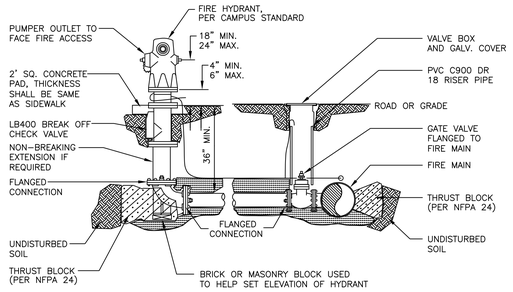
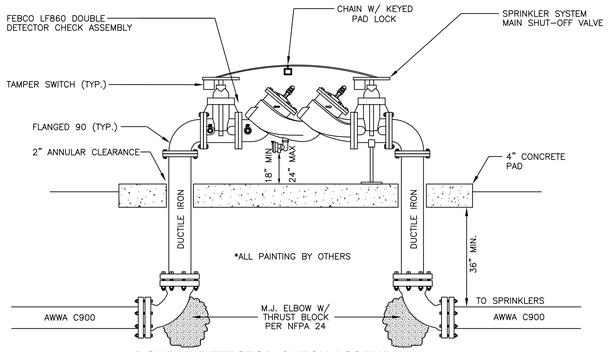


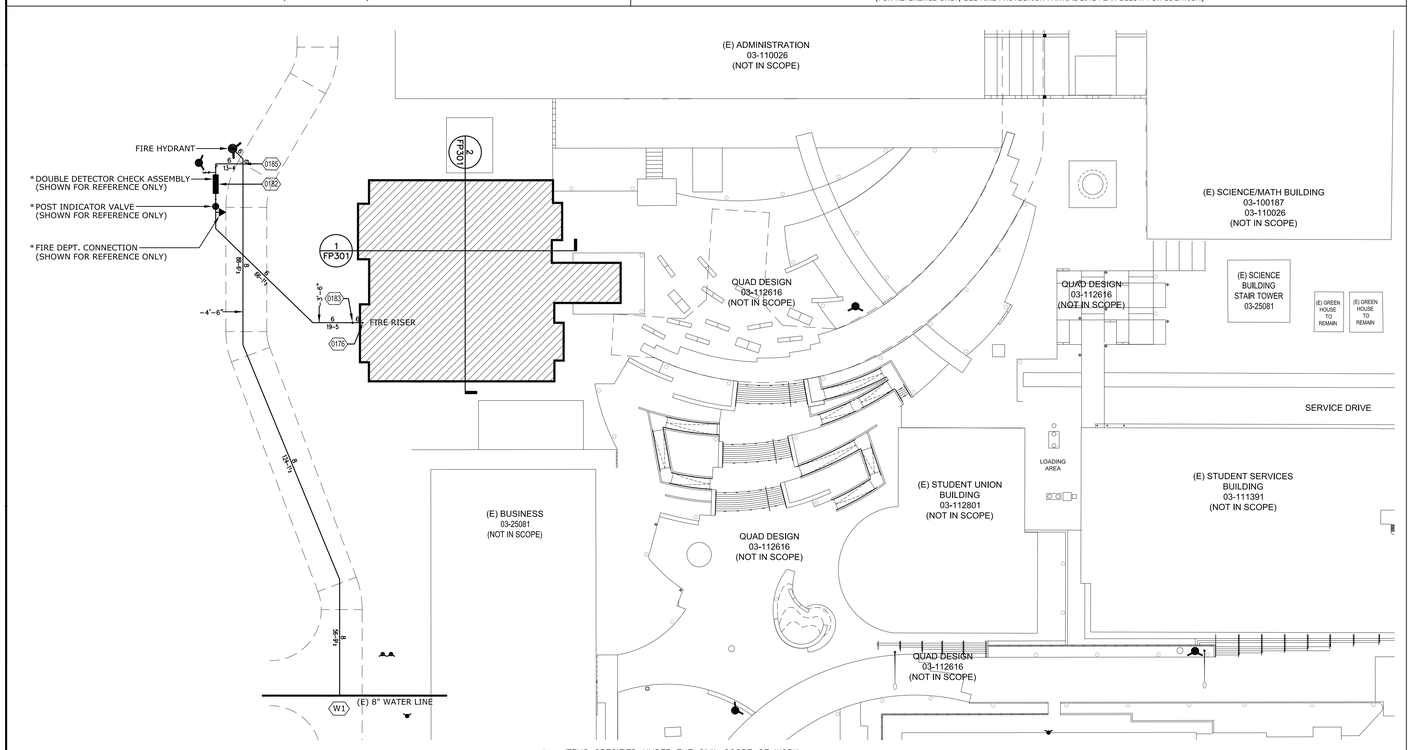
FIRE HYDRANT DETAIL (BY OTHERS)

NO SCALE (FOR REFERENCE ONLY)



DOUBLE DETECTOR CHECK ASSEMBLY

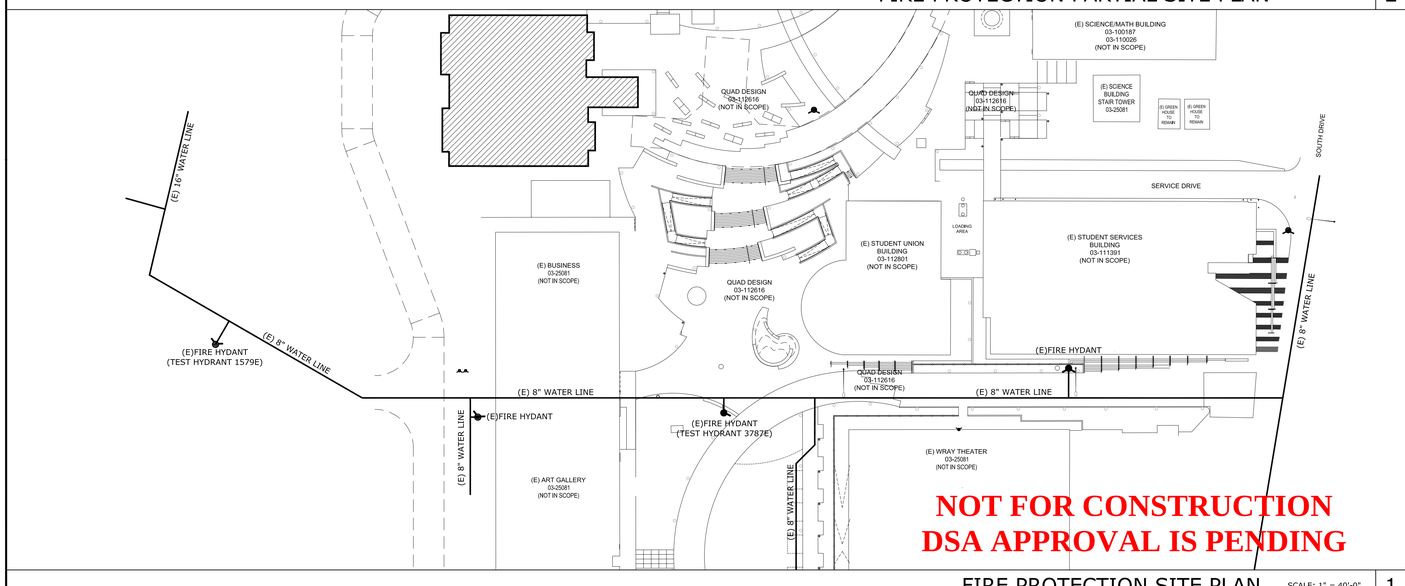
(FOR REFERENCE ONLY; SEE FIRE PROTECTION PARTIAL SITE PLAN BELOW FOR LOCATION)



* – ITEMS SPECIFIED UNDER THE CIVIL SCOPE OF WORK.

FIRE PROTECTION PARTIAL SITE PLAN

SCALE: 1" = 30'-0" 2



NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

FIRE PROTECTION SITE PLAN

SCALE: 1" = 40'-0" 1

MATERIAL NOTES

ALL PIPING AND ACCESSORIES SHALL BE NEW AND OF DOMESTIC MANUFACTURE

1. ALL PIPE 1"–2" TO BE BLACK STEEL, SCHEDULE 40 STANDARD WALL THREADED OR ROLL GROOVED, C=120. (USE GALVANIZED PIPE FOR DRAINS)
2. ALL 2–1/2" AND LARGER PIPE TO BE BLACK STEEL, SCHEDULE 10, ROLL GROOVED, C=120.
3. ALL 1"–2" FITTINGS TO BE BLACK CAST IRON, SCREWED, 125# CAST OR DUCTILE IRON, SCREWED, 150# WWP (USE GALVANIZED FITTINGS FOR DRAINS). ALL FITTINGS FOR ROLL GROOVED BRANCH LINES ARE TO BE DUCTILE IRON, GROOVED, 175# AND WELDED OUTLETS FOR LINES (UNLESS NOTED OTHERWISE).
4. ALL 2–1/2" AND LARGER FITTINGS TO BE DUCTILE IRON, GROOVED, 175# WITH GROOVED ENDS AND WELDED OUTLETS FOR LINES (UNLESS OTHERWISE NOTED).
5. ALL GROOVED COUPLINGS ARE TO BE RIGID NON–FLEXIBLE TYPE (UNLESS OTHERWISE NOTED).
6. GROOVED FLEXIBLE COUPLINGS SHALL BE INSTALLED WITHIN 24" OF THE TOP AND BOTTOM OF ALL RISERS AND WITHIN 24" OF THE TOP OF DROPS EXCEEDING 15' IN LENGTH SUPPLYING MORE THAN ONE SPRINKLER HEAD.
7. ALL PIPE SUPPORTS TO BE PER NFPA 13 REQUIREMENTS. ACTUAL SIZE, TYPE AND ROD LENGTHS TO BE PER DETAILS OR AS NOTED ON PLANS.
8. THE LENGTH OF AN UNSUPPORTED ARM–OVER TO A SPRINKLER/DROP SHALL NOT EXCEED 12" IF THE STATIC PRESSURE IS GREATER THAN 100 PSI.
9. ALL MATERIALS TO BE UL LISTED AND/OR FM APPROVED FOR FIRE PROTECTION SYSTEMS. ALL MATERIALS SHALL BE IN ACCORDANCE WITH NFPA STANDARDS.
10. ALL MATERIALS SHOWN AND/OR LISTED AS SPECIFIED SHALL BE SUBSTITUTED WITH AN EQUAL OR BETTER PRODUCT DUE TO AVAILABILITY.
11. FIRE HOSE CABINET SUPPLY PIPE MATERIAL, ASTM A53 WELDED AND SEEMLESS STEEL PIPE PER NFPA 14 REQUIREMENTS.

CURRENT CODES AND STANDARDS

2013 CA BUILDING CODE – TITLE 24 PART 2 VOLUME #1 AND #2
2013 CA ELECTRICAL CODE – TITLE 24 PART 3
2013 CA MECHANICAL CODE – TITLE 24 PART 4
2013 CA PLUMBING CODE – TITLE 24 PART 5
2013 CA FIRE CODE – TITLE 24 PART 9
2013 CA BUILDING STANDARDS – TITLE 24 PART 12
2013 NFPA 13 INSTALLATION OF SPRINKLERS SYSTEMS PLUS CALIFORNIA AMENDMENTS
2013 NFPA 14 INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEMS
2013 NFPA 72 NATIONAL FIRE ALARM CODE – SEE CALIFORNIA AMENDMENTS
2013 NFPA 20 INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
2013 NFPA 22 WATER TANKS FOR PRIVATE FIRE PROTECTION
2013 NFPA 24 INSTALLATION OF PRIVATE FIRE SERVICE MAINS PLUS CALIFORNIA AMENDMENTS
2013 NFPA 80 FIRE DOORS AND OTHER OPENING PROTECTIVES
2013 NFPA 110 EMERGENCY AND STANDBY POWER SYSTEMS
ICC 300–13 STANDARD ON BLEACHERS, FOLDING AND TELESCOPIC SEATING AND GRANDSTANDS
2013 NFPA 17A–UL 300 FOR CLASS I HOOD FIRE SUPPRESSION SYSTEM (WET CHEMICAL SYSTEM)
2012 NFPA 2001 CLEAN AGENT FIRE EXTINGUISHING SYSTEMS
TITLE 19 CCR STATE FIRE MARSHAL REGULATIONS

DSA CODES AND STANDARDS

(UNDER THE 2013 CALIFORNIA BUILDING CODE)

TITLE 19, STATE FIRE MARSHAL – PUBLIC SAFETY
TITLE 24, CALIFORNIA BUILDING AND FIRE CODE (PARTS 1–9 INCLUSIVE)
NFPA 13, INSTALLATION OF FIRE SPRINKLER SYSTEMS
NFPA 14, INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEMS
NFPA 20, INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
NFPA 25, INSPECTION, TESTING AND MAINTENANCE OF WATER–BASED FIRE PROTECTION SYSTEMS (WITH CALIFORNIA AMENDMENTS)

SHEET INDEX

FIRE TEST INFORMATION

STATIC PSI: 90
RESIDUAL PSI: 80
FLOW GPM: 5,000
DATE: 11/20/15

INFORMATION FROM: COUNTY OF LOS ANGELES FIRE DEPT.

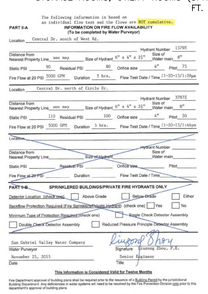
DESIGN CRITERIA

BRACING DESIGN: Ss= 2.37/Cp= 1.11

LIGHT HAZARD (.10 OVER 1,500 SQ. FT.) (COVERAGE: 225 SQ. FT. MAX.)
ORDINARY HAZARD (GROUP 1) (.15 OVER 1,500 SQ. FT.) (COVERAGE: 130 SQ. FT. MAX.)

AREA ABOVE THE CEILING: NON–COMBUSTIBLE OBSTRUCTED (ATTIC SPRINKLERS NOT REQUIRED)

AREA BELOW THE CEILING: UN–OBSTRUCTED (SPRINKLERS: 225 SQ. FT. MAX.) STORAGE ROOMS, UTILITY ROOMS (SPRINKLERS: 130 SQ. FT. MAX.)



The following information is based on an individual fire hydrant and the flows are NOT cumulative.

