

- FIRE PROTECTION GENERAL NOTES**
- SCOPE**
 - PROJECT SCOPE INCLUDES THE CONSTRUCTION OF A FOUR STORY MIXED OCCUPANCY BUILDING WHICH WILL CONSIST OF BUILDING CORE, LABORATORY SPACES, OFFICES AND MECHANICAL/ELECTRICAL EQUIPMENT SPACES.
 - THE WORK UNDER THIS SECTION INCLUDES ALL LABOR, MATERIALS, FEES AND ACTIVITIES NECESSARY TO INSTALL, TEST & COMMISSION A FULLY FUNCTIONAL AND CODE COMPLIANT SUPPRESSION SYSTEM.
 - SUBMITTALS SHALL BE PREPARED AND FORWARDED TO THE ARCHITECT/ENGINEER FOR REVIEW. SUCCESSFULLY COMPLETING THE SUBMITTAL AND REVIEW PROCESS OF FIRE ALARM SYSTEM PRODUCT DATA, SHOP DRAWINGS, CALCULATIONS, AS-BUILT DRAWINGS AND TEST CERTIFICATES SHALL BE A PREREQUISITE TO ISSUING FINAL ENGINEER APPROVAL CERTIFICATION FOR OCCUPANCY.
 - THE WORK SHALL BE DESCRIBED DIRECTLY BY THESE DRAWINGS AND RELATED DOCUMENTS UNDER THIS SECTION AND AS AFFECTED BY RELATED DOCUMENTS NOT EXCLUSIVE TO THE WORK OF THIS SECTION.
 - PURPOSE OF ENGINEERING DRAWINGS**
 - THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED FOR PURPOSES OF OBTAINING A BUILDING PERMIT AND AS THE BASIS OF DESIGN FOR PREPARATION OF DETAILED SHOP DRAWINGS. THE DRAWINGS ARE NOT INTENDED TO SHOW EXACT LOCATIONS, BUT TO DEMONSTRATE THE CONFIGURATION OF MAJOR SYSTEM COMPONENTS AND APPROXIMATE APPLIANCE AND DEVICE LOCATIONS. FIELD VERIFY LOCATIONS OF ALL DEVICES, APPLIANCES AND SYSTEM COMPONENTS.
 - ALL COMPONENTS SHOWN ARE NEW UNLESS SPECIFICALLY NOTED AS EXISTING.**
 - RELATED DOCUMENTS**
 - ARCHITECTURAL, STRUCTURAL & ENGINEERING DRAWINGS & SPECIFICATIONS
 - OWNER AND/OR TENANT CONSTRUCTION STANDARDS OF PRACTICE
 - FIRE PROTECTION SPECIFICATIONS
 - CODES & STANDARDS**
 - NEW JERSEY UNIFORM CONSTRUCTION CODE (NUCC) AS DEFINED BY CHAPTER 23 OF THE NEW JERSEY ADMINISTRATIVE CODE.
 - BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE, NEW JERSEY EDITION.
 - FIRE CODE: 2015 INTERNATIONAL FIRE CODE, NEW JERSEY EDITION.
 - ELECTRICAL CODE: 2014 NATIONAL ELECTRIC CODE
 - ELEVATOR CODE: 2007 ASME/A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS
 - MECHANICAL CODE: 2015 INTERNATIONAL MECHANICAL CODE, NEW JERSEY EDITION.
 - ACCESSIBILITY CODE: 2003 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES (A117.1)
 - QUALITY ASSURANCE**
 - PRODUCTS: DOMESTICALLY MANUFACTURED, UL LISTED & FM APPROVED FOR USE WITH FIRE PROTECTION SYSTEMS.
 - INSTALLERS: LICENSED IN GOOD STANDING AS FIRE PROTECTION INSTALLERS IN THE STATE OF NEW JERSEY.
 - WARRANTEE**
 - WARRANTEE WORK OF THIS SECTION IN WRITING FOR ONE YEAR FROM THE DATE OF OWNERS ACCEPTANCE OF CERTIFICATE OF SUBSTANTIAL COMPLETION, REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN THE PERIOD, PROMPTLY AND TO OWNERS SATISFACTION AND CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE WITH CONTRACT PRICE.

