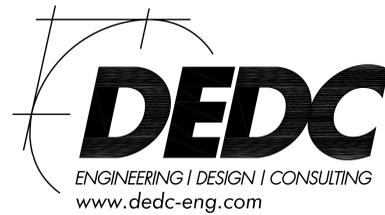
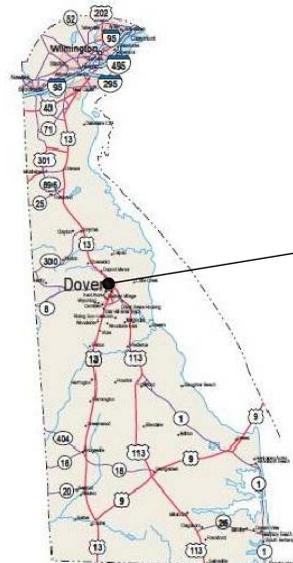


**STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCE
AND ENVIRONMENTAL CONTROL
OMB/DFM CONTRACT #MC1002000168**

**JESSE COOPER BUILDING
SPRINKLER INSTALLATION
IN
DOVER, DELAWARE**



315 South Chapel St.
Newark, DE 19711
Phone: (302)738-7172
Proj.# 11P378



JESSE COOPER BUILDING
417 FEDERAL STREET
DOVER, DELAWARE 19901

LOCATION PLAN



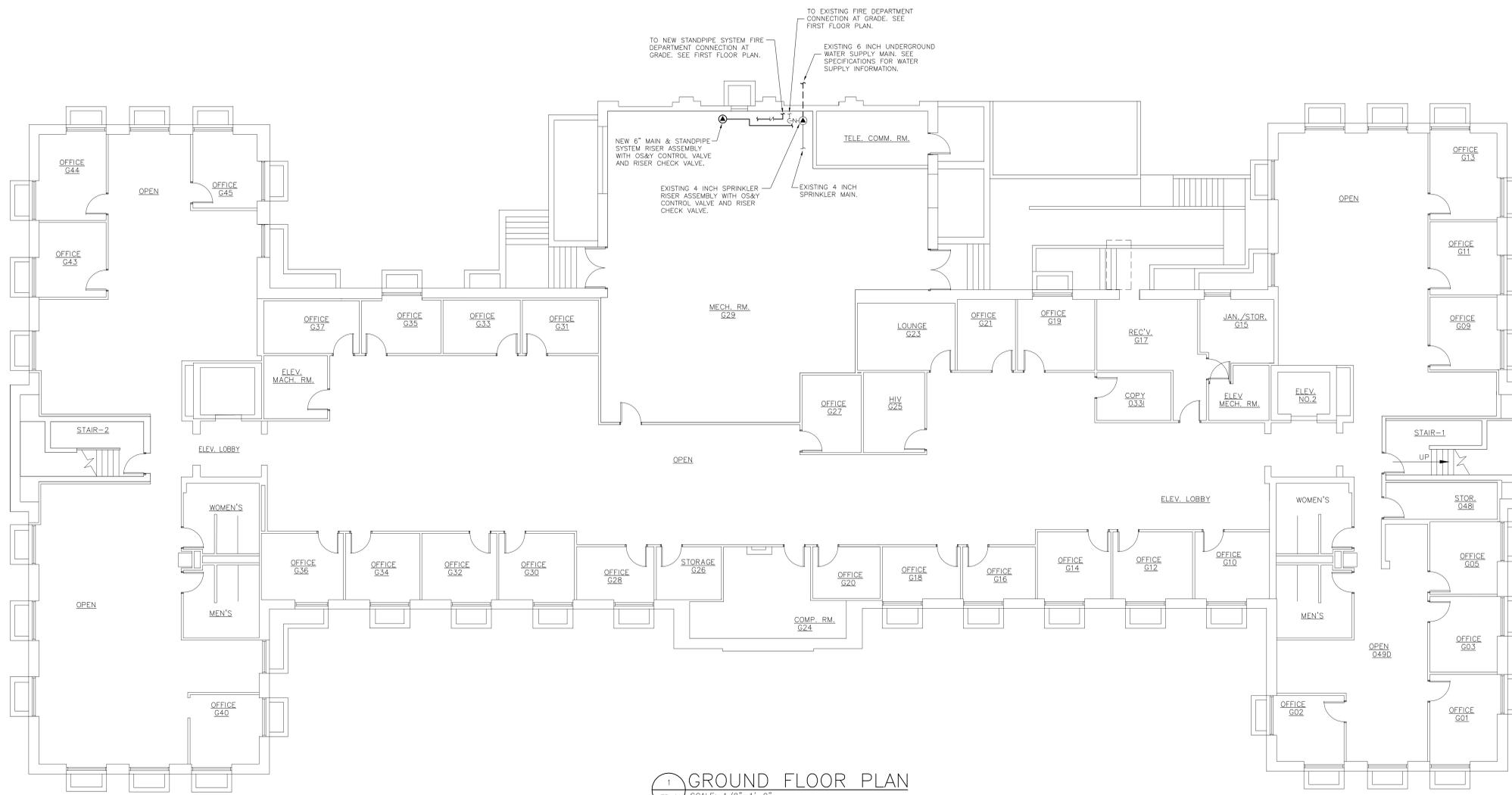
JESSE COOPER BUILDING
417 FEDERAL STREET
DOVER, DELAWARE 19901

**JESSE COOPER BUILDING
SITE PLAN**

DRAWING LIST:

DEDC #	REV #	TITLE
FS-1	A	NEW STANDPIPE SYSTEM - GROUND FLOOR PLAN
FS-2	A	NEW STANDPIPE SYSTEM - FIRST FLOOR PLAN
FS-3	A	NEW STANDPIPE SYSTEM - SECOND FLOOR PLAN
FS-4	A	NEW STANDPIPE SYSTEM - THIRD FLOOR PLAN
FS-5	A	NEW STANDPIPE SYSTEM - DETAILS & NOTES

ISSUED FOR 90% STATE REVIEW: JUNE 8, 2012



1 GROUND FLOOR PLAN
FS-1 SCALE: 1/8"=1'-0"

- DRAWING NOTES:
- BUILDING FLOOR PLAN AS SHOWN IS FOR BID PURPOSES AND REFERENCE ONLY. FLOOR PLAN HAS NOT BEEN VERIFIED FOR ACCURACY.
 - CONTRACTOR SHALL FIELD COORDINATE THE DESIGN AND INSTALLATION OF A NEW MANUAL-WET STANDPIPE SYSTEM IN ACCORDANCE WITH NFPA 14, BID SPECIFICATIONS AND THE CITY OF DOVER FIRE MARSHAL OFFICE (AHJ).
 - NEW STANDPIPES WITH 2-1/2" FIRE HOSE VALVES SHALL BE INSTALLED IN EACH OF THE TWO EXISTING EXIT STAIRTOWERS. LOCATE HOSE VALVES AT MAIN FLOOR LANDINGS.
 - INSTALL NEW STANDPIPE SYSTEM RISER ASSEMBLY IN GROUND FLOOR MECHANICAL ROOM (G29) ADJACENT TO THE EXISTING SPRINKLER SYSTEM RISER AND WATER SUPPLY. SEE SCHEMATIC DETAIL ON DRAWING FS-5.
 - REFER TO BID SPECIFICATIONS FOR SYSTEM DESIGN, INSTALLATION AND TESTING REQUIREMENTS.

Delaware State License Number FAL-0039
Fire Alarm Certificate Number FAC-0023
Held By: Roger T. Boyce, CFPS, SET
Niccet Certification Number - 080677

Delaware State License Number FSL-0023
Fire Suppression Certificate Number FSC-0181
Held By: James A. Delp
Niccet Certification Number - 90112