PART 5-A INFORMATION ON FIRE FLOW AVAILABILITY
(To be completed by Water Purveyor)

Location: Central Dr., south of West St.
Distance from Nearest Property Line: see map — Size of Hydrant: 6" x 4" x 2½" — Hydrant Number: 1329E — Size of Water main: 8"
Static PSI: 90 — Residual PSI: 80 — Orifice size: 4" — Pitot: 75
Fire Flow at 20 PSI: 5000 GPM — Duration: 5 hrs. — Flow Test Date / Time: 11/20-12/1:00pm

Location: Central Dr. north of Circle Dr.
Distance from Nearest Property Line: see map — Size of Hydrant: 6" x 4" x 2½" — Hydrant Number: 3387E — Size of Water main: 8"
Static PSI: 110 — Residual PSI: 100 — Orifice size: 4" — Pitot: 90
Fire Flow at 20 PSI: 5000 GPM — Duration: 5 hrs. — Flow Test Date / Time: 11/20-12/1:45pm

Location:
Distance from Nearest Property Line: — Size of Hydrant: — Hydrant Number: — Size of Water main:
Static PSI: — Residual PSI: — Orifice size: — Pitot:
Fire Flow at 20 PSI: — Duration: — Flow Test Date / Time:

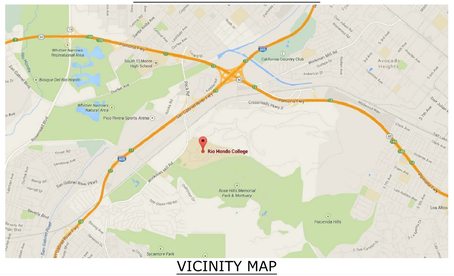
PART 5-B SPRINKLERED BUILDINGS/PRIVATE FIRE HYDRANTS ONLY
Detector Location (check one): ☐ Above Grade ☐ Below Grade ☐ Either
Backflow Protection Required (Fire Sprinkler/Standpipe systems) (check one): ☐ Yes ☐ No
Minimum Type of Protection Required (check one): ☐ Double Check Detector Assembly ☐ Reduced Pressure Principle Detector Assembly
☐ Double Check Detector Assembly ☐ Reduced Pressure Principle Detector Assembly

San Gabriel Valley Water Company — Rudolph Shaw
Water Purveyor — Signature
November 25, 2015 — Senior Engineer
Date — Title

This information is Considered Valid for Twelve Months

Fire Department approval of building plans shall be required prior to the issuance of a Building Permit by the jurisdictional Building Department. Any deficiencies or water systems will need to be resolved by the Fire Prevention Division prior to the issuance of a Building Permit.

FIRE FLOW INFORMATION



VICINITY MAP

JOB SPECIFIC & GENERAL NOTES

1. SCOPE OF WORK: INSTALL NEW WET PIPE FIRE SPRINKLER SYSTEM TO EXISTING BUILDING AS SHOWN. P.O.C. IS AT A FLANGE, 0'–6" A.F.F. INSIDE THE BUILDING. ALL UNDERGROUND WORK IS BY OTHERS.
2. THE SYSTEM HAS BEEN HYDRAULICALLY CALCULATED TO PROVIDE .10 GPM/SQ. FT. OVER THE MOST DEMANDING 1500 SQ. FT. FOR LIGHT HAZARD OCCUPANCIES. A MINIMUM 10% CUSHION SHALL BE MAINTAINED. AREAS ARE INCREASED BY 30% WHERE CEILING SLOPE EXCEEDS 2:12.
3. THE SPRINKLER SYSTEMS SHALL COMPLY WITH NFPA 13, 2013 ED., CITY OF WHITTIER AND DSA REQUIREMENTS (TITLE 24 PART 1, 2, 5, 9 & 12).
4. ALL MATERIAL SHALL BE UL LISTED FOR FIRE PROTECTION.
5. BRANCH LINE PIPING (1"–2"): BLACK SCH. 40 THREADED (ASTM A–53) WITH CAST OR DUCTILE IRON SCREWED FITTINGS OR ROLL–GROOVED (ASTM A–795) WITH WELDED OUTLETS AND GROOVED FITTINGS.
6. SPRINKLER MAIN PIPING (2–1/2"–6"): BLACK SCH. 10 ROLL–GROOVED (ASTM A–795) WITH WELDED OUTLETS AND GROOVED FITTINGS.
7. SPRINKLERS ARE INSTALLED BELOW EXTERIOR NON–COMBUSTIBLE WALKWAYS AND OVERHANGS.
8. END HANGERS SHALL BE RESTRAINED (SEE DETAIL ON PLANS).
9. ALL PAINTING AND PRIMING IS BY OTHERS.
10. ALL WIRING IS BY OTHERS.
11. PENETRATIONS OF RATED ASSEMBLIES SHALL BE FIRE STOPPED IN ACCORDANCE WITH UL LISTINGS AND THE LATEST CBC REQUIREMENTS IN CHAPTER 7, SECTION 714.
12. ALL VALVES SHALL BE EQUIPPED WITH A TAMPER SWITCH AND LOCKED IN THE OPEN POSITION.
13. ALL BRANCH LINES SHALL BE LATERALLY RESTRAINED AGAINST EXCESSIVE MOVEMENT.
14. BRANCH LINE HANGERS SHALL NOT RESTRAIN BRANCH LINES FROM LONGITUDINAL MOVEMENT DURING AN EARTHQUAKE.
15. SYSTEM COMPONENTS SHALL BE RATED AT 175 PSI MINIMUM.
16. SPRINKLERS SHALL BE CENTERED AT CENTER OR QUARTER POINTS OF CEILING PANELS.
17. AT VARIOUS STAGES AND UPON COMPLETION, THE SYSTEMS SHALL BE TESTED IN THE PRESENCE OF DSA AND LOCAL FIRE AUTHORITY.
18. THE SPACING AND DETAILS OF THE SUPPORT AND BRACING OF FIRE SPRINKLER PIPING SHALL COMPLY WITH THE 2013 EDITION OF NFPA 13 AND DSA REQUIREMENTS.
19. NFPA 13 (2013) SEC. 10.10.2.1, UNDERGROUND MAINS AND LEAD–IN CONNECTIONS TO SYSTEM RISER SHALL BE COMPLETELY FLUSHED BEFORE CONNECTION IS MADE TO OVERHEAD SPRINKLER PIPING SYSTEMS (WITNESSED BY THE INSPECTOR OF RECORD) – BY OTHERS.
20. NFPA 13 (2013) SEC. 10.10.2.2.1, ALL INTERIOR PIPING AND APPURTENCES SUBJECT TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI AND SHALL MAINTAIN THE PRESSURE WITHOUT LOSS FOR 2 HOURS (WITNESSED BY THE INSPECTOR OF RECORD). LOCAL FIRE DEPARTMENT SHALL BE NOTIFIED OF DATE AND TESTING SO THAT THEY MAY OBSERVE TESTING.
21. NFPA (2013) SEC. 6.2.9, PROVIDE SPARE SPRINKLER HEAD CABINET, SPRINKLER WRENCH AND NO FEWER THAN 6 SPARE SPRINKLER HEADS MATCHING THE TYPES AND TEMPERATURE RATINGS IN EACH PROTECTED BUILDING FOR SYSTEMS LESS THAN 300 SPRINKLERS (12 SPARE SPRINKLER HEADS FOR SYSTEMS 300 TO 1000 SPRINKLERS).
22. NFPA 13 (2013) SEC. 9.3.6.3, THE END SPRINKLER ON A LINE SHALL BE RESTRAINED AGAINST EXCESSIVE VERTICAL AND LATERAL MOVEMENT.
23. CBC SEC. 903.4.1, MAIN FIRE ALARM PANEL VALVE MONITORING AND WATER–FLOW ALARM AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT AND SHALL BE AUTOMATICALLY TRANSMITTED TO AN APPROVED CENTRAL STATION MONITORING COMPANY (BY OTHERS).
24. NFPA 13 (2013) FLOW SWITCH SHALL BE CONNECTED TO A 10" OUTSIDE ALARM BELL AT EACH RISER. APPROVED IDENTIFICATION SIGNS SHALL BE PROVIDED FOR OUTSIDE ALARM BELL, "SPRINKLER FIRE ALARM – WHEN BELL RINGS CALL 911/FIRE DEPARTMENT".
25. NFPA 13 (2013) A HYDRAULIC CALCULATIONS DESIGN DATA PLACARD SHALL BE ATTACHED TO RISER.
26. NFPA 13 (2013) SEC. 25.1, SPRINKLER CONTRACTOR (C16) SHALL COMPLETE AND SIGN CONTRACTOR'S MATERIAL TEST CERTIFICATE FOR THE OVERHEAD SPRINKLER SYSTEM USING FORM IN FIGURE 24.1. THIS FORM SHALL BE GIVEN TO THE INSPECTOR OF RECORD (IOR) WHO WILL TURN IN FOR DSA RECORDS.
27. NFPA 13 (2013) SEC. 25.2.3.4, THE MAIN DRAIN VALVE SHALL BE OPENED AND REMAIN OPEN UNTIL THE SYSTEM PRESSURE STABILIZES. THE STATIC AND RESIDUAL PRESSURE SHALL BE RECORDED ON THE CONTRACTOR'S TEST CERTIFICATE. (WITNESSED BY THE IOR)
28. TITLE 19 ARTICLE 906(a), A LABEL OF THE SELF–ADHESIVE TYPE SHALL BE PLACED ON THE FIRE DEPARTMENT CONNECTION OR ON THE RISER FOR THE FIRE SPRINKLER SYSTEM WITH THE DATE OF SERVICE AND/OR DATE OF INSTALLATION WAS PERFORMED AND LICENSE NUMBER OF PERSON PERFORMING SERVICE WORK.
29. INSTALL APPROVED TYPE PROTECTIVE METAL BASKET HEAD GUARDS WHERE HEADS ARE SUBJECT TO DAMAGE.

GENERAL NOTES

1. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13 (2013 EDITION).
2. IT IS THE RESPONSIBILITY OF THE BUILDING OWNER TO MAINTAIN THE INTEGRITY OF THE SPRINKLER SYSTEM.
3. THE SPRINKLER CONTRACTOR WILL PROVIDE THE OWNER WITH THE NECESSARY INSTRUCTION MANUALS FOR THE UPKEEP OF THE SYSTEM AS WELL AS A COPY OF NFPA 25 AT PROJECT CLOSEOUT.
4. ONLY NEW SPRINKLERS SHALL BE USED IN THE INSTALLATIONS OF THE SPRINKLER SYSTEM.
5. STAMPED AND APPROVED SPRINKLER PLANS SHALL BE MAINTAINED AT ALL TIME ON THE JOBSITE.
6. AN APPOINTMENT SHALL BE MADE A MINIMUM OF 48 HOURS IN ADVANCE WITH THE APPROPRIATE FIRE PREVENTION OFFICE FOR ALL INSPECTIONS AND TESTS.
7. ALL SYSTEM PIPING SHALL BE HYDROSTATICALLY TESTED AT 200 PSI FOR 2 HOURS, OR AT 50 PSI ABOVE THE SYSTEM OPERATING PRESSURE WHICH EVER IS GREATER.
8. ALL UNDERGROUND MAINS AND LEAD–IN CONNECTIONS SHALL BE FLUSHED AS INDICATED PER NFPA 13 PRIOR TO CONNECTION TO THE OVERHEAD PIPING. THE FLUSHING SHALL CONTINUE UNTIL THE WATER IS CLEAR.
9. ALL UNDERGROUND MAINS SHALL BE INSPECTED, PRESSURE TESTED AND FLUSHED IN THE PRESENCE OF THE LOCAL AUTHORITY HAVING JURISDICTION.
10. FIRE DEPARTMENT CONNECTIONS SHALL BE VISIBLE AND ACCESSIBLE. THEY SHALL HAVE NO FEMALE OUTLETS WITH PROTECTIVE CAPS AND AN APPROVED CHECK VALVE LOCATED AS CLOSE TO THE FDC AS POSSIBLE.
11. ALL VALVES SHALL HAVE A PERMANENT AFFIXED SIGN INDICATING ITS FUNCTION AND/OR AREA OF USE.
12. A STOCK OF SPARE SPRINKLERS OF EACH STYLE, TYPE AND TEMPERATURE RATING ALONG WITH A SPRINKLER WRENCH SHALL BE LOCATED NEXT TO THE MAIN BUILDING RISER.
13. ANY PORTION OF THE SPRINKLER SYSTEM WHICH IS EXPOSED TO FREEZING SHALL BE ADEQUATELY PROTECTED AGAINST EXPOSURE.
14. WHEN SERVING MORE THAN 100 SPRINKLERS, AUTOMATIC SPRINKLER SYSTEMS SHALL BE SUPERVISED BY AN APPROVED CENTRAL PROPRIETARY OR REMOTE STATION SERVICE AND/OR LOCAL ALARM WHICH WILL GIVE AN AUDIBLE SIGNAL AT A CONSTANTLY ATTENDED LOCATION.
15. ALL WALLS SHOWN ON PLANS ARE FULL HEIGHT WALLS (UNLESS NOTED OTHERWISE).
16. HYDRAULIC CALCULATIONS ARE PROVIDED TO THE SUPPLY SOURCE WITH A FIXED PRESSURE LOSS FOR THE BACKFLOW DEVICE AND A MINIMUM 10% REDUCTION OF THE WATER SUPPLY CURVE.

INSPECTOR TEST DRAIN NOTE

1. WHEN PERFORMING INSPECTOR TEST DRAIN, PERSON PERFORMING TEST SHALL NOTIFY CAMPUS AND ASSIGN A DESIGNATED RESTRICTED AREA ON GROUND FLOOR FREE OF PEDESTRIAN TRAFFIC TO AVOID ANY ACCIDENTS PRIOR TO TEST.

HYDRAULIC CALCULATIONS PERFORMED BY SPRINKCAD SOFTWARE PROGRAM.

