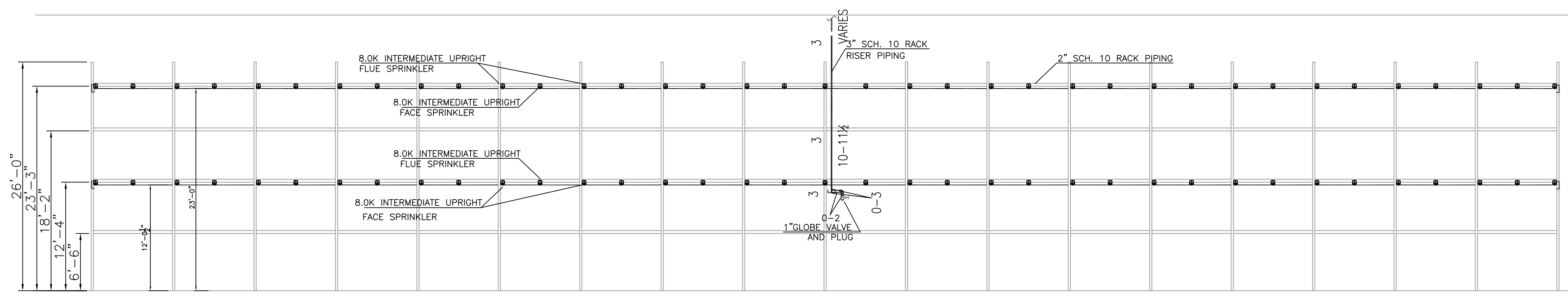


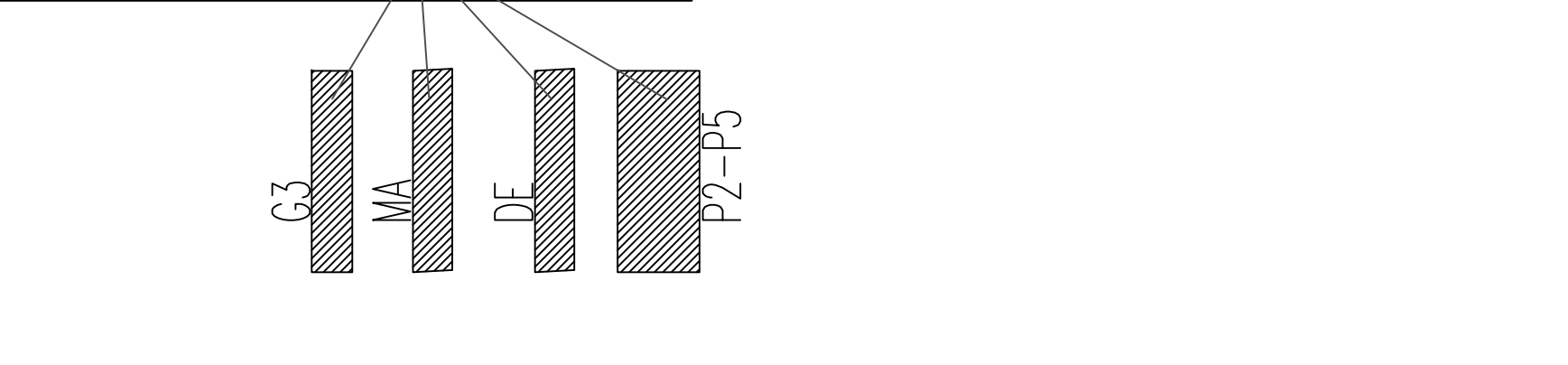
Reviewed For Code Compliance by:
Leslie Jackson
 Chief Deputy Fire Marshal
10/22/2021 2:14:41 PM

PIPING PLAN
 SCALE: 1/8"=1'-0" LOWER LEVEL AISLE P2-P5



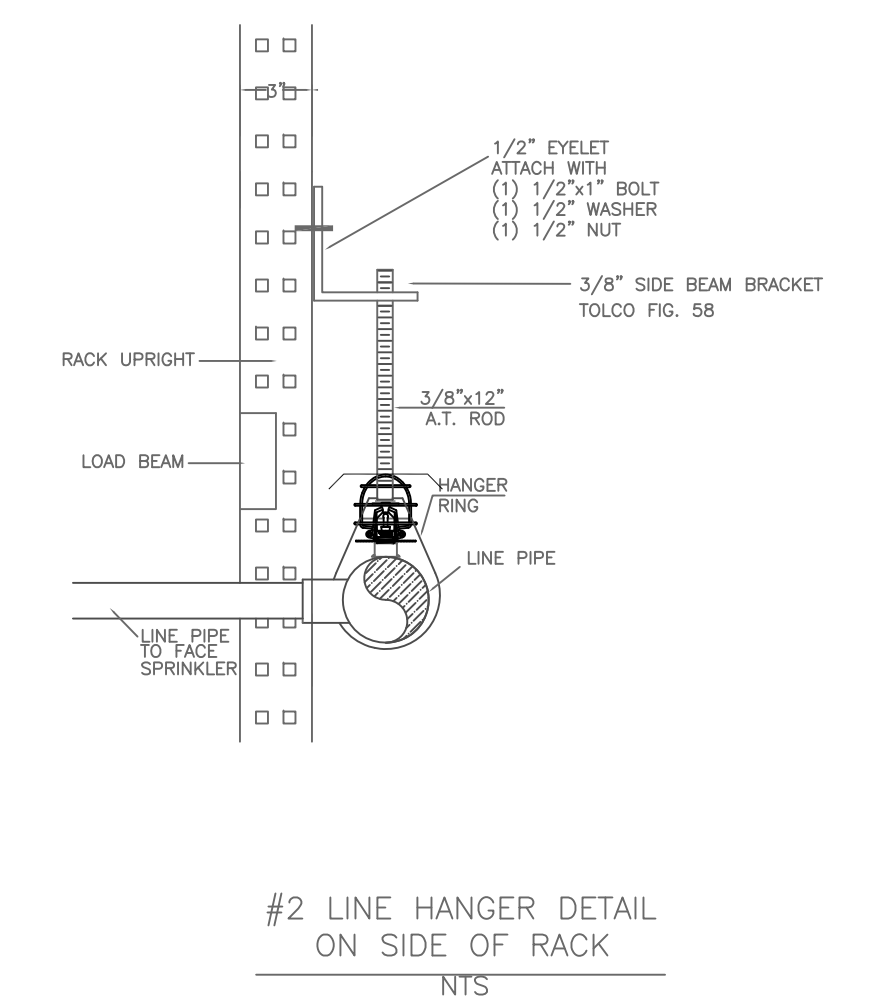
RACK ELEVATION DETAIL
 SCALE: 1/8"=1'-0"

