

MCC AUTOMOTIVE INSTITUTE

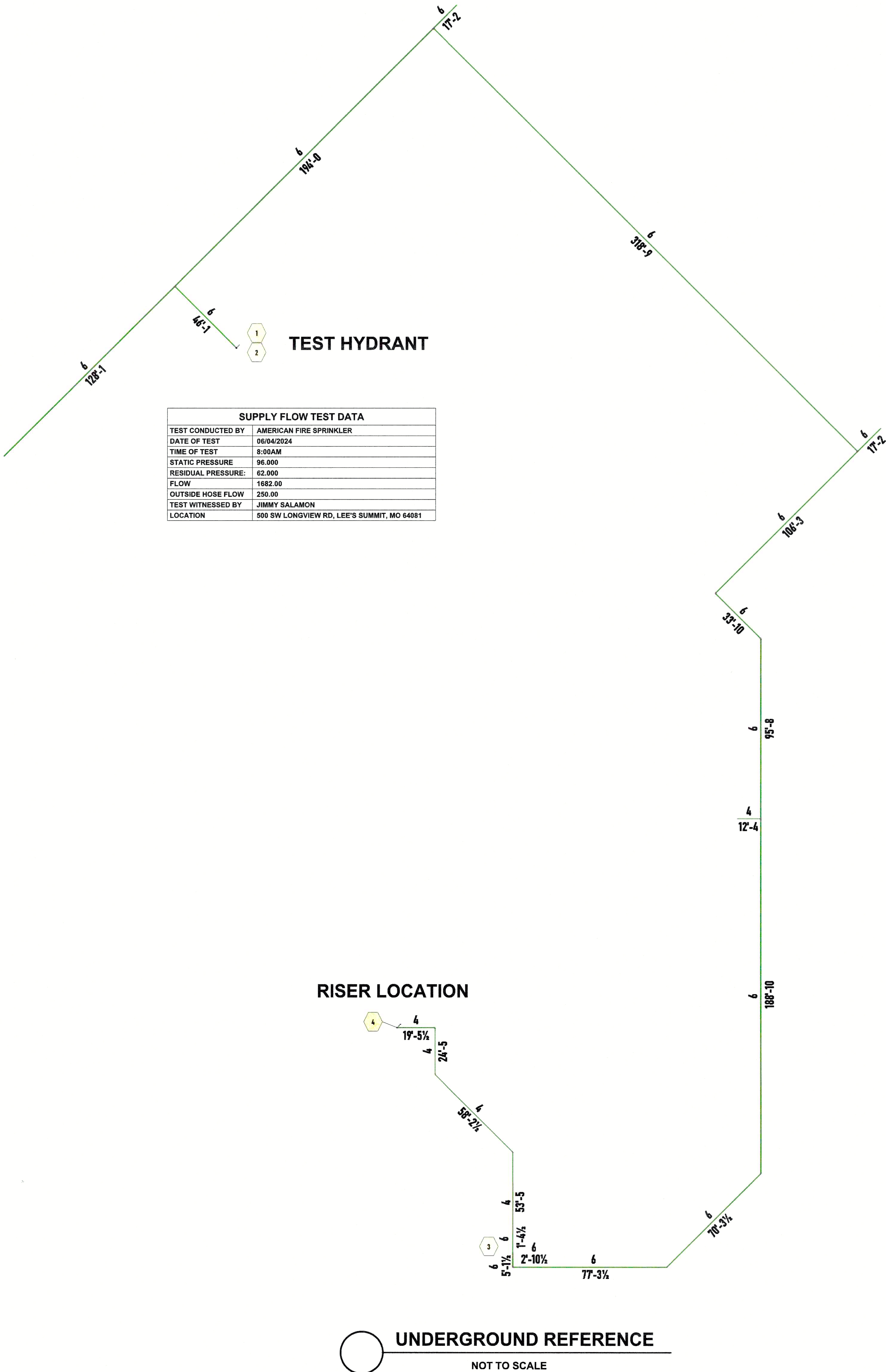
METROPOLITAN COMMUNITY COLLEGE - LONGVIEW

500 SW LONGVIEW RD.
LEE'S SUMMIT, MO 64081

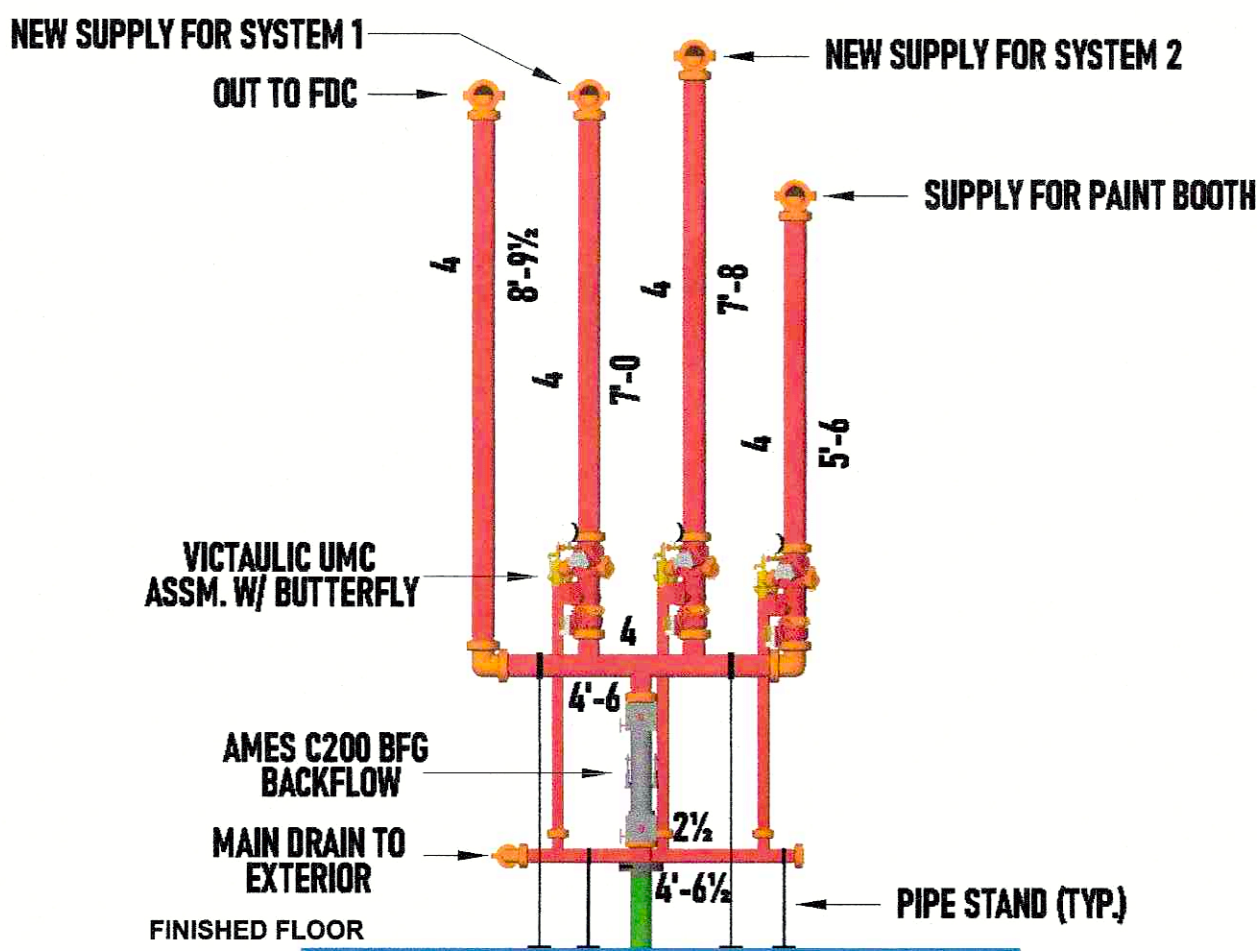
