

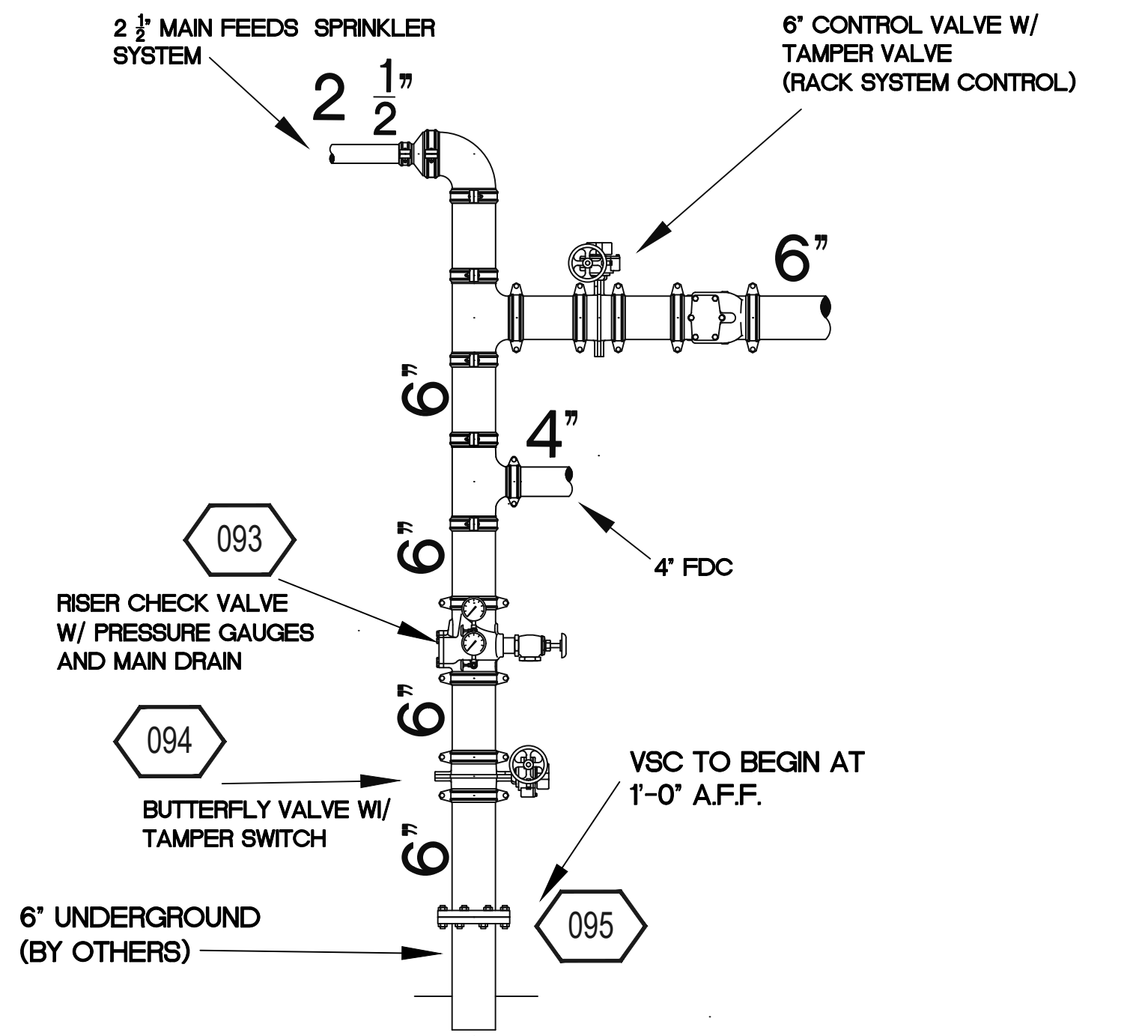
| Specified | Penetrating   | Size              | Annular | Additional        | Backfill          | ASTM E 814 |
|-----------|---------------|-------------------|---------|-------------------|-------------------|------------|
| Prod. No. | Item          | Insulation        | Space   | Installation      | Material          | Rating     |
| 150       | 1/2" SpecSeal | 1/2" Polyurethane | 1/2"    | 1/2" Polyurethane | 1/2" Polyurethane | 15         |