AREAS OF WORK



KEYPLAN
 NTS

- NOTES:**
- ALL PIPE TO BE INSTALLED ACCORDING TO NFPA 13.
 - ALL PIPE TO BE SUPPORTED ACCORDING TO NFPA 13.
 - ALL BREAKOVERS AND DROPS TO BE 1" SCH. 40 U.N.O.
 - ALL 2" & 3" PIPE TO BE SCH.10 GBE.
 - UNSUPPORTED BREAKOVERS NOT TO EXCEED 12'.
 - ALL AREAS IN WHICH PIPING IS INSTALLED SHALL BE HEATED AND MAINTAINED AT 40 F MINIMUM BY OWNER.
 - OLD CANTILEVER RACKS BEING REMOVED AND NEW RACKS BEING INSTALLED AND WILL BE PROTECTED WITH THE SAME SPRINKLER PROTECTION AS EXISTING SUPPLIED WITH SAME SIZE PIPING AS EXISTING RACKS. COMMODITY IN RACK NO CHANGE.
 - NO HYDRAULIC CHANGES TO ORIGINAL HYDRAULIC RACK DESIGN.
 - 8" DEEP RACK NEEDS TO HAVE FLUE AND FACE SPRINKLERS.
 - 4" DEEP RACK NEEDS ONLY FLUE SPRINKLERS.
 - NEW HEADS INSTALLED TO MATCH EXISTING OR BE EQUIVALENT.
 - RACK PIPING ARE ON THEIR OWN RISERS SEPARATE OF ROOF SYSTEMS.
 - ALL SUPPLY PIPING AT ROOF FROM RISER TO REMAIN AS ORIGINALLY INSTALLED.
 - NO MODIFICATIONS TO ROOF SYSTEMS.



| SPRINKLER SYMBOL DESCRIPTION | | | | | | |
|--|------|-------|-----------|-------|--------|--|
| SYMBOL | SIZE | MODEL | MAKE | SN | FINISH | STYLE |
| ○ | 3/4" | QR | VICTAULIC | V3401 | BRASS | UPRIGHT W/ INT. HEAD GUARD(SA72000020) |
| TEMP 155° K-FACTOR 8.0 TOTAL 285 | | | | | | |
| TOTAL SPRINKLERS SHOWN ON THIS SHEET 285 | | | | | | |
| TOTAL SPRINKLERS REQUIRED ON THIS CONTRACT 982 | | | | | | |

CAROLINA FIRE PROTECTION
 4055 HODGES CHAPEL ROAD
 DUNN, N.C. 28334
 Phone (910) 892-1700
 Fax (910) 892-7322

CONTRACT NAME: Food Lion Distribution
 2840 Arrowhead Rd.
 Dunn, NC 28334

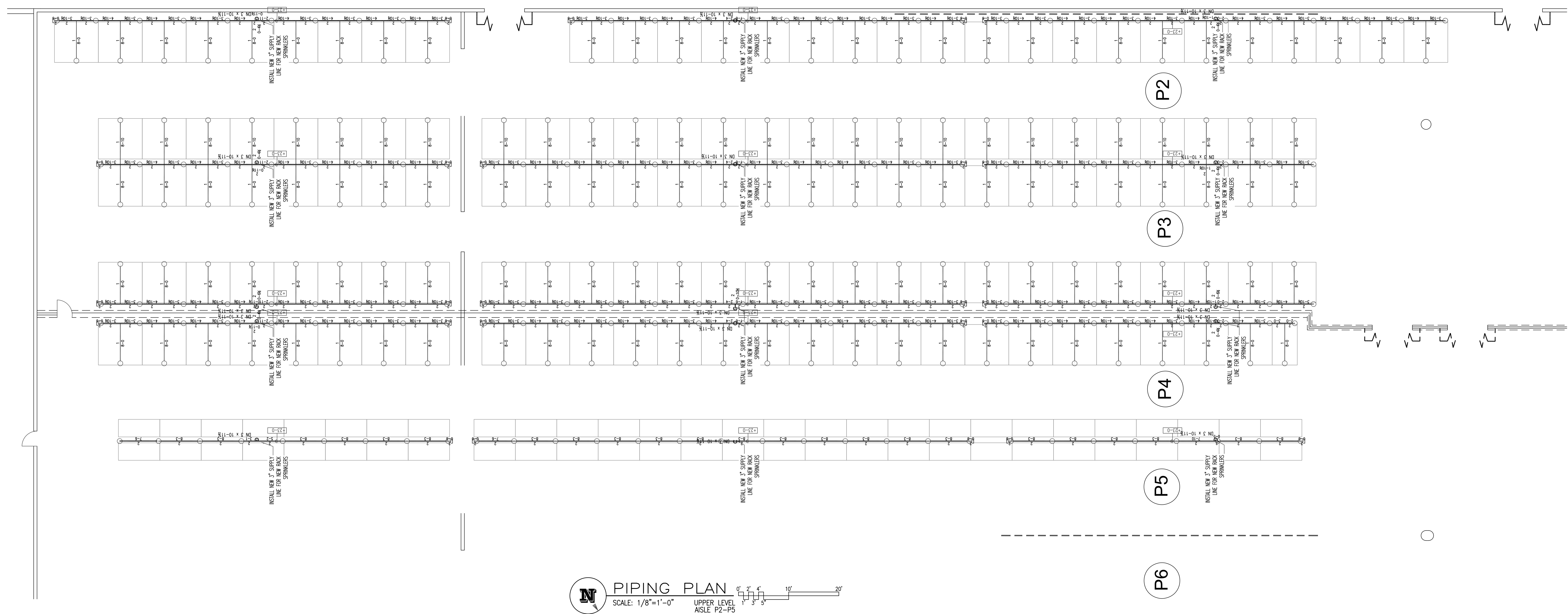
DESCRIPTION: REPLACEMENT RACK - LOWER LEVEL

