

SCHEMATIC SYSTEM SIZING

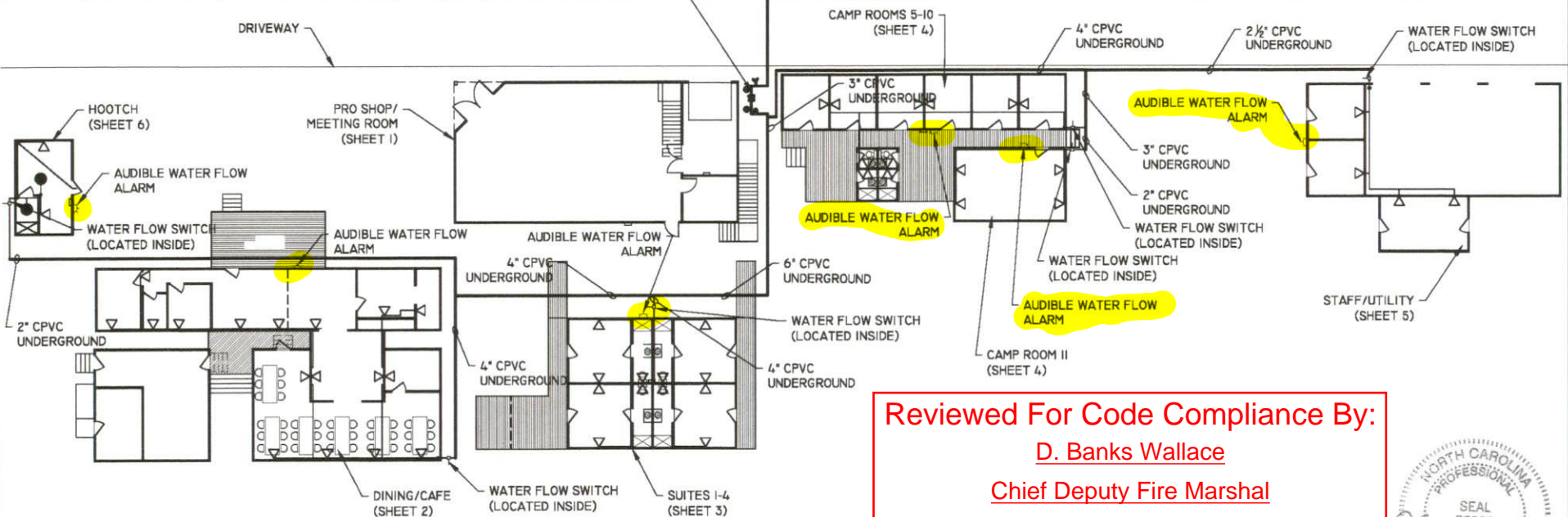
SPACE DESIGNATION	# HEADS	SQ. FT. (SPECIAL FIRE)	GPM (@ 1 GPM/172)	*MAIN SIZE TO SPACE
HOOTCH	4	226	22.6	2" CPVC
DINING/CAFE	17	1779	177.9	4" CPVC
SUITES 1-4 (R-1)	12	1384	138.4	4" CPVC
CAMP ROOMS 5-10	10	741	74.1	3" CPVC
CAMP ROOM II	4	352	35.2	2" CPVC
STAFF/UTILITY	4	486	48.6	2 1/2" CPVC
TOTALS		4,96.8		6" CPVC

*MAIN SIZES MAY BE REDUCED BASED ON HYDRALLIC CALCULATIONS BY INSTALLER
SIZES SHOWN FOR PRICING ONLY, TO BE VERIFIED BY INSTALLER

6" CPVC RUBBER-FACED CHECK VALVE
PRESSURE GAUGES
DRAIN AND TEST CONNECTION
IN ABOVE GROUND ENCLOSURE

CITY MAIN - SIZE TO BE DETERMINED BY INSTALLER

NEW 6" FIRE LINE WATER TAP



Reviewed For Code Compliance By:
D. Banks Wallace
Chief Deputy Fire Marshal
12/03/2018 11:01:25 AM