| SPRINKLER DESIGN DATA  |                             |  |                             |
|--|-----------------------------|--|-----------------------------|
| PROJECT NAME: JOHNSONVILLE ELEMENTARY  | SYSTEM NO.:                 |  |                             |
| PROJECT STREET ADDRESS: 18495 NC HWY CAMERON, NC 28526   | BUILDING AREA: N/A          |  |                             |
| SUITE # 301A   | FLOOR # 1ST                 | CEILING HGT.: 7'6"   |                             |
| DRAWN BY: MBE  | PHONE # 919-645-5880        | HAZARD CLASS: LIGHT/ORD  | TOTAL BLDG HGT.: 7'6"       |
| OCCUPANCY DESCRIPTION:   |                             |  |                             |
| DESIGN SUMMARY   |                             |  |                             |
| DESIGN METHOD: CALC  | TYPE: CALC                  | TYPE: CALC   | TYPE: CALC                  |
| DESIGN AREA NO.: 2   | DESIGN AREA NO.: 2          | DESIGN AREA NO.: 2   | DESIGN AREA NO.: 2          |
| LOCATION: CAFE/TERA  | LOCATION: KITCHEN           | LOCATION: KITCHEN  | LOCATION: KITCHEN           |
| TYPE OF SCATION: MET   | TYPE OF SCATION: MET        | TYPE OF SCATION: MET   | TYPE OF SCATION: MET        |
| HAZARD CLASS: LIGHT  | HAZARD CLASS: LIGHT         | HAZARD CLASS: LIGHT  | HAZARD CLASS: LIGHT         |
| CRITERIA FROM: NFPA 13   | CRITERIA FROM: NFPA 13      | CRITERIA FROM: NFPA 13   | CRITERIA FROM: NFPA 13      |
| DESIGN AREA: 1000  | DESIGN AREA: 2300           | DESIGN AREA: 2300  | DESIGN AREA: 2300           |
| SPRINK. SPACING: 150 SQ.FT.  | SPRINK. SPACING: 100 SQ.FT. | SPRINK. SPACING: 100 SQ.FT.  | SPRINK. SPACING: 100 SQ.FT. |
| DENSITY: 1.0   | DENSITY: 1.5                | DENSITY: 1.5   | DENSITY: 1.5                |
| K-FACTOR: 5.6  | K-FACTOR: 5.6               | K-FACTOR: 5.6  | K-FACTOR: 5.6               |
| HOSE ALLOWANCE: 7  | HOSE ALLOWANCE: 10          | HOSE ALLOWANCE: 10   | HOSE ALLOWANCE: 10          |
| # DESIGN SPRINK.: 7  | # DESIGN SPRINK.: 10        | # DESIGN SPRINK.: 10   | # DESIGN SPRINK.: 10        |
| REQUIREMENTS @   |                             |  |                             |
| SPM REQD: 14.6   | SPM REQD: 17.4              | SPM REQD: 17.4   | SPM REQD: 17.4              |
| PSI REQD: 33.4   | PSI REQD: 32                | PSI REQD: 32   | PSI REQD: 32                |
| FLOW (GPM): 262  | FLOW (GPM): 262             | FLOW (GPM): 262  | FLOW (GPM): 262             |
| TEST   | TEST                        | TEST   | TEST                        |
| SPM REQD: 241.6  | SPM REQD: 424               | SPM REQD: 424  | SPM REQD: 424               |
| PSI REQD: 43.8   | PSI REQD: 35.5              | PSI REQD: 35.5   | PSI REQD: 35.5              |
| TEST   | TEST                        | TEST   | TEST                        |
| SAFETY FACTOR: 26.9  | SAFETY FACTOR: 38.2         | SAFETY FACTOR: 38.2  | SAFETY FACTOR: 38.2         |
| FIRE PUMP DATA   |                             |  |                             |
| RATED GPM: ---   | RESIDUAL (PSI): ---         | RATED GPM: ---   | RESIDUAL (PSI): ---         |
| DESEL HP: ---  | COMBINED GPM: ---           | DESEL HP: ---  | COMBINED GPM: ---           |
| ELECTRIC VOLT: ---   | COMBINED STATIC: ---        | ELECTRIC VOLT: ---   | COMBINED STATIC: ---        |
| BOOST PRES: ---  | COMBINED RESIDUAL: ---      | BOOST PRES: ---  | COMBINED RESIDUAL: ---      |
| DISCHARGE PRES: ---  | SUCTION NODE #: ---         | DISCHARGE PRES: ---  | SUCTION NODE #: ---         |
| DISCHARGE FLOW: ---  | DISCHARGE NODE #: ---       | DISCHARGE FLOW: ---  | DISCHARGE NODE #: ---       |
| WATER SUPPLY INFORMATION   |                             |  |                             |
| TESTED BY: LKC ENGINEERING   | DATE: 12/17/2022 10:30 AM   | TESTED BY: LKC ENGINEERING   | DATE: 12/17/2022 10:30 AM   |
| PRESS. HYDRANT: XXX  | HYDRANT ELEV: XXX           | PRESS. HYDRANT: XXX  | HYDRANT ELEV: XXX           |
| FLOW HYDRANT: XXXX   | STATIC (PSI): 77            | FLOW HYDRANT: XXXX   | STATIC (PSI): 77            |
|  | RESIDUAL (PSI): 69          |  | RESIDUAL (PSI): 69          |
|  | FLOW (GPM): 860             |  | FLOW (GPM): 860             |
| IS COPY OF FLOW TEST DATA INCLUDED WITH CALCULATIONS? : <input type="checkbox"/> YES <input type="checkbox"/> NO |                             | IS COPY OF FLOW TEST DATA INCLUDED WITH CALCULATIONS? : <input type="checkbox"/> YES <input type="checkbox"/> NO |                             |
| IS STORAGE HEIGHT GREATER THAN 12 FEET? : <input type="checkbox"/> YES <input type="checkbox"/> NO               |                             | IS STORAGE HEIGHT GREATER THAN 12 FEET? : <input type="checkbox"/> YES <input type="checkbox"/> NO               |                             |

