air pressure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours.								
TESTS	ALL PIPING HYDROSTATICALLY TESTED AT: <u>225</u> PSI FOR <u>2</u> HRS.						IF NO, STATE REASON:		
	DRY PIPING PNEUMATICALLY TESTED: ☐ YES ☐ NO								
	EQUIPMENT OPERATES PROPERLY: ☐ YES ☐ NO								
	DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT ADDITIVES AND CORROSIVE CHEMICALS, SODIUM SILICATE OR DERIVATIVES OF SODIUM SILICATE, BRINE, OR OTHER CORROSIVE CHEMICALS WERE NOT USED FOR TESTING SYSTEMS OR STOPPING LEAKS? ☒ YES ☐ NO								
	DRAIN TEST: READING OF GAGE LOCATED NEAR WATER SUPPLY TEST CONNECTION: _____ PSI								
	RESIDUAL PRESSURE WITH VALVE IN TEST CONNECTION OPEN WIDE: _____ PSI								
HYDROSTATIC SIGNATURES	UNDERGROUND MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS FLUSHED BEFORE CONNECTION MADE TO SPRINKLER PIPING.								
	VERIFIED BY COPY OF THE U FORM NO. 85B: ☒ YES ☐ NO						IF NO, EXPLAIN:		
	FLUSHED BY INSTALLER OF UNDERGROUND SPRINKLER PIPING: ☒ YES ☐ NO								
	HYDROSTATIC TESTS WITNESSED BY:								
	FOR PROPERTY OWNER/REPRESENTATIVE (SIGNATURE)				TITLE		DATE		
	FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE		DATE		
WELDING	WELDING PIPE: ☒ YES ☐ NO								
	IF YES:								
	1. DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT WELDING PROCEDURES COMPLY WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3? ☒ YES ☐ NO								
	2. DO YOU CERTIFY THAT THE WELDING WAS PERFORMED BY WELDERS QUALIFIED IN COMPLIANCE WITH THE REQUIREMENTS OF AT LEAST AWS D 10.9, LEVEL AR-3? ☒ YES ☐ NO								
CUTOUPS	3. DO YOU CERTIFY THAT WELDING WAS CARRIED OUT IN COMPLIANCE WITH A DOCUMENTED QUALITY CONTROL PROCEDURE TO INSURE THAT ALL DISCS ARE RETRIEVED, THAT OPENINGS IN PIPING ARE SMOOTH, THAT SLAG AND OTHER WELDING RESIDUE ARE REMOVED, AND THAT INTERNAL DIAMETERS OF PIPING ARE NOT PENETRATED? ☒ YES ☐ NO								
	DO YOU CERTIFY THAT YOU HAVE A CONTROL FEATURE TO ENSURE ALL CUTOUPS (DISCS) ARE RETRIEVED? ☒ YES ☐ NO								
HYDRAULIC DATA NAME PLATE	NAMEPLATE PROVIDED? ☒ YES ☐ NO								
REMARKS	IF NO, EXPLAIN:								
ALARM TEST/ FINALS SIGNATURES	DATE LEFT IN SERVICE WITH ALL CONTROL VALVES OPEN: _____								
	NAME OF SPRINKLER CONTRACTOR:								
	AHERN FIRE PROTECTION / 2675 Scott Ave. Suite C / St. Louis, MO 63103 / 314/535-4544								
	TESTS WITNESSED BY:								
	FOR PROPERTY OWNER (SIGNATURE)				TITLE		DATE		
	FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE		DATE		
ADDITIONAL EXPLANATION AND NOTES:									