FIRE PROTECTION GENERAL NOTES

architecture westbergwhite
14471 CHAMBERS RD, SUITE 210
TUSTIN, CA 92780
(714) 508-1780 508-1790 FAX
1775 HANCOCK ST, SUITE 120
SAN DIEGO, CA 92110
(619) 542-1188 542-1663 FAX

CONSULTANT:
4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861–3396
Fax (949) 861–3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER MATTHEW M. FLEETWOOD No. M 29925 Exp. 6–30–2016 MECHANICAL STATE OF CALIFORNIA

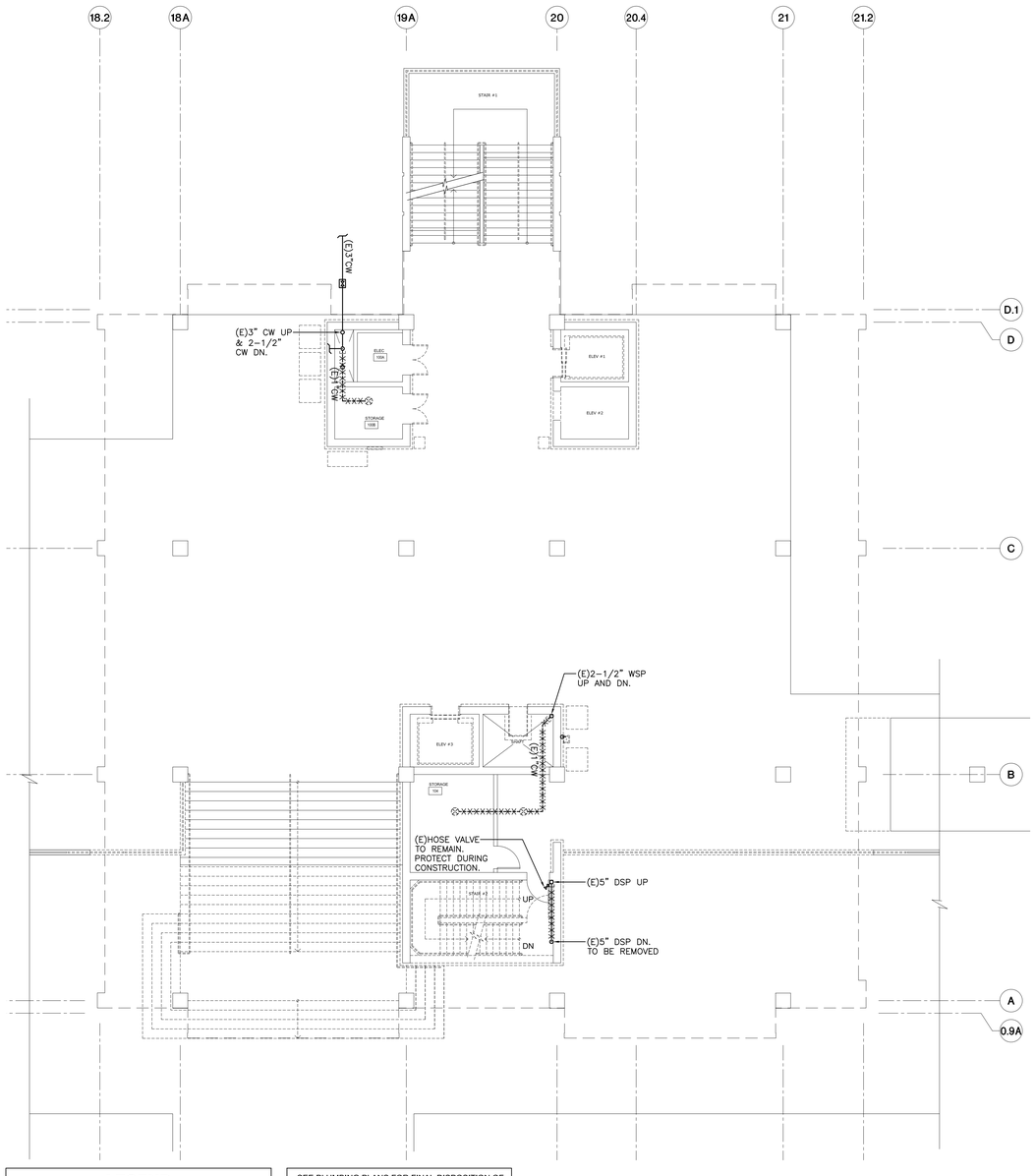
STATE:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-____
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE ____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION GENERAL NOTES AND SITE PLAN

SHEET NO:
OF: FP001



LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

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- EXISTING PIPING TO BE REMOVED
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- EXISTING SPRINKLER HEAD TO BE REMOVED
- EXISTING FIRE HOSE CABINET TO REMAIN
- EXISTING FIRE HOSE CABINET TO BE REMOVED

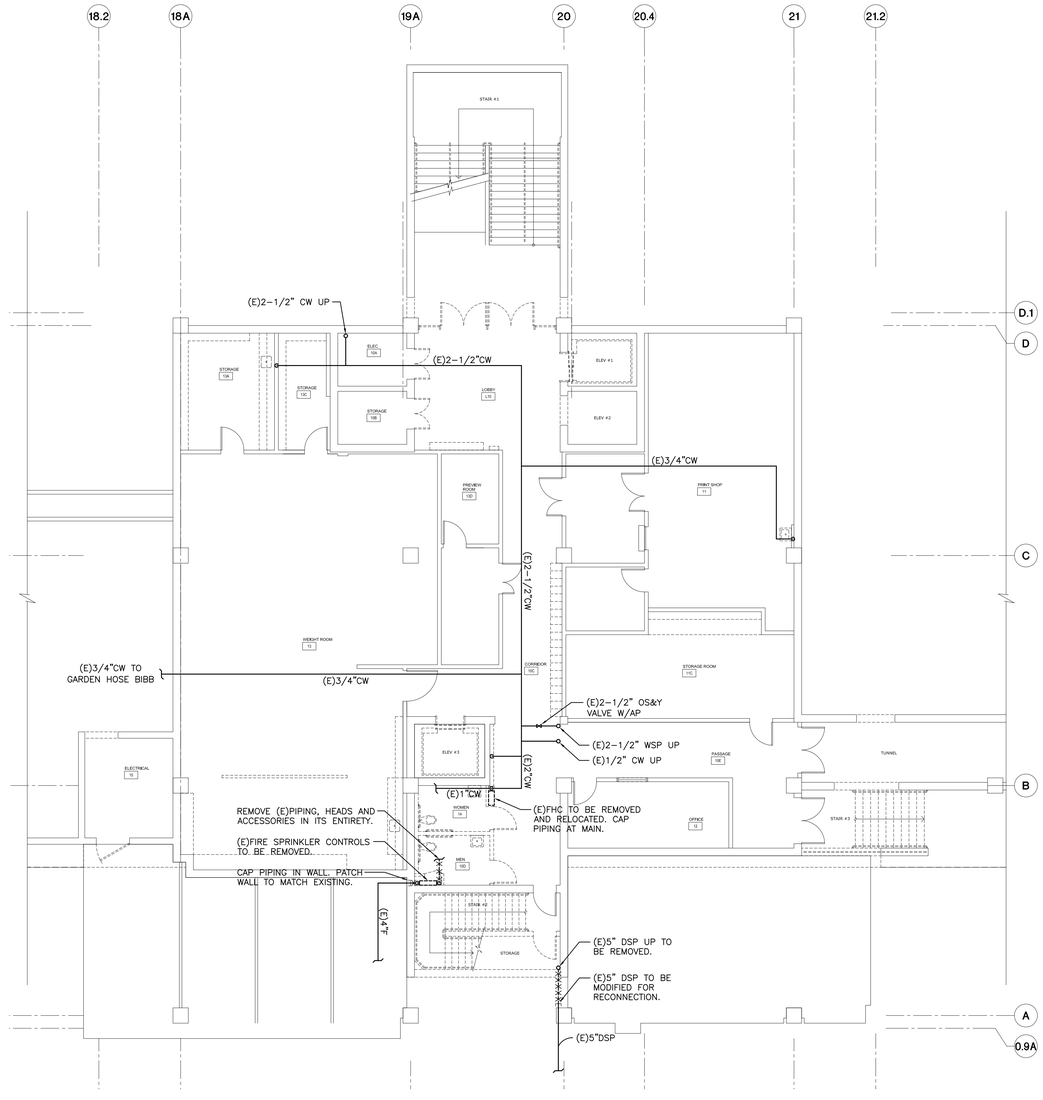
SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SEE PLUMBING PLANS FOR FINAL DISPOSITION OF EXISTING COLD WATER SUPPLY PIPING.

0 2' 4' 8' 16'

TRUE NORTH

FIRE PROTECTION FIRST FLOOR DEMOLITION PLAN SCALE: 1/8" = 1'-0" 2



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DSA APPROVAL IS PENDING

0 2' 4' 8' 16'

TRUE NORTH

FIRE PROTECTION BASEMENT DEMOLITION PLAN SCALE: 1/8" = 1'-0" 1

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
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(714) 508-1780 508-1790 FAX
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SAN DIEGO, CA 92110
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COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
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No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:
REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. PETERSON
No. M 29935
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

STATE:
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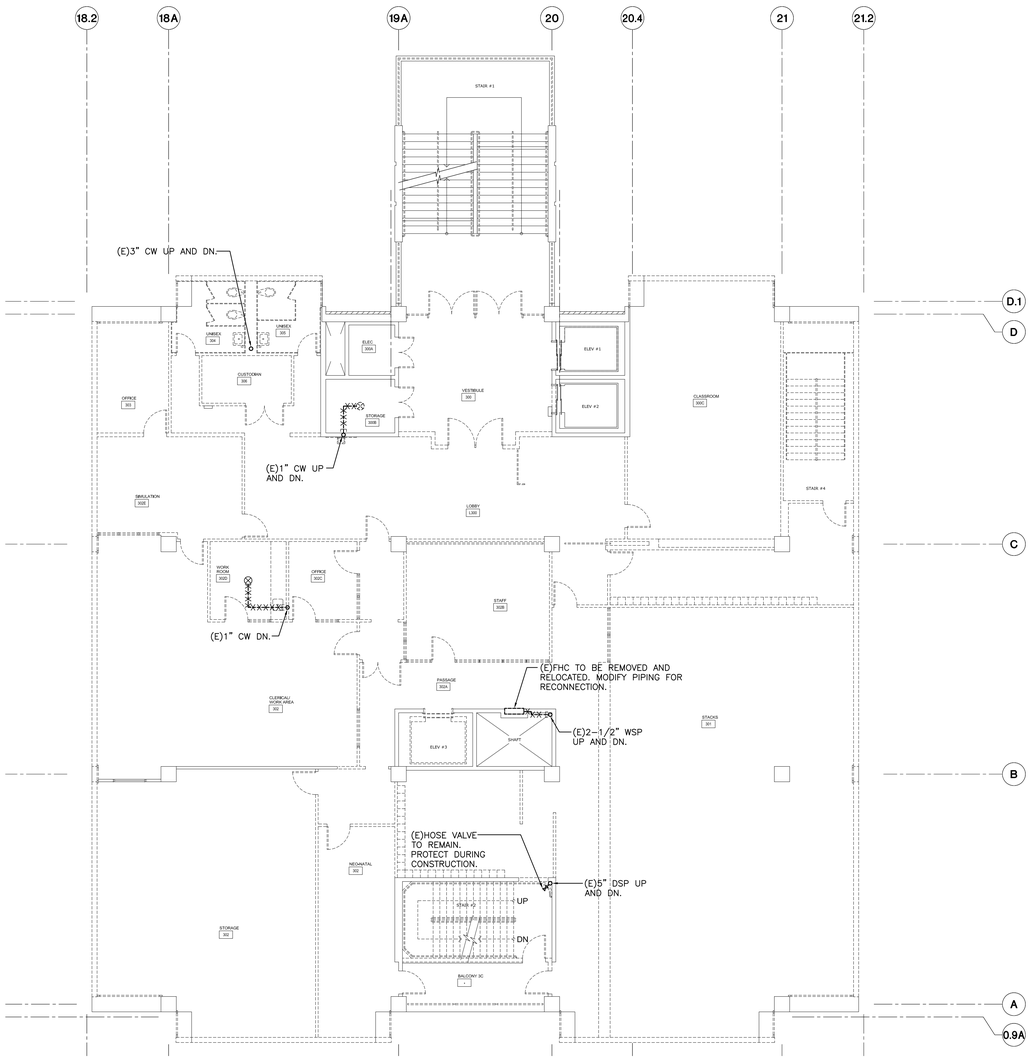
DATE ____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION
BASEMENT & FIRST FLOOR
DEMOLITION PLANS

SHEET NO:
OF: FPD100

P:\530-Westberg\530-065_Rio_Hondo_College_L_Tower\B_Production\1_Drawings\Fire Protection\FPD01.DWG Dec 22, 2015 - 10:21am Hernandez



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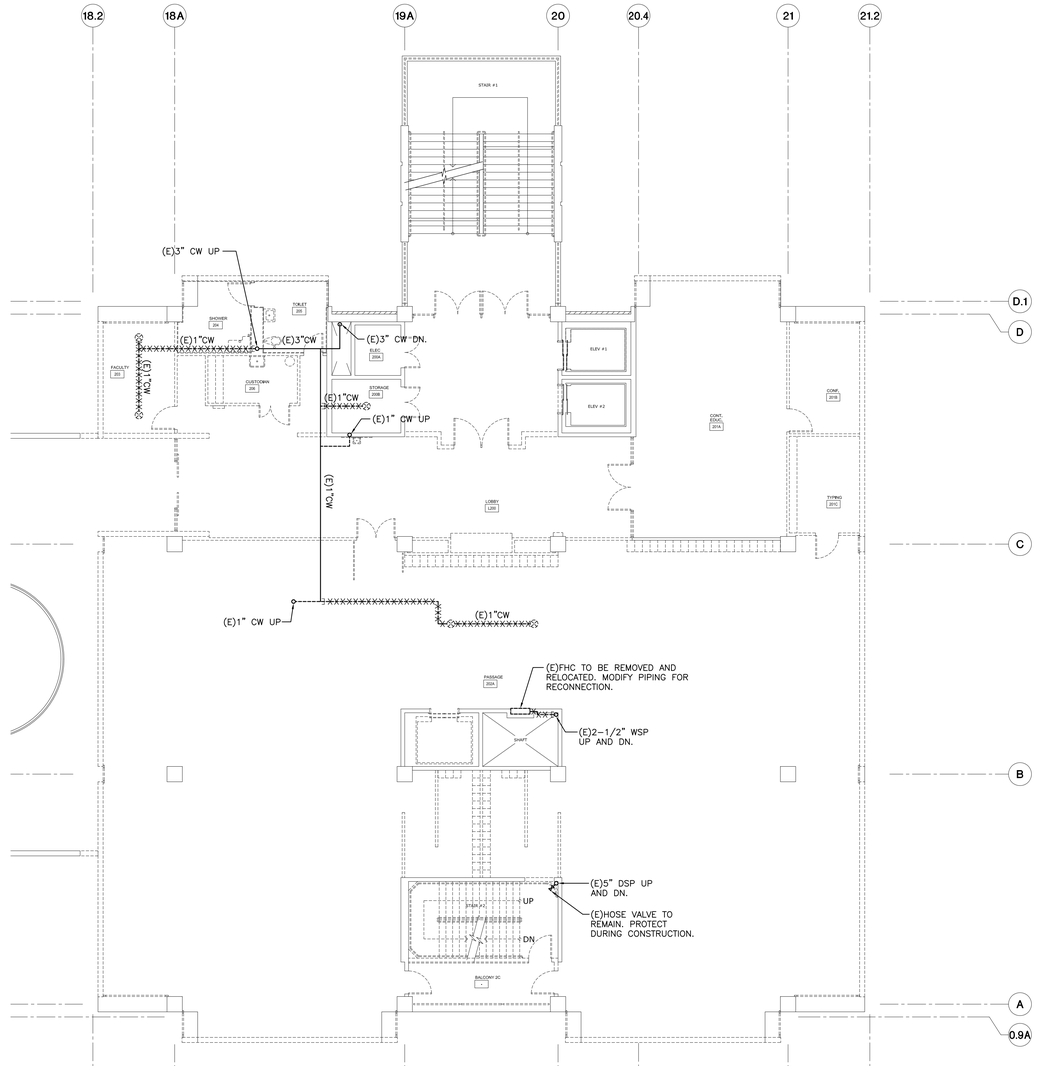
TRUE NORTH

FIRE PROTECTION THIRD FLOOR DEMOLITION PLAN SCALE: 1/8" = 1'-0" 2



LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- EXISTING PIPING TO REMAIN
- EXISTING PIPING TO BE REMOVED
- EXISTING PIPING TO BE CAPPED
- EXISTING SPRINKLER HEAD TO BE REMOVED
- EXISTING FIRE HOSE CABINET TO REMAIN
- EXISTING FIRE HOSE CABINET TO BE REMOVED

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SEE PLUMBING PLANS FOR FINAL DISPOSITION OF EXISTING COLD WATER SUPPLY PIPING.

