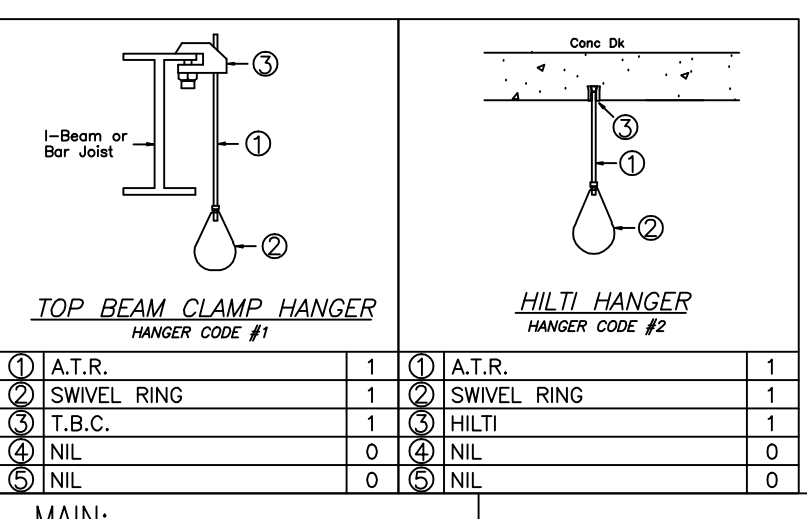
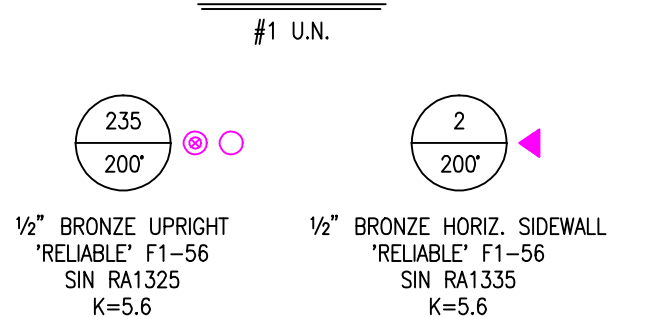


ROOF PLAN

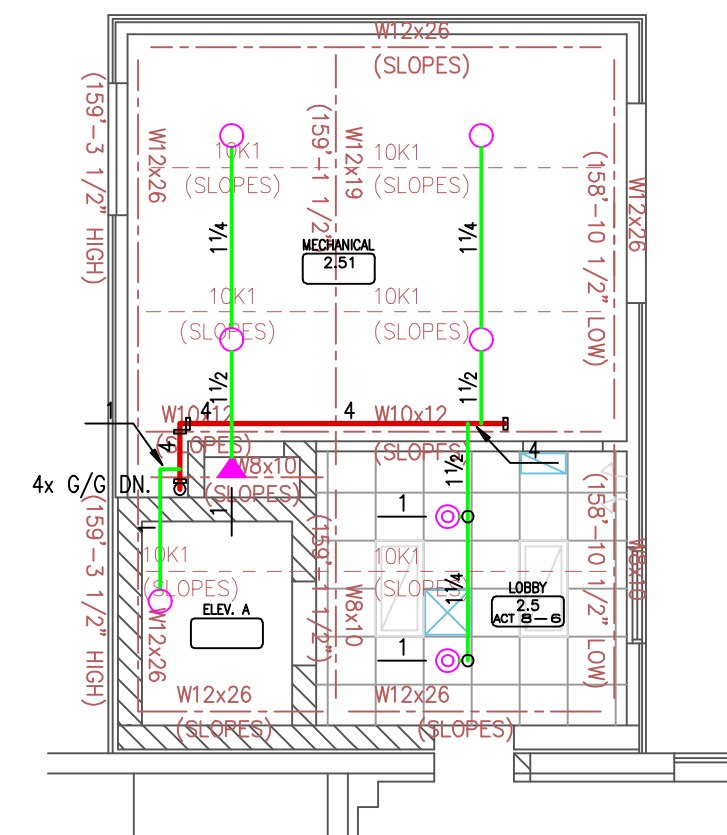
1 1/2" METAL DECK W/ POURED CONC. ON 12" TO 24" BAR JOISTS & 8" TO 10" STL L-BARS ON STL COLS UN. B.O.D. VARIES AS NOTED  
ORD HAZ OCC, 130W/HD MAX UN. +250 GPM FOR HOSE STREAMS  
SEE HYD CALCS.