SYMBOLS

SPRINKLERS		VALVES		SIGNALING	
●	CEILING SPRINKLER	○	RISER/ALARM CHECK VALVE	○	CHECK VALVE
▽	SIDEWALL SPRINKLER	○	DRY ALARM VALVE	○	BACKFLOW PREVENTOR (DCVA)
○	UPRIGHT SPRINKLER	○	CHECK VALVE	○	FIRE DEPARTMENT VALVE
○	PIPE FITTING DOWN OR DROP	○	ZONE CONTROL ASSEMBLY	○	BUTTERFLY VALVE
○	PIPE FITTING TEE DOWN	○	OS&Y VALVE	○	OS&Y VALVE
○	PIPE FITTING UP	○	FLOW SWITCH	○	PRESSURE GAUGE
○	PIPE SLEEVE OR BEAM PENETRATION	○	PRESSURE GAUGE	○	PRESSURE SWITCH
○	X: DETAIL DESIGNATION NUMBER	○	X#: DETAIL DESIGNATION DRAWING	○	FLOW SWITCH (ALARM CONNECTION)
○	X-RISER #	○	RISER TAG	○	PRESSURE SWITCH (ALARM CONNECTION)
○	X-RISER #	○	FS700	○	TAMPER SWITCH (ALARM CONNECTION)
○	Calculation Node	○	Sprinkler Calculation Node	○	Revision Tag

PIPE LABELS

— FWS —	FIRE SERVICE
— F —	FIRE/STANDPIPE
— FDC —	FIRE DEPT CONNECTION
— SP(D) —	SPRINKLER (DRY PIPE)
— SP(PA) —	SPRINKLER (PREACTION)
— SP —	SPRINKLER (WET PIPE)
— SPD —	SPRINKLER DRAIN
— TH —	TEST HEADER

DELEGATED DESIGN SUBMISSION

THE FIRE PROTECTION DRAWINGS ARE PERFORMANCE BASED. THE FIRE PROTECTION CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL AS A DEFERRED SUBMITTAL TO NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS THREE (3) SETS OF SIGNED AND SEALED SHOP DRAWINGS AND HYDRAULIC CALCULATIONS INDICATING THE SPRINKLER SYSTEM LAYOUT INCLUDING FINAL HEAD LOCATIONS AND CURRENT WATER FLOW TEST THE PROFESSIONAL SHALL REVIEW THE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS PRIOR TO THE DEFERRED SUBMISSION TO THE NJ DCA AND PROVIDE NOTATION ON THE DRAWINGS INDICATING THEY WERE REVIEWED AND APPROVED BY THE PROFESSIONAL. SUBMIT APPROVED DRAWINGS AND CALCULATIONS WITH THE REQUIRED APPLICATION FEE PRIOR TO INSTALLATION. SIGNED AND SEALED DOCUMENTS SHALL BE PREPARED BY A LICENSED ENGINEER CERTIFIED IN THE STATE OF NEW JERSEY.

ABBREVIATIONS

GENERAL		GENERAL		GENERAL	
ACV	ALARM CHECK VALVE	FFE	FINISHED FLOOR ELEVATION	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	FHC	FIRE HOSE CABINET	PA	PREACTION
AHJ	AUTHORITY HAVING JURISDICTION	FP	FIRE PUMP	PAV	PREACTION VALVE
ARCH	ARCHITECT	FSVC	FIRE SUPPRESSION VALVE CABINET	PIV	POST INDICATING VALVE
BLDG	BUILDING	FT	FEET	PMP	PRESSURE MAINTENANCE PUMP
BOP	BOTTOM OF PIPE	GALV	GALVANIZED	PRV	PRESSURE REGULATING VALVE
BLR	BOTTOM OF RISER	GC	GENERAL CONTRACTOR	QTY	QUANTITY
CL	CENTER LINE	GPM	GALLONS PER MINUTE	RCV	RISER CHECK VALVE
COL	COLUMN	GWB	GYPSUM WALL BOARD	SCH	SCHEDULE
CONT	CONTINUATION	INV	INVERT	SP	SPRINKLER
DAV	DRY ALARM VALVE	KW	KILOWATTS	SPD	SPRINKLER DRAIN
DDCVA	DETECTOR DOUBLE CHECK VALVE ASS.	LEG	LEGEND	SPEC	SPECIFICATION
DN	DOWN	MAX	MAXIMUM	SQ FT	SQUARE FEET
DWG	DRAWING	MECH	MECHANICAL	SS	STAINLESS STEEL
ELEC	ELECTRIC	MEZZ	MEZZANINE	TEMP	TEMPERATURE
ELEV	ELEVATION	MIN	MINIMUM	T&D	TEST & DRAIN ASSEMBLY
F	FIRE	MISC	MISCELLANEOUS	TH	TEST HEADER
FACP	FIRE ALARM CONTROL PANEL	N/A	NOT APPLICABLE	TOR	TOP OF RISER
FCVA	FLOOR CONTROL VALVE ASSEMBLY	NAS	NO AUTOMATIC SPRINKLERS	TS	TAMPER SWITCH
FDC	FIRE DEPARTMENT CONNECTION	NC	NORMALLY CLOSED	TYP	TYPICAL
FDV	FIRE DEPARTMENT VALVE	NIC	NOT IN CONTRACT	W/	WITH
FDVC	FIRE DEPARTMENT VALVE CABINET	NO	NORMALLY OPEN	ZCA	ZONE CONTROL ASSEMBLY