1 PARTIAL SITE PLAN - BUILDINGS & SPRINKLER PROTECTION SITE PLAN
SCALE: 1/4" = 1'-0"

10.15.2018

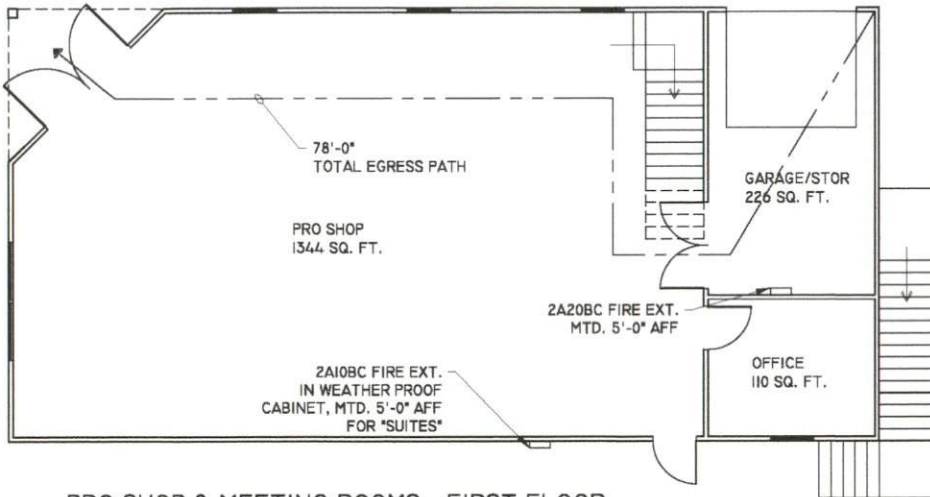
REVISED
10.15.2018

Basinger Design Co.
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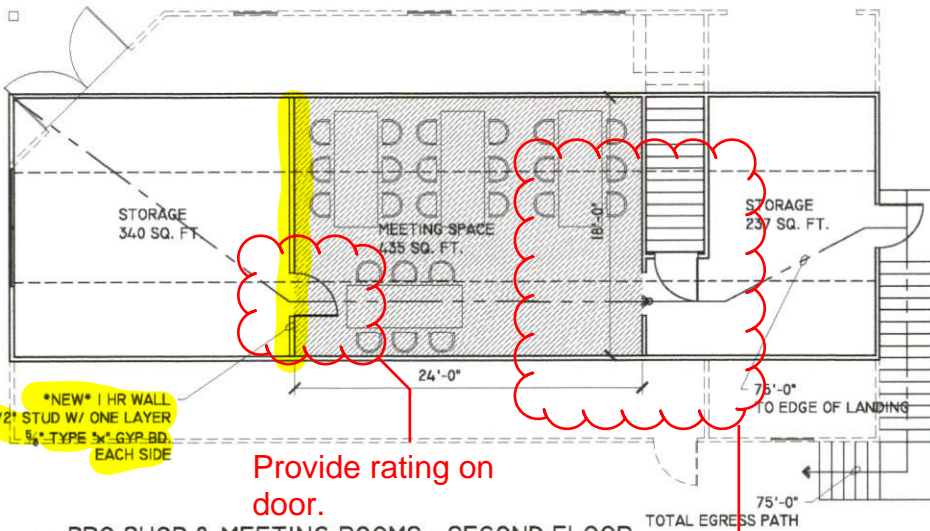
PROJECT NO.
17014
DATE
6 JAN 2018
DRAWN BY:
JRB

TITLE/PROJECT INFO:
COVER SHEET - SITE PLAN
COBLE SKI SCHOOL
LILLINGTON, NC 27546

SHEET NO.
CS



1 PRO SHOP & MEETING ROOMS - FIRST FLOOR
SCALE: 1/8" = 1'-0"



1 PRO SHOP & MEETING ROOMS - SECOND FLOOR
SCALE: 1/8" = 1'-0"

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE	ACTUAL TRAVEL DISTANCE
PRO SHOP	2	2	200'	78'-0"
MEETING SPACE/STORAGE	1	1	75'	75'-0"

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA Sq. Ft.	(b) AREA PER OCCUPANT	CALCULATED OCCUPANT LOAD	MAX OCCUPANT LOAD	(c)		EXIT WIDTH (n)			
					EGRESS WIDTH PER OCCUPANT	REQUIRED WIDTH (SECTION 1005.1) (a/b) x c		ACTUAL WIDTH SHOWN ON PLANS		
						STAIR	LEVEL	STAIR	LEVEL	
PRO SHOP (M)	1344	30 S.F./PERSON	45	45	N/A	0.2	N/A	9'	N/A	36" DOOR
OFFICE (MINOR TO M)	110	100 S.F./PERSON	2	2	N/A	0.2	N/A	0.4"	N/A	36" DOOR
GARAGE/STORAGE (S-1)	226	500 S.F./PERSON	1	1	N/A	0.2	N/A	0.2"	N/A	36" DOOR
MEETING SPACE (B)	435	15 S.F./PERSON	29	29	0.3	0.2	33.3'	2.0'	44"	36" DOOR
STORAGE	440	500 S.F./PERSON	1	1	0.3	0.2	33.3'	2.0'	44"	36" DOOR
STORAGE	237	500 S.F./PERSON	1	1	0.3	0.2	2.4"	2.0'	44"	36" DOOR

NOTE, MEETING SPACE IS A "B" OCCUPANCY (TRAINING & SKILL DEVELOPMENT) SPACE WITH ONE EXIT OR EXIT ACCESS DOORWAY PER 1015.1, MAXIMUM OCCUPANT LOAD IS 29. PER EXCEPTIONS 303.1.1, THE MEETING ROOM IS DESIGNATED "B" PER EXCEPTION 301.1.2 SINCE THE OCCUPANT LOAD IS LESS THAN 50, IT IS APPLICABLE FOR MEETING ROOM TO BE A PART OF THE OCCUPANCY OF THE PRO SHOP, AND BE A "B" OCCUPANCY.

GENERAL NOTES:

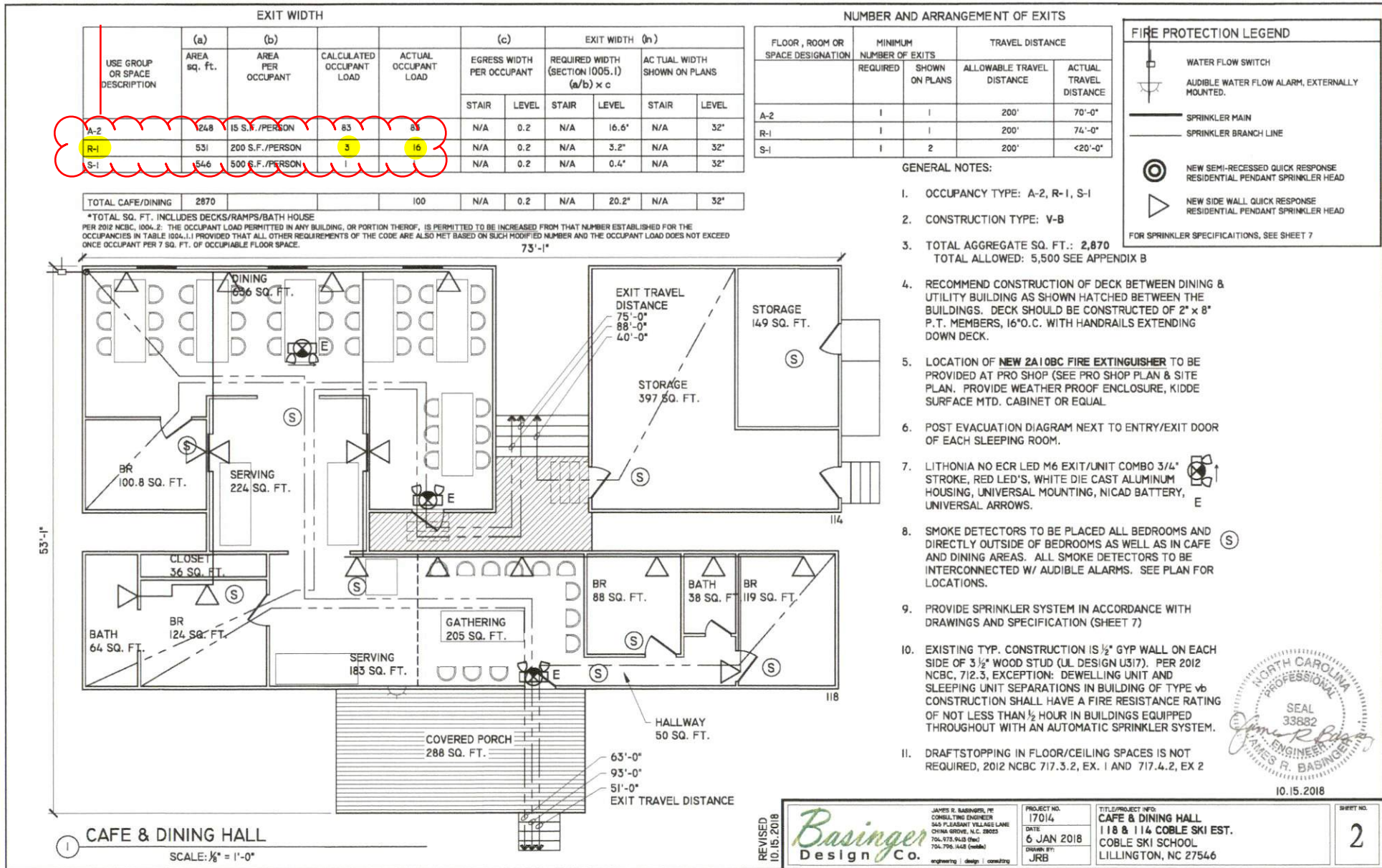
- BUILDING IS NOT FULLY SPRINKLED. EXISTING SYSTEM IS NOT CURRENTLY ACTIVE.
- ALL EXISTING EXIT LIGHT COMBO PACKS SHALL BE CHECKED AND VERIFIED TO ILLUMINATE ON BATTERY POWER. REPLACE BATTERY AS NEEDED.
- ALL PORTABLE FIRE EXTINGUISHERS TO BE MAINTAINED AND CHECKED MONTHLY.
- LOCATION OF NEW 2A20BC FIRE EXTINGUISHER TO BE PROVIDED AT IN GARAGE/SHOP
- PROVIDE KNOX BOX AT FRONT DOOR