METROPOLITAN COMMUNITY COLLEGE - LONGVIEW

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

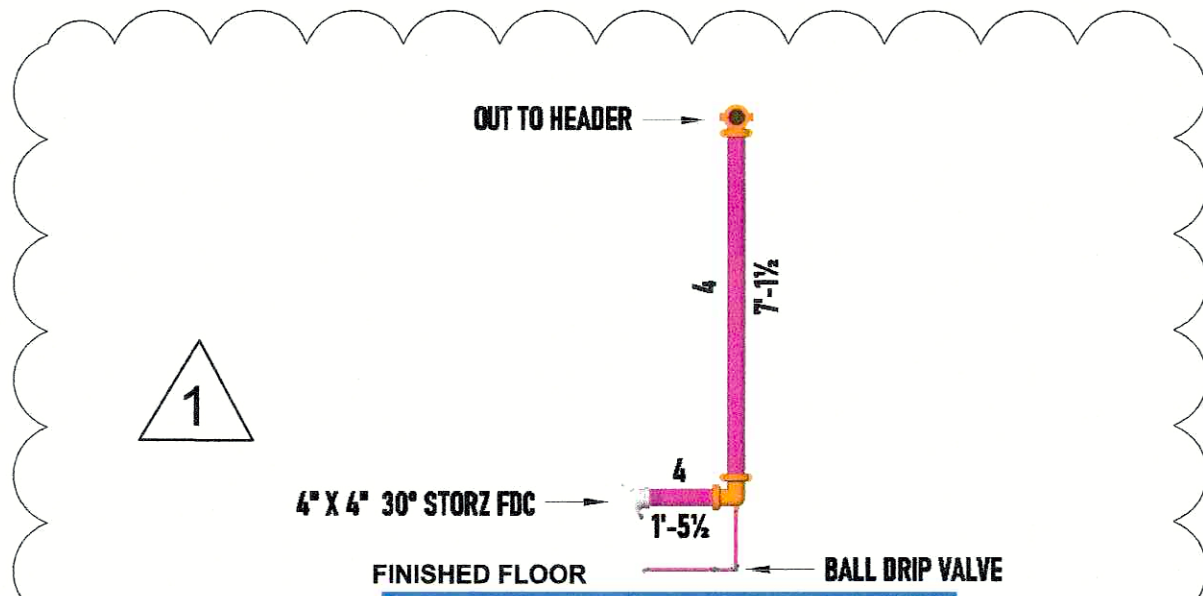
Lee's Summit Fire Department
Lee's Summit, Missouri
08/28/2024