JOHN R. FARINA P.E.
DELAWARE PE# 13559

REVISIONS						
REV.	REVISIONS	RVSD	CHCKD	APRVD	DATE	
A	ISSUED FOR 90% STATE REVIEW	JD	JRF	JRF	05/21/12	

DEDC
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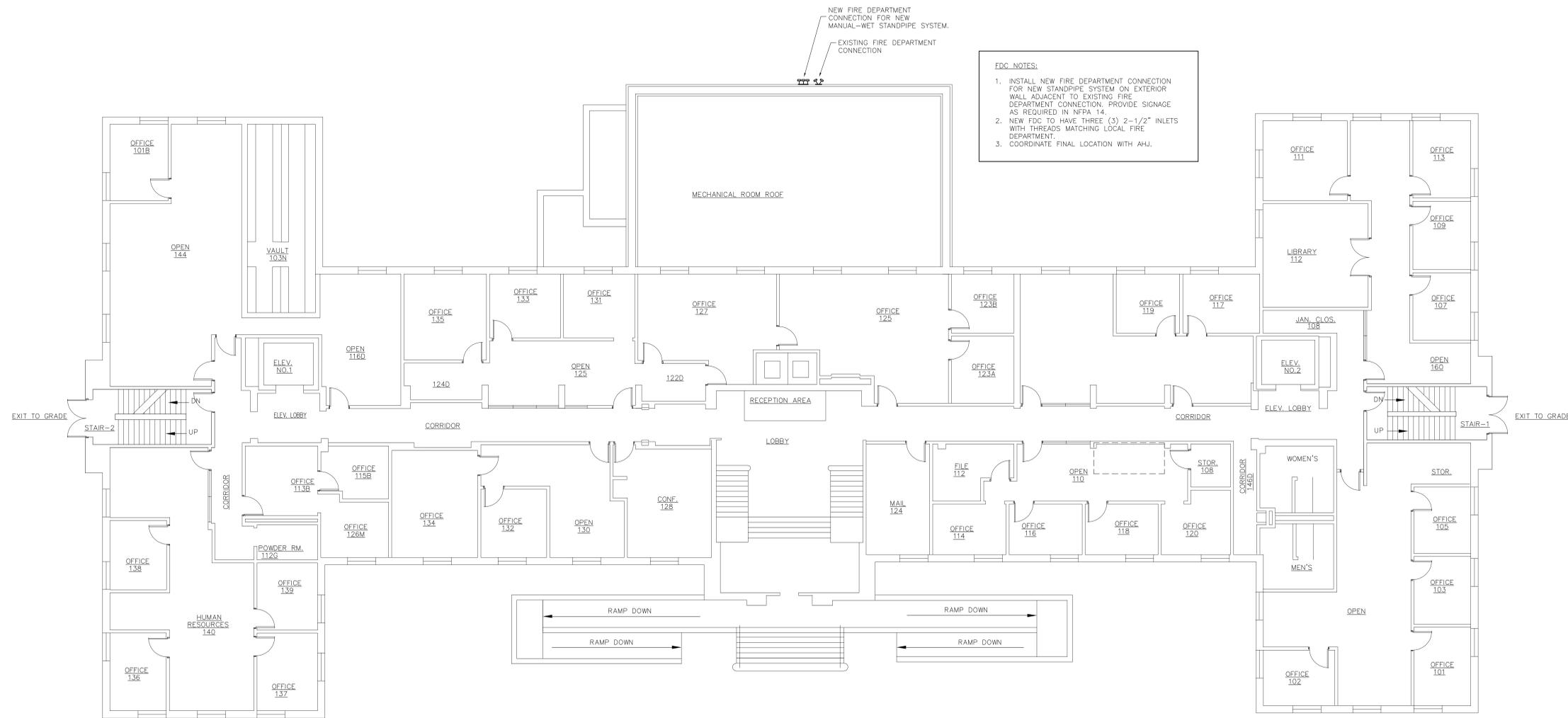
JESSE S. COOPER BUILDING 417 FEDERAL STREET DOVER, DELAWARE	DEDC PROJ.# 11P378 OMB/DFM# MC100200168
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SCALE	AS NOTED	DATE	REVISION NO.	A
DRAWN BY	JD	05/21/12		
CHECKED BY	JRF	05/21/12		
APPROVED BY	JRF	05/21/12		

FS-1

SYSTEMS APPROACH
Fire Protection
& Life Safety

3 Mill Park Court
Newark, DE 19713
Telephone: (302) 454-1000
Fax: (302) 454-4750



FDC NOTES:

1. INSTALL NEW FIRE DEPARTMENT CONNECTION FOR NEW STANDPIPE SYSTEM ON EXTERIOR WALL ADJACENT TO EXISTING FIRE DEPARTMENT CONNECTION. PROVIDE SIGNAGE AS REQUIRED IN NFPA 14.
2. NEW FDC TO HAVE THREE (3) 2-1/2" INLETS WITH THREADS MATCHING LOCAL FIRE DEPARTMENT.
3. COORDINATE FINAL LOCATION WITH AHJ.

1 FIRST FLOOR PLAN
 FS-2 SCALE: 1/8"=1'-0"

- DRAWING NOTES:**
1. BUILDING FLOOR PLAN AS SHOWN IS FOR BID PURPOSES AND REFERENCE ONLY. FLOOR PLAN HAS NOT BEEN VERIFIED FOR ACCURACY.
 2. CONTRACTOR SHALL FIELD COORDINATE THE DESIGN AND INSTALLATION OF A NEW MANUAL-WET STANDPIPE SYSTEM IN ACCORDANCE WITH NFPA 14, BID SPECIFICATIONS AND THE CITY OF DOVER FIRE MARSHAL OFFICE (AHJ).
 3. NEW STANDPIPES WITH 2-1/2" FIRE HOSE VALVES SHALL BE INSTALLED IN EACH OF THE TWO EXISTING EXIT STAIRTOWERS. LOCATE HOSE VALVES AT MAIN FLOOR LANDINGS.
 4. INSTALL NEW STANDPIPE SYSTEM RISER ASSEMBLY IN GROUND FLOOR MECHANICAL ROOM (G29) ADJACENT TO THE EXISTING SPRINKLER SYSTEM RISER AND WATER SUPPLY. SEE SCHEMATIC DETAIL ON DRAWING FS-5.
 5. REFER TO BID SPECIFICATIONS FOR SYSTEM DESIGN, INSTALLATION AND TESTING REQUIREMENTS.