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PLANS	ACCEPTED BY APPROVING AUTHORITIES (NAMES)								
	1 CITY OF WEBSTER GROVES								
	2								
	ADDRESS								
	1								
	2								
	INSTALLATION CONFORMS TO ACCEPTED PLANS				[x] YES	[] NO			
	EQUIPMENT USED IS APPROVED				[x] YES	[] NO			
	IF NO, EXPLAIN DEVIATIONS								
INSTRUCTIONS	HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO								
	LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF EQUIPMENT?				[x] YES	[] NO			
	IF NO, EXPLAIN.								
	HAVE COPIES OF THE FOLLOWING BEEN LEFT ON THE PREMISES?				[x] YES	[] NO			
	1. SYSTEM COMPONENTS INSTRUCTIONS								
	2. CARE AND MAINTENANCE INSTRUCTIONS								
	3. NFPA 25								
LOCATION OF SYSTEM	SYSTEM 3								
SPRINKLERS	MAKE	MODEL		YEAR OF MANUFACTURE	ORIFICE SIZE/ K FACTOR	QTY.	TEMP.		
	VIKING	VK300 - BRZ UPR		2016	5.6	-	155		
	VIKING	VK534 - WHT PND		2016	11.2	3	200		
	VIKING	VK462 - CONCLD		2016	5.6	46	155		
	VIKING	VK634 - EC CONCLD		2016	8.0	71	155		
	VIKING	VK464 - CONCLD		2016	8.0	2	200		
	VIKING	VK532 - EC BRZ UPR		2016	11.2	3	200		
	RELIABLE	RA5114 - DRY PND CONCLD		2016	5.6	1	155		
PIPE AND FITTINGS	1-2.5" S40 BLK PIPE AND 3-6" S10 BLK PIPE, BLK GRVD FITTINGS, BLK DI THRD FITTINGS								
ALARM VALVE OR FLOW INDICATOR	ALARM DEVICE				MAXIMUM TIME TO OPERATE THROUGH TEST CONNECTION				
	TYPE	MAKE	MODEL	MIN.	SEC.	45			
	VANE TYPE	SYSTEM SENSOR		WFD					
TAMPER SWITCHES	TYPE	MAKE	MODEL	QTY.	DID TAMPER SWITCH / SWITCHES WORK?				
	BUTTERFLY	VICAULIC	705-W	1					
DRY PIPE OPERATING TEST	DRY VALVE				Q. O. D.				
	MAKE & MODEL		SERIAL NO.		MAKE & MODEL		SERIAL NO.		
	TIME TO TRIP		WATER	AIR	TRIP POINT	TIME WATER REACHED		ALARM	
	TEST CONNECTION*		PRESSURE	PRESSURE	AIR PRESSURE	TEST OUTLET *		OPERATED	
		MIN.	SEC.	PSI	PSI	PSI	MIN.	SEC.	YES / NO
	WITHOUT Q. O. D.								
	WITH Q. O. D.								
	IF NO, EXPLAIN								
	* MEASURED FROM TIME INSPECTOR'S TEST CONNECTION IS OPENED.								