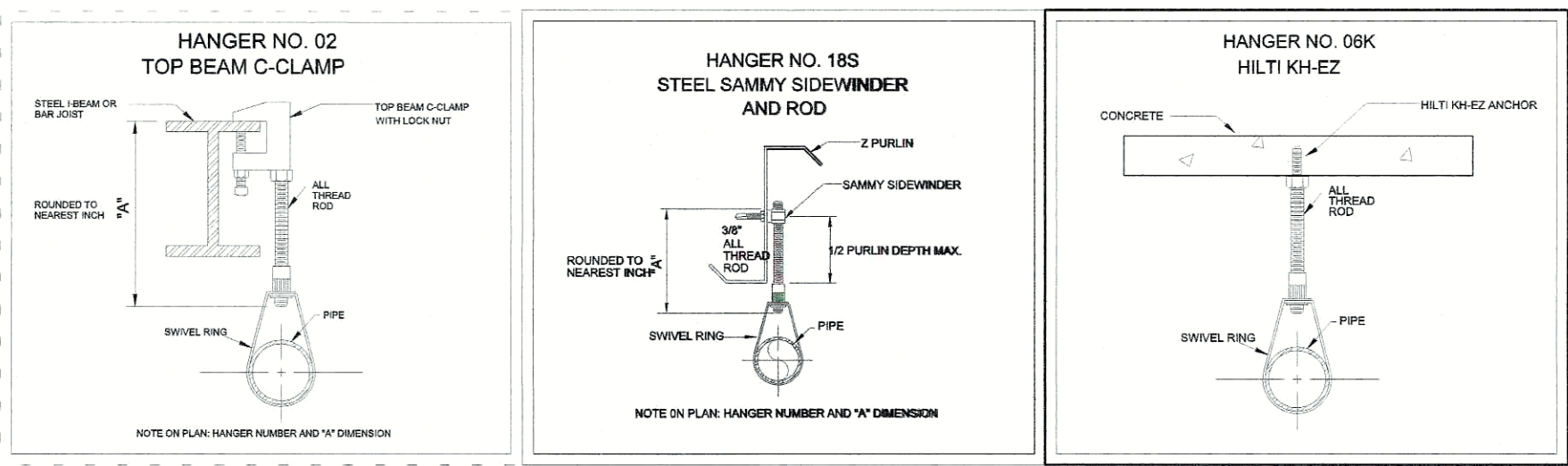
1. THE SYSTEMS SHALL CONFORM WITH THE REQUIREMENTS OF NFPA 13, 2016.
2. ALL THREADED PIPING / PIPING 2" & SMALLER SHALL BE SCHEDULE 40, BLACK STEEL. ALL GROOVED PIPING 2 1/2" AND LARGER SHALL BE SCHEDULE 10, BLACK STEEL.
3. FITTINGS FOR 1" THRU 1 1/2" SHALL BE DUTILE IRON THREADED OR ARE TO BE GROOVED WITH STANDARD TAKE-OUTS OR WELDED OUTLETS AS INDICATED ON THE DRAWING. FITTINGS FOR 2" AND LARGER ARE TO BE GROOVED WITH FIRELOCK TAKE-OUTS OR WELDED OUTLETS AS INDICATED ON THE DRAWING. ALL WELDS ARE TO BE SHOP WELDED.
4. PIPE LENGTHS ON DRAWING ARE SHOWN AS CUT LENGTH DIMENSIONS.
5. ALL SECTIONS OF TRAPPED PIPING SHALL HAVE AUXILIARY DRAINS WHERE REQUIRED, PER NFPA 13.
6. ALL HANGERS ARE TO BE IN CONFORMANCE WITH NFPA 13.
7. PENETRATIONS THRU FIRE WALLS SHALL BE FIRE CAULKED AS REQUIRED.
8. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE HEAT TO PREVENT THE WATER IN THE PIPING FROM FREEZING.
9. AMERICAN FIRE SPRINKLER CORP. IS NOT CONTRACTED TO PROVIDE THE ALARM WIRING OR THE CENTRAL STATION ALARM SYSTEM.



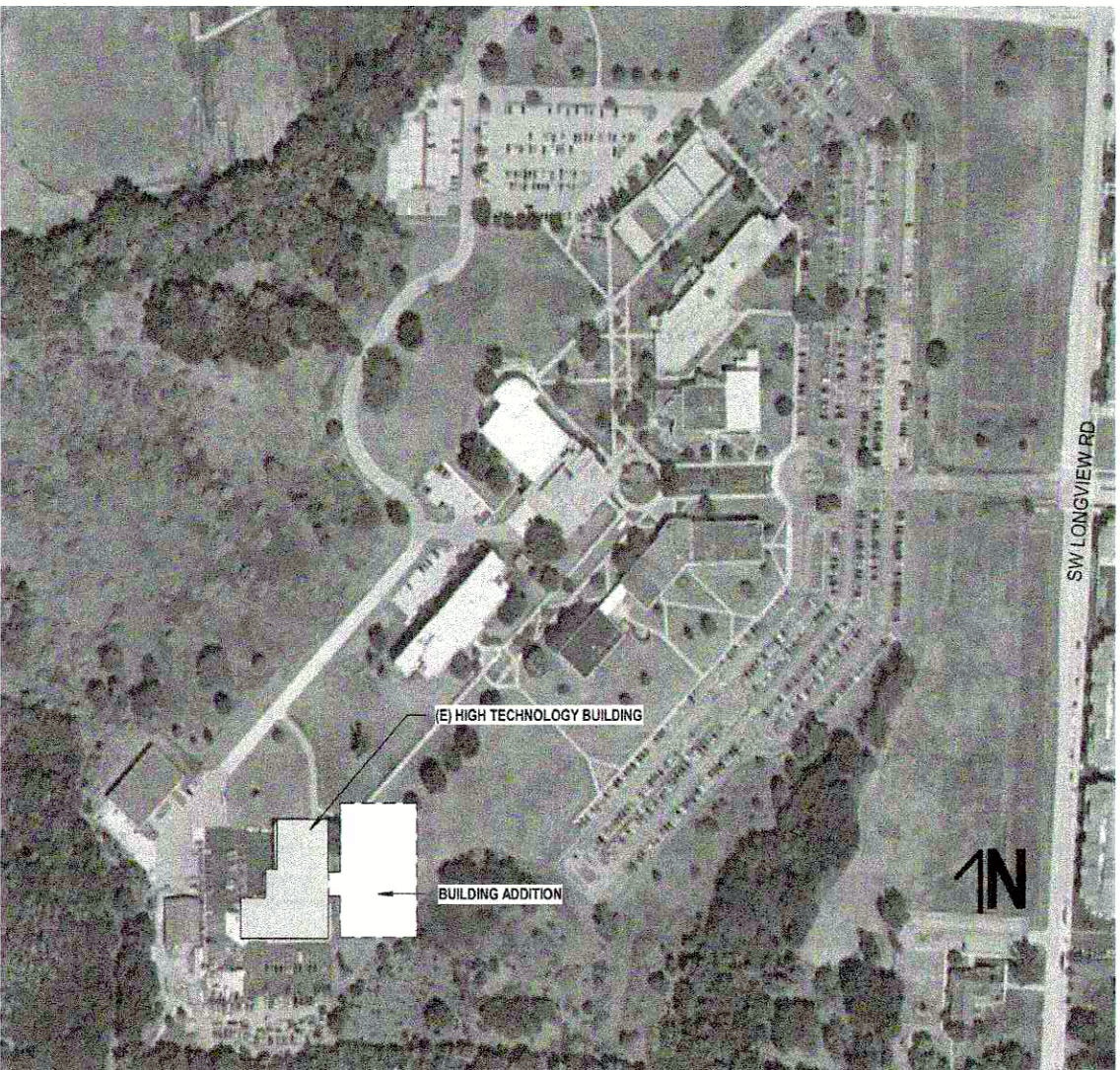
A RISER DETAIL
SCALE: 1/4" = 1'-0"