HYDRANT FLOW TEST RESULTS

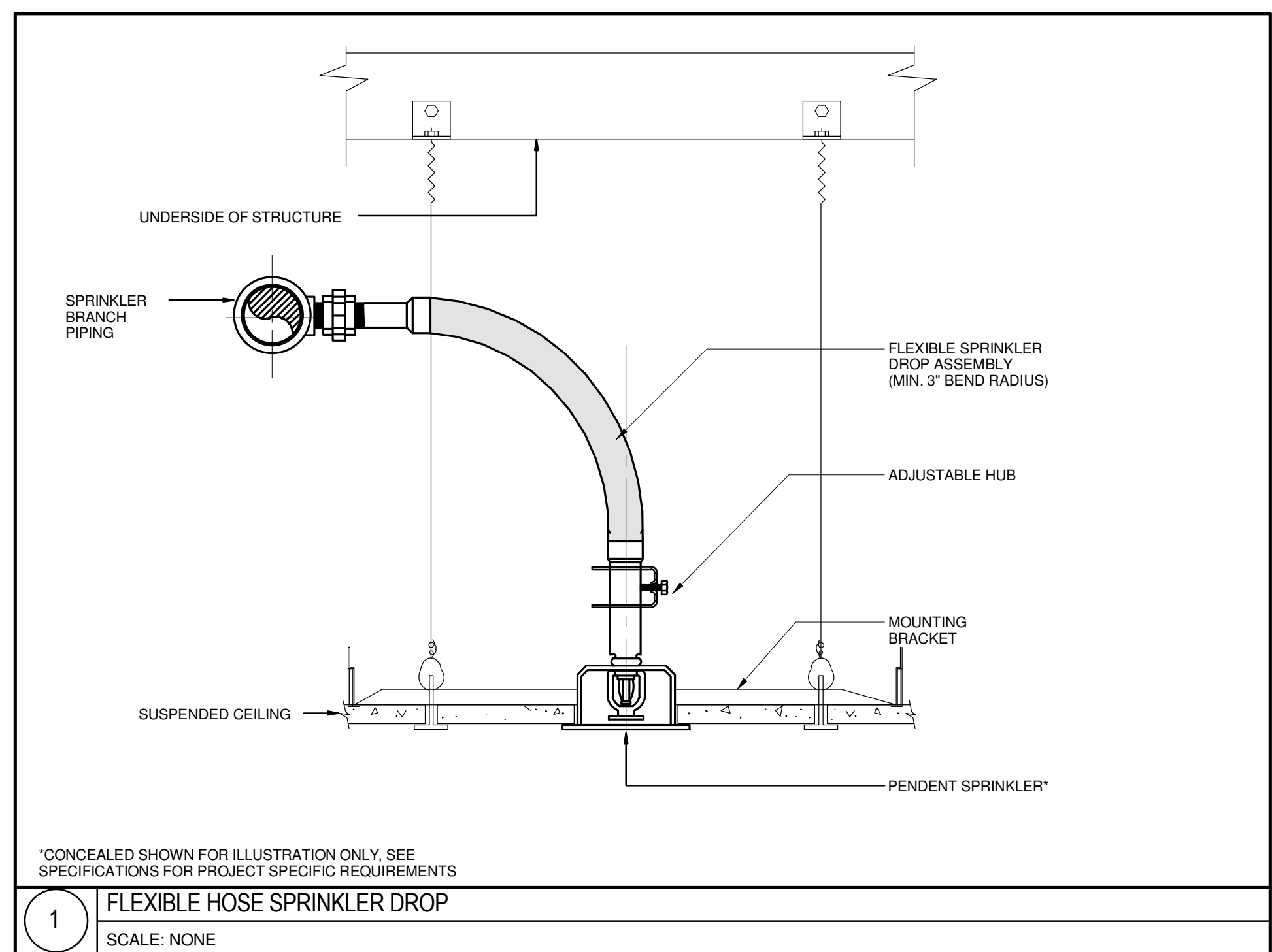
DATE CONDUCTED	RESIDUAL HYDRANT	DISCHARGE HYDRANTS	STATIC (PSI)	RESIDUAL (PSI)	FLOW (GPM)
10/20/2016	BROADWAY B/T STEVENS ST. & DR. MLK BLVD.	BROADWAY B/T STEVENS ST. & BENSON ST.	44	43	930