- ### GENERAL NOTES
- ALL WORK SHALL BE IN FULL COMPLIANCE WITH NFPA 13, 2013 Ed., HARNETT COUNTY, AND THE NORTH CAROLINA STATE BUILDING CODE 2018 Ed.
  - ALL LABOR AND MATERIALS REQUIRED SHALL BE FOR MODIFICATIONS TO EXISTING WORKING SYSTEM WHICH MEET ALL REQUIREMENTS OF NFPA 13 2013 Ed., HARNETT COUNTY, AND THE NORTH CAROLINA STATE BUILDING CODE 2018 Ed.
  - ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UL LISTED AND/OR FM APPROVED FOR THE INTENDED USE AND SHALL BE INSTALLED IN FULL COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  - SPRINKLER HEADS ARE SPACED LIGHT HAZARD NOT TO EXCEED 225 SQ.FT. AND ORDINARY HAZARD GROUP 1 NOT TO EXCEED 130 SQ.FT.
  - ALL HANGERS AND LOCATIONS TO BE PER NFPA 13, 2013 Ed.

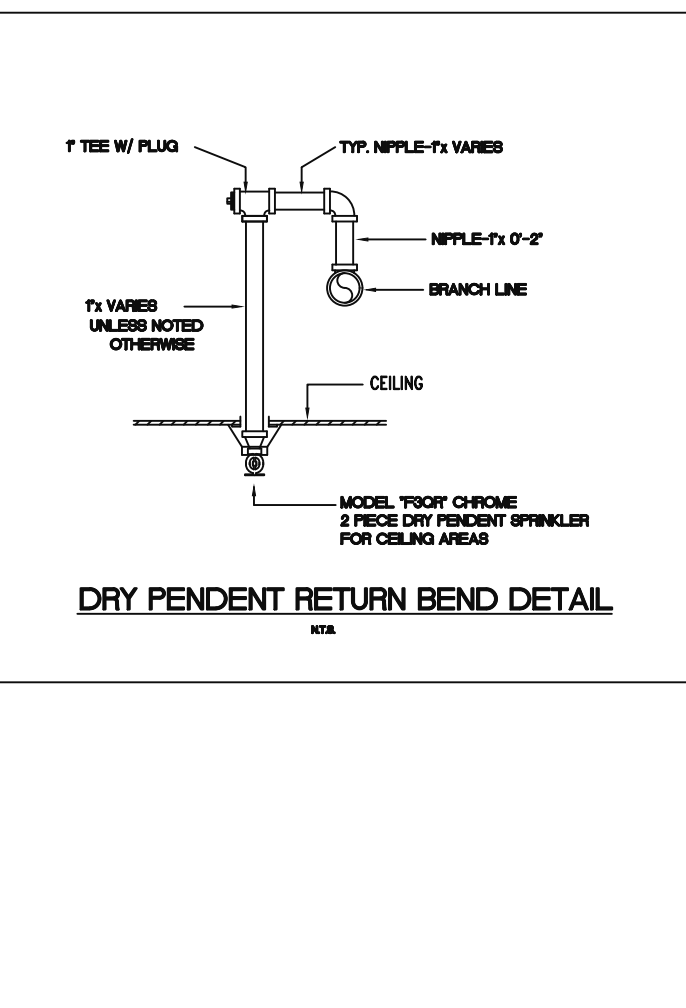
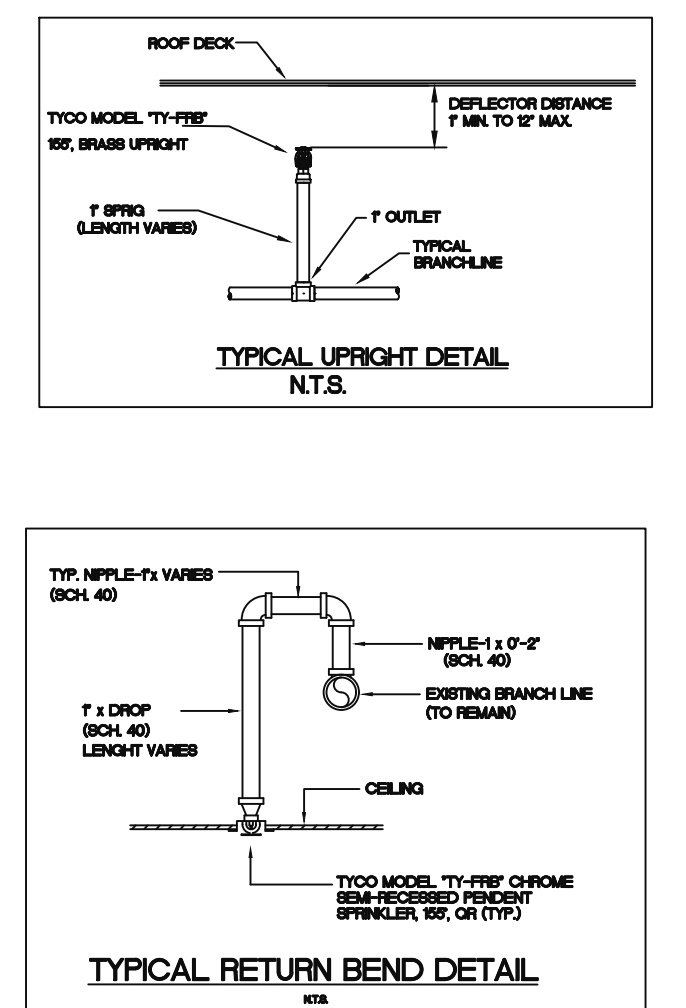
Source Information  
 Date of Flow Test / Info : 10/15/2021  
 Location of flow test data :  
 Hwy 24 & Hwy 27 In front of Self Storage  
 Source of flow test data :  
 LKC Engineering  
 Source Data Points    Pump Data Points  
 Pressure | Flow    Pressure | Flow  
 77.00    0.00  
 69.00    840.00