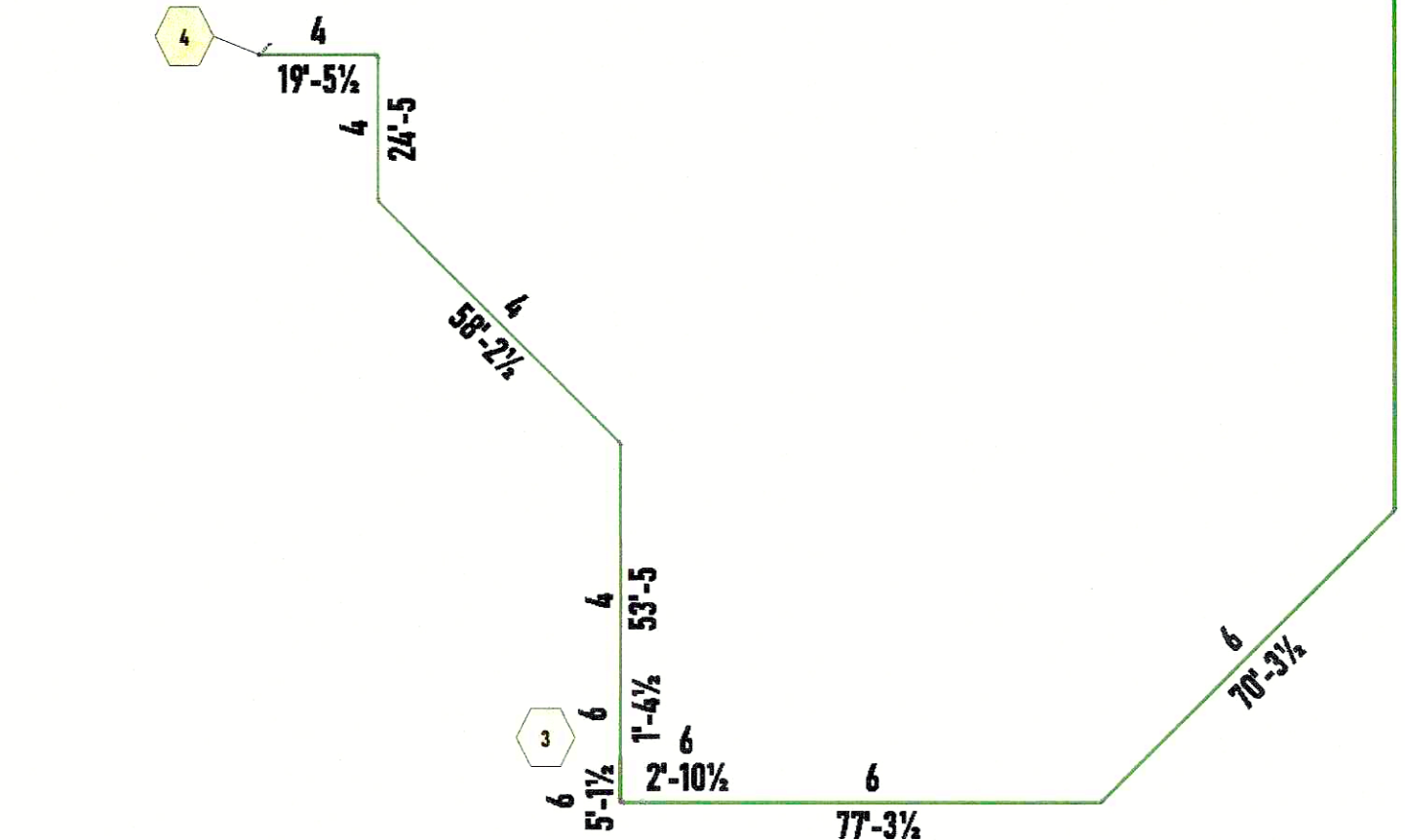
B FDC DETAIL
SCALE: 1/4" = 1'-0"



