FIRE PROTECTION DESIGN CRITERIA:

SCOPE OF WORK:

EXISTING SPRINKLER SYSTEM VERIFICATION:
FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FIRE PROTECTION SPRINKLER HEADS AND BRANCH LINE PIPING WITHIN AREA OR RENOVATION. IT IS THE RESPONSIBILITY OF THE FIRE PROTECTION CONTRACTOR TO ASSESS ALL WORK NEEDED TO SUPPORT THE NEW RENOVATIONS AND MODIFICATIONS OF THE EXISTING SPRINKLER SYSTEM PRIOR TO BIDDING.

NEW WORK:
FIRE PROTECTION CONTRACTOR SHALL ADJUST ALL THE EXISTING SPRINKLER HEAD COVERAGE WITHIN THE AREA OF RENOVATION TO COMPLY WITH THE NEW CEILING/FLOOR PLAN LAYOUTS DEPICTED ON THIS SHEET. SPRINKLER HEAD COVERAGE SHALL COMPLY WITH NFPA 13.

ACCEPTANCE TEST CRITERIA:

TESTING OF THE FIRE PROTECTION SYSTEM AND ITS COMPONENTS SHALL COMPLY WITH ALL APPLICABLE ITEMS PER NFPA 13, FIGURES 16.1, CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR ABOVE GROUND PIPING.

SYSTEMS SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI PRESSURE FOR 2 HOURS, OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE WHEN THE MAXIMUM PRESSURE TO BE MAINTAINED IN THE SYSTEM IS IN EXCESS OF 150 PSI.

THE TESTING PRESSURE SHALL BE READ FROM A GAUGE LOCATED AT THE LOW ELEVATION POINT OF THE INDIVIDUAL SYSTEM OR PORTION OF THE SYSTEM BEING TESTED.

THE CONTRACTOR SHALL PERFORM ALL REQUIRED ACCEPTANCE TESTS IN ACCORDANCE WITH NFPA-13. COMPLETE THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE(S), AND FORWARD THE APPROVED CERTIFICATE(S) TO THE ARCHITECT/ENGINEER FOR APPROVAL OF THE INSTALLATION.

ALL TEST CERTIFICATE(S) SHALL BE DATED, SIGNED AND WITNESSED BY LOCAL AHJ. SUBMIT ONE COPY OF EACH TEST CERTIFICATE TO ARCHITECT/ENGINEER.

STRUCTURAL SUPPORT AND STRUCTURAL OPENINGS:

THIS IS AN EXISTING BUILDING RENOVATION. REFER TO STRUCTURAL AS-BUILT DRAWINGS FOR LIVE AND DEAD LOADING INFORMATION. THERE ARE NO SIGNIFICANT STRUCTURAL OPENINGS THAT WILL BE REQUIRED FOR THIS FIRE SPRINKLER SYSTEM.

POINT OF SERVICE:

THIS IS AN EXISTING BUILDING RENOVATION. REFER TO CIVIL AS-BUILT DRAWINGS FOR POINT OF SERVICE LOCATION.

APPLICABLE NFPA STANDARD TO BE APPLIED:

- INTERNATIONAL BUILDING CODE
- NFPA 13
- NFPA 25

CLASSIFICATION OF HAZARD OCCUPANCY OF EACH AREA OR ROOM:
REFER TO FLOOR PLAN THIS SHEET FOR ALL ROOM/ AREA OCCUPANCY CLASSIFICATION.

DENSITY/AREA:

.10 GPM/SQ.FT. OVER THE MOST DEMANDING 1500 SQ. FT. OF LIGHT HAZARD OCCUPANCY SPACE AN ADDITIONAL 100 GPM SHALL BE ADDED FOR A TOTAL COMBINED INSIDE AND OUTSIDE HOSE STREAM DEMAND.

.15 GPM/SQ.FT. OVER THE MOST DEMANDING 1500 SQ. FT. OF ORDINARY HAZARD GROUP I OCCUPANCY SPACE. AN ADDITIONAL 250 GPM SHALL BE ADDED FOR A TOTAL COMBINED INSIDE AND OUTSIDE HOSE STREAM DEMAND.

SPACING:

MAXIMUM PROTECTION SHALL BE 225 SQ. FT. FOR ALL LIGHT HAZARD AREAS, AND 130 SQ. FT. FOR ALL ORDINARY HAZARD GROUP I AREAS.