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2' 4' 8' 16'

TRUE NORTH

FIRE PROTECTION SECOND FLOOR DEMOLITION PLAN SCALE: 1/8" = 1'-0" 1

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
TUSTIN, CA 92780
(714) 508-1780 508-1790 FAX
1775 HANCOCK ST, SUITE 120
SAN DIEGO, CA 92110
(619) 542-1188 542-1663 FAX

CONSULTANT:
4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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△		

JOB NO:	15003
DATE:	12/22/2015
DRAWN:	
CHECK:	
ARCHITECT:	
ENGINEER:	

ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. PESTOTNIK
No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

STATE:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-____
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE ____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION SECOND AND THIRD FLOOR DEMOLITION PLANS

SHEET NO:
OF: FPD101

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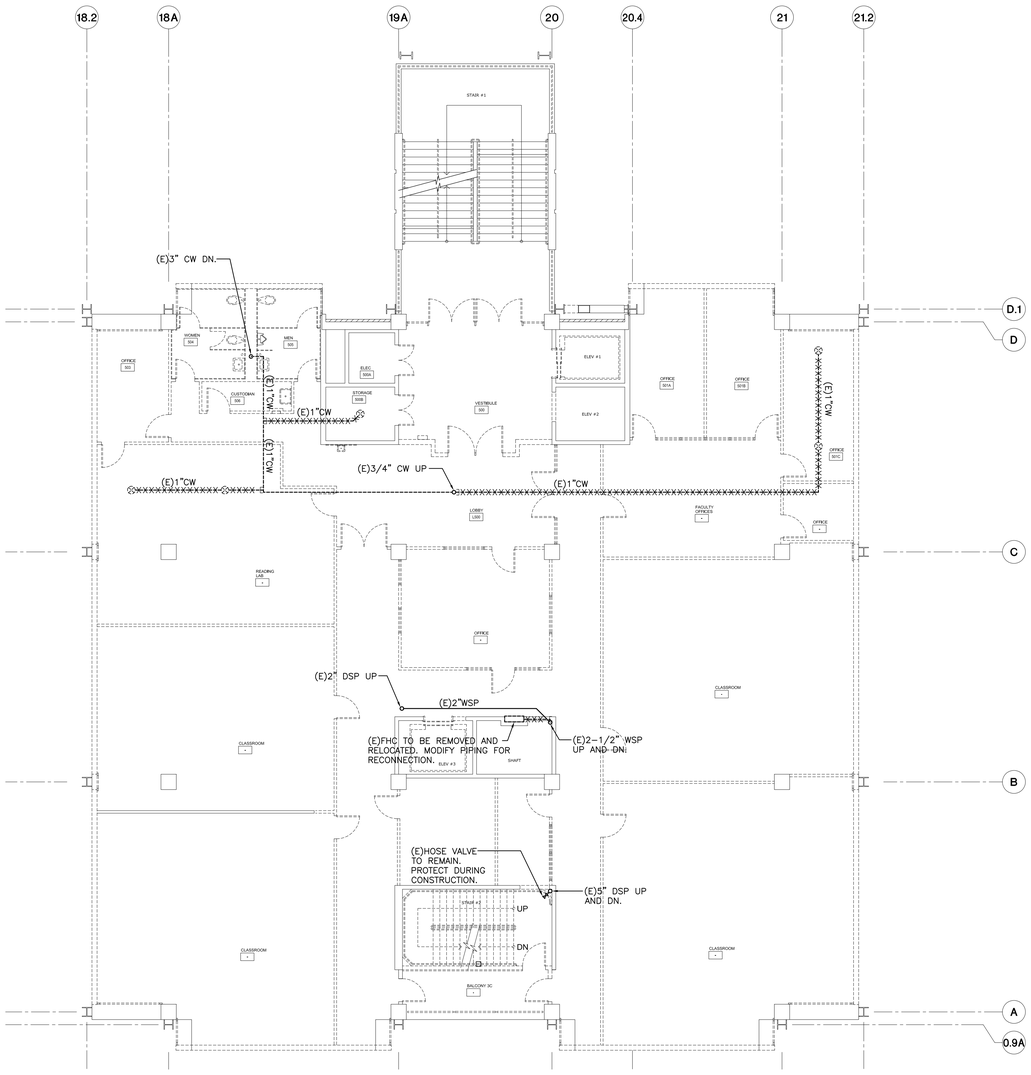

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- EXISTING PIPING TO BE CAPPED
- EXISTING SPRINKLER HEAD TO BE REMOVED
- EXISTING FIRE HOSE CABINET TO REMAIN
- EXISTING FIRE HOSE CABINET TO BE REMOVED

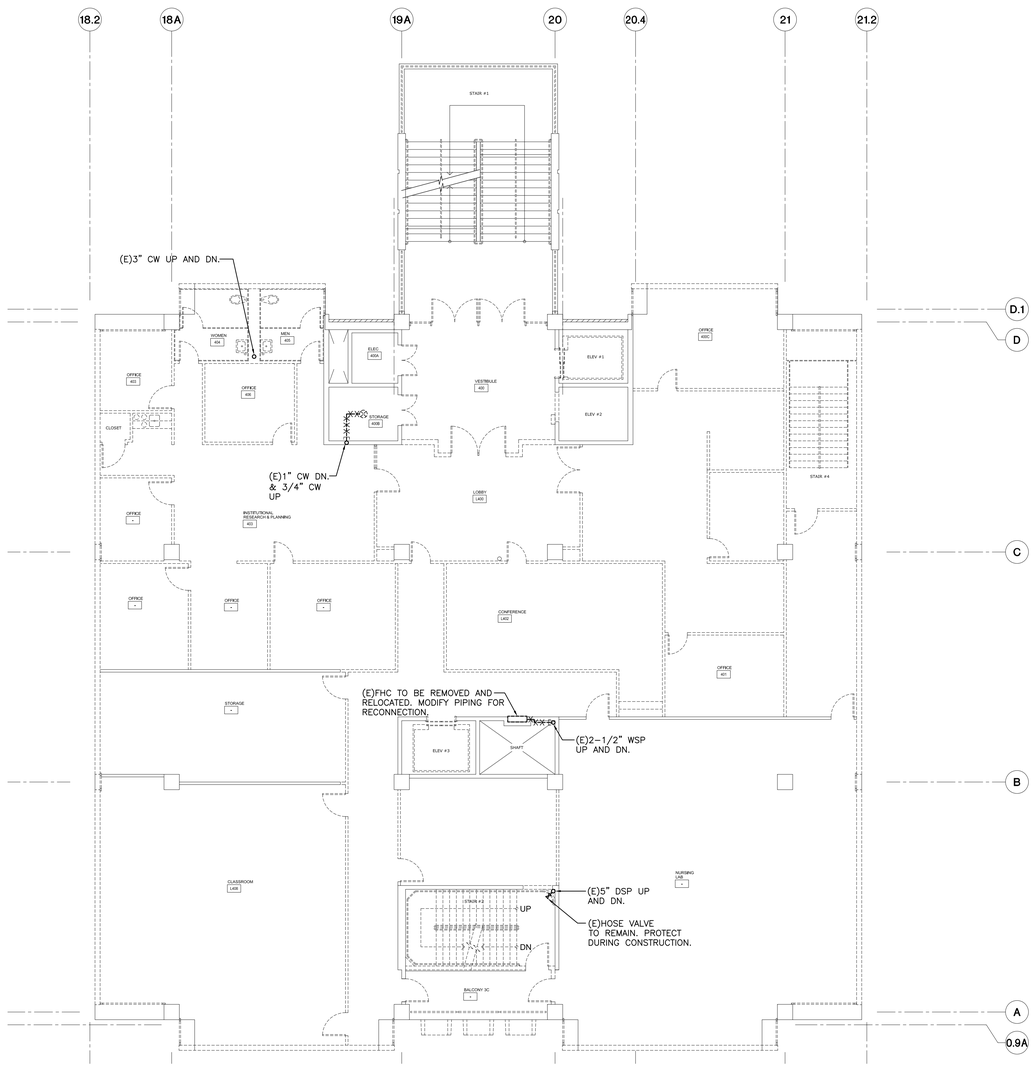
SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SEE PLUMBING PLANS FOR FINAL DISPOSITION OF EXISTING COLD WATER SUPPLY PIPING.

0 2 4' 8' 16'

TRUE NORTH

FIRE PROTECTION FIFTH FLOOR DEMOLITION PLAN SCALE: 1/8" = 1'-0" 2



LEGEND

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SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SEE PLUMBING PLANS FOR FINAL DISPOSITION OF EXISTING COLD WATER SUPPLY PIPING.

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2 4' 8' 16'

TRUE NORTH

FIRE PROTECTION FOURTH FLOOR DEMOLITION PLAN SCALE: 1/8" = 1'-0" 1

P:\530-Westberg\530-065_Rio_Hondo_College_L_Tower\B_Production\1_Drawings\Fire Protection\FP001.DWG Dec 22, 2015 - 10:22am HHernandez

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
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(714) 508-1780 508-1790 FAX
1775 HANCOCK ST, SUITE 120
SAN DIEGO, CA 92110
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CONSULTANT:

4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO
COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. PEASTER
M No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

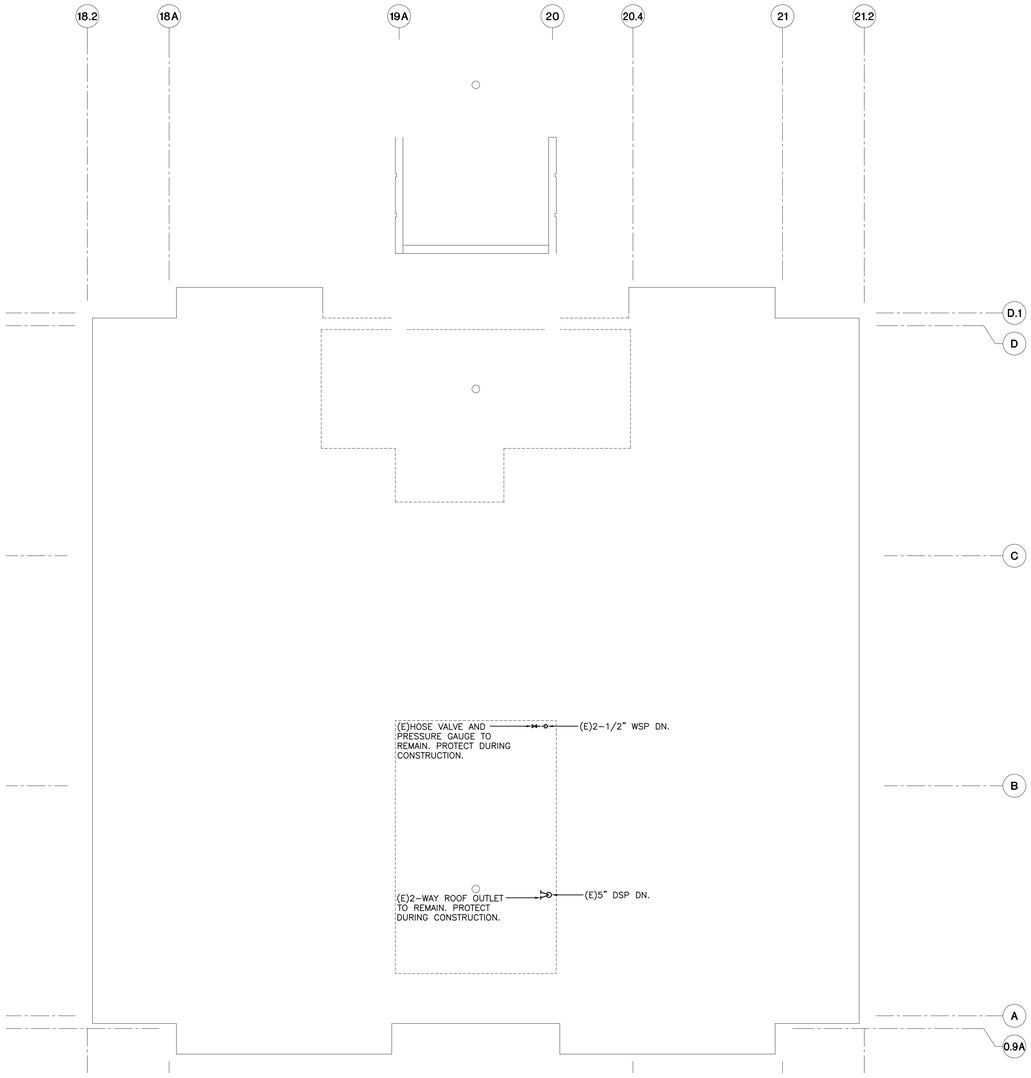
STATE:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-
FILE NO: 19-C12
AC _____ FLS _____ SS _____
DATE _____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION FOURTH AND FIFTH FLOOR DEMOLITION PLANS