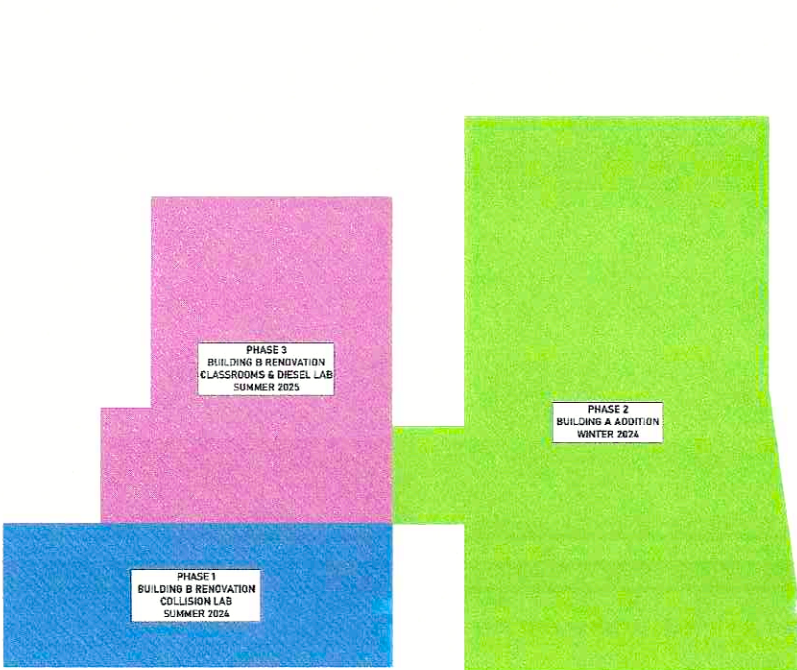
| MAXIMUM DISTANCE BETWEEN HANGERS | | | | | | | | | | | |
|--------------------------------------|------|------|--------|--------|------|--------|------|--------|------|------|------|
| NOMINAL PIPE SIZE (IN.) | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 5" | 6" |
| STEEL PIPE EXCEPT THREADED LIGHTWALL | N/A | 12-0 | 12-0 | 15-0 | 15-0 | 15-0 | 15-0 | 15-0 | 15-0 | 15-0 | 15-0 |



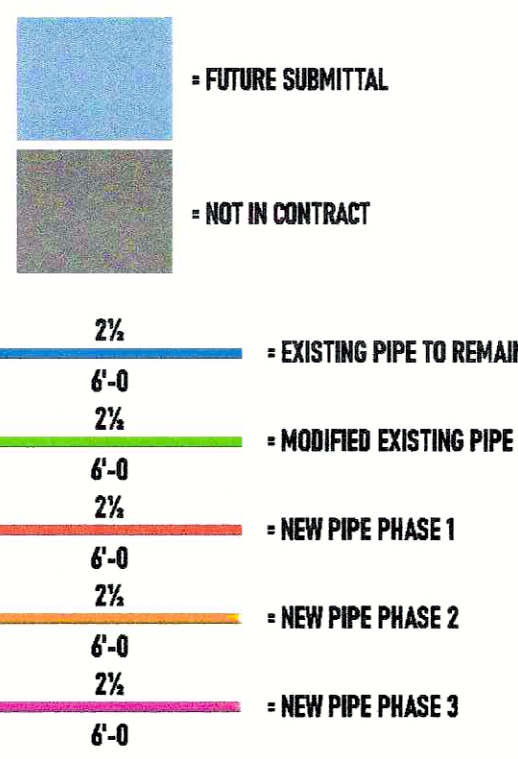
RISER LOCATION



UNDERGROUND REFERENCE
NOT TO SCALE



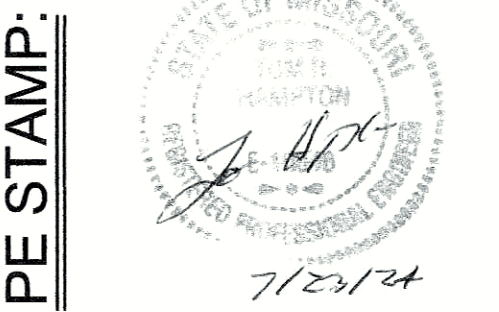
PHASING PLAN



| REVISIONS | | DATE |
|----------------------------|---------------------------|---------|
| SYMBOL | DESCRIPTION | 7/28/24 |
| DELTA | REVISOR PER AHI COMMENTS | |
| HYDRAULIC REFERENCE POINTS | ELEV BELOW TOP OF STEEL | |
| HYDRAULIC REFERENCE POINTS | ELEV ABOVE FINISHED FLOOR | |
| HYDRAULIC REFERENCE POINTS | ELEV OF TOP OF STEEL | |
| HYDRAULIC REFERENCE POINTS | CEILING HEIGHT | |
| HYDRAULIC REFERENCE POINTS | DEMOTES HANGER LOCATION | |
| HYDRAULIC REFERENCE POINTS | RISE UP OR DOWN | |

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500 SW LONGVIEW RD.
LEE'S SUMMIT, MO 64081



AMERICAN
FIRE SPRINKLER
OFFICE: 6750 W. 47TH TERR. MISSION, KS 66203
MAIL: P.O. BOX 993 MISSION, KS 66201-0993
FIRE PROTECTION SYSTEMS - CONSULTANTS - DESIGN
FABRICATION - SALES - SERVICE