SYSTEM DESIGN DATA

CONTRACT NO.: 211619
DRAWN BY: KJW
DRAWING NO.: FP 1 of 4

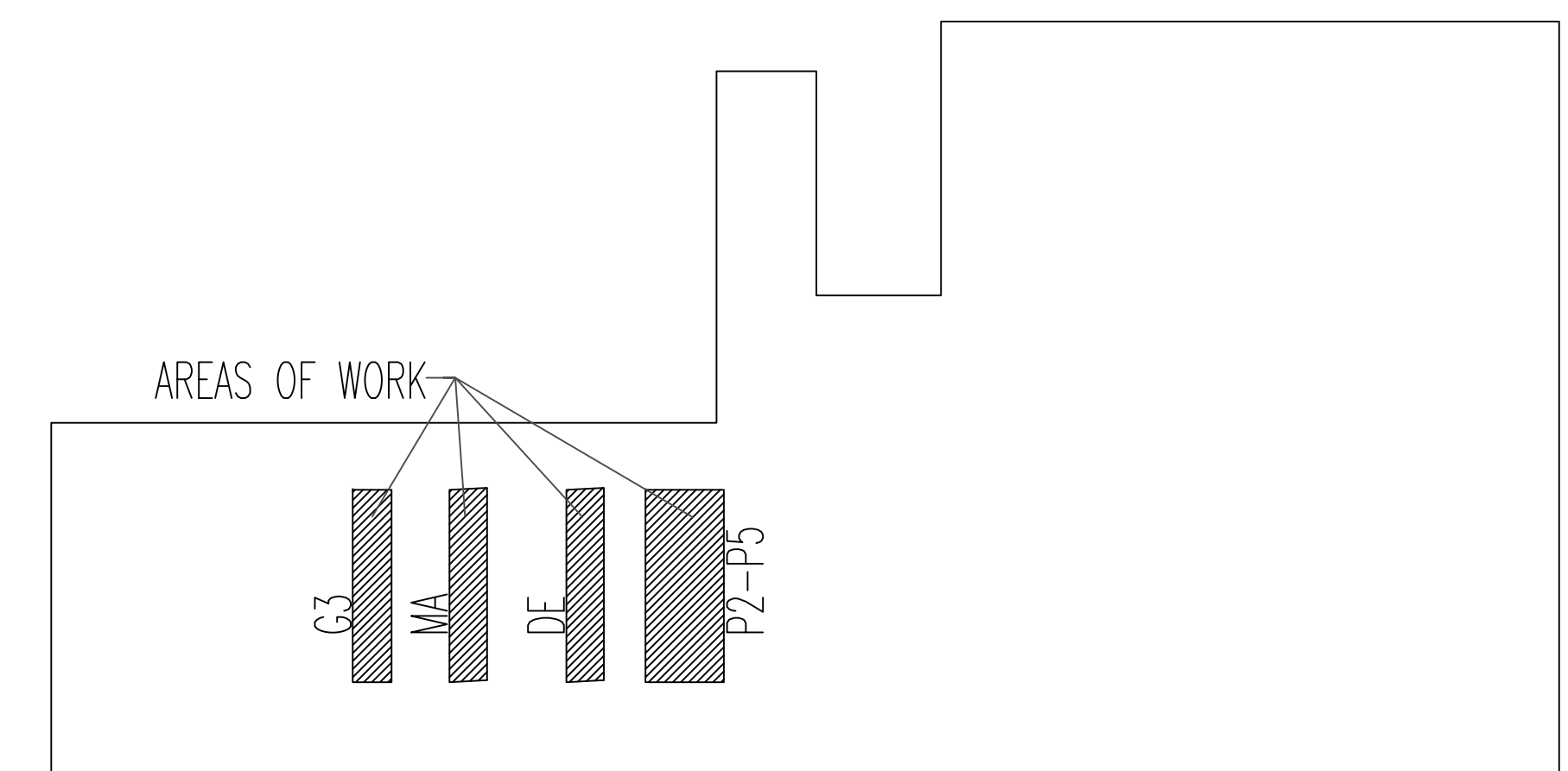


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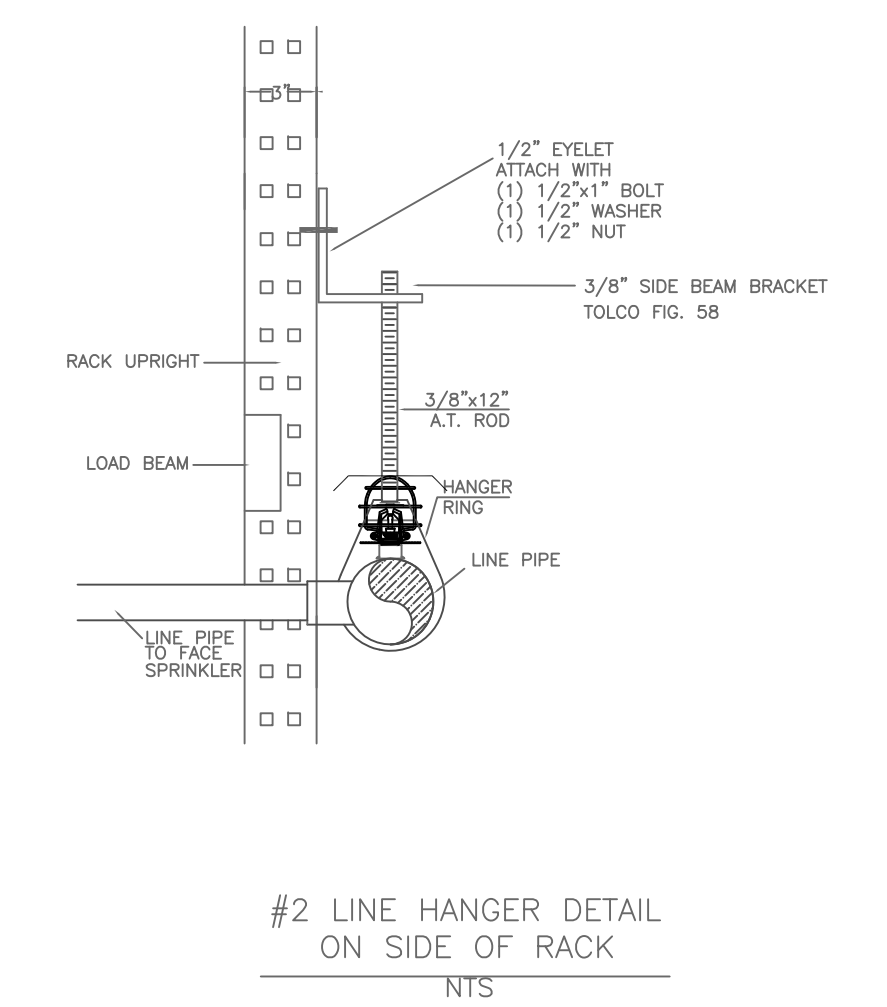


PIPING PLAN
SCALE: 1/8"=1'-0" UPPER LEVEL AISLE P2-P6

- NOTES:**
- ALL PIPE TO BE INSTALLED ACCORDING TO NFPA 13.
 - ALL PIPE TO BE SUPPORTED ACCORDING TO NFPA 13.
 - ALL BREAKERS AND DROPS TO BE 1" SCH. 40 U.N.O.
 - ALL 2" & 3" PIPE TO BE SCH.10 OBE.
 - UNSUPPORTED BREAKOVERS NOT TO EXCEED 12".
 - ALL AREAS IN WHICH PIPING IS INSTALLED SHALL BE HEATED AND MAINTAINED AT 40 F MINIMUM BY OWNER.
 - OLD CANTILEVER RACKS BEING REMOVED AND NEW RACKS BEING INSTALLED AND WILL BE PROTECTED WITH THE SAME SPRINKLER PROTECTION AS EXISTING SUPPLIED WITH SAME SIZE PIPING AS EXISTING RACKS. COMMODITY IN RACK NO CHANGE.
 - NO HYDRAULIC CHANGES TO ORIGINAL HYDRAULIC RACK DESIGN.
 - 8" DEEP RACK NEEDS TO HAVE FLUE AND FACE SPRINKLERS.
 - 4" DEEP RACK NEEDS ONLY FLUE SPRINKLERS.
 - NEW HEADS INSTALLED TO MATCH EXISTING OR BE EQUIVALENT.
 - RACK PIPING ARE ON THEIR OWN RISERS SEPARATE OF ROOF SYSTEMS.
 - ALL SUPPLY PIPING AT ROOF FROM RISER TO REMAIN AS ORIGINALLY INSTALLED.
 - NO MODIFICATIONS TO ROOF SYSTEMS.