CHARACTERISTICS OF THE WATER SUPPLY TO BE USED:

FIRE PROTECTION SYSTEM IS IN COMPLIANCE WITH FLORIDA BUILDING CODE SECTION 105.3.1.2 NO HYDRAULIC CALCULATIONS ARE REQUIRED.

FLOW TEST DATA:

FIRE PROTECTION SYSTEM IS IN COMPLIANCE WITH FLORIDA BUILDING CODE SECTION 105.3.1.2 NO HYDRAULIC CALCULATIONS ARE REQUIRED.

VALVE AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPAIRMENTS AND UNRECOGNIZED FLOW OF WATER:

ALL EXISTING PADDLE TYPE WATER FLOW INDICATORS SHALL HAVE FLOW SWITCHES. ALL EXISTING VALVES CONTROLLING THE EXISTING SPRINKLER SYSTEMS, INCLUDING EXISTING BACKFLOW DEVICE, SHALL HAVE TAMPER SWITCHES. ALL ELECTRICAL DEVICES SHALL BE MONITORED BY CENTRAL STATION OR SIMILAR AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION AND SHALL BE IN COMPLIANCE WITH NFPA 72.

QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS:

ALL INTERIOR FIRE PROTECTION COMPONENTS SHALL BE FM APPROVED AND UL LISTED. MATERIALS OF INTERNATIONAL ORIGIN ARE NOT ACCEPTABLE.

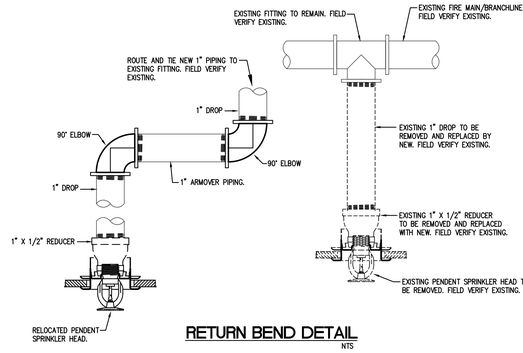
FIRE PROTECTION DATA

LIGHT HAZARD OCCUPANCY CLASSIFICATION

OCCUPANCY CLASSIFICATION:	LIGHT HAZARD
SYSTEM TYPE:	WET PIPE
DESIGN DENSITY:	.10 GPM/SQ. FT.
HYDRAULIC REMOTE AREA:	1500 SQ. FT. UNLESS OTHERWISE NOTED.
SPRINKLER ORIFICE SIZE:	1/2" UNLESS OTHERWISE NOTED
DURATION OF SUPPLY:	30 MIN.
MAX. COVERAGE/SPRINKLER HEAD:	225 SQ. FT. (15' X 15')
HOSE STREAM ALLOWANCE:	100 GPM

ORDINARY HAZARD GROUP I OCCUPANCY CLASSIFICATION

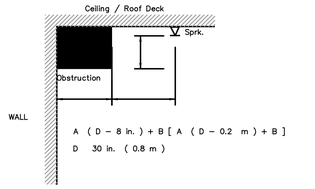
OCCUPANCY CLASSIFICATION:	ORDINARY HAZARD GROUP I
SYSTEM TYPE:	WET PIPE
DESIGN DENSITY:	.15 GPM/SQ. FT.
HYDRAULIC REMOTE AREA:	1500 SQ. FT. UNLESS OTHERWISE NOTED
SPRINKLER ORIFICE SIZE:	1/2" UNLESS OTHERWISE NOTED
DURATION OF SUPPLY:	60-90 MIN.
MAX. COVERAGE/SPRINKLER HEAD:	130 SQ. FT. (13' X 10')
HOSE STREAM ALLOWANCE:	250 GPM



RETURN BEND DETAIL

NTS

OBSTRUCTIONS AGAINST WALLS
NFPA 13 (2007 EDITION) 8.10.6.1.2



ELEVATION VIEW

FIGURE 8.10.6.1.2 (b)