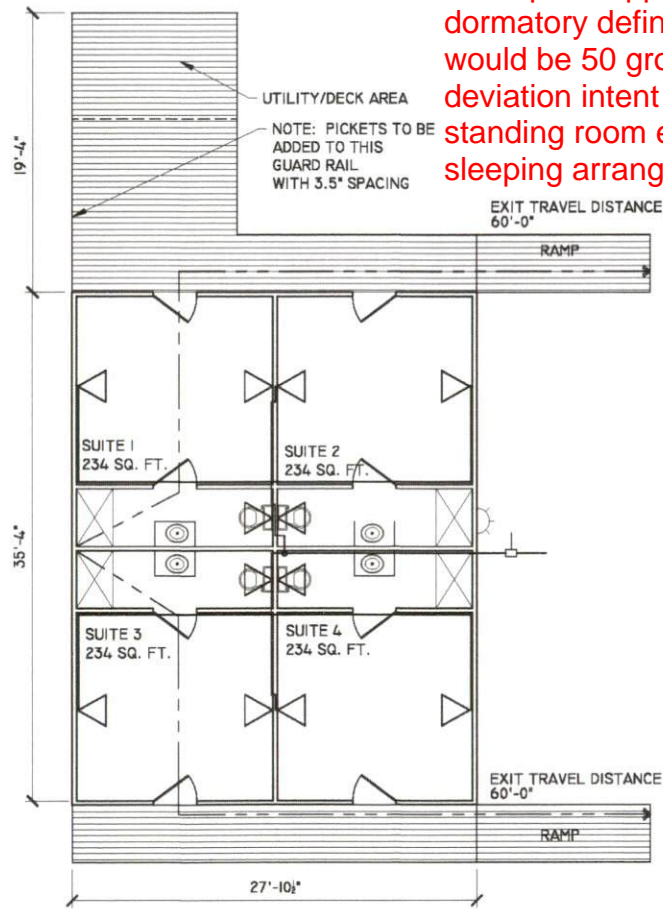
REVISED 10.15.2018		JAMES R. BASINGER, PE CONSULTING ENGINEER 242 PLEASANT VILLAGE LANE CHINA GROVE, N.C. 28023 704-975-9415 (fax) 704-750-1410 (mobile)	PROJECT NO. 17014	TITLE/PROJECT INFO: PRO-SHOP - MEETING ROOMS - REVISED 130 COBLE SKI EST. COBLE SKI SCHOOL LILLINGTON, NC 27546	SHEET NO. 1
		engineering design consulting	DATE 6 JAN 2018 DRAWN BY: JRB		

Post Occupant Load

Please clarify



This space appears to meet the dormitory definition which would be 50 gross; 1004.2 deviation intent is based on standing room events, not sleeping arrangements.



1 SUITES
SCALE: 1/8" = 1'-0"

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE	ACTUAL TRAVEL DISTANCE
SUITES 1-4 (R-1)	1	1	75'	44'-0"

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA sq. ft.	(b) AREA PER OCCUPANT	CALCULATED OCCUPANT LOAD	ACTUAL OCCUPANT LOAD	(c)		EXIT WIDTH (m)			
					EGRESS WIDTH PER OCCUPANT		REQUIRED WIDTH (SECTION 1005.1) (a/b) x c		ACTUAL WIDTH SHOWN ON PLANS	
					STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
SUITES 1-4 (R-1)	234	200 S.F./PERSON	2	4	N/A	0.2	N/A	0.8'	N/A	32'
TOTAL SUITES (R-1)	1384	200 S.F./PERSON	7	16	N/A	0.2	N/A	3.2'	N/A	32'

PER 2012 NCBC, 1004.2: THE OCCUPANT LOAD PERMITTED IN ANY BUILDING, OR PORTION THEREOF, IS PERMITTED TO BE INCREASED FROM THAT NUMBER ESTABLISHED FOR THE OCCUPANCIES IN TABLE 1004.1.1 PROVIDED THAT ALL OTHER REQUIREMENTS OF THE CODE ARE ALSO MET BASED ON SUCH MODIFIED NUMBER AND THE OCCUPANT LOAD DOES NOT EXCEED FIVE OCCUPANT PER 7 SQ. FT. OF OCCUPIABLE FLOOR SPACE.