KEYPLAN
NTS



IMPORTANT
In locations that are subject to freezing conditions, it is the owner's responsibility to provide heat throughout areas protected by wet pipe sprinkler systems and in enclosures for dry pipe, deluge or other types of valves controlling water supplies to sprinkler systems.
This drawing including all information and design concept herein contained is the property of Carolina Fire Protection Company, Inc. and is loaned upon express conditions that the same be returned to CFP, Inc. upon request; all information contained herein shall be treated as secret, and confidential; no reproduction of this drawing or any part thereof shall be made without written consent of CFP, Inc.

| CONTRACT RESPONSIBILITIES | |
|---------------------------|-----------------|
| ITEM | C.F.P. / OTHERS |
| STREET WATER CONNECTION | N/A |
| UNDERGROUND WATER MAINS | N/A |
| EXCAVATIONS | N/A |
| BACKFILL | N/A |
| WIRING | N/A |
| PAINTING | N/A |

| SYMBOLS | |
|-----------------------------|--|
| CEILING HT. ABOVE REF. | GATE VALVE (SEE NOTES) |
| +1.3 C/L OF PIPE BELOW BOB | WATER MOTOR GONG (W.M.G.) |
| 12.0 C/L OF PIPE ABOVE REF. | FIRE DEPT. CONN. (STANDARD) |
| HYDRAULIC REF. POINT | FLOW SWITCH (FS) |
| LINE DESIGNATION | MONITOR SWITCH |
| MAIN DESIGNATION | BUTTERFLY VALVE |
| HANGER | ALARM VALVE (ALV) |
| UNION | ROOF INDICATOR VALVE (RIV) |
| GROOVED COUPLING (GC) | KEY GATE SECTIONAL VALVE |
| SCREWED CAP | WTR. CHECK VALVE |
| GROOVED CAP | SWING CHECK VALVE |
| SCREWED PLUG | FIRE HYDRANT (S.WAY) |
| FLANGED CONNECTION | THRUST BLOCK |
| | 2&4 WAY SEISMIC BRACING |
| | INSPECTOR'S TEST |
| | GLOBE VALVE |
| | ANGLE VALVE |
| | ELEVATION CHANGE IN PIPE (NOT THROUGH FLOOR) |

| ABBREVIATIONS | |
|---------------|------------------------|
| BOB | Bottom of Beam |
| BOD | Bottom of Deck |
| BP | Bottom of Pipe |
| DC | Ditto |
| NY | Nipple and Cap |
| N & C | Not in Contract |
| N/S | Not to Scale |
| OSU | Open Bar Joint |
| PRV | Pressure Red. Valve |
| RM | Roof Manifold |
| SP | Standpipe |
| T&B | Top of Beam |
| TOP | Top of Pipe |
| T/S | Top of Slab |
| UNO | Unless Noted Otherwise |

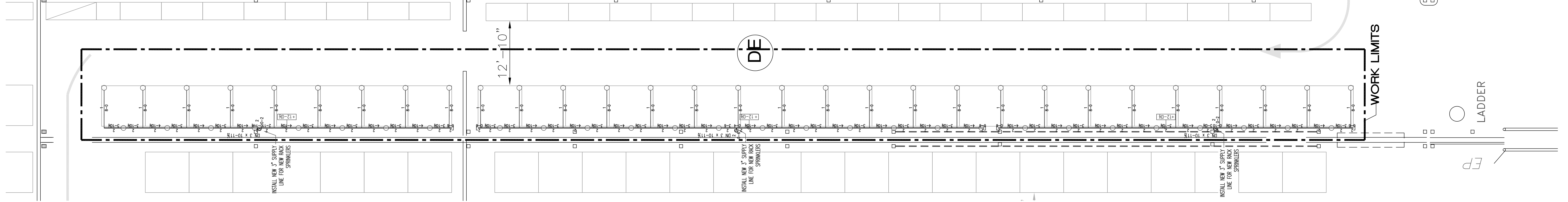


| SPRINKLER SYMBOL DESCRIPTION | | | | | | | | | |
|---|------|-------|-----------|-------|--------|--|----------|-------|-----|
| SYMBOL | SIZE | MODEL | MAKE | S/N | FINISH | TEMP | K-FACTOR | TOTAL | |
| ○ | 3/4" | QR | VICTAULIC | V3401 | BRASS | UPRIGHT W/ INT. HEAD GUARD(SA72000020) | 155° | 8.0 | 285 |
| TOTAL SPRINKLERS SHOWN ON THIS SHEET: 285 | | | | | | | | | |
| TOTAL SPRINKLERS REQUIRED ON THIS CONTRACT: 982 | | | | | | | | | |

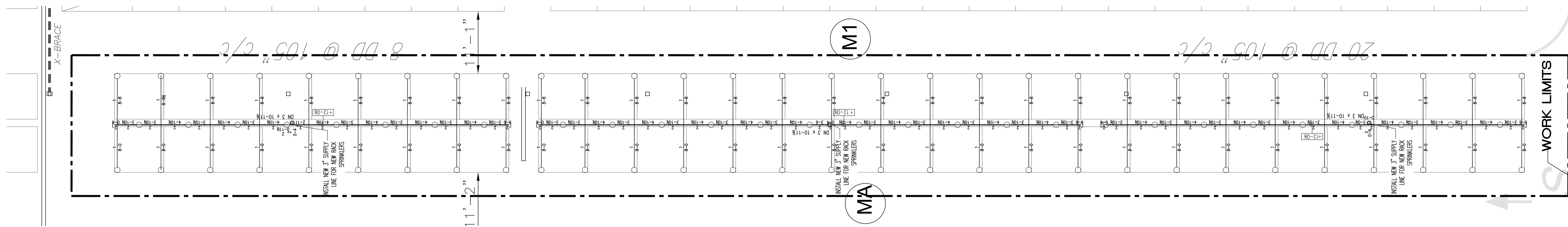
CAROLINA FIRE PROTECTION
4055 HODGES CHAPEL ROAD
Dunn, N.C. 28334
Phone (910) 892-1700
Fax (910) 892-7322

| | |
|---|--------------------------|
| CONTRACT NAME: Food Lion Distribution 2940 Arrowhead Rd. Dunn, NC 28334 | CHECKED BY: M.FORD |
| CONTRACT WITH: Food Lion | DATE: 9-23-21 |
| DESCRIPTION: REPLACEMENT RACK - UPPER PIPING | SCALE: AS SHOWN |
| SYSTEM DESIGN DATA | CONTRACT NO: 21619 |
| DESIGNER: [Blank] | DRAWN BY: KJW |
| DATE: [Blank] | DRAWING NO. FP 2 of 4 |