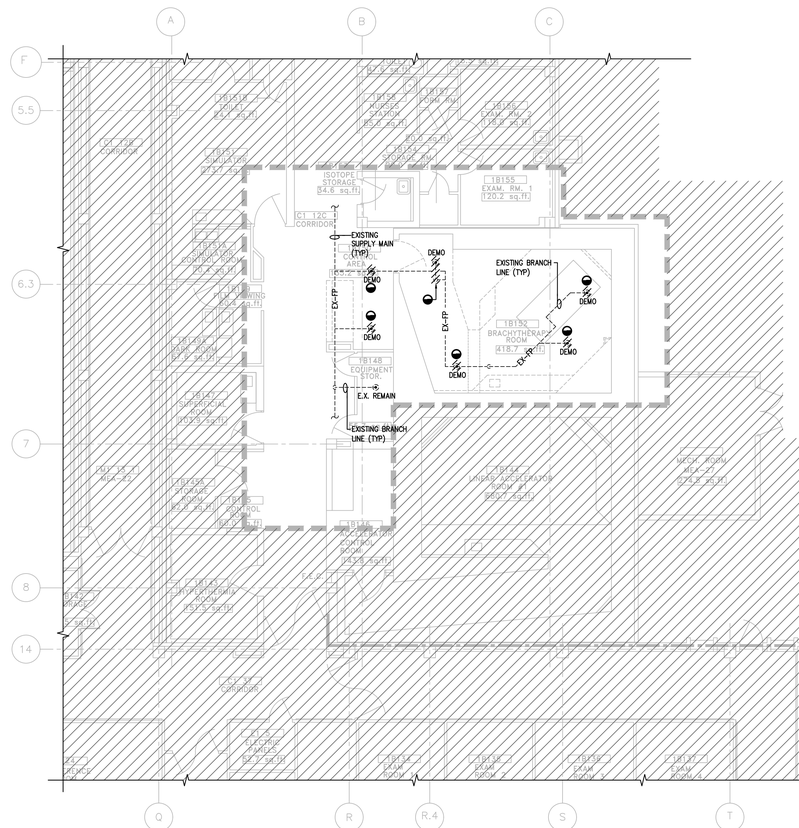
NFPA 13 2007 EDITION TABLE 9.2.2.1 AND SECTIONS 9.2.3.3 AND 9.2.3.4.1
NFPA SPACING REQUIREMENTS

HANGER LOCATION DETAIL

PIPE SIZE	A	B*	C
1"	3'-0" MAX.	12'-0" MAX.	3" MIN.
1-1/4"	4'-0" MAX.	12'-0" MAX.	3" MIN.
1-1/2"-8"	5'-0" MAX.	15'-0" MAX.	3" MIN.

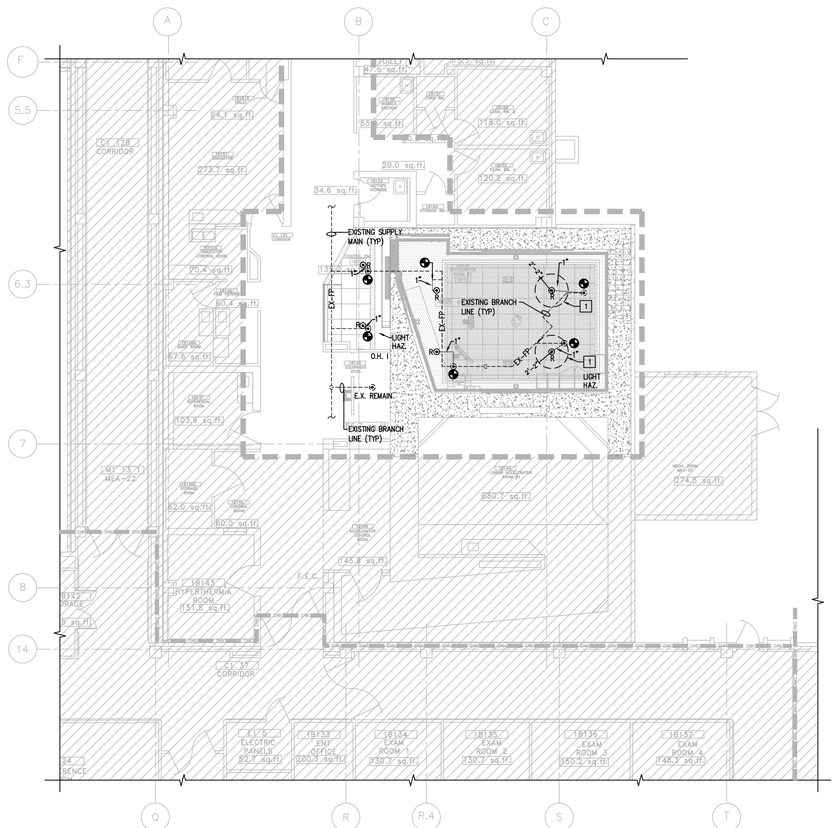
* MAXIMUM HANGER SPACING FOR STEEL PIPE

NOTES:
THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMOVER TO A SPRINKLER, SPRINKLER DROP, OR SPRIG SHALL NOT EXCEED 24 IN.