GENERAL NOTES:

- OCCUPANCY TYPE: R-1
- CONSTRUCTION TYPE: V-B
- TOTAL AGGREGATE SQ. FT.: 1,384 (INCLUDES WALKWAYS/BATH AREA)
- SUITES COMBUSTIBLE DECORATIVE MATERIALS MEETING NFPA 701 IS LIMITED TO 10% OF WALL AREA.
WALL PLAN DIR. SQ. FT. ALLOWED
N / S 108 SQ. FT. 10 SQ. FT.
E / W 104 SQ. FT. 10 SQ. FT.
- LOCATION OF NEW 2A10BC FIRE EXTINGUISHER TO BE PROVIDED AT PRO SHOP (SEE PRO SHOP PLAN & SITE PLAN. PROVIDE WEATHER PROOF ENCLOSURE, KIDDE SURFACE MTD. CABINET OR EQUAL)
- POST EVACUATION DIAGRAM NEXT TO ENTRY/EXIT DOOR OF EACH SLEEPING ROOM.
- SMOKE DETECTION/ALARM SHALL BE INTERCONNECTED TO PROVIDE AUDIBLE ALARM IN ALL BEDROOMS IF ONE ALARM IS ACTIVATED. BECAUSE THE DECK ON THE REAR IS CLOSE TO THE DINING ROOM, WE WOULD PROPOSE INTERCONNECTING THIS BUILDING WITH THE CAFE/DINING AREA SMOKE DETECTORS.
- PROVIDE SPRINKLER SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION (SHEET 7)
- EXISTING TYP. CONSTRUCTION IS 1/2" GYP WALL ON EACH SIDE OF 3 1/2" WOOD STUD (UL DESIGN U317). PER 2012 NCBC, 712.3, EXCEPTION: DEWELLING UNIT AND SLEEPING UNIT SEPARATIONS IN BUILDING OF TYPE vb CONSTRUCTION SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 1/2 HOUR IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM.
- DRAFTSTOPPING IN FLOOR/CEILING SPACES IS NOT REQUIRED, 2012 NCBC 717.3.2, EX. 1 AND 717.4.2, EX 2

FIRE PROTECTION LEGEND

	WATER FLOW SWITCH
	AUDIBLE WATER FLOW ALARM, EXTERNALLY MOUNTED.
	SPRINKLER MAIN
	SPRINKLER BRANCH LINE
	NEW SEMI-RECESSED QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD
	NEW SIDE WALL QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD

FOR SPRINKLER SPECIFICATIONS, SEE SHEET 7



REVISED 10.15.2018	 JAMES R. BASINGER, PE CONSULTING ENGINEER 340 PLEASANT VILLAGE LANE CHINA GROVE, N.C. 28023 704.975.9143 (fax) 704.756.1455 (mobile)	PROJECT NO. 17014	TITLE/PROJECT INFO: SUITES 134 COBLE SKI EST. COBLE SKI SCHOOL LILLINGTON, NC 27546	SHEET NO. 3
		DATE 6 JAN 2018	DRAWN BY: JRB	10.15.2018

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

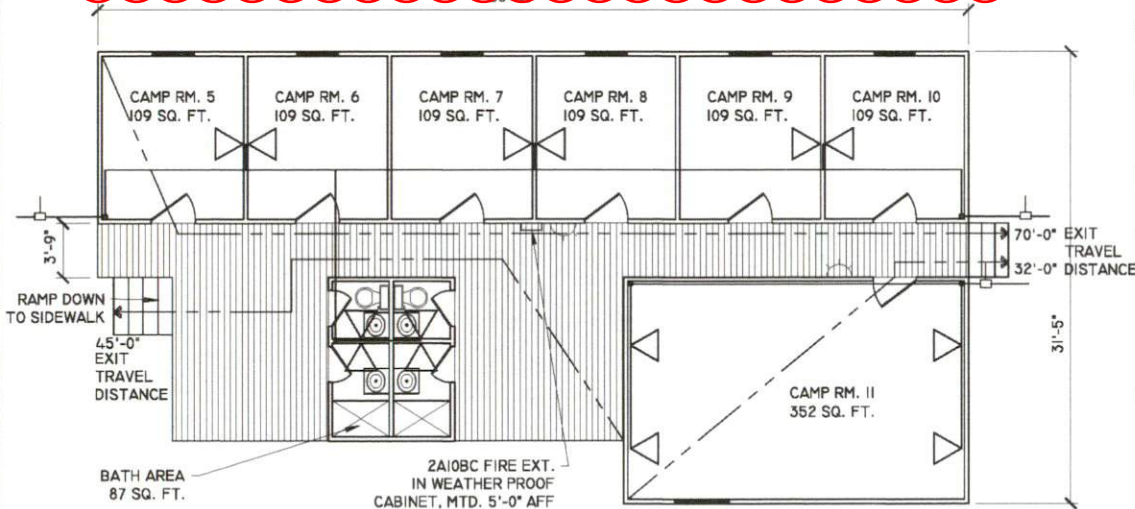
FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE	ACTUAL TRAVEL DISTANCE
CAMP ROOMS 5-10 (R-I)	1	1	75'	70'-0"
CAMP ROOM II (R-I)	1	1	75'	32'-0"

This space appears to meet the dormitory definition which would be 50 gross; 1004.2 deviation intent is based on standing room events, not sleeping arrangements.

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a)		CALCULATED OCCUPANT LOAD	ACTUAL OCCUPANT LOAD	(c)		EXIT WIDTH (n)			
	AREA sq. ft.	AREA PER OCCUPANT			EGRESS WIDTH PER OCCUPANT	REQUIRED WIDTH (SECTION 1005.1)		ACTUAL WIDTH SHOWN ON PLANS		
						(a/b) x c	(a/b) x c	STAIR	LEVEL	
CAMP ROOMS 5-10 (R-I)	109	200 S.F./PERSON	1	4	N/A	0.2	N/A	0.8"	N/A	32"
CAMP ROOM II (R-I)	352	200 S.F./PERSON	2	10	N/A	0.2	N/A	2.0"	N/A	32"
TOTAL CAMP ROOMS	1581	200 S.F./PERSON	8	30	N/A	0.2	N/A	6"	N/A	32"

*TOTAL SQ. FT. INCLUDES DECKS/RAMPS/BATH HOUSE PER 2012 NCBC, 1004.2: THE OCCUPANT LOAD PERMITTED IN ANY BUILDING, OR PORTION THEREOF, IS PERMITTED TO BE INCREASED FROM THAT NUMBER ESTABLISHED FOR THE OCCUPANCIES IN TABLE 1004.1.1 PROVIDED THAT ALL OTHER REQUIREMENTS OF THE CODE ARE ALSO MET BASED ON SUCH MODIFIED NUMBER AND THE OCCUPANT LOAD DOES NOT EXCEED ONCE OCCUPANT PER 7 SQ. FT. OF OCCUPABLE FLOOR SPACE.