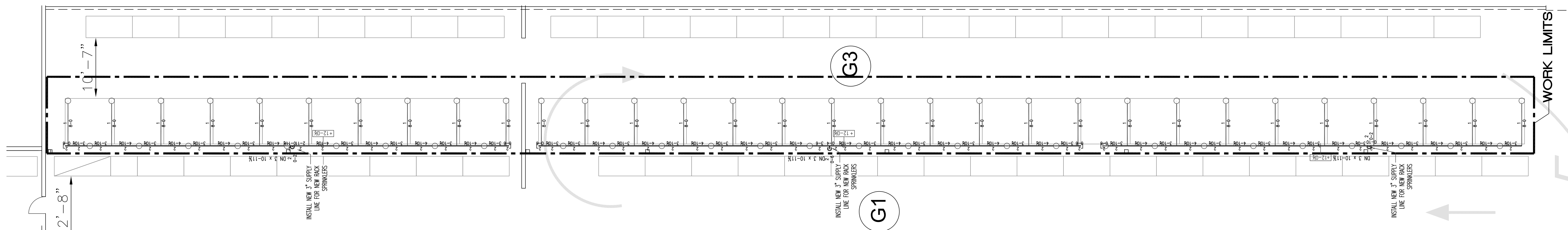
| NO. | DATE | BY | REVISIONS - SEE FLAGGED AREA ON PLAN |
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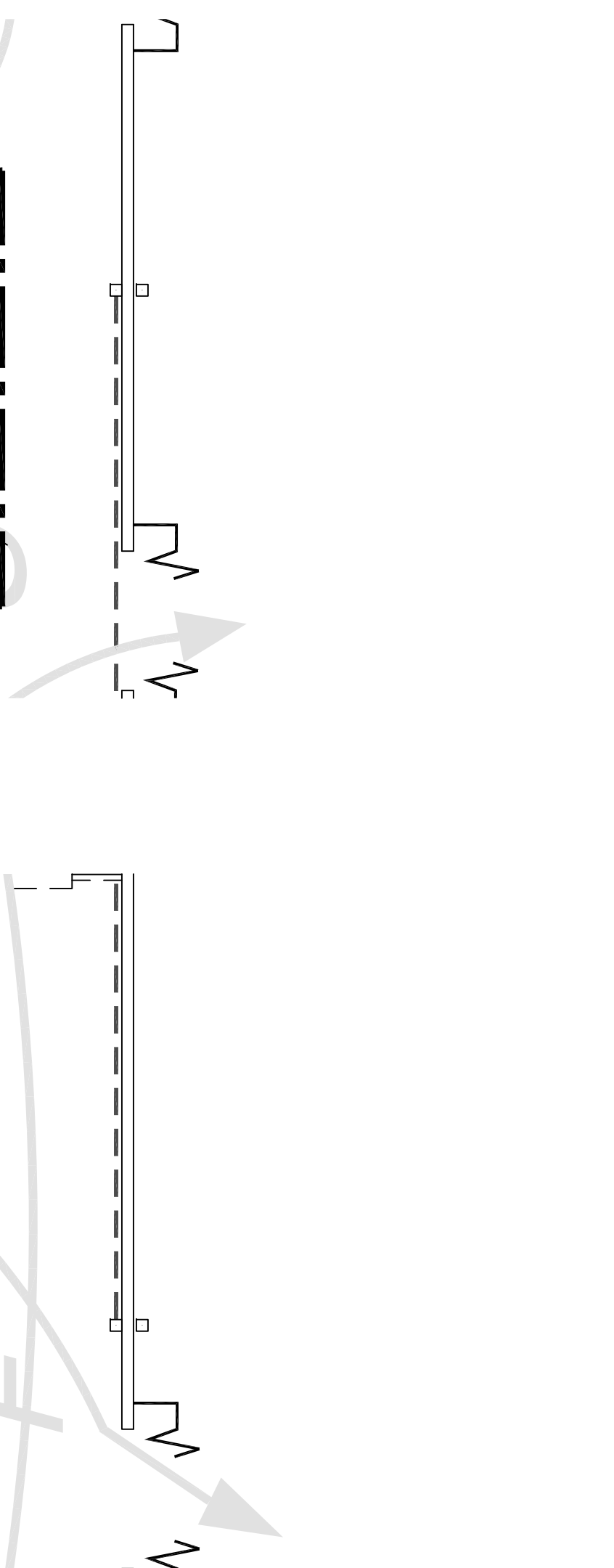
PIPING PLAN
SCALE: 1/8"=1'-0" LOWER LEVEL AISLE DE



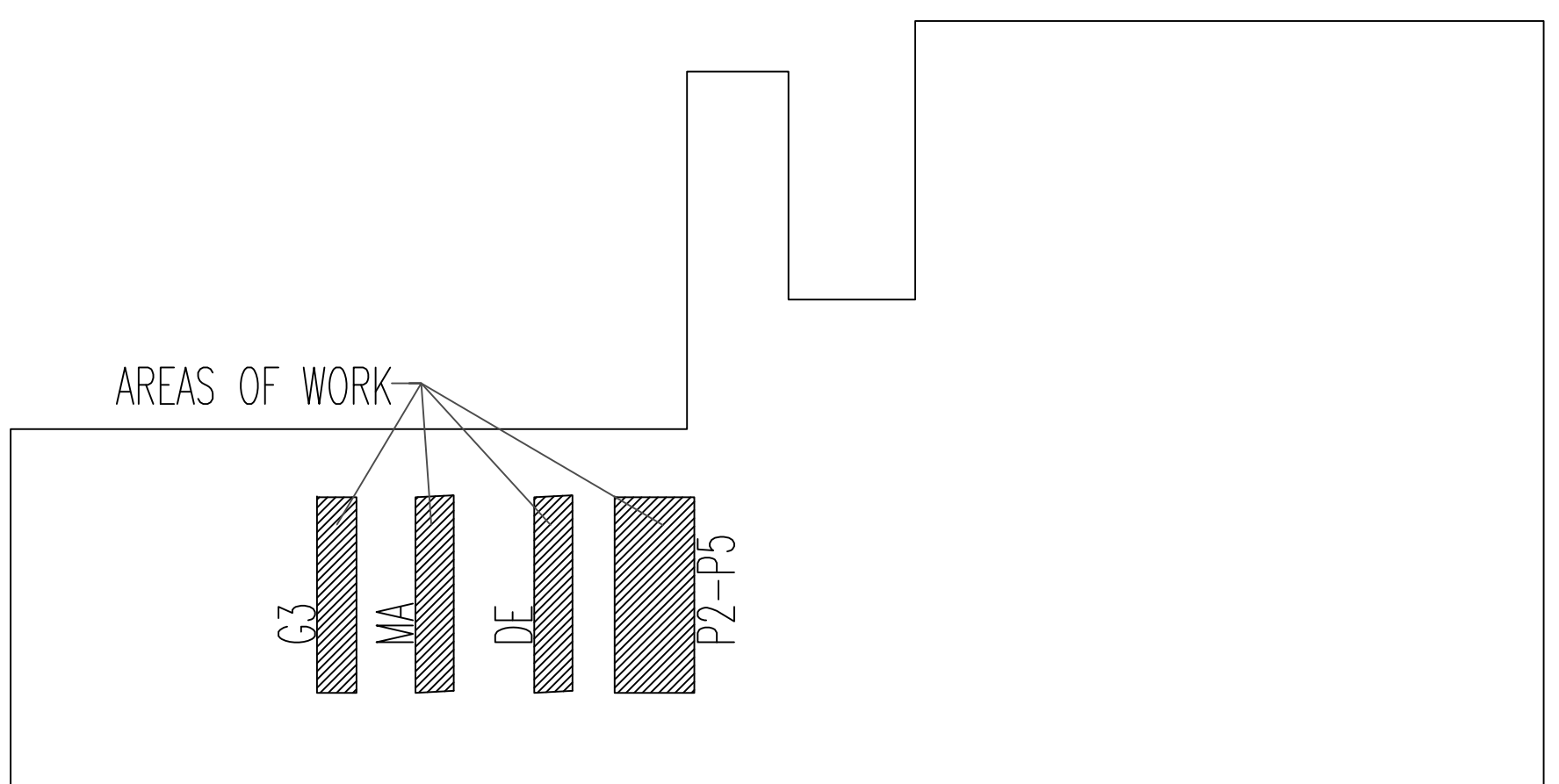
PIPING PLAN
SCALE: 1/8"=1'-0" LOWER LEVEL AISLE MA