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 Nicet Certification Number - 080677

Delaware State License Number FSL-0023
 Fire Suppression Certificate Number FSC-0181
 Held By: James A. Delp
 Nicet Certification Number - 90112

JOHN R. FARINA P.E.
 DELAWARE PE# 13559

REVISIONS						
REV.	REVISIONS	RVSD	CHCKD	APPRVD	DATE	
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JESSE S. COOPER BUILDING
 417 FEDERAL STREET
 DOVER, DELAWARE

DEDC PROJ.# 11P378
 OMB/DFM# MC1002000168

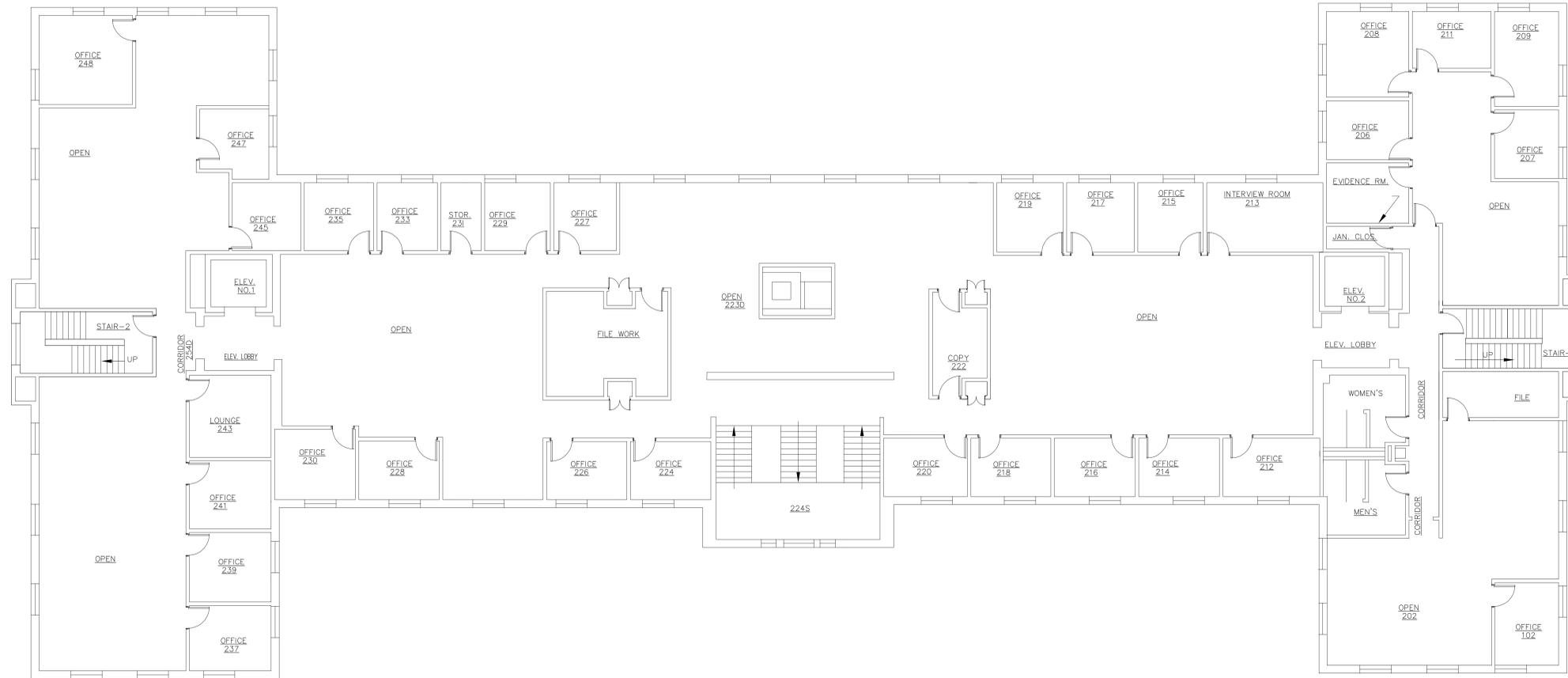
STANDPIPE SYSTEM INSTALLATION
**NEW STANDPIPE SYSTEM
 FIRST FLOOR PLAN**

SCALE	AS NOTED	DATE	REVISION NO.	A
DRAWN BY	JD	05/21/12		
CHECKED BY	JRF	05/21/12		
APPROVED BY	JRF	05/21/12		

FS-2

SYSTEMS APPROACH
 Fire Protection
 & Life Safety

3 Mill Park Court
 Newark, DE 19713
 Telephone: (302) 454-1000
 Fax: (302) 454-4750



1 SECOND FLOOR PLAN
FS-3 SCALE: 1/8"=1'-0"

DRAWING NOTES:

- BUILDING FLOOR PLAN AS SHOWN IS FOR BID PURPOSES AND REFERENCE ONLY. FLOOR PLAN HAS NOT BEEN VERIFIED FOR ACCURACY.
- CONTRACTOR SHALL FIELD COORDINATE THE DESIGN AND INSTALLATION OF A NEW MANUAL-WET STANDPIPE SYSTEM IN ACCORDANCE WITH NFPA 14, BID SPECIFICATIONS AND THE CITY OF DOVER FIRE MARSHAL OFFICE (AHJ).
- NEW STANDPIPES WITH 2-1/2" FIRE HOSE VALVES SHALL BE INSTALLED IN EACH OF THE TWO EXISTING EXIT STAIRTOWERS. LOCATE HOSE VALVES AT MAIN FLOOR LANDINGS.
- INSTALL NEW STANDPIPE SYSTEM RISER ASSEMBLY IN GROUND FLOOR MECHANICAL ROOM (G29) ADJACENT TO THE EXISTING SPRINKLER SYSTEM RISER AND WATER SUPPLY. SEE SCHEMATIC DETAIL ON DRAWING FS-5.
- REFER TO BID SPECIFICATIONS FOR SYSTEM DESIGN, INSTALLATION AND TESTING REQUIREMENTS.