DELUGE & PREACTION VALVES	OPERATION: ☐ PNEUMATIC ☐ ELECTRIC ☐ HYDRAULIC							
	PIPING SUPERVISED ☐ YES ☐ NO				DETECTING MEDIA SUPERVISED ☐ YES ☐ NO			
	DOES VALVE OPERATE FROM THE MANUAL TRIP AND/OR REMOTE CONTROL STATIONS? ☐ YES ☐ NO							
	IS THERE AN ACCESSIBLE FACILITY IN EACH CIRCUIT FOR TESTING? ☐ YES ☐ NO							
	IF NO, EXPLAIN:							
	MAKE	MODEL	DOES EACH CIRCUIT OPERATE SUPERVISION LOSS ALARM?		DOES EACH CIRCUIT OPERATE VALVE RELEASE?		MAXIMUM TIME TO OPERATE RELEASE	
			YES	NO	YES	NO	MIN.	SEC.
PRESSURE REDUCING VALVE TEST	LOC. & FLOOR	MAKE	MODEL	SETTING	STATIC PRESSURE		RESIDUAL PRESSURE	
					INLET (PSI)	OUTLET (PSI)	INLET (PSI)	OUTLET (PSI)
TEST DESCRIPTION	HYDROSTATIC: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for two hours. Differential dry pipe valve clappers shall be left open during test to prevent damage. All aboveground piping leakage shall be stopped. PNEUMATIC: Establish 40 psi (2.7 bars) air pressure and measure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours. Test pressure tanks normal water level and air pressure and measure air pressure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours.							
TESTS	ALL PIPING HYDROSTATICALLY TESTED AT: <u>225</u> PSI FOR <u>2</u> HRS.						IF NO, STATE REASON:	
	DRY PIPING PNEUMATICALLY TESTED: ☐ YES ☐ NO							
	EQUIPMENT OPERATES PROPERLY: ☐ YES ☐ NO							
	DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT ADDITIVES AND CORROSIVE CHEMICALS, SODIUM SILICATE OR DERIVATIVES OF SODIUM SILICATE, BRINE, OR OTHER CORROSIVE CHEMICALS WERE NOT USED FOR TESTING SYSTEMS OR STOPPING LEAKS? ☒ YES ☐ NO							
	DRAIN TEST: READING OF GAGE LOCATED NEAR WATER SUPPLY TEST CONNECTION: _____ PSI							
	RESIDUAL PRESSURE WITH VALVE IN TEST CONNECTION OPEN WIDE: _____ PSI							
	UNDERGROUND MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS FLUSHED BEFORE CONNECTION MADE TO SPRINKLER PIPING.							
HYDROSTATIC SIGNATURES	HYDROSTATIC TESTS WITNESSED BY:							
	FOR PROPERTY OWNER/REPRESENTATIVE (SIGNATURE)				TITLE		DATE	
	FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE		DATE	
WELDING	WELDING PIPE: ☒ YES ☐ NO							
	IF YES:							
	1. DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT WELDING PROCEDURES COMPLY WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3?						☒ YES ☐ NO	
	2. DO YOU CERTIFY THAT THE WELDING WAS PERFORMED BY WELDERS QUALIFIED IN COMPLIANCE WITH THE REQUIREMENTS OF AT LEAST AWS D 10.9, LEVEL AR-3?						☒ YES ☐ NO	
CUTOUTS	3. DO YOU CERTIFY THAT WELDING WAS CARRIED OUT IN COMPLIANCE WITH A DOCUMENTED QUALITY CONTROL PROCEDURE TO INSURE THAT ALL DISCS ARE RETRIEVED, THAT OPENINGS IN PIPING ARE SMOOTH, THAT SLAG AND OTHER WELDING RESIDUE ARE REMOVED, AND THAT INTERNAL DIAMETERS OF PIPING ARE NOT PENETRATED:						☒ YES ☐ NO	
	DO YOU CERTIFY THAT YOU HAVE A CONTROL FEATURE TO ENSURE ALL CUTOUTS (DISCS) ARE RETRIEVED? ☒ YES ☐ NO							
HYDRAULIC DATA NAME PLATE	NAMEPLATE PROVIDED? ☒ YES ☐ NO							
	IF NO, EXPLAIN:							
REMARKS	DATE LEFT IN SERVICE WITH ALL CONTROL VALVES OPEN: _____							
ALARM TEST/FINALS SIGNATURES	NAME OF SPRINKLER CONTRACTOR:							
	AHERN FIRE PROTECTION / 2675 Scott Ave. Suite C / St. Louis, MO 63103 / 314/535-4544							
	TESTS WITNESSED BY:							
	FOR PROPERTY OWNER (SIGNATURE)				TITLE		DATE	
	FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE		DATE	
	<i>Steve Summers</i>				<i>Foreman</i>			
ADDITIONAL EXPLANATION AND NOTES:								