PIPING PLAN
SCALE: 1/8"=1'-0" LOWER LEVEL AISLE G3



- NOTES:**
- ALL PIPE TO BE INSTALLED ACCORDING TO NFPA 13.
 - ALL PIPE TO BE SUPPORTED ACCORDING TO NFPA 13.
 - ALL BREAKOVERS AND DROPS TO BE 1" SCH. 40 U.N.O.
 - ALL 2" & 3" PIPE TO BE SCH.10 CBE.
 - UNSUPPORTED BREAKOVERS NOT TO EXCEED 12".
 - ALL AREAS IN WHICH PIPING IS INSTALLED SHALL BE HEATED AND MAINTAINED AT 40 F MINIMUM BY OWNER.
 - OLD CANTILEVER RACKS BEING REMOVED AND NEW RACKS BEING INSTALLED AND WILL BE PROTECTED WITH THE SAME SPRINKLER PROTECTION AS EXISTING SUPPLIED WITH SAME SIZE PIPING AS EXISTING RACKS. COMMODITY IN RACK NO CHANGE.
 - NO HYDRAULIC CHANGES TO ORIGINAL HYDRAULIC RACK DESIGN.
 - 8' DEEP RACK NEEDS TO HAVE FLUE AND FACE SPRINKLERS.
 - 4' DEEP RACK NEEDS ONLY FLUE SPRINKLERS.
 - NEW HEADS INSTALLED TO MATCH EXISTING OR BE EQUIVALENT.
 - RACK PIPING ARE ON THEIR OWN RISERS SEPARATE OF ROOF SYSTEMS.
 - ALL SUPPLY PIPING AT ROOF FROM RISER TO REMAIN AS ORIGINALLY INSTALLED.
 - NO MODIFICATIONS TO ROOF SYSTEMS.



IMPORTANT
In locations that are subject to freezing conditions, it is the owner's responsibility to provide heat throughout areas protected by wet pipe sprinkler systems and in enclosures for dry pipe, deluge or other types of water controlling water supplies to sprinkler systems.

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| CONTRACT RESPONSIBILITIES | |
|---------------------------|-----------------|
| ITEM | C.F.P. / OTHERS |
| STREET WATER CONNECTION | N/A |
| UNDERGROUND WATER MAINS | N/A |
| EXCAVATIONS | N/A |
| BACKFILL | N/A |
| WIRING | N/A |
| PAINTING | N/A |

| SYMBOLS | |
|------------------------|------------------------|
| CEILING HT. ABOVE REF. | GATE VALVE (SEE NOTES) |
| C/L OF PIPE BELOW BOB | FIRE HOSE ASSEMBLY |
| C/L OF PIPE ABOVE REF. | FLOW SWITCH (FS) |
| HYDRAULIC REF. POINT | MONITOR SWITCH |
| LINE DESIGNATION | BUTTERFLY VALVE |
| MAIN DESIGNATION | ALARM VALVE (ALV) |
| HANGER | DRY PIPE VALVE |
| UNION | WATER CHECK VALVE |
| GROOVED COUPLING (GC) | SWING CHECK VALVE |
| SCREWED CAP | SYSTEM RISER |
| GROUNDED CAP | INSPECTOR'S TEST |
| SCREWED PLUG | GLOBE VALVE |
| FLANGED CONNECTION | ANGLE VALVE |

| ABBREVIATIONS | |
|---------------|-------------------------|
| BBB | Bottom of Beam |
| BBB | Bottom of Deck |
| BOB | Bottom of Box |
| BOF | Bottom of Floor |
| DO | Drift Valve |
| N & C | Nipple and Cap |
| NTS | Not to Scale |
| OSU | Open Bar Adjust |
| PRV | Pressure Reducing Valve |
| RM | Roof Manifold |
| SP | Standpipe |
| TOP | Top of Beam |
| TOP | Top of Pipe |
| TOS | Top of Slab |
| UNO | Unless Noted Otherwise |

| SYSTEM TYPE | |
|-------------|---|
| WET | <input type="checkbox"/> DELUZE <input type="checkbox"/> |
| DRY | <input type="checkbox"/> PREACTION <input type="checkbox"/> |

| APPROVALS | |
|-------------------------------|--------|
| <input type="checkbox"/> ISG | OUT IN |
| <input type="checkbox"/> IFR1 | OUT IN |
| <input type="checkbox"/> FM | OUT IN |
| <input type="checkbox"/> | OUT IN |



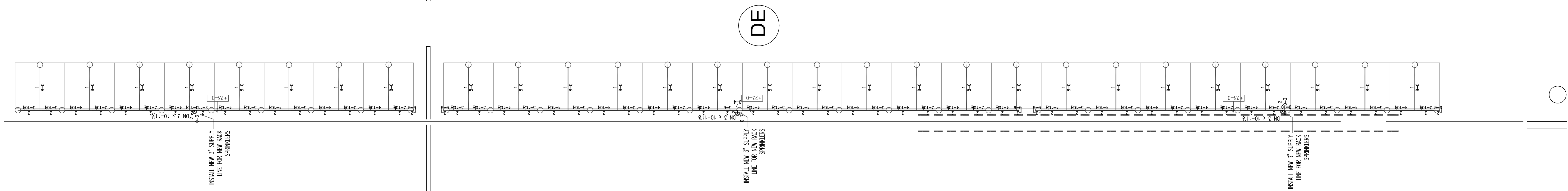
| SPRINKLER SYMBOL DESCRIPTION | | | | | | | |
|--|------|-------|----------|-------|--------|--|-----|
| SYMBOL | SIZE | MODEL | MAKE | SN | FINISH | STYLE | |
| ○ | 3/4" | QR | MCTAULIC | V3401 | BRASS | UPRIGHT W/ INT. HEAD GUARD(SA72000020) | |
| TOTAL SPRINKLERS SHOWN ON THIS SHEET | | | | | | | 206 |
| TOTAL SPRINKLERS REQUIRED ON THIS CONTRACT | | | | | | | 982 |