1 CAMP ROOMS
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- OCCUPANCY TYPE: R-I
- CONSTRUCTION TYPE: V-B
- TOTAL AGGREGATE SQ. FT.: 1,581 (INCLUDES WALKWAYS/BATH AREA)
- CAMP ROOMS 5-10 COMBUSTIBLE DECORATIVE MATERIALS MEETING NFPA 701 IS LIMITED TO 10% OF WALL AREA.
- CAMP ROOM II COMBUSTIBLE DECORATIVE MATERIALS MEETING NFPA 701 IS LIMITED TO 10% OF WALL AREA.

WALL PLAN DIR.	SQ. FT.	ALLOWED
N / S	77.3 SQ. FT.	7.7 SQ. FT.
E / W	90.6 SQ. FT.	9.0 SQ. FT.

- LOCATION OF NEW 2A10BC FIRE EXTINGUISHER SHOWN. PROVIDE WEATHER PROOF ENCLOSURE, KIDDE SURFACE MTD. CABINET OR EQUAL.
- POST EVACUATION DIAGRAM NEXT TO ENTRY/EXIT DOOR OF EACH SLEEPING ROOM.
- EXISTING SMOKE DETECTION/ALARM SHALL BE INTERCONNECTED TO PROVIDE AUDIBLE ALARM IN ALL BEDROOMS IF ONE ALARM IS ACTIVATED. THIS INCLUDES CAMP RM. II TO CAMP R.M.S 5-10.
- PROVIDE SPRINKLER SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION (SHEET 7)
- EXISTING TYP. CONSTRUCTION IS 1/2" GYP WALL ON EACH SIDE OF 3 1/2" WOOD STUD (UL DESIGN U317). PER 2012 NCBC, 712.3, EXCEPTION: DEWELLING UNIT AND SLEEPING UNIT SEPARATIONS IN BUILDING OF TYPE vb CONSTRUCTION SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 1/2 HOUR IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM.
- DRAFTSTOPPING IN FLOOR/CEILING SPACES IS NOT REQUIRED, 2012 NCBC 717.3.2, EX. 1 AND 717.4.2, EX 2

FIRE PROTECTION LEGEND

- WATER FLOW SWITCH
- AUDIBLE WATER FLOW ALARM, EXTERNALLY MOUNTED.
- SPRINKLER MAIN
- SPRINKLER BRANCH LINE
- NEW SEMI-RECESSED QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD
- NEW SIDE WALL QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD

FOR SPRINKLER SPECIFICATIONS, SEE SHEET 7



REVISED 10.15.2018	Basinger Design Co.	JAMES R. BASINGER, PE CONSULTING ENGINEER 340 PLEASANT VILLAGE LANE CHINA GROVE, N.C. 28023 704.475.9133 (fax) 704.795.1458 (cell)	PROJECT NO. 17014	TITLE/PROJECT INFO: CAMP ROOMS	SHEET NO. 4
			DATE 6 JAN 2018	146 COBLE SKI EST. COBLE SKI SCHOOL LILLINGTON, NC 27546	

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE	ACTUAL TRAVEL DISTANCE
STAFF ROOMS (R-1)	1	1	75'	20'-0"
UTILITY (S-1)	1	3	75'	30'-0"

This space appears to meet the dormitory definition which would be 50 gross; 1004.2 deviation intent is based on standing room events, not sleeping arrangements.

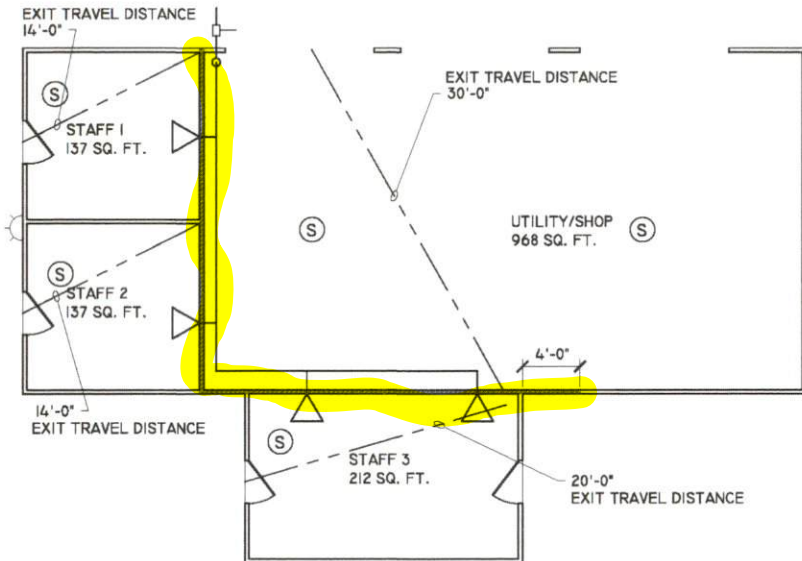
GENERAL NOTES:

- OCCUPANCY TYPE: R-1, S-1
- CONSTRUCTION TYPE: V-B
- POST EVACUATION DIAGRAM NEXT TO ENTRY/EXIT DOOR OF EACH SLEEPING ROOM.
- SMOKE DETECTION/ALARM SHALL BE INTERCONNECTED TO PROVIDE AUDIBLE ALARM IN ALL BEDROOMS IF ONE ALARM IS ACTIVATED.
- SMOKE DETECTORS SHALL BE ADDED TO UTILITY/SHOP AREA, AND INTERCONNECTED TO SMOKE DETECTORS IN THE SLEEPING ROOMS. (S)
- PROVIDE SPRINKLER SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION (SHEET 7)
- EXISTING TYP. CONSTRUCTION IS 1/2" GYP WALL ON ONE SIDE OF HATCHED WALL. SINCE ONLY R-1 SIDE IS SPRINKLERED, THEN WALL MUST BE A 2 HOUR WALL. FOR 2 HOUR WALL, PROVIDE (2) LAYERS OF 5/8" TYP "X" GYP BOARD EACH SIDE, (UL DES. U301).
- ALT. 2 HOUR CONSTRUCTION: INSTALL (1) LAYER OF 1/2" GYP. BOARD ON SHOP SIDE OF HATCHED WALL, AND PROVIDE FLAMEOFF FIRE BARRIER PAINT, INTUMESCENT PAINT APPLIED TO BOTH SIDES OF WALL. PAINT TO BE APPLIED TO THE SPECIFIC DRY FILM THICKNESS (DFT) LISTED BY MANUFACTURER. PAINT TO MEET OR EXCEED ASTM E119 LISTING STANDARDS IN ACCORDANCE WITH UL 265.
- DRAFTSTOPPING IN WALL ASSEMBLY EXTENDING BEYOND CEILING LINE OF R-1 AREAS MUST BE DRAFTSTOPPED IN ACCORDANCE WITH 2012 NCBC.