SHEET NO:
OF: FPD102



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- EXISTING FIRE HOSE CABINET TO BE REMOVED

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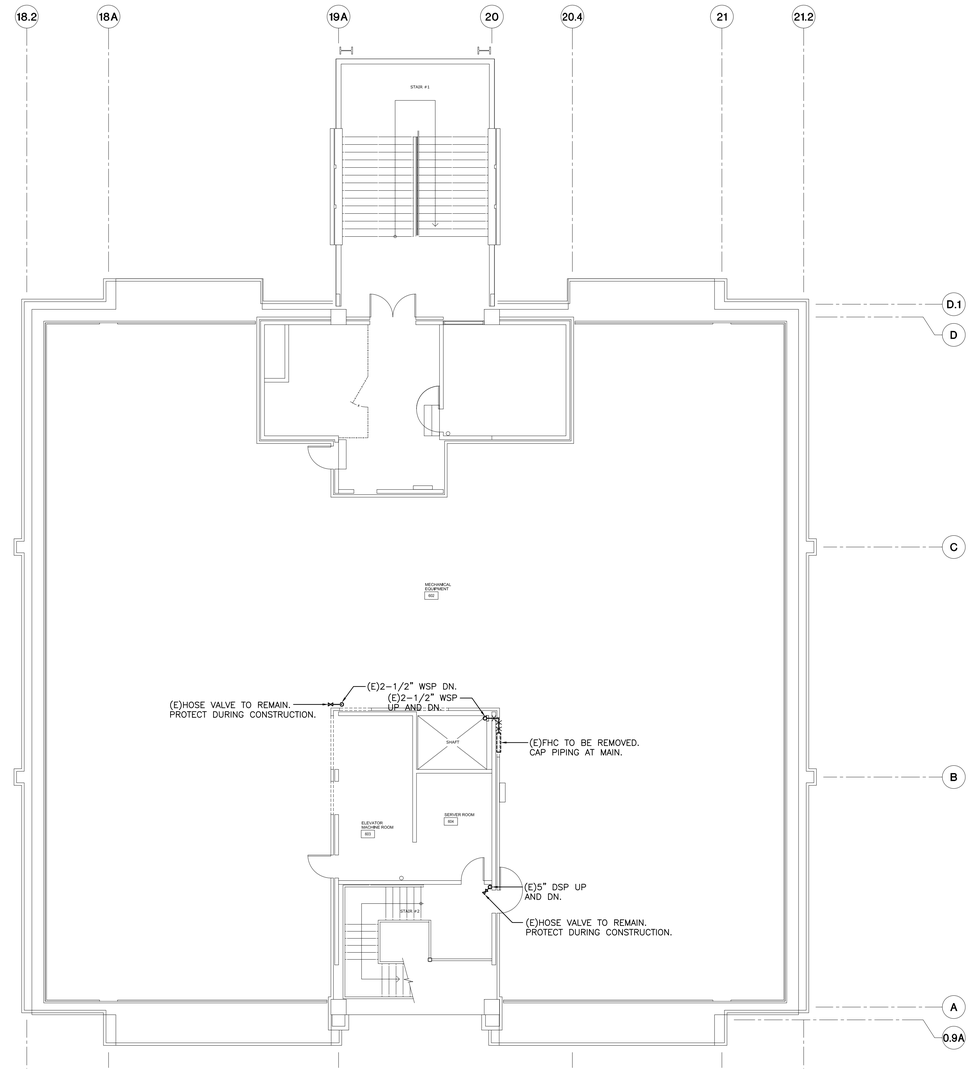
SEE PLUMBING PLANS FOR FINAL DISPOSITION OF EXISTING COLD WATER SUPPLY PIPING.

0 2' 4' 8' 16'

TRUE NORTH

FIRE PROTECTION MECHANICAL ROOM ROOF DEMOLITION PLAN SCALE: 1/8" = 1'-0" 2



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SEE PLUMBING PLANS FOR FINAL DISPOSITION OF EXISTING COLD WATER SUPPLY PIPING.

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2' 4' 8' 16'

TRUE NORTH

FIRE PROTECTION ROOF/MECHANICAL ROOM DEMOLITION PLAN SCALE: 1/8" = 1'-0" 1

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
TUSTIN, CA 92780
(714) 508-1780 508-1790 FAX
1775 HANCOCK ST, SUITE 120
SAN DIEGO, CA 92110
(619) 542-1188 542-1663 FAX

CONSULTANT:
4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:
RIO HONDO
COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:
REGISTERED PROFESSIONAL ENGINEER MATTHEW M. PESSOTTO No. M 29925 Exp. 6-30-2016 MECHANICAL STATE OF CALIFORNIA

STATE:
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-
FILE NO: 19-C12
AC _____ FLS _____ SS _____
DATE _____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION ROOF PENTHOUSE DEMOLITION PLANS

SHEET NO:
OF: FPD103

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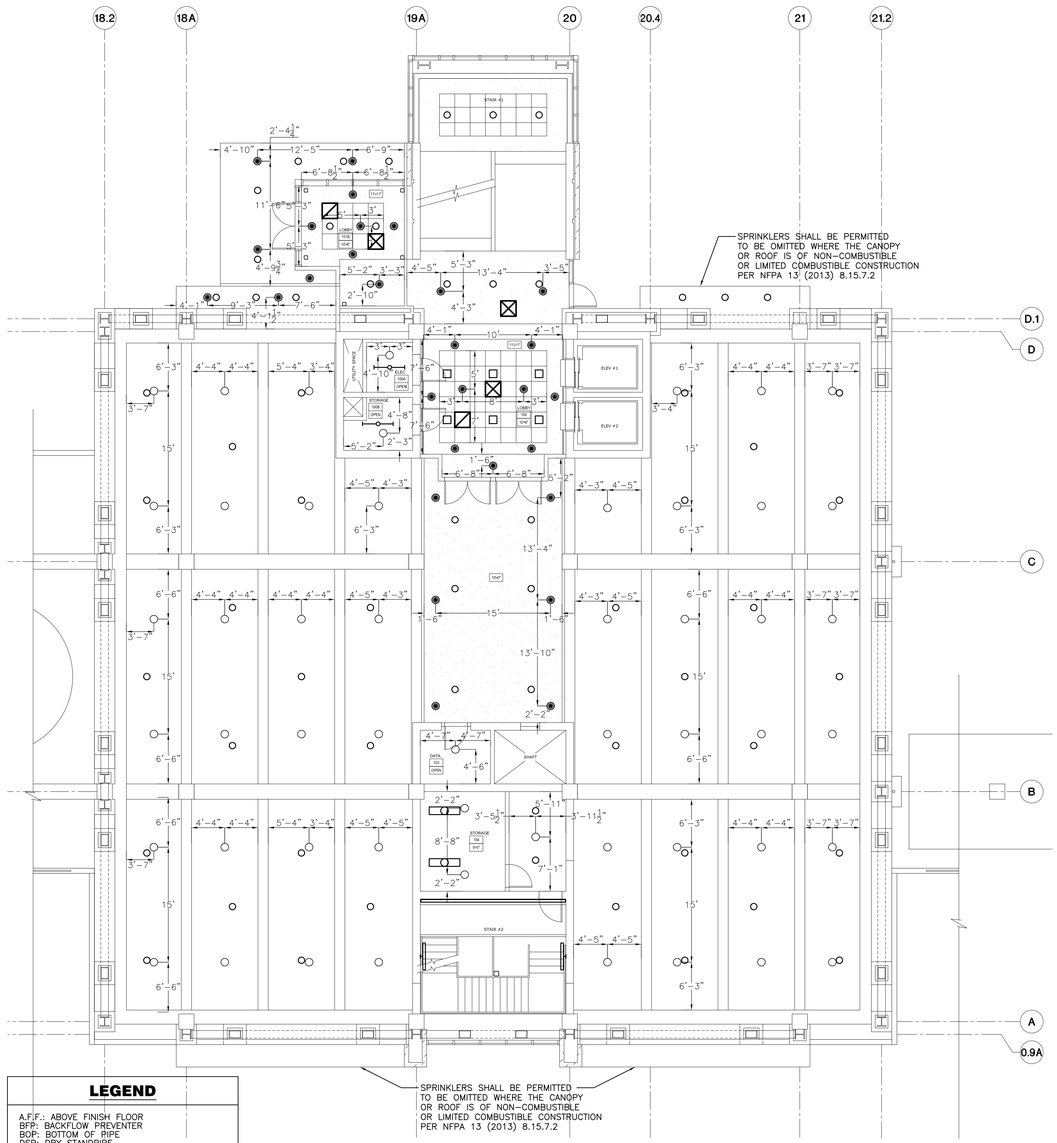

LEGEND

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PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- # / # — REPRESENTS DETAIL NUMBER / REPRESENTS FIRE PROTECTION SHEET
- W1 — REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1'-0 — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

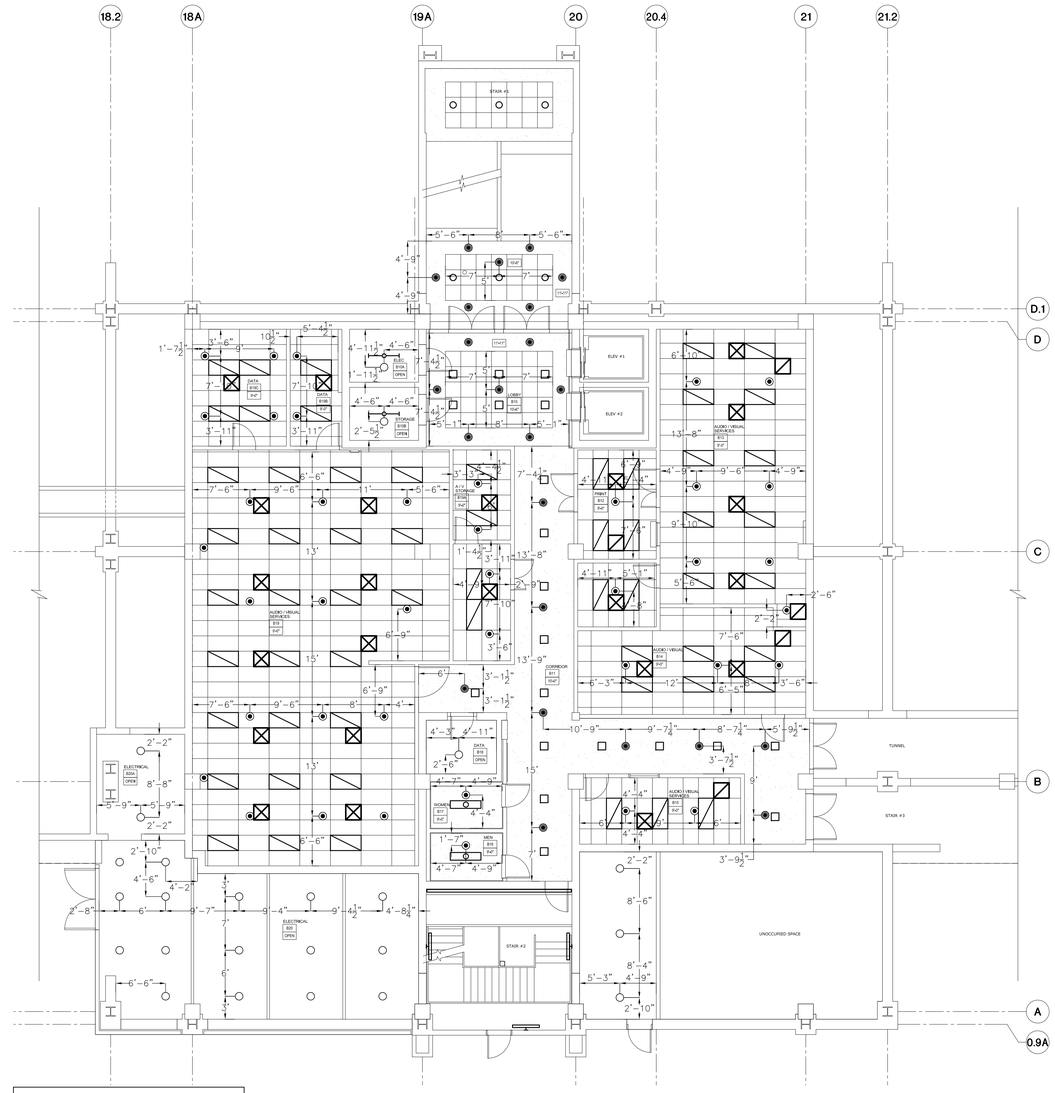
SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3531	52	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	29	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 81						

0 2 4 8 16'

TRUE NORTH

FIRE PROTECTION FIRST FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" 2



LEGEND

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- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1'-0 — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
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- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	40	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
◉	TY 3531	23	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	24	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 87						

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2 4 8 16'

TRUE NORTH

FIRE PROTECTION BASEMENT REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" 1

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
TUSTIN, CA 92780
(714) 508-1780 508-1790 FAX
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CONSULTANT:
4611 Teller Ave, Suite A
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Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
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JOB NO: 15003
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ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. PEZESHKI
No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

STATE:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-_____
FILE NO: 19-C12
AC _____ FLS _____ SS _____
DATE _____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION
BASEMENT AND FIRST FLOOR
REFLECTED CEILING PLANS