### SITE PLAN FOR HYD. REF. ONLY NOT TO SCALE



### RISER DETAIL NOT TO SCALE

| N.F.P.A. (2001 ED.) TABLE 6.2.2.1 |                                  |
|-----------------------------------|----------------------------------|
| SPRINKLER TYPE                    | MAXIMUM DISTANCE BETWEEN HANGERS |
| WET                               | 15'-0"                           |
| DRY                               | 15'-0"                           |
| DELUGE                            | 15'-0"                           |
| ESCALATOR                         | 15'-0"                           |
| WET                               | 15'-0"                           |
| DRY                               | 15'-0"                           |
| DELUGE                            | 15'-0"                           |
| ESCALATOR                         | 15'-0"                           |
| WET                               | 15'-0"                           |
| DRY                               | 15'-0"                           |
| DELUGE                            | 15'-0"                           |
| ESCALATOR                         | 15'-0"                           |



| LEGEND |   |
|--------|---|
| ---    | DENOTES NEW MAIN PIPING                                     |
| ---    | DENOTES NEW BRANCH LINE PIPING                              |
| ---    | DENOTES EXIST. UNDERGROUND CITY MAIN (BY OTHERS)            |
| ---    | DENOTES CONTINUATION OF PIPING                              |
| ○      | DENOTES RISE IN PIPE  |
| ●      | DENOTES DROP IN PIPE  |
| ○      | DENOTES NEW UPRIGHT SPRINKLER                               |
| ⊥      | DENOTES PIPELINE END CAP OR PLUG                            |
| ⊙      | DENOTES SPRINKLER SYSTEM RISER                              |
| N.I.C. | DENOTES 'NOT IN CONTRACT'                                   |
| ⊕      | DENOTES ELEVATION TO CENTER OF PIPE FROM ABOVE FINISH FLOOR |
| ⊗      | DENOTES HYDRAULIC REFERENCE NODE                            |