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA sq. ft.	(b) AREA PER OCCUPANT	CALCULATED OCCUPANT LOAD	ACTUAL OCCUPANT LOAD BED LAYOUT	(c) EXIT WIDTH (m)					
					EGRESS WIDTH PER OCCUPANT		REQUIRED WIDTH (SECTION 1005.1) (a/b) x c		ACTUAL WIDTH SHOWN ON PLANS	
					STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
STAFF ROOMS (R-1)	486	200 S.F./PERSON	2 PER	6	N/A	0.2	N/A	0.4'	N/A	36"
UTILITY (S-1)	968	500 S.F./PERSON	2	2	N/A	0.2	N/A	0.4'	N/A	72"

PER 2012 NCBC, 1004.2: THE OCCUPANT LOAD PERMITTED IN ANY BUILDING, OR PORTION THEREOF, IS PERMITTED TO BE INCREASED FROM THAT NUMBER ESTABLISHED FOR THE OCCUPANCIES IN TABLE 1004.1.1 PROVIDED THAT ALL OTHER REQUIREMENTS OF THE CODE ARE ALSO MET BASED ON SUCH MODIFIED NUMBER AND THE OCCUPANT LOAD DOES NOT EXCEED 50 PER PERSON PER 750 SQ. FT. OF OCCUPABLE FLOOR SPACE.



FIRE PROTECTION LEGEND

- WATER FLOW SWITCH
- AUDIBLE WATER FLOW ALARM, EXTERNALLY MOUNTED.
- SPRINKLER MAIN
- SPRINKLER BRANCH LINE
- NEW SEMI-RECESSED QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD
- NEW SIDE WALL QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD

FOR SPRINKLER SPECIFICATIONS, SEE SHEET 7



10.15.2018

1 STAFF ROOMS

SCALE: 1/8" = 1'-0"

REVISED
10.15.2018

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engineering | design | consulting

PROJECT NO.
17014
DATE
6 JAN 2018
DRAWN BY:
JRB

TITLE/PROJECT INFO:
CAMP ROOMS
150 COBLE SKI EST.
COBLE SKI SCHOOL
LILLINGTON, NC 27546

SHEET NO.
5

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE	ACTUAL TRAVEL DISTANCE
HOOTCH (R-1)	1	1	75'	16'-0"

This space appears to meet the dormitory definition which would be 50 gross; 1004.2 deviation intent is based on standing room events, not sleeping arrangements.

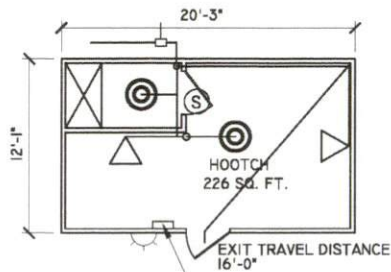
EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA sq. ft.	(b) AREA PER OCCUPANT	CALCULATED OCCUPANT LOAD	ACTUAL OCCUPANT LOAD BUNK BED LAYOUT	EXIT WIDTH (in)					
					(c) EGRESS WIDTH PER OCCUPANT		REQUIRED WIDTH (SECTION 1005.1) (a/b) x c		ACTUAL WIDTH SHOWN ON PLANS	
					STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
HOOTCH (R-1)	226	200 S.F./PERSON	2	6	N/A	0.2	N/A	1.2"	N/A	36"

PER 2012 NCBC, 1004.2: THE OCCUPANT LOAD PERMITTED IN ANY BUILDING, OR PORTION THEREOF, IS PERMITTED TO BE INCREASED FROM THAT NUMBER ESTABLISHED FOR THE OCCUPANCIES IN TABLE 1004.1.1 PROVIDED THAT ALL OTHER REQUIREMENTS OF THE CODE ARE ALSO MET BASED ON SUCH MODIFIED NUMBER AND THE OCCUPANT LOAD DOES NOT EXCEED ONCE OCCUPANT PER 7 SQ. FT. OF OCCUPIABLE FLOOR SPACE.

GENERAL NOTES:

- OCCUPANCY TYPE: R-2
- CONSTRUCTION TYPE: V-B
- TOTAL AGGREGATE SQ. FT.: 226 (INCLUDES BATH AREA)
- LOCATION OF NEW 2A10BC FIRE EXTINGUISHER SHOWN.
- POST EVACUATION DIAGRAM NEXT TO ENTRY/EXIT DOOR.
- MUST HAVE SMOKE DETECTOR (S)
- NOTE - ON BOTH SIDES, A LOFT IS CREATED WHICH LEAVES A CEILING OF 6'-2". THE LOFT NEEDS TO BE REMOVED FROM BOTH SIDES SO THAT THE MINIMUM CEILING HEIGHT OF 7'-0" IS OBTAINED.