1 FP100 PARTIAL FIRST FLOOR PLAN – DEMOLITION FIRE PROTECTION

1/8" = 1'-0"



2 FP100 PARTIAL FIRST FLOOR PLAN – NEW FIRE PROTECTION

1/8" = 1'-0"

PLAN LEGEND

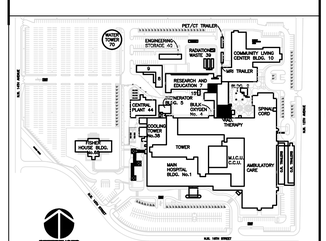
R RELOCATED	RELOCATED SPRINKLER HEAD. FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY EXISTING.
E.X. REMAIN	EXISTING SPRINKLER HEAD TO REMAIN. FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY EXISTING.
DEMO	EXISTING SPRINKLER HEAD TO BE REMOVED AND RELOCATED. SEE NEW WORK PLAN THIS SHEET FOR NEW SPRINKLER HEAD LOCATIONS. FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY EXISTING.
--EX-FP--	EXISTING SPRINKLER PIPING TO REMAIN UNLESS OTHERWISE NOTES. FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY EXISTING.
	NEW SPRINKLER PIPING
	EXISTING PIPING OR SPRINKLER HEAD TO BE REMOVED
	END POINT OF DEMOLITION
	POINT OF CONNECTION TO EXISTING

GENERAL PLAN NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE FOLLWING:
   - INTERNATIONAL BUILDING CODE
   - NFPA 13
   - NFPA 25
2. ALL HANGERS & MATERIALS TO BE IN ACCORDANCE W/ NFPA 13.
3. ALL BRANCH LINES SHALL BE SCH. 40 BLACK STEEL PIPE ALL DROPS SHALL BE 1" SCH. 40 BLACK IRON PIPE. NO FERROUS MATERIAL SHALL BE UTILIZED IN ALL REQUIRED SPACES, VERIFY REQUIREMENTS WITH OWNER.
4. ALL SPRINKLER HEADS SHALL BE CENTER OF TILE.
5. FIRE PROTECTION CONTRACTOR SHALL THOROUGHLY COORDINATE ALL NEW HEADS, HANGERS, PIPING AND ANY ASSOCIATED MATERIAL LOCATIONS WITH NEW AND EXISTING MECHANICAL EQUIPMENT, PLUMBING EQUIPMENT, ELECTRICAL EQUIPMENT AND ALL STRUCTURAL MEMBERS/ OBSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE FIRE PROTECTION CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES AND STRUCTURAL TO AVOID CONFLICTS.
6. LOCATIONS OF EXISTING FIRE SPRINKLER HEADS AND PIPING WHERE DETERMINED VIA SITE VISITS AND EXISTING AS-BUILT INFORMATION. FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING EQUIPMENT PRIOR TO DEMOLITION/RENOVATION.
7. ALL WALL PATCHING, CEILING REPAIR, AND OTHER GENERAL WORK REQUIRED FOR INSTALLING SPRINKLER SYSTEMS SHALL BE REPAIRED TO "LIKE NEW CONDITION". (COORDINATE WITH GENERAL CONTRACTOR).
8. FIRE PROTECTION CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT EXECUTION OF THE WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED. IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES IN EQUIPMENT ROUTING AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAY BE NECESSARY AND IT IS INTENDED THAT ;SUCH DEVIATIONS SHALL BE CONSIDERED AS PART OF THIS CONTRACT. CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL SITE UTILITIES, ETC., PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.

KEYED NOTES

1 SPRINKLER HEADS SHALL BE INSTALLED A MINIMUM OF 3'-2" AWAY FROM SIDE OF OBSTRUCTION PER NFPA 13, 2007 EDITION FIGURE 8.6.5.1.2(B). SEE OBSTRUCTION DETAIL THIS SHEET. DASHED CIRCLE DEPICTS REQUIRED DISTANCE FROM OBSTRUCTION TO SPRINKLER HEAD.



CONSTRUCTION DOCUMENT FINAL SUBMISSION

Revisions	Date

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Drawing Title: PARTIAL FIRST FLOOR PLANS – FIRE PROTECTION

Approved: Project Director

Project Title: SITE PREP FOR LINEAR ACCELERATOR

Location: 1201 NW 16th ST, MIAMI, FL.

Date: NOVEMBER 18, 2016 | Checked: RC | Drawn: RC

Project Number: 546-CSI-110

Building Number: 1

Drawing Number: FP100 Dwg. of 38

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