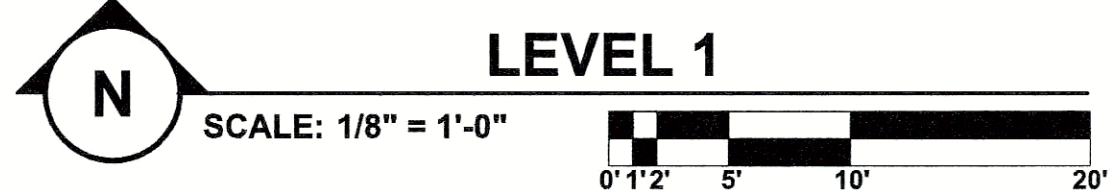
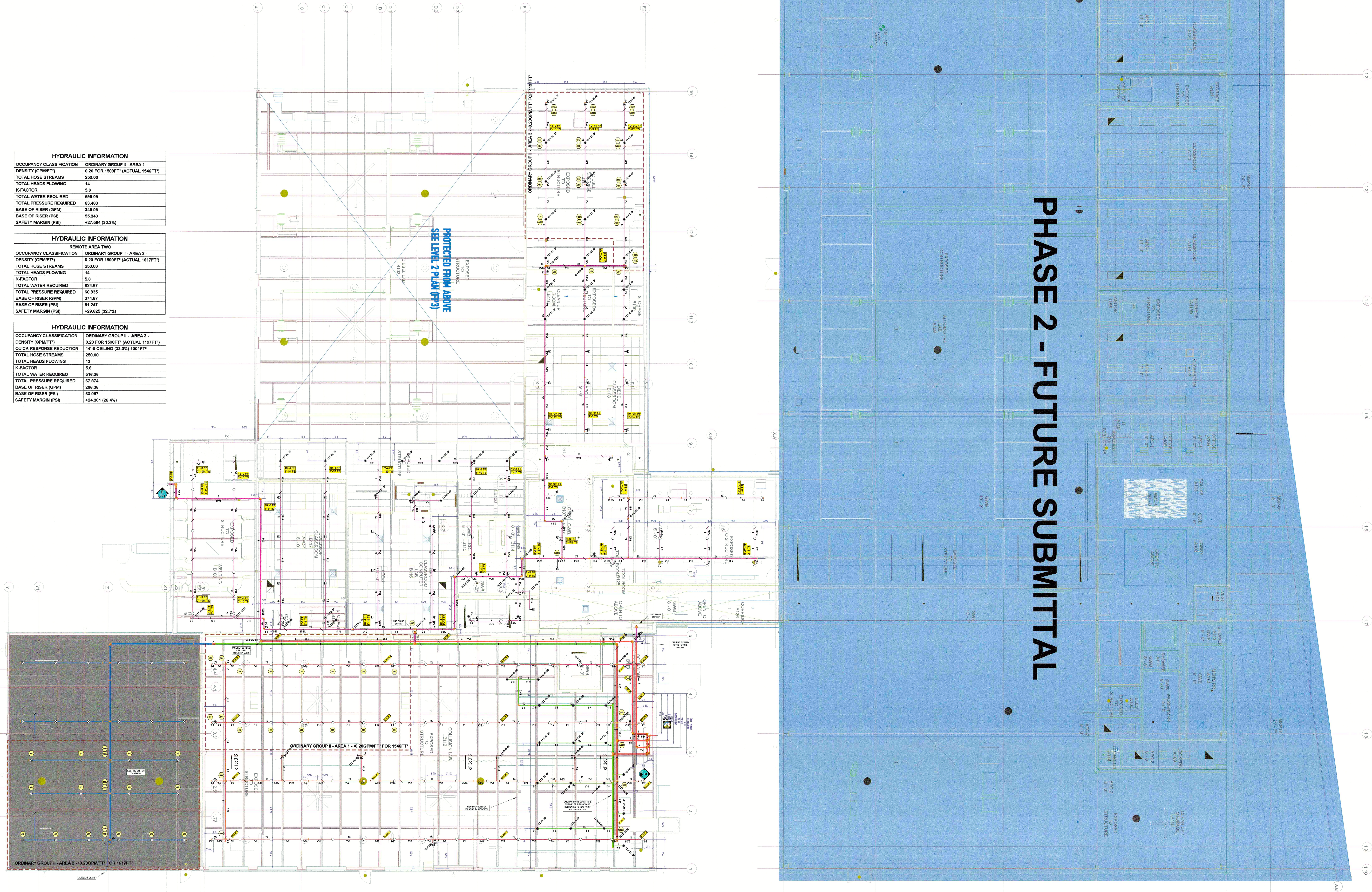
PAY ITEM: SPR
REVIEWING AUTHORITY: OWNER / CITY
HEADS THIS SHEET: N/A
HEADS THIS JOB: TBD
DRAWN BY: ALEC MOBLEY
DATE: 06-28-2024
REVISION DATE: 07-23-2024
SCALE: AS SHOWN
CONTRACT #: 4352CK
DWG #: **FP01**
SHEET: 1 OF 3

| SPRINKLER LEGEND - LEVEL 1 | | | | | | | | | |
|----------------------------|----------|--------------|-------|----------|--------------------|------|--------|-------------|--------------------|
| SYMBOL | QUANTITY | MANUFACTURER | SIN | K-FACTOR | TYPE | SIZE | FINISH | TEMPERATURE | NOTE |
| ● | 62 | YONG | W3001 | 5.6 | UPRINT | 1/2" | BRASS | 200°F | |
| ○ | 34 | YONG | W4401 | 5.6 | CONCEALED PENDENT | 1/2" | BRASS | 200°F | |
| ○ | 4 | YONG | W3005 | 5.6 | HORIZONTAL SPERALL | 1/2" | BRASS | 200°F | EXISTING TO REMAIN |
| ○ | 4 | YONG | W3005 | 5.6 | HORIZONTAL SPERALL | 1/2" | BRASS | 200°F | EXISTING TO REMAIN |
| ○ | 26 | GENERIC | | 5.6 | UPRINT | 1/2" | BRASS | 200°F | EXISTING TO REMAIN |
| ○ | 34 | YONG | W3001 | 5.6 | UPRINT | 1/2" | BRASS | 200°F | ON SP905 |
| ○ | 17 | YONG | W3014 | 11.2 | PENDENT | 1/2" | BRASS | 200°F | |
| TOTAL = 303 | | | | | | | | | |

| HYDRAULIC INFORMATION | |
|--------------------------|-----------------------------------|
| OCCUPANCY CLASSIFICATION | ORDINARY GROUP II - AREA 1 - |
| DENSITY (GPM/FT²) | 0.20 FOR 1500FT² (ACTUAL 1548FT²) |
| TOTAL HOSE STREAMS | 250.00 |
| TOTAL HEADS FLOWING | 14 |
| K-FACTOR | 5.6 |
| TOTAL WATER REQUIRED | 595.09 |
| TOTAL PRESSURE REQUIRED | 53.463 |
| BASE OF RISER (GPM) | 345.09 |
| BASE OF RISER (PSI) | 55.243 |
| SAFETY MARGIN (PSI) | +27.564 (30.3%) |