2A10BC FIRE EXT.,
MTD, 5'-0" AFF

1 HOOCH
SCALE: 1/8" = 1'-0"

FIRE PROTECTION LEGEND

- WATER FLOW SWITCH
- AUDIBLE WATER FLOW ALARM, EXTERNALLY MOUNTED.
- SPRINKLER MAIN
- SPRINKLER BRANCH LINE
- NEW SEMI-RECESSED QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD
- NEW SIDE WALL QUICK RESPONSE RESIDENTIAL PENDANT SPRINKLER HEAD

FOR SPRINKLER SPECIFICATIONS, SEE SHEET 7



10.15.2018

REVISED
10.15.2018

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PROJECT NO.
17014
DATE
6 JAN 2018
DRAWN BY:
JRB

TITLE/PROJECT INFO:
HOOTCH
112 COBLE SKI EST.
COBLE SKI SCHOOL
LILLINGTON, NC 27546

SHEET NO.
6

SPRINKLER NOTES

- 1. PIPE SIZING IS SHOWN FOR PRICING AND SCHEMATIC ARRANGEMENT ONLY, ALL PIPING TO BE HYDRAULICALLY SIZED PER NFPA 13R, AND INSTALLATION OF AUTOMATIC SPRINKLER SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 13R. THE SPRINKLER CONTRACTOR SHALL PROVIDE ALL PIPING, VALVES, TRIM, ETC. FOR A COMPLETE SYSTEM.
- 2. ALL MATERIALS SHALL BE "UL" LISTED OR "FM" APPROVED.
- 3. ALL SPRINKLERS SHALL BE INSTALLED WITH QUICK RESPONSE RESIDENTIAL AUTOMATIC SPRINKLERS.
- 4. THE POTABLE WATER SUPPLY SHALL BE PROTECTED AGAINST BACKFLOW. SEE SCHEMATIC DIAGRAMS FOR EACH BUILDING FOR LOCATION OF BACKFLOW DEVICE.
- 5. HYDRAULIC CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND THE LOCAL FIRE MARSHAL FOR REVIEW PRIOR TO INSTALLATION OF THE SYSTEM.
- 6. FOR APPLICATIONS USING THE LIMITED AREA SPRINKLER SYSTEMS - THEY SHALL BE LIMITED TO FEWER THAN 20 SPRINKLERS ON ANY SINGLE CONNECTION, AND WILL BE CONNECTED TO THE DOMESTIC SERVICE OF EACH BUILDING.
 - 6.1. VALVES SHALL NOT BE INSTALLED BETWEEN THE DOMESTIC WATER RISER CONTROL VALVE AND THE SPRINKLER.
 - 6.2. THE DOMESTIC SERVICE SHALL BE CAPABLE OF SUPPLYING THE SIMULTANEOUS DOMESTIC DEMAND AND THE SPRINKLER DEMAND REQUIRED TO BE HYDRAULICALLY CALCULATED BY NFPA 13R.
- 7. A SINGLE COMBINATION WATER SUPPLY SHALL BE ALLOWED PROVIDED THAT THE DOMESTIC DEMAND IS ADDED TO THE SPRINKLER DEMAND AS REQUIRED BY NFPA 13R
- 8. SPRINKLER SYSTEM SUPERVISION AND ALARMS ARE NOT REQUIRED PER 903.1, EX. 3: AUTOMATIC SPRINKLER SYSTEMS INSTALLED IN ACCORDANCE WITH NFPA 13R WHERE A COMMON SUPPLY MAIN IS USED TO SUPPLY BOTH DOMESTIC WATER AND THE AUTOMATIC SPRINKLER SYSTEM AND A SEPARATE SHUTOFF VALVE FOR THE AUTOMATIC SPRINKLER SYSTEM IS NOT PROVIDED.
- 9. SYSTEMS SHOWN ARE NOT REQUIRED TO BE MONITORED PER EXCEPTION 903.4.1, EX. 2: BACKFLOW PREVENTION DEVICE TEST VALVES LOCATED IN LIMITED AREA SPRINKLER SYSTEM SUPPLY PIPING SHALL BE LOCKED IN THE OPEN POSITION.
- 10. AN APPROVED AUDIBLE DEVICE SHALL BE CONNECTED TO EVERY AUTOMATIC SPRINKLER SYSTEM. THESE WATERFLOW ALARM DEVICES SHALL BE ACTIVATED BY WATERFLOW EQUIVALENT TO THE FLOW OF A SINGLE SPRINKLER OF THE SMALLEST ORIFICE SIZE INSTALLED IN THE SYSTEM. ALARM DEVICES SHALL BE PROVIDED ON THE EXTERIOR OF THE BUILDING IN AN APPROVED LOCATION. WHERE A FIRE ALARM SYSTEM IS INSTALLED, ACTUATION OF THE AUTOMATIC SPRINKLER SYSTEM SHALL ACTUATE THE BUILDING FIRE ALARM SYSTEM.
- 11. ONLY NEW LISTED SPRINKLERS SHALL BE INSTALLED.
- 12. SPRINKLER PLANS PROVIDED ARE SCHEMATIC IN NATURE AND INDICATE THE DESIGN INTENT FOR THE SPRINKLER CONTRACTOR. WORKING SPRINKLER DRAWINGS SHALL PROVIDE BY THE SPRINKLER CONTRACTOR WITH THE FOLLOWING INFORMATION:
 - 12.1. NAME OF OWNER AND OCCUPANT
 - 12.2. LOCATION, INCLUDING STREET ADDRESS
 - 12.3. POINT OF COMPASS
 - 12.4. CEILING CONSTRUCTION
 - 12.5. METHOD OF PROTECTION FOR NONMETALLIC PIPING
 - 12.6. LOCATION OF FIRE WALLS
 - 12.7. LOCATION OF PARTITIONS
- 12.8. OCCUPANCY OF EACH AREA OR ROOM
- 12.9. LOCATION AND SIZE OF CONCEALED SPACES, ATTICS, CLOSES, AND BATHROOMS
- 12.10. ANY SMALL ENCLOSURES IN WHICH NO SPRINKLERS ARE TO BE INSTALLED
- 12.11. SIZE OF CITY MAIN IN THE STREET; PRESSURE; DEAD-END, THE DIRECTION AND DISTANCE TO THE NEAREST CIRCULATING MAIN; AND THE CITY MAIN TEST RESULTS INCLUDING ELEVATION OF THE TEST HYDRANT.
- 12.12. MAKE MANUFACTURER, TYP, HEAT-RESPONSE ELEMENT, TEMPERATURE RATING, SPRINKLER IDENTIFICATION NUMBER, AND NOMINAL ORIFICE SIZE OF THE SPRINKLER.