SHEET NO:
OF: FP100

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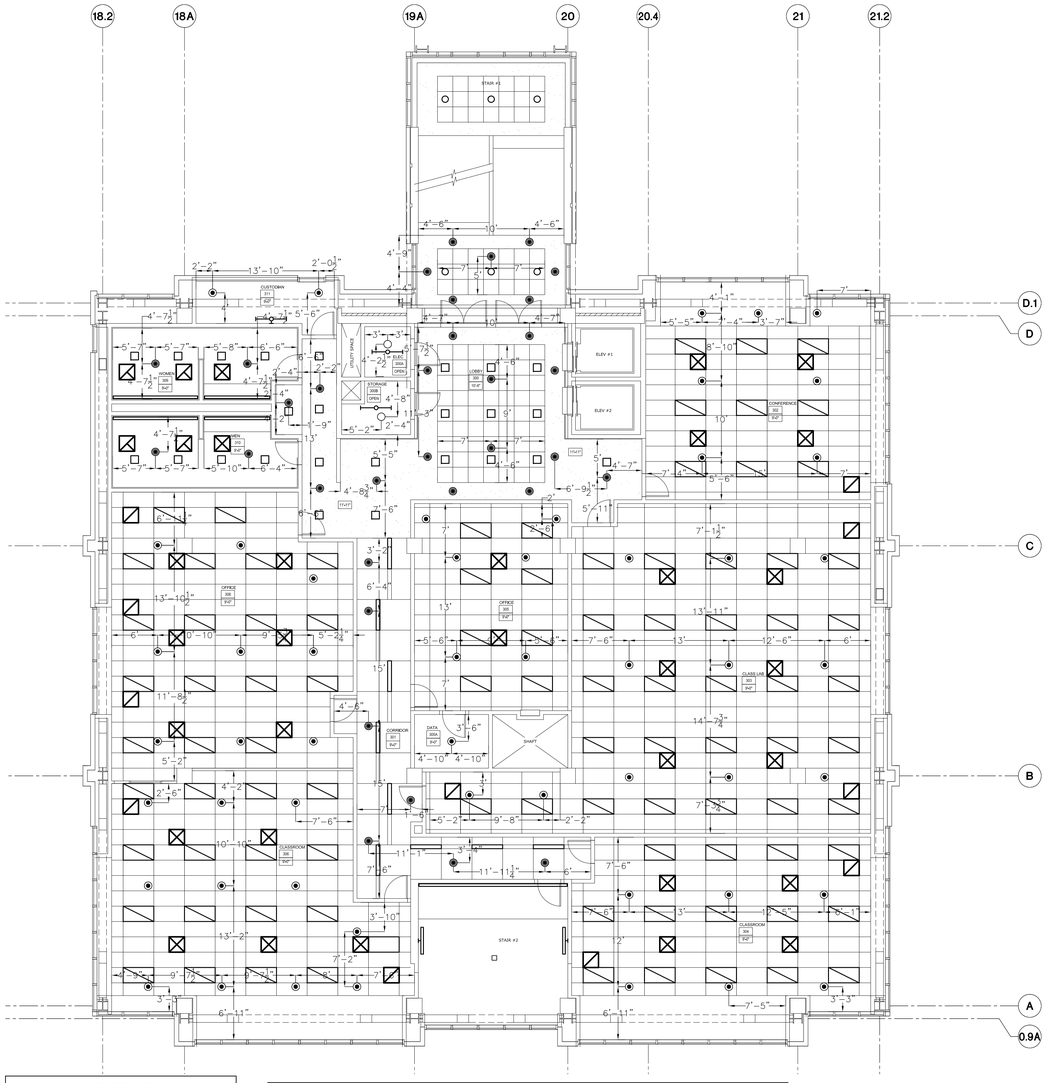

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- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
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- 3 — REPRESENTS PIPE SIZE
- 1-0 — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

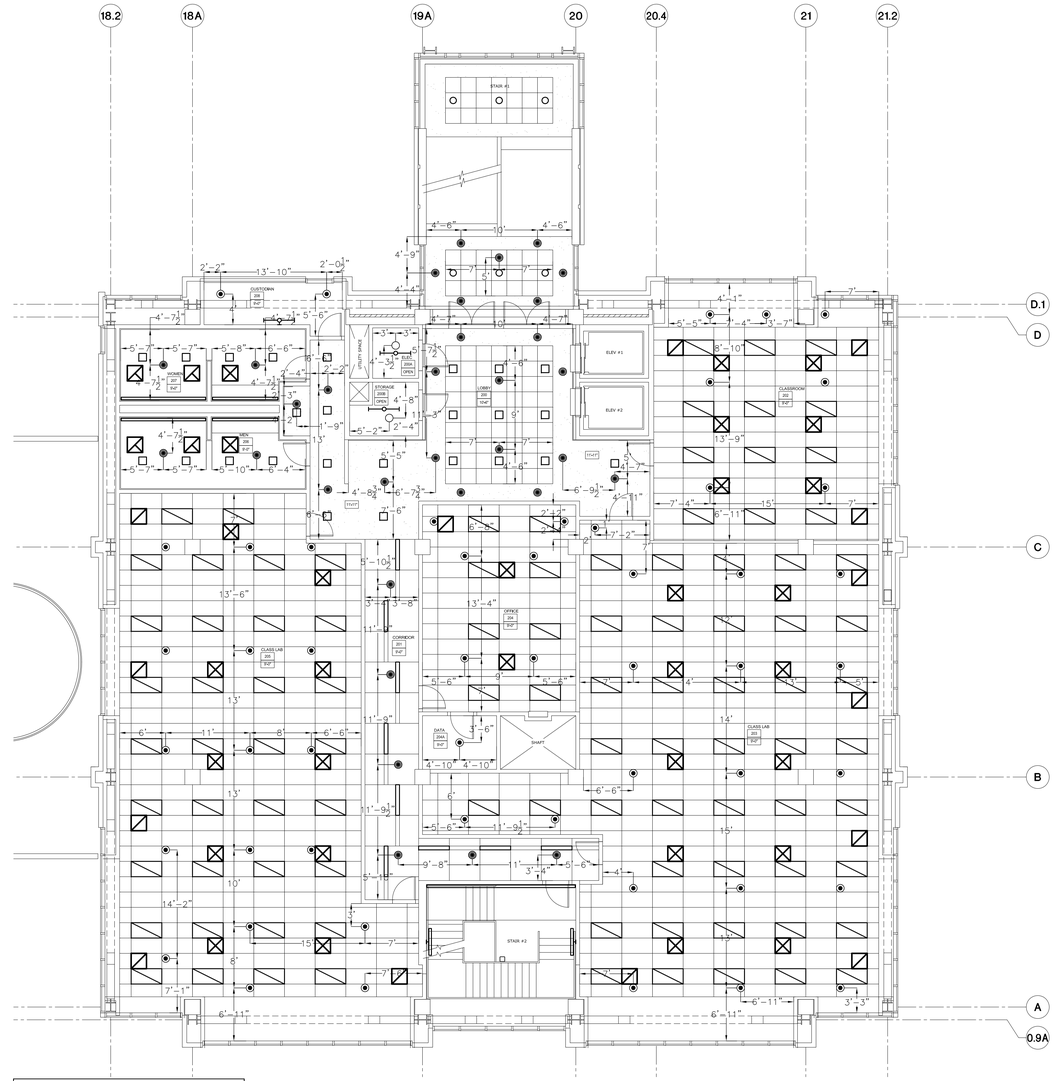
SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	53	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
◉	TY 3531	33	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 88						

0 2 4 8 16'

TRUE NORTH

FIRE PROTECTION THIRD FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" 2



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SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	51	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
◉	TY 3531	31	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 84						

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2 4 8 16'

TRUE NORTH

FIRE PROTECTION SECOND FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" 1

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
TUSTIN, CA 92780
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CONSULTANT:
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PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. FERRETTI
No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

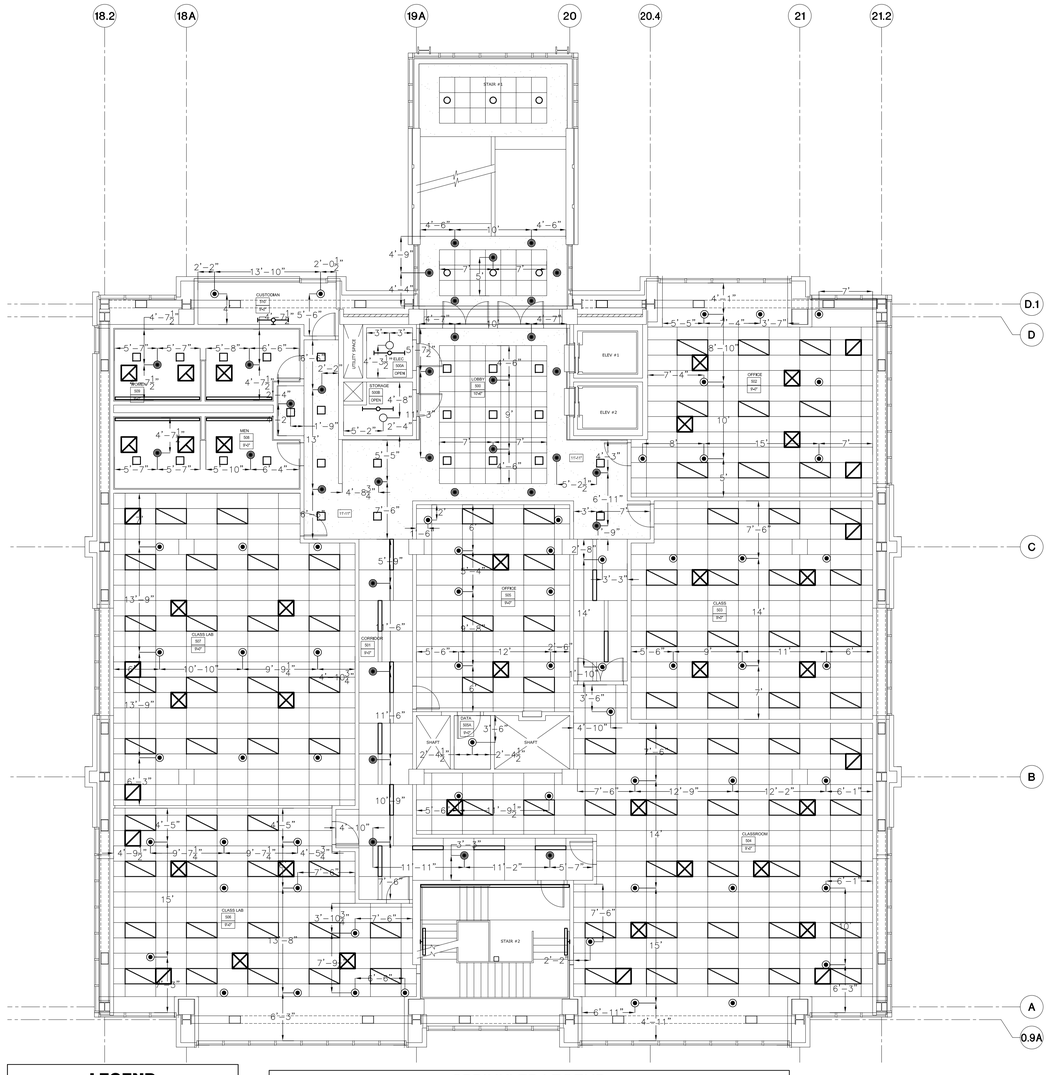
STATE:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-_____
FILE NO: 19-C12
AC _____ FLS _____ SS _____
DATE _____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION SECOND AND THIRD FLOOR REFLECTED CEILING PLANS

SHEET NO:
OF: FP101



LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- # / # — REPRESENTS DETAIL NUMBER / REPRESENTS FIRE PROTECTION SHEET
- W1 — REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1-0 — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

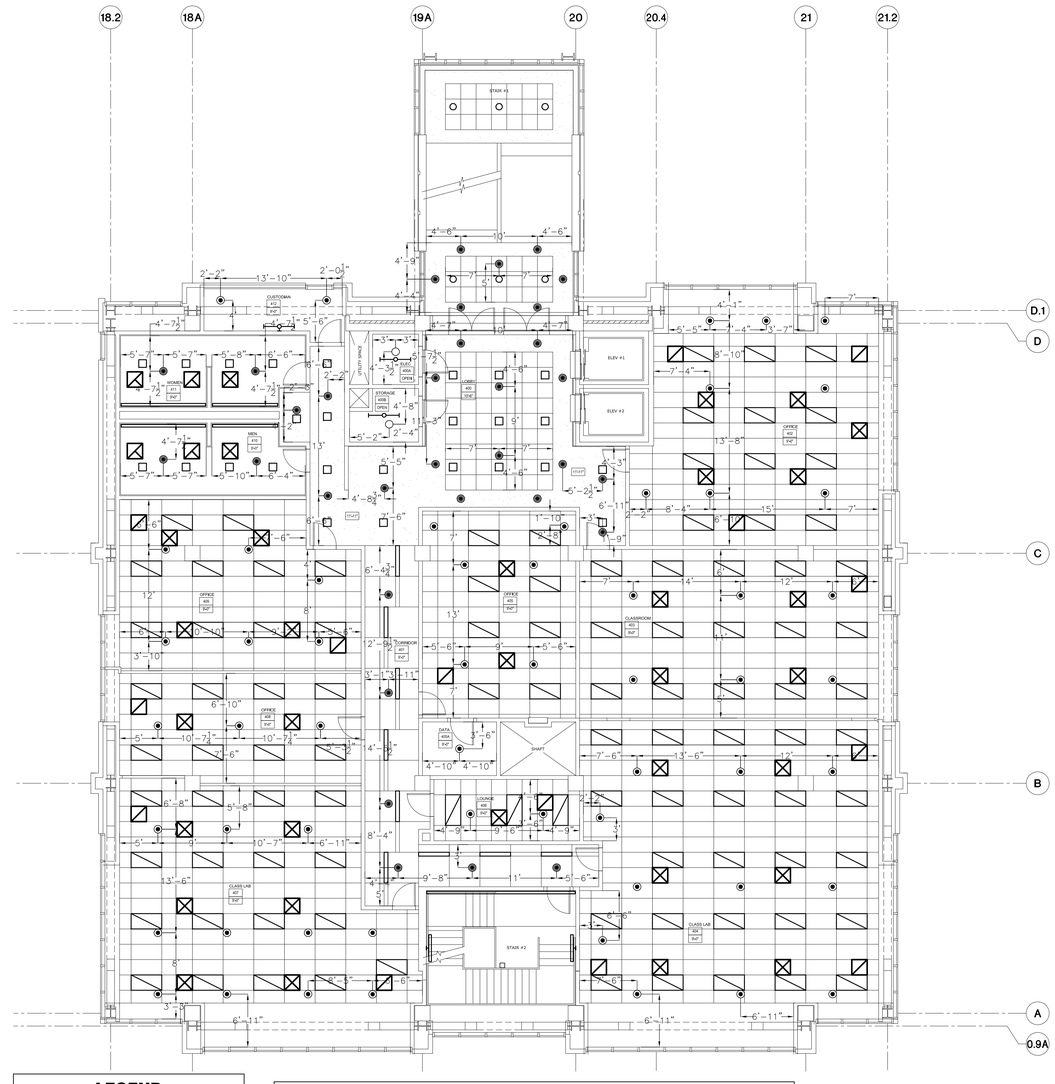
SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	60	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
◉	TY 3531	32	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 94						

0 2 4' 8' 16'