| HYDRAULIC INFORMATION | |
|--------------------------|-----------------------------------|
| REMOE AREA TWO | |
| OCCUPANCY CLASSIFICATION | ORDINARY GROUP II - AREA 2 - |
| DENSITY (GPM/FT²) | 0.20 FOR 1500FT² (ACTUAL 1517FT²) |
| TOTAL HOSE STREAMS | 250.00 |
| TOTAL HEADS FLOWING | 14 |
| K-FACTOR | 5.6 |
| TOTAL WATER REQUIRED | 524.67 |
| TOTAL PRESSURE REQUIRED | 50.835 |
| BASE OF RISER (GPM) | 374.67 |
| BASE OF RISER (PSI) | 51.247 |
| SAFETY MARGIN (PSI) | +25.625 (32.7%) |

| HYDRAULIC INFORMATION | |
|------------------------------|-----------------------------------|
| ORDINARY GROUP II - AREA 3 - | |
| DENSITY (GPM/FT²) | 0.20 FOR 1500FT² (ACTUAL 1197FT²) |
| QUICK RESPONSE REDUCTION | 14'-6" CEILING (33.3%) 1001FT² |
| TOTAL HOSE STREAMS | 250.00 |
| TOTAL HEADS FLOWING | 13 |
| K-FACTOR | 5.6 |
| TOTAL WATER REQUIRED | 516.36 |
| TOTAL PRESSURE REQUIRED | 67.874 |
| BASE OF RISER (GPM) | 286.36 |
| BASE OF RISER (PSI) | 63.057 |
| SAFETY MARGIN (PSI) | +24.301 (26.4%) |



| REVISIONS | |
|-----------|-------------|
| DATE | DESCRIPTION |
| | |

| SYMBOLS | |
|---------|----------------------------|
| SYMBOL | DESCRIPTION |
| ○ | HYDRAULIC REFERENCE POINTS |
| ○ | ELEV. OF TOP OF STEEL |
| ○ | ELEV. OF TOP OF STEEL |
| ○ | CEILING HEIGHT |
| ○ | DENOTES HANGER LOCATION |
| ○ | RISE UP OR DOWN |

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LEE'S SUMMIT, MO 64081

PE STAMP:

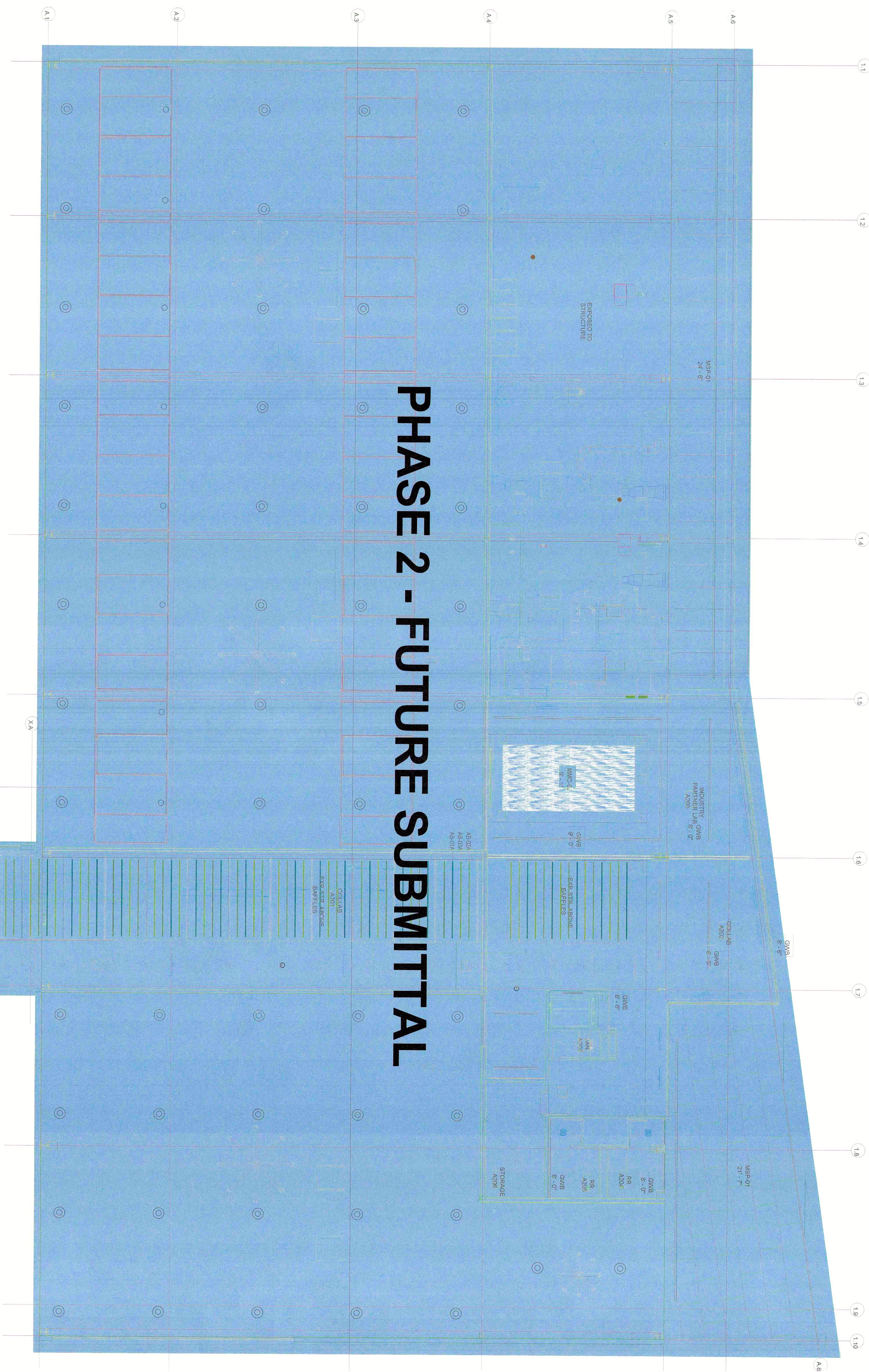
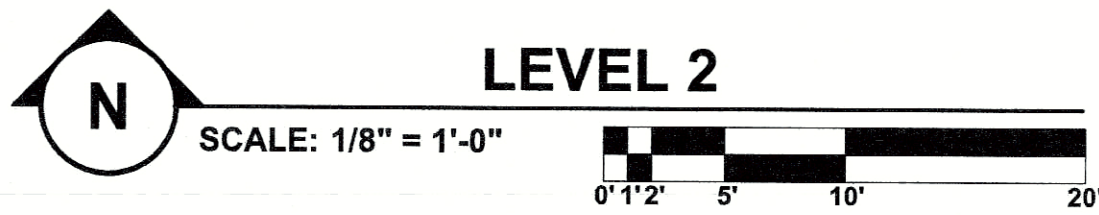
AMERICAN
FIRE SPRINKLER
OFFICE: 6750 W. 47TH TERR. MISSION, KS 66203
MAIL: P.O. BOX 683 MISSION, KS 66201-0683
FIRE PROTECTION SYSTEMS - DESIGN
FABRICATION - SALES - SERVICE