SPRINKLER SYSTEM DESIGN CRITERIA

NFPA OCCUPANCY CLASSIFICATION	DESCRIPTION	DESIGN DENSITY (GPM/SQ FT)	CALCULATION AREA (SQ FT)	MAX AREA PER SPRINKLER (SQ FT)	HOSE ALLOWANCE (GPM)
LIGHT HAZARD	OFFICE, EDUCATIONAL, CAFE	0.10	1500	225	100
LIGHT HAZARD	LOBBY, CORRIDORS, COMMON AREAS, RESTROOMS	0.10	1500	225	100
ORDINARY HAZARD I	MECHANICAL, ELECTRICAL, TEL/DATA	0.15	1500	130	250
ORDINARY HAZARD II	STORAGE UNDER 12 FT.	0.20	1500	130	250
ORDINARY HAZARD II	LABORATORIES, LAB SUPPORT ROOMS, CELL CULTURE	0.20	1500	130	250

EXISTING ELECTRIC PUMP SCHEDULE

DRAWING DESIGNATION	FUNCTION	PUMP TYPE	BASIS OF DESIGN PERFORMANCE CURVE	CAPACITY (GPM)	BOOST (PSI)	CHURN (PSI)	ELECTRICAL					SET POINTS	
							HP	V	PH	HZ	RPM	START	STOP
FP-1	FIRE PUMP	HORIZONTAL SPLIT CASE	AURORA 480-6-485-17A	1,000	55	69	50	480	3	60	1,770	---	---
PMP-1	PRESSURE MAINTENANCE PUMP	POSITIVE DISPLACEMENT	---	10	60	75	2	480	3	60	3,560	---	---



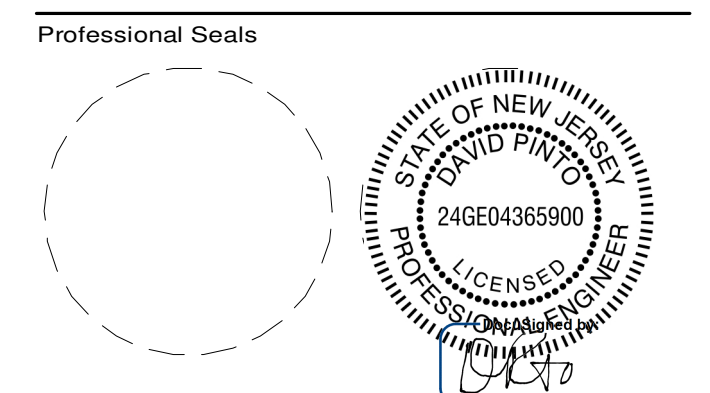
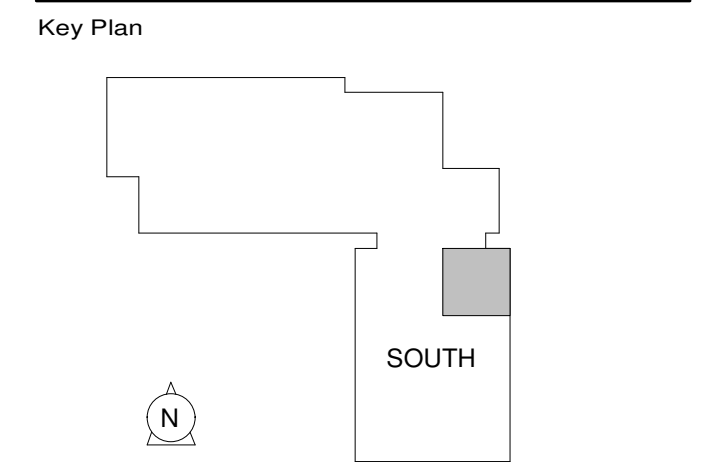
Project:
JOINT HEALTH SCIENCES CENTER - CAFE FITOUT

Prepared For:
**Rowan University - Rutgers Camden
Board of Governors
200 Federal Street, Suite 300
Camden, NJ 08103
Contract No: 16.07011.12**



HOK
One Logan Square, Suite 1510
Philadelphia, PA 19103 USA
t +1 215 940 3570 f +1 215 940 3571

All reproduction & intellectual property rights reserved © 2016
In Association with:



No.	Description	Date
1	ISSUED FOR CONSTRUCTION	01/17/2020

Drawn by: JD Reviewed by: BC
Project No: 16.07011.12

ISSUED FOR CONSTRUCTION - 01.17.20
Sheet Title

FIRE PROTECTION LEGEND SHEET