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Nictet Certification Number - 080677

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DELAWARE PE# 13559

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JESSE S. COOPER BUILDING
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DOVER, DELAWARE

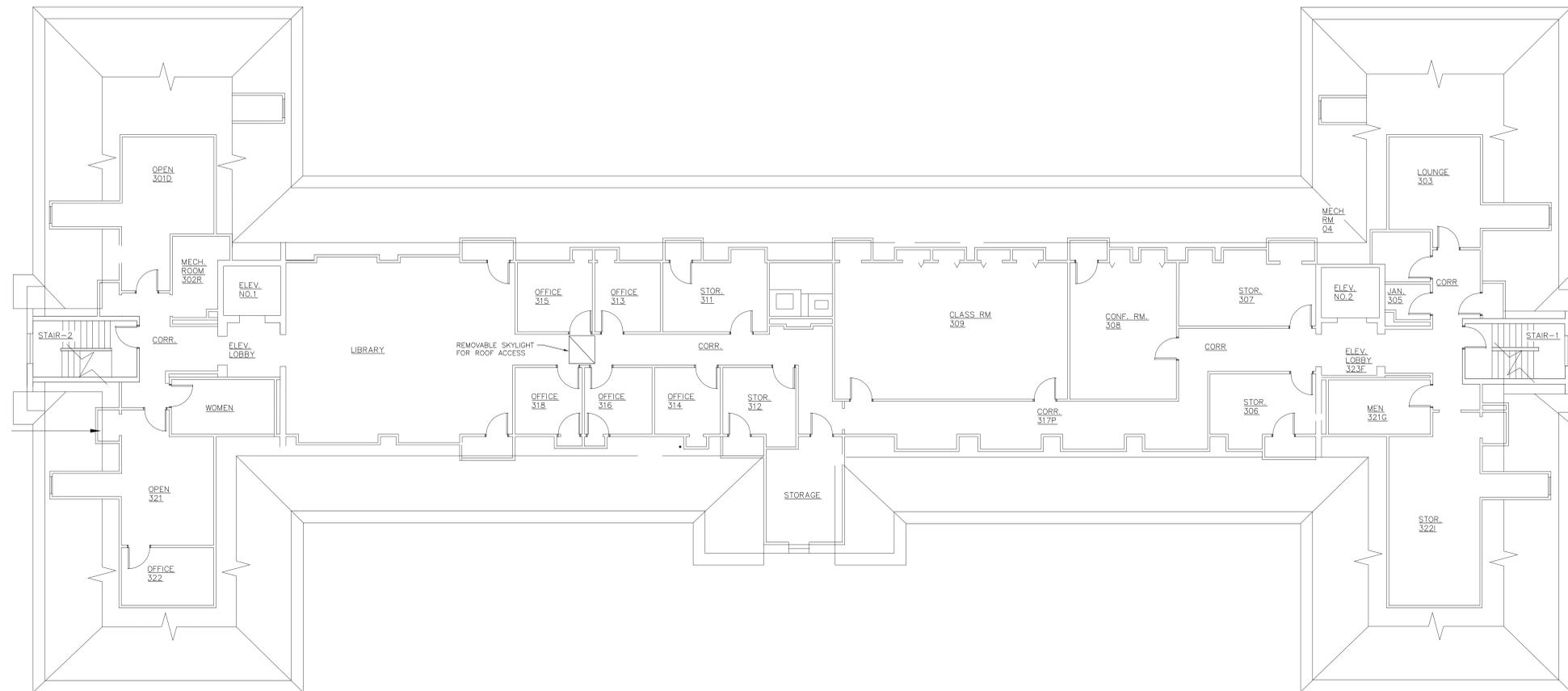
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STANDPIPE SYSTEM INSTALLATION

**NEW STANDPIPE SYSTEM
SECOND FLOOR PLAN**

SCALE	AS NOTED	DATE	REVISION NO.	A
DRAWN BY	JD	05/21/12		
CHECKED BY	JRF	05/21/12		
APPROVED BY	JRF	05/21/12		

FS-3



1 THIRD FLOOR PLAN
 FS-4 SCALE: 1/8"=1'-0"

DRAWING NOTES:

- BUILDING FLOOR PLAN AS SHOWN IS FOR BID PURPOSES AND REFERENCE ONLY. FLOOR PLAN HAS NOT BEEN VERIFIED FOR ACCURACY.
- CONTRACTOR SHALL FIELD COORDINATE THE DESIGN AND INSTALLATION OF A NEW MANUAL-WET STANDPIPE SYSTEM IN ACCORDANCE WITH NFPA 14, BID SPECIFICATIONS AND THE CITY OF DOVER FIRE MARSHAL OFFICE (AHJ).
- NEW STANDPIPES WITH 2-1/2" FIRE HOSE VALVES SHALL BE INSTALLED IN EACH OF THE TWO EXISTING EXIT STAIRTOWERS. LOCATE HOSE VALVES AT MAIN FLOOR LANDINGS.
- INSTALL NEW STANDPIPE SYSTEM RISER ASSEMBLY IN GROUND FLOOR MECHANICAL ROOM (G29) ADJACENT TO THE EXISTING SPRINKLER SYSTEM RISER AND WATER SUPPLY. SEE SCHEMATIC DETAIL ON DRAWING FS-5.
- REFER TO BID SPECIFICATIONS FOR SYSTEM DESIGN, INSTALLATION AND TESTING REQUIREMENTS.