Barry D. Bandy  
 WATER BASED SYSTEMS LAYOUT  
 N.I.C.E.T. LEVEL III  
 CERTIFICATE # 112781  
 N.C. LICENSE # 28783



### SUBMITTAL

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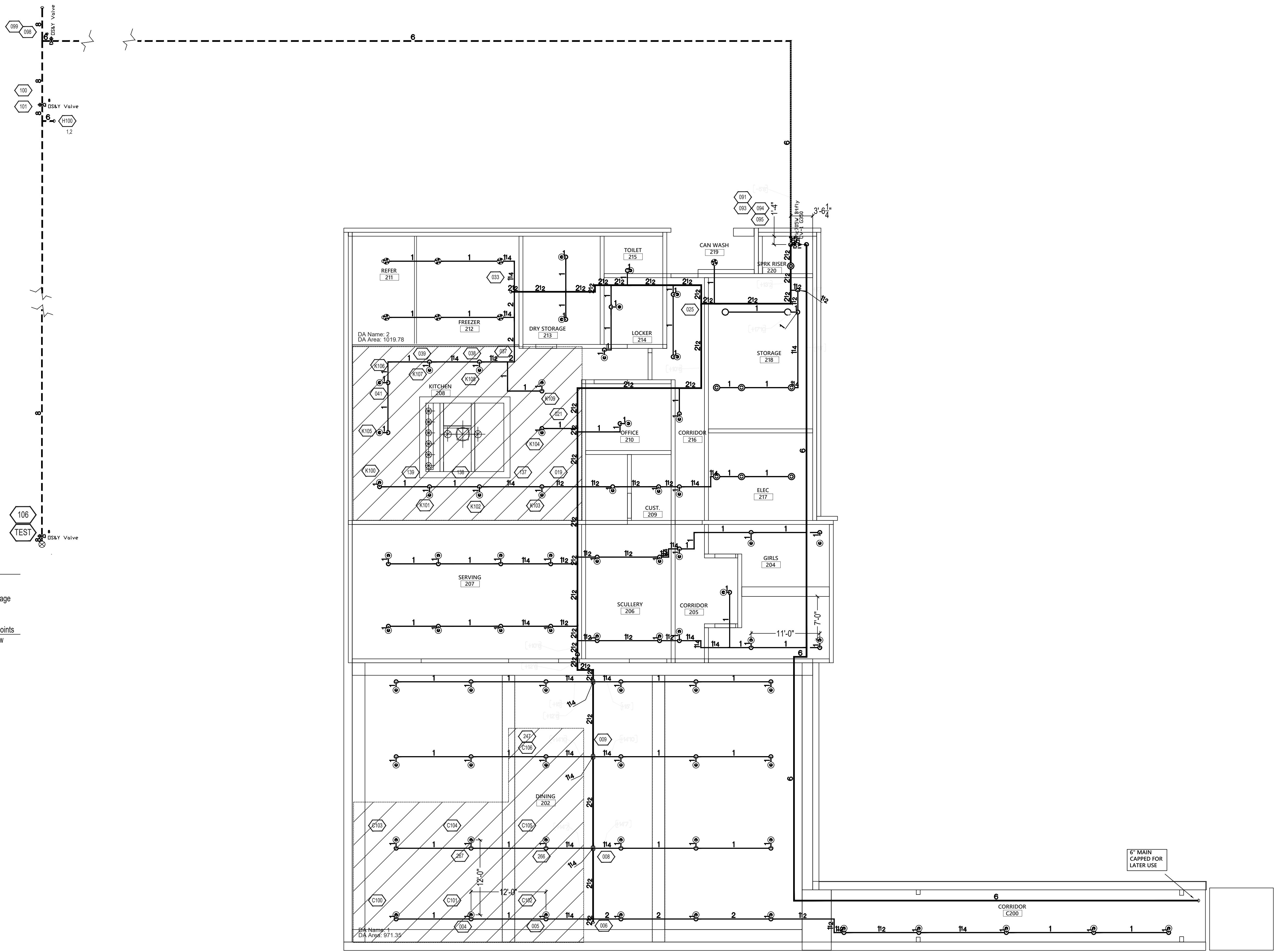
| FOREMAN NOTE:  |   |
|--|---|
| SPRINKLER HEAD LOCATIONS IN AREAS WITH SUSPENDED ACoustical CEILING TILES ARE SHOWN IN CENTER OF TILE FOR DESIGN PURPOSES. THESE HEADS ARE NOT REQUIRED TO BE CENTERED IN CEILING TILES PER CONTRACT SPECIFICATIONS. | <input type="checkbox"/> ALL MATERIAL TO BE FOREIGN OR DOMESTIC                   |
| <input type="checkbox"/> ALL MAIN PIPING TO BE SCH.40 W/ STANDARD 125# THREADED FITTINGS   | <input type="checkbox"/> VICTALUIC "FIRELOCK" GROOVED COUPLINGS/FITTINGS          |
| <input type="checkbox"/> ALL MAIN PIPING TO BE SCH.10 W/ WELDED OUTLETS & GROOVED ENDS   | <input type="checkbox"/> ALL MAIN PIPING TO BE W/ STANDARD 125# THREADED FITTINGS |
| <input type="checkbox"/> ALL MAIN PIPING TO BE W/ STANDARD 125# THREADED FITTINGS  |   |
| HANGER NOTES   |   |
| <input type="checkbox"/> DENOTES HANGER LOCATION   | <input type="checkbox"/> STEEL BEAM CLAMP, PIPE RING, & ATR                       |
| <input type="checkbox"/> DENOTES TRAPEZE HANGER LOCATION   | <input type="checkbox"/> CONCRETE ANCHOR, PIPE RING, & ATR                        |
| <input type="checkbox"/> 3/8" ATR 1"-4" PIPE   | <input type="checkbox"/> WOOD HANGER ASSEMBLY, SEE DETAIL                         |
| <input type="checkbox"/> 1/2" ATR 5"-8" PIPE   | <input type="checkbox"/> STAINLESS STEEL HANGER ASSEMBLY                          |

| DESIGN CRITERIA                              |            |
|--|------------|
| TYPE SYSTEM: WET                             | PRE-ACTION |
| N.F.P.A. STANDARD: 13-2013                   | 14-2013    |
| APPROVING AUTHORITY: Hartnett County, FD     |            |
| APPLICABLE CODE: NC STATE BUILDING CODE 2018 |            |
| DENSITY: 1.1/1.15                            | GPM/SQ.FT. |
| REMOTE AREA: 900/1000                        | SQ.FT.     |
| MAX. S.F./HD.: 225/130                       |            |
| TOTAL HOSE STREAM: 750 GPM                   | 750 GPM    |
| LOCAL HOSE THREAD: NSHT                      |            |

| SPRINKLER SUMMARY                             |                      |
|---|----------------------|
| TOTAL SPRINKLERS THIS DRAWING: 000            | Plotted By: Max Bova |
| Plot Date: 11/8/2021 2:54 PM                  |                      |
| 1/8" GRAPHIC SCALE                            |                      |
| REVISIONS                                     |                      |
| NO. 28783                                     |                      |
| VSC FIRE & SECURITY ACCEPTS NO RESPONSIBILITY |                      |

| REVISIONS                                     |  |
|---|--|
| NO. 28783                                     |  |
| VSC FIRE & SECURITY ACCEPTS NO RESPONSIBILITY |  |