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	1 CITY OF WEBSTER GROVES							
	2							
	ADDRESS							
	1							
	2							
	INSTALLATION CONFORMS TO ACCEPTED PLANS				☒ YES	☐ NO		
	EQUIPMENT USED IS APPROVED				☒ YES	☐ NO		
	IF NO, EXPLAIN DEVIATIONS							
INSTRUCTIONS	HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO							
	LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF EQUIPMENT?				☒ YES	☐ NO		
	IF NO, EXPLAIN.							
	HAVE COPIES OF THE FOLLOWING BEEN LEFT ON THE PREMISES?				☒ YES	☐ NO		
	1. SYSTEM COMPONENTS INSTRUCTIONS							
	2. CARE AND MAINTENANCE INSTRUCTIONS							
	3. NFPA 25							
LOCATION OF SYSTEM	SYSTEM 4							
SPRINKLERS	MAKE	MODEL		YEAR OF MANUFACTURE	ORIFICE SIZE/ K FACTOR	QTY.	TEMP.	
	VIKING	VK300 - BRZ UPR		2016	5.6	1	155	
	VIKING	VK350 - BRZ UP		2016	8.0	2	200	
	VIKING	VK462 - CONCLD		2016	5.6	33	155	
	VIKING	VK634 - EC CONCLD		2016	8.0	57	155	
	VIKING	VK464 - CONCLD		2016	8.0	1	200	
	VIKING	VK532 - EC BRZ UPR		2016	11.2	2	200	
	VIKING	VK305 - WHT HSW		2016	5.6	2	200	
PIPE AND FITTINGS	1-2.5" S40 BLK PIPE AND 3" S10 BLK PIPE, BLK GRVD FITTINGS, BLK DI THRD FITTINGS							
ALARM VALVE OR FLOW INDICATOR	ALARM DEVICE			MAXIMUM TIME TO OPERATE THROUGH TEST CONNECTION				
	TYPE	MAKE	MODEL	MIN.	SEC. 49			
	VANE TYPE	SYSTEM SENSOR	WFD					
TAMPER SWITCHES	TYPE	MAKE	MODEL	QTY.	DID TAMPER SWITCH / SWITCHES WORK?			
	BUTTERFLY	VICAULIC	705-W	1				
DRY PIPE OPERATING TEST	DRY VALVE				Q.O.D.			
	MAKE & MODEL		SERIAL NO.		MAKE & MODEL		SERIAL NO.	
	TIME TO TRIP		WATER PRESSURE	AIR PRESSURE	TRIP POINT	TIME WATER REACHED	ALARM OPERATED	
	TEST CONNECTION*				AIR PRESSURE	TEST OUTLET*		
		MIN.	SEC.	PSI	PSI	PSI	MIN.	SEC.
								YES / NO
	WITHOUT Q.O.D.							
	WITH Q.O.D.							
	IF NO, EXPLAIN:							

* MEASURED FROM TIME INSPECTOR'S TEST CONNECTION IS OPENED.