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 Fire Suppression Certificate Number FSC-0181
 Held By: James A. Delp
 Nicet Certification Number - 90112

JOHN R. FARINA P.E.
 DELAWARE PE# 13559

REVISIONS						
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SYSTEMS APPROACH
Fire Protection & Life Safety

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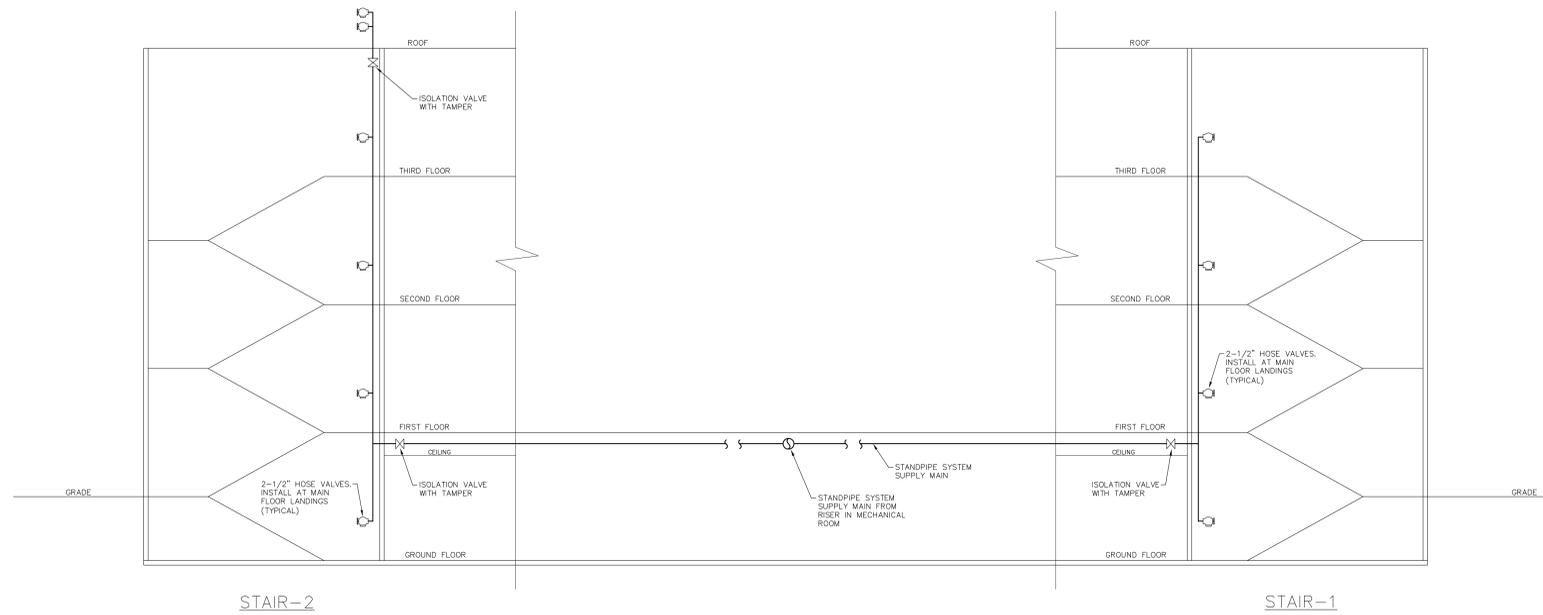
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JESSE S. COOPER BUILDING
 417 FEDERAL STREET
 DOVER, DELAWARE

DEDC PROJ.# 11P378
 OMB/DFM# MC100200168

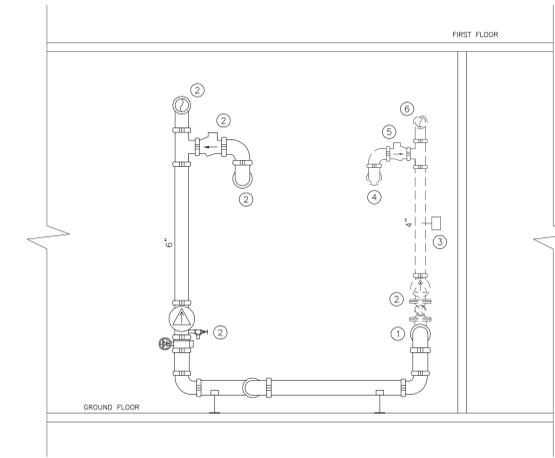
STANDPIPE SYSTEM INSTALLATION			
NEW STANDPIPE SYSTEM THIRD FLOOR PLAN			
SCALE	AS NOTED	DATE	REVISION NO. A
DRAWN BY	JD	05/21/12	FS-4
CHECKED BY	JRF	05/21/12	
APPROVED BY	JRF	05/21/12	