Source Information  
 Date of Flow Test / Info : 10/15/2021  
 Location of flow test data :  
 Hwy 24 & Hwy 27 in front of Self Storage  
 Source of flow test data :  
 LKO Engineering  
 Source Data Points Pump Data Points  
 Pressure | Flow Pressure | Flow  
 77.00 0.00  
 69.00 840.00

Calculation results for Design Area 1 - CAF

This system as shown on VSC Fire & Security, Inc. company print no. dated 10/29/2021 for Johnsonville Elementary at 18495 NC-27 at 18495 NC-27 contract no. PM9192 is designed to discharge at a rate of 0.15 gpm/ft<sup>2</sup> (L/min/m<sup>2</sup>) of floor area over a maximum area of 250 ft<sup>2</sup> when supplied with water at a rate of 241.6 gpm at 49.3 psi at the base of the riser. Hose stream allowance of 100 is included in the above.

Occupancy classification: LH Number of heads flowing: 7  
 Commodity classification: Wet System Type: Wet  
 Maximum storage height: Maximum velocity: 14.06 ft/s  
 Storage arrangement:

|                                   |           |                               |          |
|-----------------------------------|-----------|-------------------------------|----------|
| Flow from in-Rack sprinklers:     | 0 gpm     | Pressure Required at Source:  | 49.3 psi |
| Flow from Overhead sprinklers:    | 141.6 gpm | Pressure Available at Source: | 75.2 psi |
| Flow from Inside Hoses:           | 100 gpm   | Surplus Pressure at Source:   | 26.9 psi |
| Flow from Outside Hoses:          | 0 gpm     |                               |          |
| Other fixed flows:                | 0 gpm     |                               |          |
| Total flow in system piping:      | 241.6 gpm |                               |          |
| Additional flow at/around source: | 0 gpm     |                               |          |
| Total of all flows:               | 241.6 gpm |                               |          |

Design Area 1 Wet System  
 Demand Calculations using Hazen-Williams Method  
 Occupancy Classification: LH  
 Design Area Density: 0.1  
 Additional Outside Hose: 0  
 Design Area Size: 900  
 Notes:

Calculation results for Design Area 2 - KITCHEN

This system as shown on VSC Fire & Security, Inc. company print no. dated 10/29/2021 for Johnsonville Elementary at 18495 NC-27 at 18495 NC-27 contract no. PM9192 is designed to discharge at a rate of 0.15 gpm/ft<sup>2</sup> (L/min/m<sup>2</sup>) of floor area over a maximum area of 1000 ft<sup>2</sup> when supplied with water at a rate of 424 gpm at 38.8 psi at the base of the riser. Hose stream allowance of 250 is included in the above.

Occupancy classification: CH1 Number of heads flowing: 10  
 Commodity classification: Wet System Type: Wet  
 Maximum storage height: Maximum velocity: 11.75 ft/s  
 Storage arrangement:

|                                   |         |                               |          |
|-----------------------------------|---------|-------------------------------|----------|
| Flow from in-Rack sprinklers:     | 0 gpm   | Pressure Required at Source:  | 35.5 psi |
| Flow from Overhead sprinklers:    | 174 gpm | Pressure Available at Source: | 74.2 psi |
| Flow from Inside Hoses:           | 250 gpm | Surplus Pressure at Source:   | 39.2 psi |
| Flow from Outside Hoses:          | 0 gpm   |                               |          |
| Other fixed flows:                | 0 gpm   |                               |          |
| Total flow in system piping:      | 424 gpm |                               |          |
| Additional flow at/around source: | 0 gpm   |                               |          |
| Total of all flows:               | 424 gpm |                               |          |

Design Area 2 Wet System  
 Demand Calculations using Hazen-Williams Method  
 Occupancy Classification: CH1  
 Design Area Density: 0.15  
 Additional Outside Hose: 0  
 Design Area Size: 1000  
 Notes:

**SPRINKLER SYSTEM - PIPING LAYOUT**  
**SCALE: 1/8" = 1'-0"**



Barry D. Bandy  
 WATER BASED SYSTEMS LAYOUT  
 N.I.C.E.T. LEVEL III  
 CERTIFICATE # 112781  
 N.C. LICENSE # 28783

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**Sprinkler Plan**

JOHNSONVILLE ELEMENTARY  
 18495 NC-27  
 CAMERON, NC 28326

FILE: PM9192Sub.dwg  
 SHEET No. 2 OF 3

**FOREMAN NOTE:**  
 SPRINKLER HEAD LOCATIONS IN AREAS WITH SUSPENDED ACOUSTICAL CEILING TILES ARE SHOWN IN CENTER OF TILE FOR DESIGN PURPOSES. THESE HEADS ARE NOT REQUIRED TO BE CENTERED IN CEILING TILES PER CONTRACT SPECIFICATIONS.