PAY ITEM: SPR
REVIEWING AUTHORITY: OWNER / CITY
HEADS THIS SHEET: 203
HEADS THIS JOB: TBD
DRAWN BY: ALEC MOBLEY
DATE: 06-28-2024
REVISION DATE:
SCALE: AS SHOWN
CONTRACT #: 4352CK
DWG #: FP02

SHEET: 2 OF 3

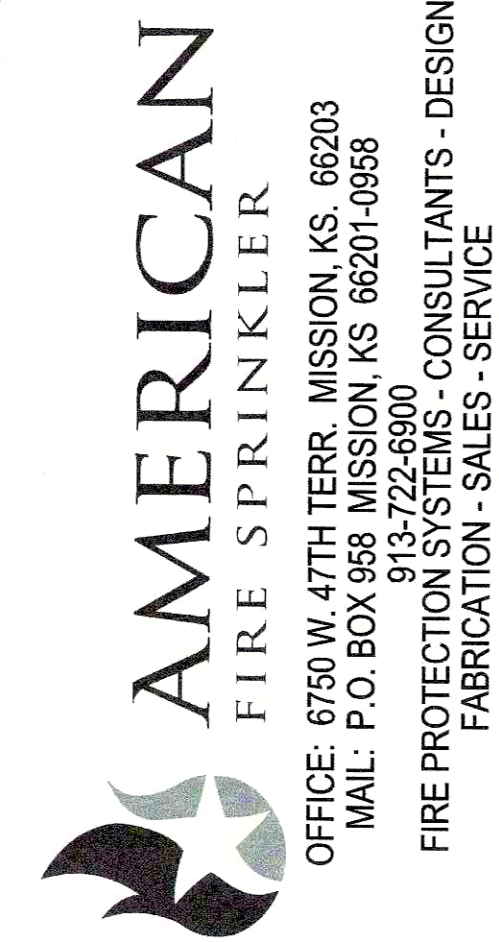
| HYDRAULIC INFORMATION | |
|--------------------------|--|
| OCCUPANCY CLASSIFICATION | ORDINARY GROUP II - AREA 4 - |
| DENSITY (GPWFT) | 0.20 FOR 1500FT ² (ACTUAL 1517FT ²) |
| TOTAL HOSE STREAMS | 250.00 |
| TOTAL HEADS FLOWING | 14 |
| K-FACTOR | 5.6 |
| TOTAL WATER REQUIRED | 575.51 |
| TOTAL PRESSURE REQUIRED | 72.573 |
| BASE OF RISER (PSI) | 325.51 |
| BASE OF RISER (PSI) | 55.269 |
| SAFETY MARGIN (PSI) | +18.752 (20.5%) |

| SPRINKLER LEGEND - LEVEL 2 | | | | | | | | | |
|----------------------------|----------|--------------|-------|----------|-------------------|------|--------|-------------|------|
| SYMBOL | QUANTITY | MANUFACTURER | SIN | K-FACTOR | TYPE | SIZE | FINISH | TEMPERATURE | NOTE |
| | 87 | VIKING | W3091 | 5.6 | UPRIGHT | 1/2" | BRASS | 200°F | |
| | 28 | VIKING | W3421 | 5.6 | CONCEALED PENDENT | 1/2" | BRASS | 200°F | |
| TOTAL - 87 | | | | | | | | | |



PHASE 2 - FUTURE SUBMITTAL

PE STAMP:



PAY ITEM: SPR
REVIEWING AUTHORITY: OWNER / CITY
HEADS THIS SHEET: 87
HEADS THIS JOB: TBD
DRAWN BY: ALEC MOBLEY
DATE: 06-28-2024
REVISION DATE: AS SHOWN
CONTRACT #: 4382CK
DWG #:

FP3

SHEET: 3 OF 3

MCC AUTOMOTIVE INSTITUTE

500 SW LONGVIEW RD.
LEE'S SUMMIT, MO 64081

REVISIONS

DATE

SYMBOLS

DESCRIPTION

HYDRAULIC REFERENCE POINTS

ELEV. BELOW TOP OF STEEL

ELEV. ABOVE FINISHED FLOOR

ELEV. ABOVE FINISHED FLOOR

ELEV. ABOVE FINISHED FLOOR

CEILING HEIGHT

DEVOTES HANGER LOCATION

RISE UP OR DOWN