CAROLINA FIRE PROTECTION
4055 HODGES CHAPEL ROAD
Dunn, N.C. 28334
Phone (910) 892-1700
Fax (910) 892-7322

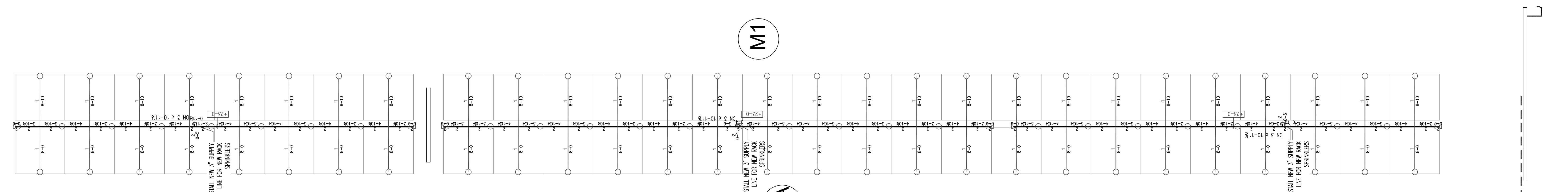
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|---|--------------------------|
| CONTRACT NAME: Food Lion Distribution 2940 Arrowhead Rd. Dunn, NC 28334 | CHECKED BY: M.FORD |
| CONTRACT WITH: Food Lion | DATE: 9-23-21 |
| DESCRIPTION: REPLACEMENT RACK - LOWER PIPING | SCALE: AS SHOWN |
| SYSTEM DESIGN DATA | CONTRACT NO: 211619 |
| DRAWN BY: KJW | DRAWING NO. FP 3 of 4 |

NO. DATE BY REVISIONS - SEE FLAGGED AREA ON PLAN

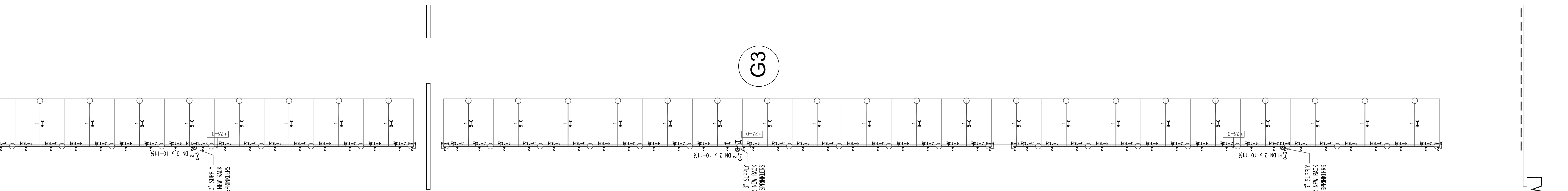
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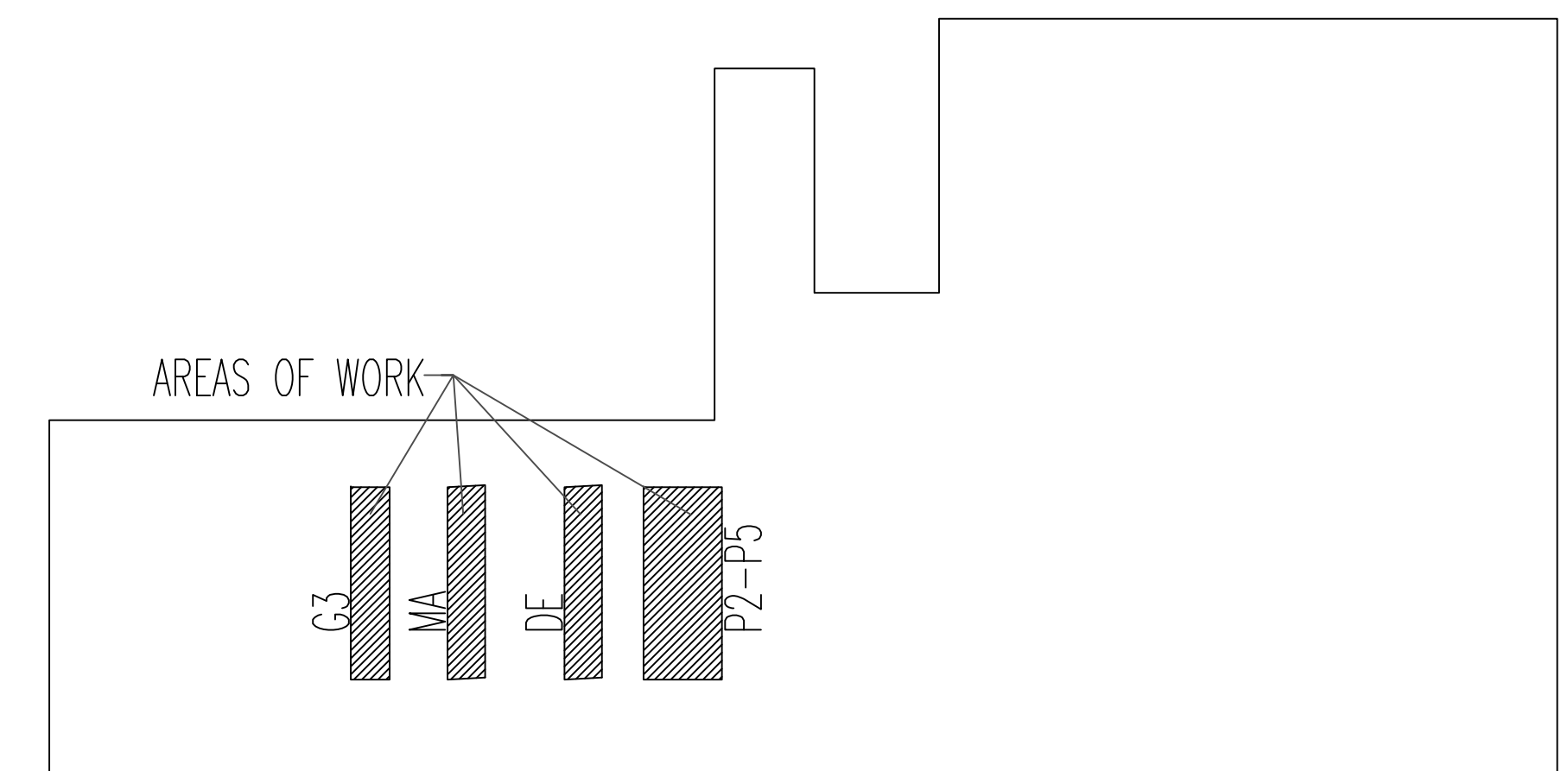
PIPING PLAN
SCALE: 1/8"=1'-0" UPPER LEVEL AISLE DE