**IMPORTANT:**  
 THE OWNER HAS THE RESPONSIBILITY OF PROVIDING FREEZE PROTECTION IN AREAS THAT HAVE A WET PIPE SPRINKLER SYSTEM AS WELL AS A SUITABLE HEATED ENCLOSURE FOR DRY PIPE, DELUGE OR ANY OTHER TYPE VALVE CONTROLLING WATER SUPPLIES TO AUTOMATIC SPRINKLER SYSTEMS.

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| PIPE & FITTING NOTES  |  |
|---|--|
| <input type="checkbox"/> ALL LINE PIPING TO BE W/ STANDARD 125# THREADED FITTINGS                       | <input type="checkbox"/> ALL MATERIAL TO BE FOREIGN OR DOMESTIC          |
| <input checked="" type="checkbox"/> ALL LINE PIPING TO BE SCH.10/SCH.40W/ WELDED OUTLETS & GROOVED ENDS | <input type="checkbox"/> VICTALUIC "FIRELOCK" GROOVED COUPLINGS/FITTINGS |
| <input checked="" type="checkbox"/> ALL MAIN PIPING TO BE SCH.10 W/ WELDED OUTLETS & GROOVED ENDS       |  |
| <input type="checkbox"/> ALL MAIN PIPING TO BE W/ STANDARD 125# THREADED FITTINGS                       |  |
| HANGER NOTES  |  |
| <input type="checkbox"/> DENOTES HANGER LOCATION  | <input type="checkbox"/> STEEL BEAM CLAMP, PIPE RING, & ATR              |
| <input type="checkbox"/> DENOTES TRAPEZE HANGER LOCATION  | <input type="checkbox"/> CONCRETE ANCHOR, PIPE RING, & ATR               |
| <input checked="" type="checkbox"/> 3/8" ATR 1'-4" PIPE   | <input type="checkbox"/> WOOD HANGER ASSEMBLY, SEE DETAIL                |
| <input checked="" type="checkbox"/> 1/2" ATR 5'-8" PIPE   | <input type="checkbox"/> STAINLESS STEEL HANGER ASSEMBLY                 |

| DESIGN CRITERIA   |   |
|---|---|
| TYPE SYSTEM: <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY <input type="checkbox"/> PRE-ACTION | NFPA STANDARD: <input checked="" type="checkbox"/> 13-2013 <input type="checkbox"/> 14-2013 <input type="checkbox"/> 20-2013 <input type="checkbox"/> 24-2013 |
| OCCUPANCY: SCHOOL   | APPROVING AUTHORITY: Hartnett County, FD  |
| HAZARD: LIGHT/ORDINARY GROUP 1  | APPLICABLE CODE: NC STATE BUILDING CODE 2018  |
| DENSITY: 1.1/15 GPM/SQ.FT.  | REMOTE AREA: 225/130 SQ.FT.   |
| MAX. S.F./HD.: 225/130  |   |
| TOTAL HOSE STREAM: <input checked="" type="checkbox"/> 700 GPM <input type="checkbox"/> 750 GPM                       |   |
| LOCAL HOSE THREAD: NSHT   |   |

| SPRINKLER SUMMARY   |                    | TOTAL SPRINKLERS THIS DRAWING |    |
|---------------------|--------------------|-------------------------------|----|
| SYMBOL              | DESCRIPTION        | QTY.                          | BY |
| UPRIGHT BRASS       | 155° 1/2" 5.6 1/2" | 2                             |    |
| UPRIGHT/SPRIG BRASS | 155° 1/2" 5.6 1/2" | 17                            |    |
| CONC. PEND WHITE    | 155° 1/2" 5.6 1/2" | 70                            |    |
| DRY PENDENT CHROME  | 286° 17/32" 8 1"   | 7                             |    |

| REVISIONS |           |                      |
|-----------|-----------|----------------------|
| NO.       | DATE      | DESCRIPTION          |
| 1         | 11/5/2021 | Plotted By: Max Bova |

| NOTES:   |  |
|--|--|
| <input type="checkbox"/> PIPE PAINTING IS BY OTHERS  |  |
| <input type="checkbox"/> SEISMIC BRACING IS NOT REQUIRED   |  |
| <input type="checkbox"/> PIPE IDENTIFICATION IS NOT REQUIRED   |  |
| <input type="checkbox"/> PIPE SLEEVES ARE NOT REQUIRED   |  |
| PIPE INSULATION NOTE:  |  |
| ALL PIPE INSULATION IS TO BE BY OTHERS, ANY DETAILS PROVIDED ARE FOR SUGGESTIONS ONLY, ALL INSULATION MUST BE INSTALLED BY A QUALIFIED INSTALLER. VSC FIRE & SECURITY ACCEPTS NO RESPONSIBILITY. |  |





SPRINKLER SYSTEM - HEAD LAYOUT  
SCALE: 1/8" = 1'-0"

*Barry D. Bandy*  
**Barry D. Bandy**

**WATER BASED SYSTEMS LAYOUT**  
N.I.C.E.T. LEVEL III  
CERTIFICATE # 112781  
N.C. LICENSE # 28783

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**Sprinkler Plan**

JOHNSONVILLE ELEMENTARY  
18495 NC-27  
CAMERON, NC 28326

SHEET No. **3 OF 3**

JOB No. PM9192  
DATE 11/5/2021  
DESIGNER MB  
SCALE 1/8" = 1'

**FOREMAN NOTE:**  
SPRINKLER HEAD LOCATIONS IN AREAS WITH SUSPENDED ACoustICAL CEILING TILES ARE SHOWN IN CENTER OF TILE FOR DESIGN PURPOSES. THESE HEADS ARE NOT REQUIRED TO BE CENTERED IN CEILING TILES PER CONTRACT SPECIFICATIONS.