DELUGE & PREACTION VALVES	OPERATION: ☐ PNEUMATIC ☐ ELECTRIC ☐ HYDRAULIC									
	PIPING SUPERVISED ☐ YES ☐ NO					DETECTING MEDIA SUPERVISED ☐ YES ☐ NO				
	DOES VALVE OPERATE FROM THE MANUAL TRIP AND/OR REMOTE CONTROL STATIONS? ☐ YES ☐ NO									
	IS THERE AN ACCESSIBLE FACILITY IN EACH CIRCUIT FOR TESTING? ☐ YES ☐ NO									
	IF NO, EXPLAIN:									
	MAKE	MODEL	DOES EACH CIRCUIT OPERATE SUPERVISION LOSS ALARM?		DOES EACH CIRCUIT OPERATE VALVE RELEASE?		MAXIMUM TIME TO OPERATE RELEASE			
			YES	NO	YES	NO	MIN.	SEC.		
PRESSURE REDUCING VALVE TEST	LOC. & FLOOR	MAKE	MODEL	SETTING	STATIC PRESSURE		RESIDUAL PRESSURE		FLOW	
					INLET (PSI)	OUTLET (PSI)	INLET (PSI)	OUTLET (PSI)	RATE	
TEST DESCRIPTION	HYDROSTATIC: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for two hours. Differential dry-pipe valve clappers shall be left open during test to prevent damage. All aboveground piping leakage shall be stopped. PNEUMATIC: Establish 40 psi (2.7 bars) air pressure and measure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours. Test pressure tanks normal water level and air pressure and measure air pressure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours.									
TESTS	ALL PIPING HYDROSTATICALLY TESTED AT: _____ 225 PSI FOR _____ 2 HRS.						IF NO, STATE REASON:			
	DRY PIPING PNEUMATICALLY TESTED: ☐ YES ☐ NO									
	EQUIPMENT OPERATES PROPERLY: ☐ YES ☐ NO									
	DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT ADDITIVES AND CORROSIVE CHEMICALS, SODIUM SILICATE OR DERIVATIVES OF SODIUM SILICATE, BRINE, OR OTHER CORROSIVE CHEMICALS WERE NOT USED FOR TESTING SYSTEMS OR STOPPING LEAKS? ☒ YES ☐ NO									
	DRAIN TEST: READING OF GAGE LOCATED NEAR WATER SUPPLY TEST CONNECTION: _____ PSI RESIDUAL PRESSURE WITH VALVE IN TEST CONNECTION OPEN WIDE: _____ PSI									
	UNDERGROUND MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS FLUSHED BEFORE CONNECTION MADE TO SPRINKLER PIPING. VERIFIED BY COPY OF THE U FORM NO. 85B: ☒ YES ☐ NO IF NO, EXPLAIN: FLUSHED BY INSTALLER OF UNDERGROUND SPRINKLER PIPING: ☒ YES ☐ NO									
HYDROSTATIC SIGNATURES	HYDROSTATIC TESTS WITNESSED BY:									
	FOR PROPERTY OWNER/REPRESENTATIVE (SIGNATURE)				TITLE			DATE		
	FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE			DATE		
WELDING	WELDING PIPE: ☒ YES ☐ NO									
	IF YES:									
	1. DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT WELDING PROCEDURES COMPLY WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3? ☒ YES ☐ NO									
	2. DO YOU CERTIFY THAT THE WELDING WAS PERFORMED BY WELDERS QUALIFIED IN COMPLIANCE WITH THE REQUIREMENTS OF AT LEAST AWS D 10.9, LEVEL AR-3? ☒ YES ☐ NO									
	3. DO YOU CERTIFY THAT WELDING WAS CARRIED OUT IN COMPLIANCE WITH A DOCUMENTED QUALITY CONTROL PROCEDURE TO INSURE THAT ALL DISCS ARE RETRIEVED, THAT OPENINGS IN PIPING ARE SMOOTH, THAT SLAG AND OTHER WELDING RESIDUE ARE REMOVED, AND THAT INTERNAL DIAMETERS OF PIPING ARE NOT PENETRATED? ☒ YES ☐ NO									
CUTOUTS	DO YOU CERTIFY THAT YOU HAVE A CONTROL FEATURE TO ENSURE ALL CUTOUTS (DISCS) ARE RETRIEVED? ☒ YES ☐ NO									
HYDRAULIC DATA NAME PLATE	NAMEPLATE PROVIDED? ☒ YES ☐ NO									
	IF NO, EXPLAIN:									
REMARKS	DATE LEFT IN SERVICE WITH ALL CONTROL VALVES OPEN: _____									
ALARM TEST/ FINALS SIGNATURES	NAME OF SPRINKLER CONTRACTOR:									
	AHERN FIRE PROTECTION / 2675 Scott Ave. Suite C / St. Louis, MO 63103 / 314/535-4544									
	TESTS WITNESSED BY:									
	FOR PROPERTY OWNER (SIGNATURE)				TITLE			DATE		
	FOR SPRINKLER CONTRACTOR (SIGNATURE)				TITLE			DATE		
	<i>Steve Summers</i>				<i>Foreman</i>					
ADDITIONAL EXPLANATION AND NOTES:										

AHERN FIRE PROTECTION - ST. LOUIS

Contractor's Material and Test Certificate for ABOVE GROUND PIPING

PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by an owner's representative.

All defects shall be corrected and system left in service before contractor's personnel finally leave the job.

A certificate shall be filled out and signed by both representatives. Copies shall be prepared for approving authorities, owners, and contractor.

It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.