1 STANDPIPE SYSTEM SCHEMATIC
FS-5 SCALE: N.T.S.

NOTES:

- STANDPIPE SCHEMATIC AS SHOWN IS DIAGRAMMATIC AND IS INTENDED TO SHOW THE DESIGN CONCEPT FOR THE NEW MANUAL-WET STANDPIPE SYSTEM. ALL PIPING AND EQUIPMENT FOR THE NEW STANDPIPE SYSTEMS AS SHOWN ON THIS DIAGRAM SHALL BE COORDINATED WITH THE EXISTING BUILDING CONDITIONS AND OTHER TRADES.
- HOSE CONNECTIONS SHALL BE LOCATED 3 TO 5 FEET ABOVE LANDING AND PROVIDED WITH SIGNAGE IN ACCORDANCE WITH NFPA 14.
- DRAIN VALVES AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 14. ALL DRAINS SHALL BE ROUTED TO THE EXTERIOR OR A DRAIN LOCATION APPROVED BY THE OWNER AND CAPABLE OF HANDLING THE FLOW.
- REFER TO RISER DETAIL ON THIS DRAWING AND BID SPECIFICATIONS FOR ADDITIONAL DETAILS AND SYSTEM REQUIREMENTS.



SCHEMATIC LEGEND

- | | |
|---|---|
| ① REPLACE EXISTING 6X4 ELBOW AT CONNECTION TO WATER SUPPLY WITH NEW 6X6X4 TEE | ⑦ NEW STANDPIPE SYSTEM 6" BUTTERFLY VALVE AND RISER CHECK VALVE ASSEMBLY. |
| ② EXISTING SPRINKLER SYSTEM 4" OS&Y VALVE AND RISER CHECK VALVE ASSEMBLY. | ⑧ NEW 6" MAIN FROM FIRE DEPARTMENT CONNECTION AT GRADE |
| ③ EXISTING WATER FLOW DEVICE | ⑨ NEW 6" CHECK VALVE |
| ④ EXISTING 4" MAIN FROM FIRE DEPARTMENT CONNECTION AT GRADE | ⑩ NEW 6" SUPPLY MAIN TO BUILDING MANUAL-WET STANDPIPE SYSTEM |
| ⑤ EXISTING 4" CHECK VALVE | |
| ⑥ EXISTING 4" SUPPLY MAIN TO BUILDING SPRINKLER SYSTEM | |

2 STANDPIPE SYSTEM RISER DETAIL
FS-5 SCALE: N.T.S.

NOTES:

- STANDPIPE SYSTEM DETAIL AS SHOWN IS DIAGRAMMATIC AND IS INTENDED TO SHOW THE DESIGN CONCEPT FOR THE NEW MANUAL-WET STANDPIPE SYSTEM. ALL PIPING AND EQUIPMENT FOR THE NEW STANDPIPE SYSTEMS AS SHOWN ON THIS DIAGRAM SHALL BE COORDINATED WITH THE EXISTING BUILDING CONDITIONS AND OTHER TRADES.
- NEW STANDPIPE RISER ASSEMBLY SHALL BE COORDINATED WITH THE EXISTING SPRINKLER RISER AND ALL OTHER EQUIPMENT IN THE MECHANICAL ROOM.
- CONTRACTOR SHALL COORDINATE WITH THE OWNER AT ALL TIMES PRIOR TO SHUTTING DOWN THE EXISTING SPRINKLER SYSTEM FOR NEW WORK.
- REFER TO SCHEMATIC PLAN ON THIS DRAWING, DRAWINGS FS-1 THROUGH FS-4 AND THE BID SPECIFICATIONS FOR ADDITIONAL DETAILS AND SYSTEM REQUIREMENTS.
- EXISTING PIPING AND EQUIPMENT IS SHOWN AS DASHED LINES IN DETAIL.

STANDPIPE SYSTEM NOTES:

- THE NEW STANDPIPE SYSTEM WORK SHALL INCLUDE THE DESIGN, INSTALLATION AND TESTING OF A NEW MANUAL-WET STANDPIPE SYSTEM FOR THE JESSE COOPER BUILDING. THE SPRINKLER SYSTEM DESIGN AND INSTALLATION SHALL BE COORDINATED WITH THE EXISTING BUILDING CONDITIONS. CONTRACTOR SHALL COORDINATE INSTALLATION AND TESTING SCHEDULE WITH THE STATE OF DELAWARE PROJECT MANAGER THROUGHOUT THE PROJECT.
- THE STANDPIPE SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 14, THE BID DOCUMENTS, DELAWARE STATE FIRE PREVENTION REGULATIONS (DSFPR), STATE OF DELAWARE DIVISION OF FACILITIES MANAGEMENT (DFM) FACILITY DESIGN STANDARDS AND THE CITY OF DOVER FIRE MARSHAL'S OFFICE (AHJ). THE CONTRACTOR SHALL PROVIDE TO THE STATE OF DELAWARE A COMPLETE, FULLY OPERATIONAL AND FULLY COORDINATED CODE COMPLIANT CLASS I MANUAL-WET STANDPIPE SYSTEM.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND EQUIPMENT DATA SHEETS TO THE STATE OF DELAWARE DFM AND AHJ FOR APPROVAL PRIOR TO STARTING ANY INSTALLATION WORK.
- CONTRACTOR SHALL DOCUMENT ALL FIELD CHANGES TO THE APPROVED SHOP DRAWINGS AND SHALL ISSUE FINAL AS-BUILT DOCUMENTATION TO AT COMPLETION OF THE PROJECT.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE BUILDING STRUCTURE AND BUILDING EQUIPMENT DURING ALL INSTALLATION AND TESTING WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND APPROVALS AND BE RESPONSIBLE FOR PAYMENT OF ALL FEES RELATIVE TO THE INSTALLATION AND TESTING FOR THE STANDPIPE SYSTEM. ALL PERMIT AND APPROVAL FEES SHALL BE INCLUDED IN THE BID PROPOSALS
- ALL VALVES INSTALLED ON THE NEW STANDPIPE SYSTEM SHALL BE TAGGED IN ACCORDANCE WITH NFPA 13 AND NFPA 14. ALL TAGS/SIGNS SHALL BE EASILY VISIBLE AND SHALL INDICATE THE SYSTEM AND/OR THE PORTION OF THE BUILDING SERVED. TAGS/SIGNS SHALL INDICATE WHETHER THE VALVE IS TO BE NORMALLY OPEN OR NORMALLY CLOSED.
- CONTRACTOR SHALL COORDINATE THE DESIGN AND INSTALLATION OF ALL PIPING, HANGERS, SUPPORTS AND STANDPIPE SYSTEM COMPONENTS WITH ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL FEATURES OF THE BUILDING.
- SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LAYOUT AND COORDINATION OF SHOP DRAWINGS PRIOR TO FABRICATION AND INSTALLATION OF PIPE AND/OR EQUIPMENT.
- ALL STANDPIPE SYSTEM PIPING AND FITTINGS SHALL BE INSTALLED SO THAT THE SYSTEMS CAN BE DRAINED AND FLUSHED IN ACCORDANCE WITH NFPA 13 AND 14. TRAPPED PIPING SHALL BE DRAINED IN ACCORDANCE WITH NFPA 13. THE DRAIN DISCHARGE SHALL CONFORM TO ANY HEALTH OR WATER DEPARTMENT REGULATIONS.
- PIPE HANGERS AND SUPPORTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND NFPA 14. ALL HANGER MATERIAL AND METHODS SHALL BE UL LISTED AND APPROVED. ALL STANDPIPE SYSTEM PIPING SHALL BE SECURED TO THE BUILDING STRUCTURE USING THE GUIDELINES AS LISTED BY THE MANUFACTURER AND AS LISTED IN NFPA 13 AND NFPA 14.
- ALL PENETRATIONS OF FIRE RATED WALLS OR ASSEMBLIES SHALL BE FIRE STOPPED TO THE REQUIRED FIRE RATING BY THE SPRINKLER CONTRACTOR. CLEARANCE IN ACCORDANCE WITH NFPA 13 SHALL BE PROVIDED AROUND ALL PIPING EXTENDING THROUGH WALLS, FLOORS, PLATFORMS AND FOUNDATIONS. FOR PIPING THAT PASSES THROUGH FOUNDATION WALLS BELOW GRADE A MINIMUM OF 1 INCH CLEARANCE AROUND THE PIPE SHALL BE PROVIDED. ALL PIPING THROUGH CONCRETE WALL SHALL BE PROVIDED WITH STEEL SLEEVES.
- FINAL LOCATION OF THE NEW FIRE DEPARTMENT CONNECTION (FDC) SHALL BE COORDINATED WITH THE AHJ. SIGNAGE FOR FDC SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 14 AND AHJ.

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JOHN R. FARINA P.E.
DELAWARE PE# 13559

REVISIONS					
REV.	REVISIONS	RVSD	CHCKD	APPRVD	DATE
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SYSTEMS APPROACH
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JESSE S. COOPER BUILDING 417 FEDERAL STREET DOVER, DELAWARE	DEDC PROJ.# 11P378 OMB/DFM# MC100200168
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STANDPIPE SYSTEM INSTALLATION			
NEW STANDPIPE SYSTEM DETAILS & NOTES			
SCALE	AS NOTED	DATE	REVISION NO. A
DRAWN BY	JD	05/21/12	FS-5
CHECKED BY	JRF	05/21/12	
APPROVED BY	JRF	05/21/12	