ALL MATERIAL TO BE FOREIGN OR DOMESTIC  
 VICTALCIC "FIRELOCK" GROOVED COUPLINGS/FITTINGS

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**PIPE & FITTING NOTES**

|  |  |
|--|--|
| <input checked="" type="checkbox"/> SOME LINE PIPING TO BE SCH.40 W/ STANDARD 125# THREADED FITTINGS | <input type="checkbox"/> ALL MAIN PIPING TO BE SCH.10 W/ WELDED OUTLETS & GROOVED ENDS   |
| <input checked="" type="checkbox"/> SOME LINE PIPING TO BE SCH.10 W/ WELDED OUTLETS & GROOVED ENDS   | <input type="checkbox"/> ALL MAIN PIPING TO BE SCH.10 W/ STANDARD 125# THREADED FITTINGS |

**HANGER NOTES**

|  |   |
|--|---|
| <input type="checkbox"/> DENOTES HANGER LOCATION         | <input type="checkbox"/> STEEL BEAM CLAMP, PIPE RING, & ATR |
| <input type="checkbox"/> DENOTES TRAPEZE HANGER LOCATION | <input type="checkbox"/> CONCRETE ANCHOR, PIPE RING, & ATR  |
| <input type="checkbox"/> 3/8" ATR 1'-4" PIPE             | <input type="checkbox"/> 1/2" ATR 5'-8" PIPE                |
| <input type="checkbox"/> 3/8" ATR 1'-4" PIPE             | <input type="checkbox"/> WOOD HANGER ASSEMBLY, SEE DETAIL   |
| <input type="checkbox"/> 1/2" ATR 5'-8" PIPE             | <input type="checkbox"/> STAINLESS STEEL HANGER ASSEMBLY    |

**DESIGN CRITERIA**

|   |   |
|---|---|
| TYPE SYSTEM: <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY <input type="checkbox"/> PRE-ACTION | NFPA STANDARD: <input checked="" type="checkbox"/> 13-2013 <input type="checkbox"/> 14-2013 <input type="checkbox"/> 20-2013 <input type="checkbox"/> 24-2013 |
| OCCUPANCY: SCHOOL   | APPROVING AUTHORITY: Hartnett County, ED  |
| HAZARD: LIGHT/ORDINARY GROUP 1  | APPLICABLE CODE: NC STATE BUILDING CODE 2018  |
| DENSITY: 1.1/15 GPM/SQ.FT.  | REMOTE AREA: 900/1000 SQ. FT.   |
| MAX. S.F./HD.: 225/130  |   |
| TOTAL HOSE STREAM: <input checked="" type="checkbox"/> 700 GPM <input type="checkbox"/> 750 GPM                       |   |
| LOCAL HOSE THREAD: NSHT   |   |

**SEE HYDRAULIC DATA**

**SPRINKLER SUMMARY**

| SYM | TYPE          | FINISH | TEMP | ORIF.  | "K" | NPT  | MFG / MODEL # | S.I.N. | ESLUTCH / TEMP | QTY. | BY | DESCRIPTION | DATE | # |
|-----|---------------|--------|------|--------|-----|------|---------------|--------|----------------|------|----|-------------|------|---|
| ○   | UPRIGHT       | BRASS  | 155° | 1/2"   | 5.6 | 1/2" | FIFR56        | RA1425 |                | 2    |    |             |      |   |
| ⊙   | UPRIGHT/SPRIG | BRASS  | 155° | 1/2"   | 5.6 | 1/2" | FIFR56        | RA1425 |                | 17   |    |             |      |   |
| ⊗   | CONC. PEND    | WHITE  | 155° | 1/2"   | 5.6 | 1/2" | FIFR56        | RA1414 |                | 70   |    |             |      |   |
| ⊕   | DRY PENDENT   | CHROME | 286° | 17/32" | 8   | 1"   | F30R          | TV4133 |                | 7    |    |             |      |   |



**NOTES:**  
• PIPE PAINTING IS BY OTHERS  
• SEISMIC BRACING IS NOT REQUIRED  
• PIPE IDENTIFICATION IS NOT REQUIRED  
• PIPE SLEEVES ARE NOT REQUIRED

**PIPE INSULATION NOTE:**  
ALL PIPE INSULATION IS TO BE BY OTHERS, ANY DETAILS PROVIDED ARE FOR SUGGESTIONS ONLY. ALL INSULATION MUST BE INSTALLED BY A QUALIFIED INSTALLER. VSC FIRE & SECURITY ACCEPTS NO RESPONSIBILITY.

Plot Date: 11/8/2021 2:54 PM  
Plotted By: Max Bova