TRUE NORTH

FIRE PROTECTION FIFTH FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" 2



LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
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- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
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- REPRESENTS PIPE DROP
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- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	56	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
◉	TY 3531	33	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 91						

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2 4' 8' 16'

TRUE NORTH

FIRE PROTECTION FOURTH FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" 1

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
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(714) 508-1780 508-1790 FAX
1775 HANCOCK ST, SUITE 120
SAN DIEGO, CA 92110
(619) 542-1188 542-1663 FAX

CONSULTANT:

4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. PEZESHKI
No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

STATE:

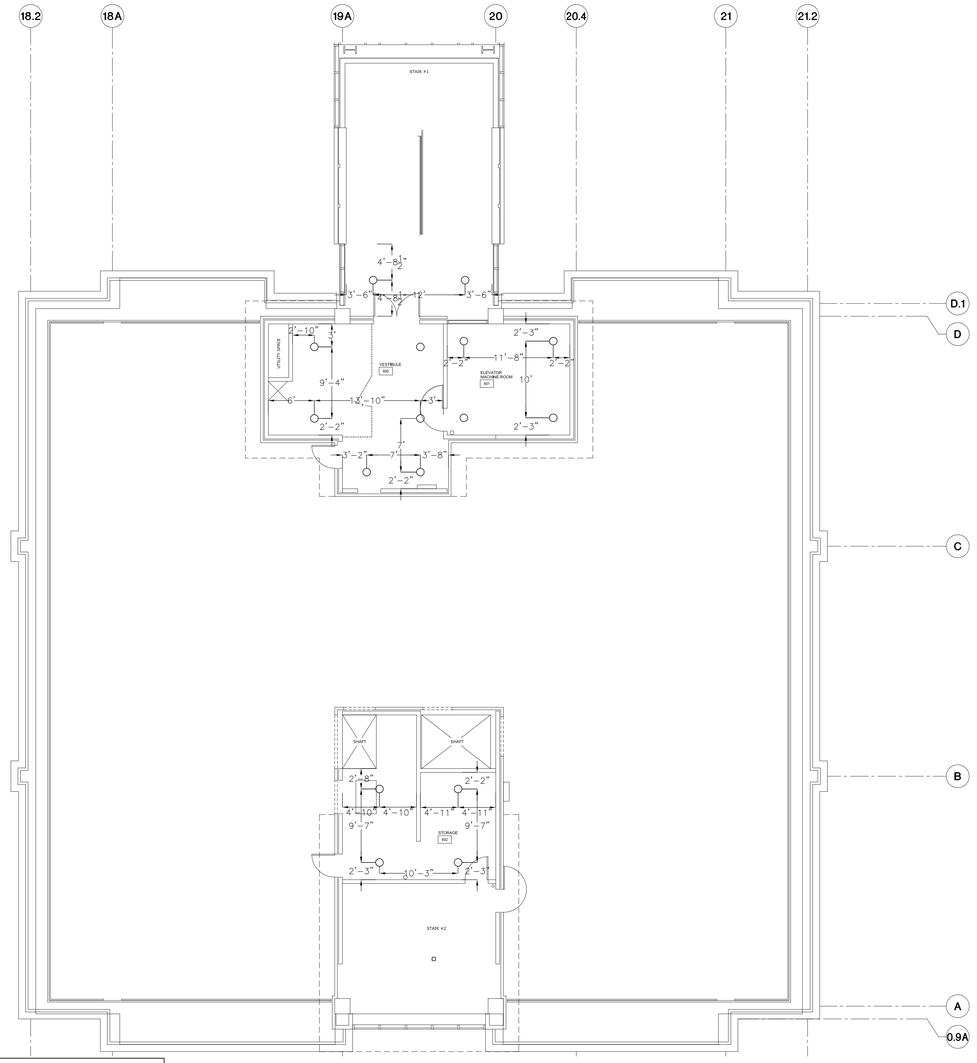
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-
FILE NO: 19-C12
AC _____ FLS _____ SS _____
DATE _____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION FOURTH AND FIFTH FLOOR REFLECTED CEILING PLANS

SHEET NO:
OF: FP102

P:\530-Westberg\530-065_Rio_Hondo_College_L_Tower\B_Production\1_Drawings\Fire Protection\FP001.DWG Dec 22, 2015 - 10:23am HHernandez



LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
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FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- # / # — REPRESENTS DETAIL NUMBER / REPRESENTS FIRE PROTECTION SHEET
- W1 — REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1'-0 — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◯	TY 3131	16	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 16						

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2' 4' 8' 16'

TRUE NORTH

SCALE: 1/8" = 1'-0"

2

FIRE PROTECTION THIRD FLOOR REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

1

architecture
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14471 CHAMBERS RD, SUITE 210
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(714) 508-1780 508-1790 FAX

1775 HANCOCK ST, SUITE 120
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CONSULTANT:
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PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:
REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. FEE-FISHER
No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

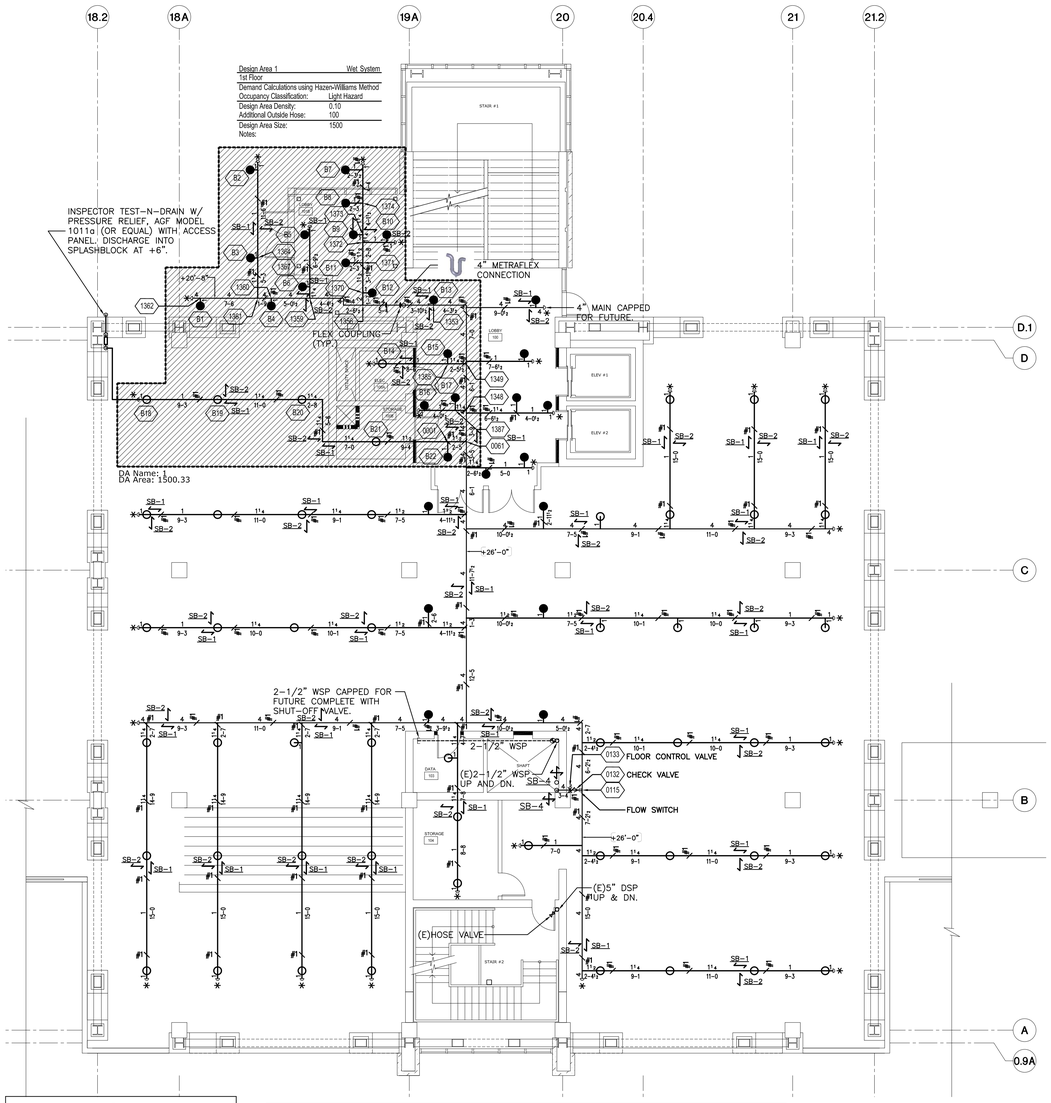
STATE:
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-____
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE ____

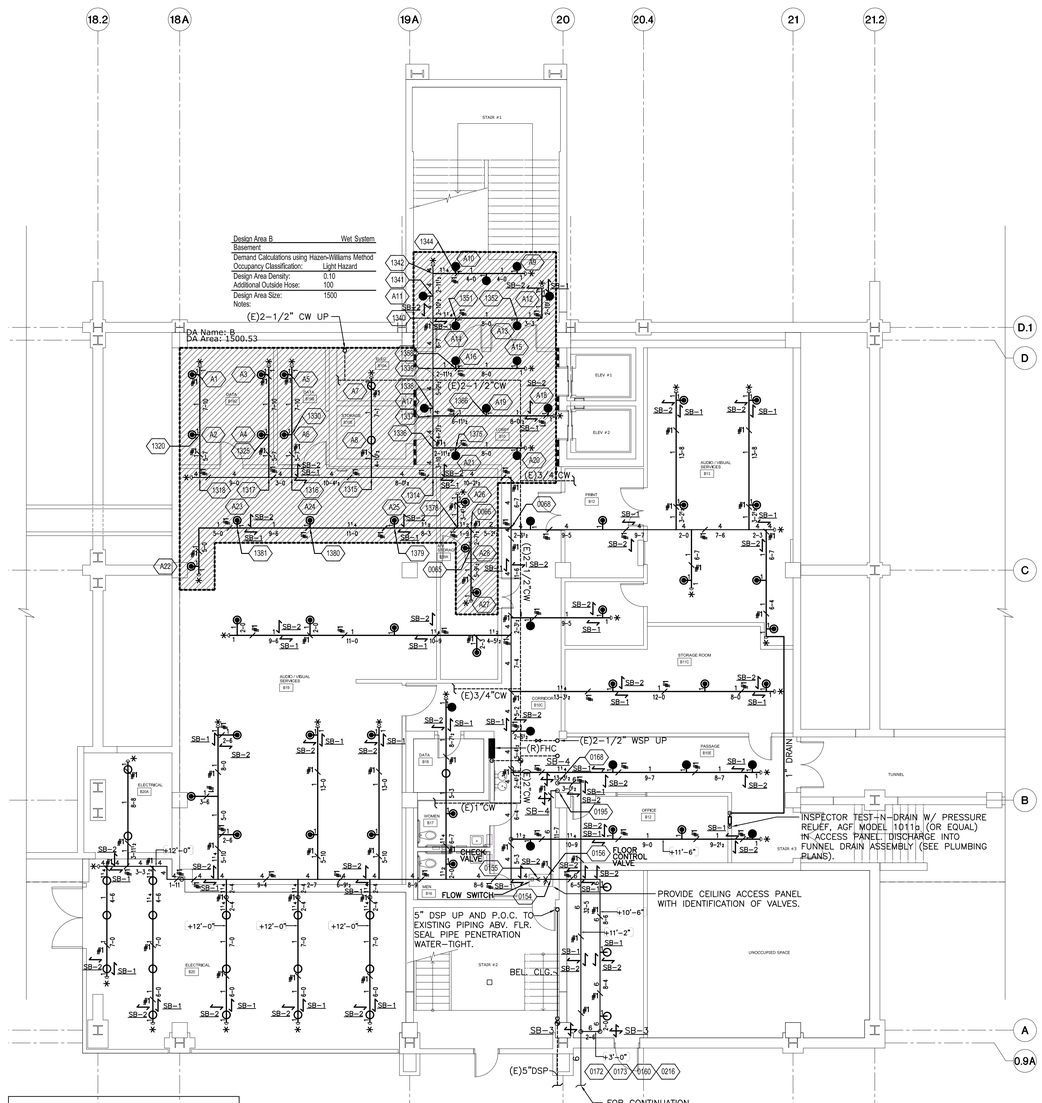
DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION ROOF PENTHOUSE REFLECTED CEILING PLAN

SHEET NO:
OF: FP103

P:\530-Westberg\530-065_Rio_Hondo_College_L_Tower\B_Production\1_Drawings\Fire Protection\FP001.DWG Dec 22, 2015 - 10:23am Hernandez





LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
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- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 / #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1'-0" — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3531	52	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	29	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 81						

COORDINATE W/ FIRE ALARM DRAWINGS FOR ALL FLOW & TAMPER SWITCHES (TYP.)

FOR SB-1 AND SB-2 SWAY BRACE DETAILS, SEE SHEET FP302

MAXIMUM SPACING (FT.) OF STL. BRANCH LINE RESTRAINTS	
	SEISMIC COEFFICIENT (Cp) PROJECT Cp = 1.11
PIPE SIZE	Cp>0.71
1"	26
1-1/4"	27
1-1/2"	29
2"	31

PER NFPA 13 (2013) TABLE 9.3.6.4(a)

PIPE HANGER SPACING TABLE	
PIPE SIZE	MAX. DISTANCE
1" - 1-1/4"	12'-0"
1-1/2" - 8"	15'-0"

PER NFPA 13 (2013) TABLE 9.2.2.1(a)

Calculation results for Design Area 1 – 1st Floor

This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd.
contract no _____ is designed to discharge at a rate of 0.1 gpm/ft² (L/min/m²) of floor area over a maximum area of 1500 ft² when supplied with water at a rate of 642.1 gpm at 78.2 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Light Hazard
Commodity classification: _____
Maximum storage height: _____
Storage arrangement: _____
Number of heads flowing: 22
System Type: Wet
Maximum velocity: 22.37 ft/s.

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	642.1 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	642.1 gpm
Additional flow at/beyond source:	100 gpm
Total of all flows:	742.1 gpm

Pressure Required at Source:	78.2 psi
Pressure Available at Source:	89.7 psi
Surplus Pressure at Source:	11.5 psi

0 2 4 8 16'
TRUE NORTH

FIRE PROTECTION FIRST FLOOR PIPING PLAN

SCALE: 1/8" = 1'-0"

2

LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
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TYP.: TYPICAL
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- # / # — REPRESENTS DETAIL NUMBER / REPRESENTS FIRE PROTECTION SHEET
- W1 — REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 / #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1'-0" — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
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SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	40	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
◉	TY 3531	23	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	24	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 87						

COORDINATE W/ FIRE ALARM DRAWINGS FOR ALL FLOW & TAMPER SWITCHES (TYP.)