PROPERTY NAME:	WEBSTER UNIV - ISB				AFP # 461259				
ADDRESS:	8274 BIG BEND BLVD., WEBSTER GROVES, MO								
PLANS	ACCEPTED BY APPROVING AUTHORITIES (NAMES)								
	1 CITY OF WEBSTER GROVES								
	2								
	ADDRESS								
	1								
2									
INSTALLATION CONFORMS TO ACCEPTED PLANS				☒ YES		☐ NO			
EQUIPMENT USED IS APPROVED				☒ YES		☐ NO			
IF NO, EXPLAIN DEVIATIONS									
INSTRUCTIONS	HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO								
	LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF EQUIPMENT?				☒ YES		☐ NO		
	IF NO, EXPLAIN.								
	HAVE COPIES OF THE FOLLOWING BEEN LEFT ON THE PREMISES?				☒ YES		☐ NO		
	1. SYSTEM COMPONENTS INSTRUCTIONS								
2. CARE AND MAINTENANCE INSTRUCTIONS									
3. NFPA 25									
LOCATION OF SYSTEM	PREACTION SYSTEM								
SPRINKLERS	MAKE	MODEL		YEAR OF MANUFACTURE	ORIFICE SIZE/ K FACTOR	QTY.	TEMP.		
	VIKING	VK462 - CONCLD		2016	5.6	7	155		
PIPE AND FITTINGS	S40 GALV ON PREACTION, BLK GRVD FITTINGS, BLK DI THRD FITTINGS								
ALARM VALVE OR FLOW INDICATOR	ALARM DEVICE				MAXIMUM TIME TO OPERATE THROUGH TEST CONNECTION				
	TYPE	MAKE	MODEL	MIN.	SEC.				
	PRESSURE SWITCH	POTTER	PS-10						
TAMPER SWITCHES	TYPE	MAKE	MODEL	QTY.	DID TAMPER SWITCH / SWITCHES WORK?				
	BUTTERFLY	VICAULIC	705-W	1					
	PRESSURE SWITCH	POTTER	PS-40	1					
DRY PIPE OPERATING TEST	DRY VALVE				Q. O. D.				
	MAKE & MODEL		SERIAL NO.		MAKE & MODEL		SERIAL NO.		
		TIME TO TRIP	WATER PRESSURE	AIR PRESSURE	TRIP POINT	TIME WATER REACHED	ALARM OPERATED		
		TEST CONNECTION*			AIR PRESSURE	TEST OUTLET *			
		MIN.	SEC.	PSI	PSI	PSI	MIN.	SEC.	YES / NO
	WITHOUT Q. O. D.								
	WITH Q. O. D.								
	IF NO, EXPLAIN:								
	* MEASURED FROM TIME INSPECTOR'S TEST CONNECTION IS OPENED								