- 12.13. TEMPERATURE RATING AND LOCATION OF HIGH TEMPERATURE SPRINKLERS, IF USED.
- 12.14. NUMBER OF SPRINKLER ON EACH RISER, PER FLOOR, IF REQUIRED.
- 12.15. KIND AND LOCATION OF ALARM BELLS
- 12.16. TYPE OF PIPE AND FITTINGS
- 12.17. TYPE OF PROTECTION FOR NONMETALLIC PIPE
- 12.18. NOMINAL PIPE SIZE WITH LENGTHS SHOWN TO SCALE
- 12.19. LOCATION AND SIZE OF RISER NIPPES
- 12.20. TYPE OF FITTINGS AND JOINTS AND THE LOCATIONS OF ALL WELDS AND BENDS
- 12.21. TYPES AND LOCATIONS OF HANGERS, SLEEVES, AND BRACES, AND METHODS OF SECURING SPRINKLERS, WHERE APPLICABLE.
- 12.22. ALL CONTROL VALVES, CHECK VALVES, DRAIN PIPES, AND TEST CONNECTIONS
- 12.23. UNDERGROUND PIPE SIZE, LENGTH, LOCATION, WEIGHT, MATERIAL, AND POINT OF CONNECTION TO THE CITY MAIN; TYPE OF VALVES, METER, AND VALVE PITS, AND DEPTH AT WHICH THE TOP OF THE PIPE IS LAID BELOW GRADE
- 12.24. IN THE CASE OF HYDRAULICALLY DESIGNED SYSTEMS, THE MATERIAL TO BE INCLUDED ON THE HYDRAULIC DATA NAMEPLATE
- 12.25. NAME AND ADDRESS OF CONTRACTOR.
- 13. THE WATER SUPPLY SHALL BE CAPABLE OF SUPPLYING THE SYSTEM DEMAND FOR AT LEAST 30 MINUTES.
- 14. DOMESTIC DEMAND FOR THE BUILDINGS CALCULATED SHALL BE INCLUDED AS PART OF THE OVERALL SYSTEM DEMAND FOR SYSTEMS WITH COMMON DOMESTIC/FIRE MAINS WHERE NO PROVISIONS AREA MADE TO PREVENT THE DOMESTIC WATERFLOW UPON SPRINKLER ACTIVATION.
- 15. THE INSTALLER SHALL PERFORM ALL REQUIRED ACCEPTANCE TESTS PRIOR TO ASKING FOR APPROVAL OF THE INSTALLATION
- 16. THE INSTALLER SHALL COMPLETE THE CONTRACTORS MATERIAL AND TEST CERTIFICATE AND SHALL FORWARD THE CERTIFICATE TO THE AUTHORITY HAVING JURISDICTION.
- 17. IF REQUIRED, THE AUTHORITY HAVING JURISDICTION SHALL BE PRESENT FOR ACCEPTANCE TEST.
- 18. ALL ACCEPTANCE TESTS SHALL BE IN ACCORDANCE WITH NFPA 13R
- 19. THE DENSITY/AREA REQUIREMENT FOR THE ALL SYSTEMS SHALL BE 0.1 GPM/SQ. FT. MINIMUM.
- 20. SYSTEMS HAVING MORE THAN 20 SPRINKLERS OR HAVING A FIRE DEPARTMENT CONNECTION SHALL PASS A HYDROSTATIC PRESSURE TEST PERFORMED FOR THE ABOVE GROUND PIPING SYSTEM IN ACCORDANCE WITH NFPA 13.
- 21. SYSTEMS HAVING BOTH FEWER THAN 20 SPRINKLERS AND NO FIRE DEPARTMENT CONNECTION SHALL PASS A HYDROSTATIC PRESSURE TEST PERFORMED FOR THE ABOVEGROUND PIPING SYSTEM AT 50 PSI HIGHER THAN THE MAXIMUM SYSTEM PRESSURE, USING THE HYDROSTATIC TEST PROCEDURE SPECIFIED IN NFPA 13.
- 22. INSTALLATION OF ALL HEADS, WITH RESPECT TO OBSTRUCTIONS SHALL BE INSTALLED WITH ACCORDANCE TO NFPA 13R, CH. 6
- 23. PIPING MATERIAL AND FIXTURES ALLOWED SHALL BE IN ACCORDANCE WITH NFPA 13R, TABLE 5.2.1
 - ASTM F 442, CPVC PIPING
 - ASTM F 437, CPVC SCH. 80 THREADED FITTINGS
 - ASTM F 438, CPVC SCH. 40 SOCKET-TYPE FITTINGS
 - ASTM F 439, CPVC SCH. 80 SOCKET-TYPE FITTINGS
- 24. FITTINGS AND PIPING SHALL BE DESIGNED TO WITHSTAND A WORKING PRESSURE OF NOT LESS THAN 175 PSI AT 120°F.
- 25. PIPING IN AREAS THAT CANNOT BE MAINTAINED RELIABLE ABOVE 40°F, SHALL BE PROTECTED BY ONE OF THE FOLLOWING METHODS:
 - 25.1. ANTIFREEZE SYSTEM USING A LISTED ANTIFREEZE SOLUTION IN ACCORDANCE WITH NFPA 13. GLYCERIN ANTIFREEZE SOLUTIONS CAN BE USED WITH CPVC.
 - 25.2. HEAT TRACING - SHALL BE SUPERVISED, AND LISTED FOR UTILIZATION WITH BRANCH LINES SPECIFICALLY LISTED FOR USE IN AREAS SUBJECT TO COLD TEMPERATURES. IF CHOOSE HEAT TRACING, PROVIDE PRODUCT INFORMATION FOR ENGINEER OF RECORD REVIEW, AN ELECTRICAL DRAWING WILL BE PROVIDED FOR INSTALLATION OF HEAT TRACE TAPE.
- 26. A SUPPLY OF AT LEAST SIX SPARE SPRINKLERS SHALL BE MAINTAINED ON THE PREMISES, AND KEPT IN A CABINET LOCATED WHERE THE TEMPERATURE WILL NOT EXCEED 100°F.
- 27. SYSTEM SHALL BE INSPECTED, TESTED, AND MAINTAINED IN ACCORDANCE WITH NFPA 25
- 28. INSTALLATION CONTRACTOR SHALL PROVIDE ALL LITERATURE AND INSTRUCTIONS PROVIDED BY THE MANUFACTURER DESCRIBING PROPER OPERATION AND MAINTENANCE OF ANY EQUIPMENT AND DEVICES INSTALLED AS WELL AS A COPY OF NFPA 25



10.15.2018

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