1. **INSTRUCTIONS for FPQC Specialist:**

Perform surveillance of fire protection system installation during construction and during pre-final and final acceptance inspections. Surveillance includes either visual inspections or observations performed by the FPQC as indicated in the following Schedule of Fire Protection System Inspections. Check boxes in the schedule indicate the inspections or observations that are applicable to this project, which must be performed and documented by the FPQC.

Surveillance of fire protection system inspections is divided into three phases:

Surveillance During Construction – Includes periodic on-site visits by the FPQC during construction

Pre-Final Acceptance Inspection – FPQC must be onsite during pre-final acceptance inspection

Final Acceptance inspection – FPQC must be onsite during final acceptance inspection

1. **INSPECTION TYPE**

**VISUAL INSPECTION:**

Perform on-site visual inspections as indicated in the Schedule of Fire Protection System Inspections as construction progresses to confirm work conforms with the contract requirements including but not limited to verifying proper installation of equipment and materials in accordance with applicable codes. Where work will be covered up by finished walls and ceilings, inspections must be scheduled and performed when work is still visible.

**OBSERVATION:**

Observe component and system testing in person on-site as indicated in the Schedule of Fire Protection System Inspections. Confirm testing is completed in accordance with applicable codes and that testing was successful.

**DOCUMENTATION:**

Document all inspections and observations in the FPQC Report in accordance with UFGS 01 45 00. Document any deficiencies and all work observed that has been successfully performed in accordance with the contract documents. Record deficiencies in the rework list.

**DESIGNER NOTES (delete this box after reviewing): Rev 2-14-23**

1. Fire Protection DOR must edit this schedule based on the project scope.
2. Indicate inspection and observation tasks applicable to your project that are to be performed by the FPQC by checking boxes next to each task required. Either delete unchecked sections or leave them in the schedule unchecked.
3. This schedule does NOT need to be printed in color.
4. When finished editing, delete this note box and save this schedule as a PDF and insert into the project specifications immediately following UFGS Section 01 45 00.

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| **PERFORM SURVEILLANCE DURING CONSTRUCTION** | | | |
| **~ FIRE SUPPRESSION SYSTEM ~** | | | |
| PERFORM TASK IF CHECKED | TASK | INSPECTION TYPE | DESCRIPTION |
|  | 1. Verify proper installation of underground service main and service; laterals, thrust blocks, tie-rods and connection to above ground piping. | **VISUAL INSPECTION** | * Visually inspect materials * Visually inspect installation |
|  | 1. Verify proper orientation of fire hydrants and fire department access | **VISUAL INSPECTION** | * Visually inspect installation and orientation |
|  | 1. Verify proper installation of interior and exterior attachments, coatings, and vortex plate prior to filling fire protection water tank | **VISUAL INSPECTION** | * Visually inspect fire protection water tank installation |
|  | 1. Hydrostatic/leak test for underground piping | **OBSERVE** | * Verify proper test method * Confirm test was successful |
|  | 1. Hydrostatic/leak test for above ground piping prior to ceiling installation | **OBSERVE** | * Verify proper test method * Confirm test was successful |
|  | 1. Underground system flush prior to connection to the riser | **OBSERVE** | * Verify system was properly flushed |
|  | 1. Forward flow test for Backflow preventer | **OBSERVE** | * Verify proper test method * Confirm test was successful |
|  | 1. Suction pipe flush prior to fire pump startup | **OBSERVE** | * Verify system was properly flushed |
|  | 1. Hydrostatic test fire pump suction and discharge piping | **OBSERVE** | * Verify proper test method * Confirm test was successful |
|  | 1. Fire pump startup | **OBSERVE** | * Confirm successful startup |
|  | 1. Verify proper installation of sprinkler piping prior to wall or ceiling installation | **VISUAL INSPECTION** | * Inspect pipe hangars, bracing, sprinkler heads * Inspect for sprinkler obstructions; damaged, painted or covered heads * Verify proper location of control valves, drains, vents, backflow, test header * Verify proper component mounting heights |
|  | 1. Document inspections and observations in FPQC Report | **DOCUMENT** | * Submit report for each day inspections or observations occur * Annotate deficiencies and satisfactory work observed * Record rework items in FPQC report |
| **~ SPECIAL FIRE SUPPRESSION SYSTEM ~** | | | |
| PERFORM TASK IF CHECKED | TASK | INSPECTION TYPE | DESCRIPTION |
|  | 1. Verify proper installation of gaseous fire suppression system | **VISUAL INSPECTION** | * Inspect gas cylinders, initiating controls, shutdowns, aborts, and visual warning |
|  | 1. Verify proper installation of IR hangar detector | **VISUAL INSPECTION** | * Inspect detector and nozzle layout * Inspect for obstructions, abort stations * Inspect riser piping |
|  | 1. Verify proper installation of elevator fire protection | **VISUAL INSPECTION** | * Inspect elevator recall functions * Inspect two-way communication |
|  | 1. Verify proper installation of fire suppression in secure spaces | **VISUAL INSPECTION** | * Inspect location of sprinkler piping and sprinklers |
|  | 1. Document inspections and observations in FPQC Report | **DOCUMENT** | * Submit report for each day inspections or observations occur * Document deficiencies and satisfactory work observed in FPQC Report * Record deficiencies in rework list |
| **~ PASSIVE FIRE PROTECTION SYSTEMS ~** | | | |
| PERFORM TASK IF CHECKED | TASK | INSPECTION TYPE | DESCRIPTION |
|  | 1. Verify proper construction of fire rated assemblies | **VISUAL INSPECTION** | * Inspect partitions for proper fire rated construction per design * Inspect doors and door hardware for proper fire rating * Inspect glass for proper fire rating |
|  | 1. Verify proper installation of fireproofing | **VISUAL INSPECTION** | * Inspect for use of proper fireproofing materials * Inspect for cracking, spalling or delaminating * Inspect for proper application thickness |
|  | 1. Verify proper installation of firestopping | **VISUAL INSPECTION** | * Inspect to confirm firestopping system is UL tested or an engineering judgement has been obtained and submitted * Inspect for use of proper firestopping materials * Inspect penetrations through fire rated walls, partitions and ceilings * Inspect construction joints and gaps |
|  | 1. Document inspections and observations in FPQC Report | **DOCUMENT** | * Submit report for each day inspections or observations occur * Document deficiencies and satisfactory work observed in FPQC Report * Record deficiencies in rework list |
| **~ FIRE ALARM SYSTEMS ~** | | | |
| PERFORM TASK IF CHECKED | TASK | INSPECTION TYPE | DESCRIPTION |
|  | 1. Verify proper installation of fire alarm system after conduit is installed and wiring pulled, but before devices are installed | **VISUAL INSPECTION** | * Inspect conduit, wiring, conduit fill, wire type * Inspect installation heights of back boxes |
|  | 1. Document inspections and observations in FPQC Report | **DOCUMENT** | * Submit report for each day inspections or observations occur * Document deficiencies and satisfactory work observed in FPQC Report * Record deficiencies in rework list |