DELUGE & PREACTION VALVES	OPERATION: ☒ PNEUMATIC ☒ ELECTRIC ☐ HYDRAULIC									
	PIPING SUPERVISED ☒ YES ☐ NO					DETECTING MEDIA SUPERVISED ☒ YES ☐ NO				
	DOES VALVE OPERATE FROM THE MANUAL TRIP AND/OR REMOTE CONTROL STATIONS? ☒ YES ☐ NO									
	IS THERE AN ACCESSIBLE FACILITY IN EACH CIRCUIT FOR TESTING? ☒ YES ☐ NO									
	IF NO, EXPLAIN:									
	MAKE	MODEL	DOES EACH CIRCUIT OPERATE SUPERVISION LOSS ALARM?		DOES EACH CIRCUIT OPERATE VALVE RELEASE?		MAXIMUM TIME TO OPERATE RELEASE.			
			YES	NO	YES	NO	MIN.	SEC.		
	Viking	TotalPax	☒	☐	☒	☐	0	35		
PRESSURE REDUCING VALVE TEST	LOC. & FLOOR	MAKE	MODEL	SETTING	STATIC PRESSURE		RESIDUAL PRESSURE		FLOW	
					INLET (PSI)	OUTLET (PSI)	INLET (PSI)	OUTLET (PSI)	RATE	
TEST DESCRIPTION HYDROSTATIC: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for two hours. Differential dry-pipe valve clappers shall be left open during test to prevent damage. All aboveground piping leakage shall be stopped. PNEUMATIC: Establish 40 psi (2.7 bars) air pressure and measure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours. Test pressure tanks normal water level and air pressure and measure air pressure drop, which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours.										
TESTS	ALL PIPING HYDROSTATICALLY TESTED AT: <u>200</u> PSI FOR <u>2</u> HRS. IF NO, STATE REASON:									
	DRY PIPING PNEUMATICALLY TESTED: ☒ YES ☐ NO EQUIPMENT OPERATES PROPERLY: ☒ YES ☐ NO									
	DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT ADDITIVES AND CORROSIVE CHEMICALS, SODIUM SILICATE OR DERIVATIVES OF SODIUM SILICATE, BRINE, OR OTHER CORROSIVE CHEMICALS WERE NOT USED FOR TESTING SYSTEMS OR STOPPING LEAKS? ☐ YES ☐ NO									
	DRAIN TEST: READING OF GAGE LOCATED NEAR WATER SUPPLY TEST CONNECTION: <u>85</u> PSI RESIDUAL PRESSURE WITH VALVE IN TEST CONNECTION OPEN WIDE: <u>71</u> PSI									
	UNDERGROUND MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS FLUSHED BEFORE CONNECTION MADE TO SPRINKLER PIPING. VERIFIED BY COPY OF THE U FORM NO. 85B: ☒ YES ☐ NO IF NO, EXPLAIN: FLUSHED BY INSTALLER OF UNDERGROUND SPRINKLER PIPING: ☒ YES ☐ NO									
HYDROSTATIC SIGNATURES	HYDROSTATIC TESTS WITNESSED BY:									
	FOR PROPERTY OWNER/REPRESENTATIVE (SIGNATURE) <u>Superintendent</u>					DATE <u>4/20/17</u>				
	FOR SPRINKLER CONTRACTOR (SIGNATURE) <u>Steve Summers</u>					DATE <u>4/20/17</u>				
WELDING	WELDING PIPE: ☐ YES ☒ NO									
	IF YES:									
	1. DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT WELDING PROCEDURES COMPLY WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3? ☐ YES ☐ NO 2. DO YOU CERTIFY THAT THE WELDING WAS PERFORMED BY WELDERS QUALIFIED IN COMPLIANCE WITH THE REQUIREMENTS OF AT LEAST AWS D 10.9, LEVEL AR-3? ☐ YES ☐ NO 3. DO YOU CERTIFY THAT WELDING WAS CARRIED OUT IN COMPLIANCE WITH A DOCUMENTED QUALITY CONTROL PROCEDURE TO INSURE THAT ALL DISCS ARE RETRIEVED, THAT OPENINGS IN PIPING ARE SMOOTH, THAT SLAG AND OTHER WELDING RESIDUE ARE REMOVED, AND THAT INTERNAL DIAMETERS OF PIPING ARE NOT PENETRATED: ☐ YES ☐ NO									
CUTOUTS	DO YOU CERTIFY THAT YOU HAVE A CONTROL FEATURE TO ENSURE ALL CUTOUTS (DISCS) ARE RETRIEVED? ☐ YES ☐ NO									
HYDRAULIC DATA NAME PLATE	NAMEPLATE PROVIDED? ☒ YES ☐ NO									
	IF NO, EXPLAIN:									
REMARKS	DATE LEFT IN SERVICE WITH ALL CONTROL VALVES OPEN:									
ALARM TEST/FINALS SIGNATURES	NAME OF SPRINKLER CONTRACTOR: <u>Ahern Fire Protection 2675 Scott Ave. Suite C St. Louis, MO 63103</u>									
	TESTS WITNESSED BY:									
	FOR PROPERTY OWNER (SIGNATURE) <u>Superintendent</u>					DATE <u>6/29/17</u>				
	FOR SPRINKLER CONTRACTOR (SIGNATURE) <u>Steve Summers</u>					DATE <u>6/29/17</u>				
ADDITIONAL EXPLANATION AND NOTES:										