HANGERS



MAIN:				HYDRAULIC SYSTEM												FLOW TEST		PIPE TYPE		GENERAL NOTES		LEGEND		SPRINKLER TYPE										NICET		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)	
LINE	NO.	LINE	NO.	LOCATION: DA #1	LOCATION: DA #2	LOCATION: DA #3	OCC. CLASSIFICATION: WAREHOUSE	STATIC: 75 PSI.	RESIDUAL: 71 PSI. W/ 2138 GPM. FLOWING	FEED MAIN: SCH. 40	CROSS MAIN: SCH. 40	1) DESIGN BASED ON "NFPA 13" 2010 EDITION.	◇ SMOOTH CEILING HEIGHT	155	165	235	212	280	BRONZE	NICET		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)															
				NO. OF SPRINKLERS:	NO. OF SPRINKLERS:	NO. OF SPRINKLERS:	COMMODITY CLASSIFICATION: N/A					2) ALL PIPE & HANGER DIMENSIONS ARE ACTUAL CUT LENGTHS	○ ACOUSTICAL CEILING HEIGHT						BRONZE	NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)															
				DENSITY: .17 G.P.M./SQ. FT.	DENSITY: .17 G.P.M./SQ. FT.	DENSITY: .17 G.P.M./SQ. FT.	MAXIMUM STORAGE HEIGHT: N/A					3) SPRINKLERS WILL NOT CENTER IN ACOUSTICAL TILE	▷ ROOF HEIGHT						BRONZE	NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)															
				DESIGNED AREA OF DISCHARGE: 3000 SQ. FT.	DESIGNED AREA OF DISCHARGE: 3000 SQ. FT.	DESIGNED AREA OF DISCHARGE: 3000 SQ. FT.						4) FREEZE PROTECTION IS NOT INCLUDED. ALL SPRINKLERED AREAS TO BE HEATED.	AFF ABOVE FINISH FLOOR							NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)															
				INSIDE DEMAND @ BASE OF RISER: G.P.M. @ P.S.I.	INSIDE DEMAND @ BASE OF RISER: G.P.M. @ P.S.I.	INSIDE DEMAND @ BASE OF RISER: G.P.M. @ P.S.I.	RACK SPRINKLER: N/A					5) ALL G'S GIVEN FROM: BOT. OF MTL. DECK	⊗ ASR - AUTOMATIC SPRINKLER RISER							NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)															
				TOTAL DEMAND AT STREET: G.P.M. @ P.S.I.	TOTAL DEMAND AT STREET: G.P.M. @ P.S.I.	TOTAL DEMAND AT STREET: G.P.M. @ P.S.I.	IN RACK WATER DEMAND: N/A						⊙ HYDRAULIC CALCULATION POINT								NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)														
				HOSE STREAMS: 250 GPM.	HOSE STREAMS: 250 GPM.	HOSE STREAMS: 250 GPM.							FDC FIRE DEPARTMENT CONNECTION								NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)														
													N.S. NOT SPRINKLERED								NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)														
													B.O.D. BOTTOM OF DECK								NICET <th colspan="2">APPROVAL</th> <th colspan="2">DRAWN BY</th> <th colspan="2">DATE</th> <th colspan="2">SCALE</th> <th colspan="2">SHEET</th> <th colspan="2">BLACKHAWK</th> <th colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</th>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)														
				TOTAL SPRINKLERS ON THIS SHEET		237		PROVIDE SPRINKLER CABINET W/ SPARE SPRINKLERS & WRENCH AS REQUIRED																				NICET <th colspan="2">APPROVAL</th> <td colspan="2">DRAWN BY</td> <td colspan="2">DATE</td> <td colspan="2">SCALE</td> <td colspan="2">SHEET</td> <td colspan="2">BLACKHAWK</td> <td colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</td>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)							
				TOTAL SPRINKLERS ON THIS JOB		472																						NICET <th colspan="2">APPROVAL</th> <td colspan="2">DRAWN BY</td> <td colspan="2">DATE</td> <td colspan="2">SCALE</td> <td colspan="2">SHEET</td> <td colspan="2">BLACKHAWK</td> <td colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</td>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)							
				CERT.#		106233																						NICET <th colspan="2">APPROVAL</th> <td colspan="2">DRAWN BY</td> <td colspan="2">DATE</td> <td colspan="2">SCALE</td> <td colspan="2">SHEET</td> <td colspan="2">BLACKHAWK</td> <td colspan="2">525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)</td>		APPROVAL		DRAWN BY		DATE		SCALE		SHEET		BLACKHAWK		525 EAST 18th ST. CEDAR FALLS, IOWA 50613 (ph. 319-232-7721)							





1 1/2" METAL DECK 10" BAR JOISTS & 8" TO 12" STL I-BMS ON STL COLS.  
U.N. B.O.D. VARIES AS NOTED ORD HAZ OCC, 130#/HD MAX U.N. +250  
GPM. FOR HOSE STREAMS  
SEE HYD CALCS.