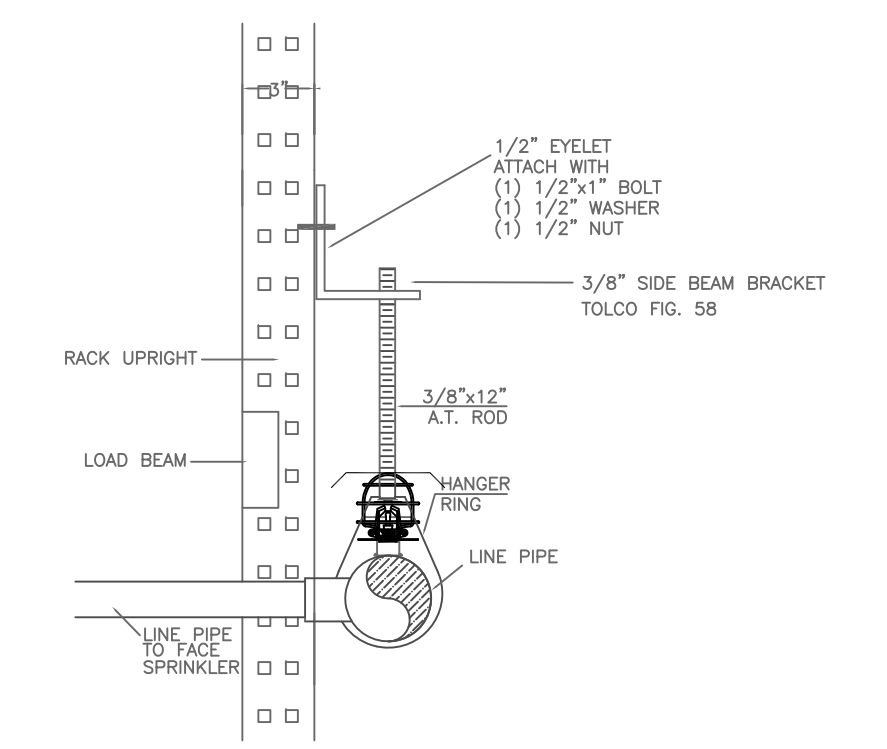
PIPING PLAN
SCALE: 1/8"=1'-0" UPPER LEVEL AISLE MA



PIPING PLAN
SCALE: 1/8"=1'-0" UPPER LEVEL AISLE G3



NOTES:
 -ALL PIPE TO BE INSTALLED ACCORDING TO NFPA 13.
 -ALL PIPE TO BE SUPPORTED ACCORDING TO NFPA 13.
 -ALL BREAKOVERS AND DROPS TO BE 1" SCH. 40 U.N.O.
 -ALL 2" & 3" PIPE TO BE SCH.10 GSE.
 -UNSUPPORTED BREAKOVERS NOT TO EXCEED 12".
 -ALL AREAS IN WHICH PIPING IS INSTALLED SHALL BE HEATED AND MAINTAINED AT 40 F MINIMUM BY OWNER.
 -OLD CANTILEVER RACKS BEING REMOVED AND NEW RACKS BEING INSTALLED AND WILL BE PROTECTED WITH THE SAME SPRINKLER PROTECTION AS EXISTING SUPPLIED WITH SAME SIZE PIPING AS EXISTING RACKS. COMMODITY IN RACK NO CHANGE.
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 -8' DEEP RACK NEEDS TO HAVE FLUE AND FACE SPRINKLERS.
 -4' DEEP RACK NEEDS ONLY FLUE SPRINKLERS.
 -NEW HEADS INSTALLED TO MATCH EXISTING OR BE EQUIVALENT.
 -RACK PIPING ARE ON THEIR OWN RISERS SEPARATE OF ROOF SYSTEMS.
 -ALL SUPPLY PIPING AT ROOF FROM RISER TO REMAIN AS ORIGINALLY INSTALLED
 -NO MODIFICATIONS TO ROOF SYSTEMS.



NO. DATE BY REVISIONS - SEE FLAGGED AREA ON PLAN

IMPORTANT
 In locations that are subject to freezing conditions, it is the owner's responsibility to provide heat throughout areas protected by wet pipe sprinkler systems and in enclosures for dry pipe, deluge or other types of valves controlling water supplies to sprinkler systems.

| CONTRACT RESPONSIBILITIES | |
|---------------------------|-----------------|
| ITEM | C.F.P. / OTHERS |
| STREET WATER CONNECTION | N/A |
| UNDERGROUND WATER MAINS | N/A |
| EXCAVATIONS | N/A |
| BACKFILL | N/A |
| WIRING | N/A |
| PAINTING | N/A |

| SYMBOLS | |
|------------------------------|--|
| CEILING HT. ABOVE REF. | GATE VALVE (SEE NOTES) |
| +1.3 C/L OF PIPE BELOW BOB | FIRE HOSE ASSEMBLY |
| 12'-4 C/L OF PIPE ABOVE REF. | FLOW SWITCH (FS) |
| HYDRAULIC REF. POINT | MONITOR SWITCH |
| LINE DESIGNATION | BUTTERFLY VALVE |
| MAIN DESIGNATION | ALARM VALVE (ALV) |
| HANGER | DRY PIPE VALVE |
| UNION | WATER CHECK VALVE |
| GROOVED COUPLING (GC) | SWING CHECK VALVE |
| SCREWED CAP | SYSTEM RISER |
| GROOVED CAP | INSPECTOR'S TEST |
| SCREWED PLUG | 2&4 WAY SEISMIC BRACING |
| FLANGED CONNECTION | ELEVATION CHANGE IN PIPE (NOT THROUGH FLOOR) |
| | ANGLE VALVE |

| ABBREVIATIONS | |
|---------------|------------------------|
| BOB | Bottom of Beam |
| BOB | Bottom of Deck |
| BOF | Bottom of Pipe |
| DO | Drift |
| HV | Hose Valve |
| N & C | Nipple and Cap |
| NTS | Not in Contract |
| OSU | Open Bar Joint |
| PRV | Pressure Red. Valve |
| RM | Roof Manifold |
| SP | Standpipe |
| TOP | Top of Beam |
| TOS | Top of Steel |
| UNO | Unless Noted Otherwise |

SYSTEM TYPE
 WET DELUGE
 DRY PREACTION

APPROVALS
 ISO OUT IN
 IRI OUT IN
 FM OUT IN
 OUT IN



| SPRINKLER SYMBOL DESCRIPTION | | | | | | |
|---|------|-------|-----------|-------|--------|--|
| SYMBOL | SIZE | MODEL | MAKE | SN | FINISH | STYLE |
| ○ | 3/4" | QR | VICTAULIC | V3401 | BRASS | UPRIGHT W/ INT. HEAD GUARD(SA72000020) |
| TOTAL SPRINKLERS SHOWN ON THIS SHEET: 204 | | | | | | |
| TOTAL SPRINKLERS REQUIRED ON THIS CONTRACT: 982 | | | | | | |

CAROLINA FIRE PROTECTION
 4055 HODGES CHAPEL ROAD
 DUNN, N.C. 28334
 Phone (910) 892-1700
 Fax (910) 892-7322

CONTRACT NAME: **Food Lion Distribution**
 2940 Arrowhead Rd.
 Dunn, NC 28334

DESCRIPTION: **REPLACEMENT RACK - UPPER PIPING SYSTEM DESIGN DATA**

SCALE: **AS SHOWN**

CONTRACT NO.: **211619**

DRAWN BY: **KJW**

DRAWING NO.: **FP 4 of 4**

CHECKED BY: **M.FORD**
 DATE: **9-23-21**