**~ END OF SURVEILLANCE DURING CONSTRUCTION SECTION**

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| **PERFORM DURING PRE-FINAL ACCEPTANCE INSPECTION** | | | |
| PERFORM TASK IF CHECKED | TASK | INSPECTION TYPE | DESCRIPTION |
|  | 1. Inspect all fire protection systems and all life safety features | **VISUAL INSPECTION** | * Verify proper installation of fire protection and life safety systems |
|  | 1. Witness functional testing of all fire protection and life safety systems | **OBSERVE** | * Verify proper testing is performed on fire protection and life safety systems |
|  | 1. Identify deficiencies that require correction | **VISUAL INSPECTION** | * Document deficiencies in FPQC Report and record in rework list |
|  | 1. Verify rework items have been corrected | **VISUAL INSPECTION** | * Record re-inspection results on FPQC Report |
|  | 1. Document results of pre-final inspection and photograph unsatisfactory conditions | **DOCUMENT** | * Document results of pre-final inspection in FPQC Report |
|  | 1. Certify installation and operation of all fire protection and life safety systems conform to the contract documents | **DOCUMENT** | * Provide separate letter certifying conformance with contract requirements |

**~ END OF PRE-FINAL INSPECTION SECTION**

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| **PERFORM DURING FINAL ACCEPTANCE INSPECTION** | | | |
| PERFORM TASK IF CHECKED | TASK | INSPECTION TYPE | DESCRIPTION |
|  | 1. Verify proper installation and operation of all fire protection systems and all life safety features | **VISUAL INSPECTION** |  |
|  | 1. Note any deficiencies identified by Government FPE on deficiency list | **DOCUMENT** | * Document deficiencies identified by Government FPE on deficiency list |
|  | 1. Verify all deficiencies have been corrected | **VISUAL INSPECTION** | * Inspect rework to confirm all deficiencies have been corrected |
|  | 1. Certify that all deficiencies have been corrected | **DOCUMENT** | * Document inspection results on FPQC Report |

**~ END OF FINAL ACCEPTANCE INSPECTION SECTION**