## #1 U.N.

1  
200'

1/2" BRONZE HORIZ. SIDEWALL  
"RELATIVE" F1-56  
SIN RA13135  
K=5.6

5  
200'

1/2" BRONZE UPRIGHT  
"RELATIVE" F1-56  
SIN RA1325  
K=5.6

2  
200'

1/2" RECESSED CHROME PENDENT  
"RELATIVE" F1-56  
SIN RA1314  
K=5.6

1 1/2" METAL DECK 12" TO 24" BAR JOISTS & 8" TO 30" STL I-BMS ON STL  
COLS U.N. B.O.D. VARIES AS NOTED ORD HAZ OCC, 130#/HD MAX U.N.  
+250 GPM. FOR HOSE STREAMS  
SEE HYD CALCS.

#1 U.N.

110  
200g

72  
200g

1/2" BRONZE UPRIGHT  
'RELIABLE' F1-56  
SIN RA1325  
K=5.6

1/2" RECESSED CHROME PENDEN  
'RELIABLE' F1-56  
SIN RA1314  
K=5.6

[illegible]

LOCATION:  
NO. OF SPRINKLERS:  
DENSITY: \_\_\_\_\_ G.P.M./SQ. FT.  
DESIGNED AREA OF  
DISCHARGE: SQ. FT.  
INSIDE DEMAND @ BASE OF RISE  
\_\_\_\_\_ G.P.M. @ \_\_\_\_\_ P.S.  
TOTAL DEMAND AT STREET:  
\_\_\_\_\_ G.P.M. @ \_\_\_\_\_  
HOSE STREAMS:

STATIC:  
RESIDUAL:  
DATE:  
TIME:  
LOCATION:  
BY:

GENERAL NOTES

- 1) DESIGN BASED ON "NFPA"
- 2) ALL PIPE & HANGER DIM
- 3) SPRINKLERS WILL NOT C
- 4) FREEZE PROTECTION IS AREAS TO BE HEATED.
- 5) ALL  $\epsilon$ 's GIVEN FROM:

>	SMOOTH CEILING HEIGHT
>	ACOUSTICAL CEILING HEIGHT
>	ROOF HEIGHT
FF	ABOVE FINISH FLOOR
>	ASR – AUTOMATIC SPRINKLER
>	HYDRAULIC CALCULATION POINT
DC	FIRE DEPARTMENT CONNECTION
S.	NOT SPRINKLERED
O.D.	BOTTOM OF DECK

ER					
ER					
SPRINKLER					
SHEET	190			PRO	
JOB	472			SP	

NAME	DENNIS WILSON
LEVEL	FOUR
CERT.#	106233

XXXXXXXXXXXX			XXXXXXXXXXXX
CONTRACT WITH:		XXXXXXXXXXXX	
APPROVAL BY:		XXXXXXXXXXXX	
DRAWN BY: XXX	CK'D BY: XXX	DATE: X	
SYSTEM NO.	CONT. NO. XXXXXX	AUTOMATIC 525 IOWA	
3 SHEET OF 3			

FIRST FLOOR APPROX A.S.: 19,340\* OF A.S. AREA  
2ND FLOOR APPROX A.S.: 16,070\* OF A.S. AREA  
MECH. PENTHOUSE APPROX A.S.: 590\* OF A.S. AREA  
MEZZANINE APPROX A.S.: 2,660\* OF A.S. AREA  
TOTAL APPROX A.S.: 38,660\* OF A.S. AREA

XXXXXXXXXX,	IOWA
CONTRACT WITH:	

APPROVAL BY:	XXXXXXXXXXXXXXXXXXXX
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XX-XX-XXXX	1/8" = 1'-0" U.
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**BLACKHAWK**  
AUTOMATIC SPRINKLERS, INC.

525 EAST 18th St. CEDAR FALLS.

IOWA 50613 (ph. 319-232-7721)