FOR SB-1 AND SB-2 SWAY BRACE DETAILS, SEE SHEET FP302

MAXIMUM SPACING (FT.) OF STL. BRANCH LINE RESTRAINTS	
	SEISMIC COEFFICIENT (Cp) PROJECT Cp = 1.11
PIPE SIZE	Cp>0.71
1"	26
1-1/4"	27
1-1/2"	29
2"	31

PER NFPA 13 (2013) TABLE 9.3.6.4(a)

PIPE HANGER SPACING TABLE	
PIPE SIZE	MAX. DISTANCE
1" - 1-1/4"	12'-0"
1-1/2" - 8"	15'-0"

PER NFPA 13 (2013) TABLE 9.2.2.1(a)

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

Calculation results for Design Area B – Basement

This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd.
contract no _____ is designed to discharge at a rate of 0.1 gpm/ft² (L/min/m²) of floor area over a maximum area of 1500 ft² when supplied with water at a rate of 755.6 gpm at 66.3 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Light Hazard
Commodity classification: _____
Maximum storage height: _____
Storage arrangement: _____
Number of heads flowing: 28
System Type: Wet
Maximum velocity: 20.57 ft/s.

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	755.6 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	755.6 gpm
Additional flow at/beyond source:	100 gpm
Total of all flows:	855.6 gpm

Pressure Required at Source:	66.3 psi
Pressure Available at Source:	89.6 psi
Surplus Pressure at Source:	23.3 psi

0 2 4 8 16'
TRUE NORTH

FIRE PROTECTION BASEMENT PIPING PLAN

SCALE: 1/8" = 1'-0"

1

architecture
westbergwhite
14471 CHAMBERS RD, SUITE 210
TUSTIN, CA 92780
(714) 508-1780 508-1790 FAX
1775 HANCOCK ST, SUITE 120
SAN DIEGO, CA 92110
(619) 542-1188 542-1663 FAX

CONSULTANT:
4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. PEZZETTI
No. M 29925
Exp. 6-30-2016
MECHANICAL
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APP NO: 03-____
FILE NO: 19-C12
AC _____ FLS _____ SS _____
DATE _____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION BASEMENT AND FIRST FLOOR PIPING PLANS

SHEET NO:
OF: FP200

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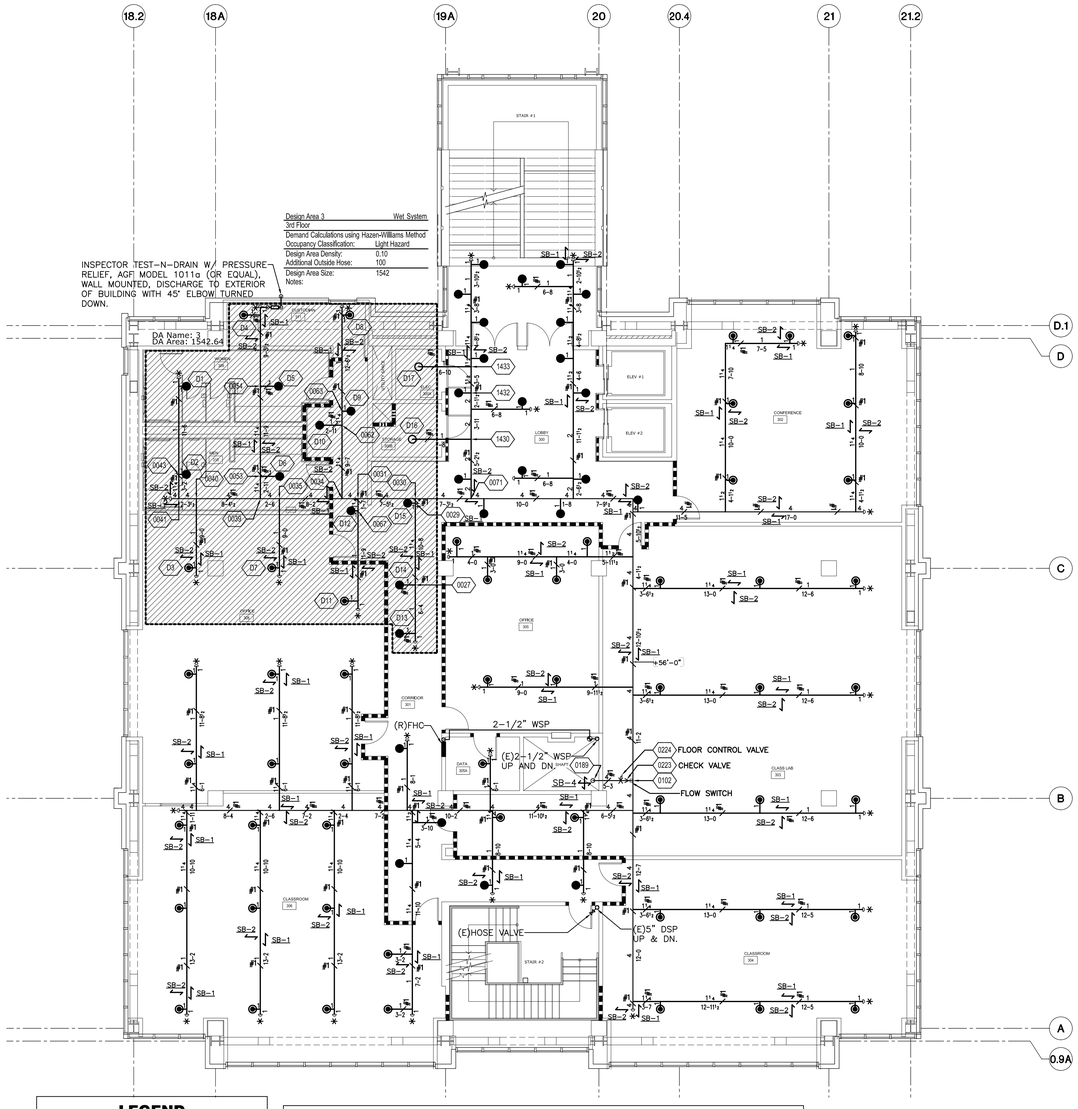

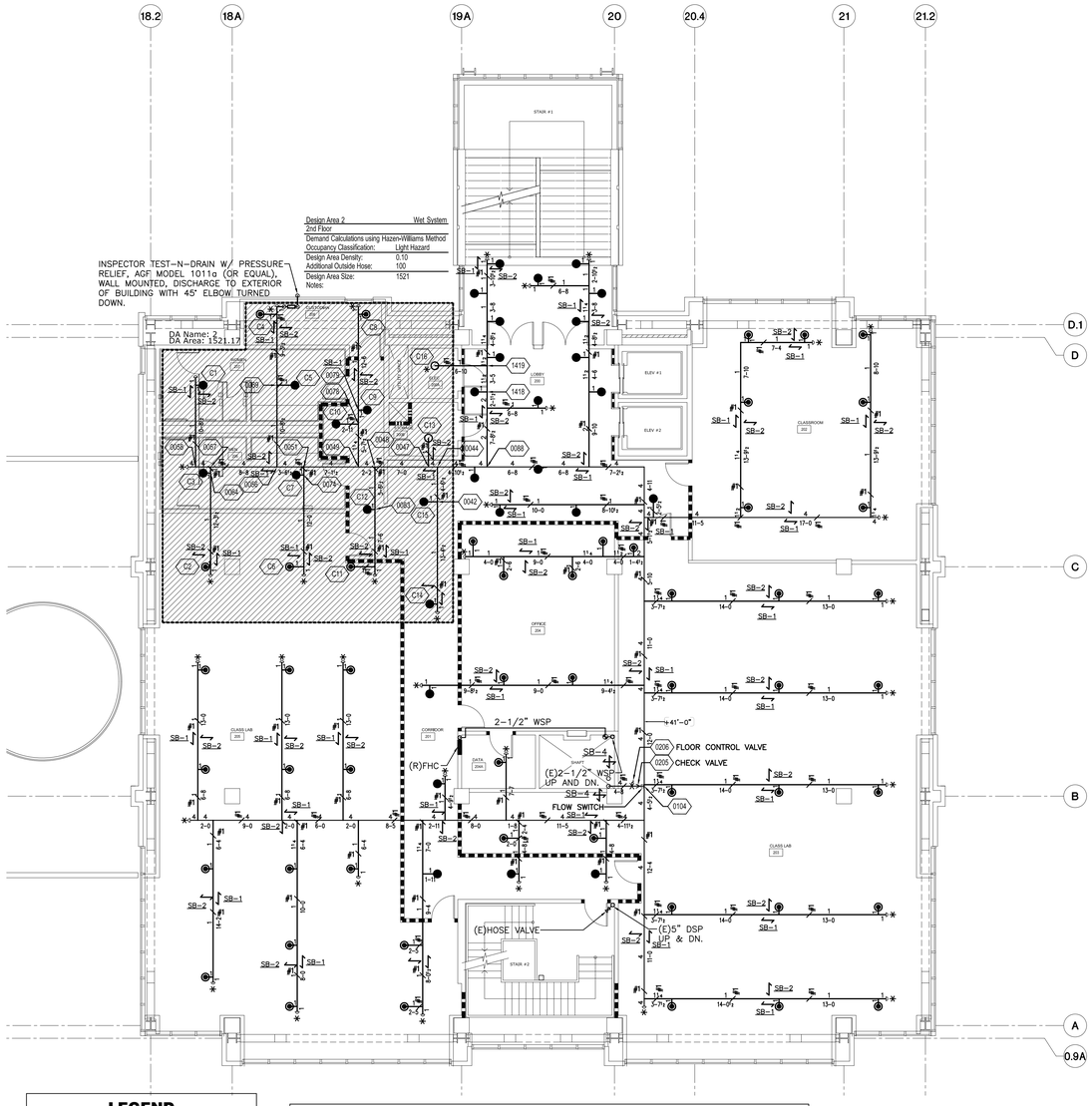

LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
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DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
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- REPRESENTS DETAIL NUMBER
- REPRESENTS FIRE PROTECTION SHEET
- REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
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- REPRESENTS PIPE ELEVATION
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- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
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SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
	TY 3231	53	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
	TY 3531	33	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 88						

COORDINATE W/ FIRE ALARM DRAWINGS FOR ALL FLOW & TAMPER SWITCHES (TYP.)

FOR SB-1 AND SB-2 SWAY BRACE DETAILS, SEE SHEET FP302

MAXIMUM SPACING (FT.) OF STL. BRANCH LINE RESTRAINTS

	SEISMIC COEFFICIENT (Cp) PROJECT Cp = 1.11
PIPE SIZE	Cp>0.71
1"	26
1-1/4"	27
1-1/2"	29
2"	31

PER NFPA 13 (2013) TABLE 9.3.6.4(a)

PIPE HANGER SPACING TABLE

PIPE SIZE	MAX. DISTANCE
1" - 1-1/4"	12'-0"
1-1/2" - 8"	15'-0"

PER NFPA 13 (2013) TABLE 9.2.2.1(a)

Calculation results for Design Area 3 – 3rd Floor
This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd.
contract no _____ is designed to discharge at a rate of 0.1 gpm/ft² (L/min/m²) of floor area over a maximum area of 1542 ft² when supplied with water at a rate of 430.7 gpm at 72.9 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Light Hazard
Commodity classification: _____
Maximum storage height: _____
Storage arrangement: _____
Number of heads flowing: 17
System Type: Wet
Maximum velocity: 16.56 ft/s

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	430.7 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	430.7 gpm
Additional flow at/beyond source:	100 gpm
Total of all flows:	530.7 gpm

Pressure Required at Source:	72.9 psi
Pressure Available at Source:	89.8 psi
Surplus Pressure at Source:	16.9 psi

0 2' 4' 8' 16'

TRUE NORTH

FIRE PROTECTION THIRD FLOOR PIPING PLAN SCALE: 1/8" = 1'-0" 2

LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- REPRESENTS DETAIL NUMBER
- REPRESENTS FIRE PROTECTION SHEET
- REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- REPRESENTS PIPE ELEVATION
- REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- REPRESENTS PIPE SIZE
- REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
	TY 3231	51	5.6	PENDENT	1/2"	CHROME	155°F	SEMI-RECESSED
	TY 3531	31	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 84						

COORDINATE W/ FIRE ALARM DRAWINGS FOR ALL FLOW & TAMPER SWITCHES (TYP.)

FOR SB-1 AND SB-2 SWAY BRACE DETAILS, SEE SHEET FP302

MAXIMUM SPACING (FT.) OF STL. BRANCH LINE RESTRAINTS

	SEISMIC COEFFICIENT (Cp) PROJECT Cp = 1.11
PIPE SIZE	Cp>0.71
1"	26
1-1/4"	27
1-1/2"	29
2"	31

PER NFPA 13 (2013) TABLE 9.3.6.4(a)

PIPE HANGER SPACING TABLE

PIPE SIZE	MAX. DISTANCE
1" - 1-1/4"	12'-0"
1-1/2" - 8"	15'-0"

PER NFPA 13 (2013) TABLE 9.2.2.1(a)

Calculation results for Design Area 2 – 2nd Floor
This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd.
contract no _____ is designed to discharge at a rate of 0.1 gpm/ft² (L/min/m²) of floor area over a maximum area of 1521 ft² when supplied with water at a rate of 421.6 gpm at 64.5 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Light Hazard
Commodity classification: _____
Maximum storage height: _____
Storage arrangement: _____
Number of heads flowing: 16
System Type: Wet
Maximum velocity: 20.27 ft/s

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	421.6 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	421.6 gpm
Additional flow at/beyond source:	100 gpm
Total of all flows:	521.6 gpm

Pressure Required at Source:	64.5 psi
Pressure Available at Source:	89.8 psi
Surplus Pressure at Source:	25.4 psi

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

0 2' 4' 8' 16'

TRUE NORTH

FIRE PROTECTION SECOND FLOOR PIPING PLAN SCALE: 1/8" = 1'-0" 1

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PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:
RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:
REGISTERED PROFESSIONAL ENGINEER MATTHEW M. PETERSON No. M 29925 Exp. 6-30-2016 MECHANICAL STATE OF CALIFORNIA

STATE:
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE ____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION SECOND AND THIRD FLOOR PIPING PLANS

SHEET NO:
OF: FP201

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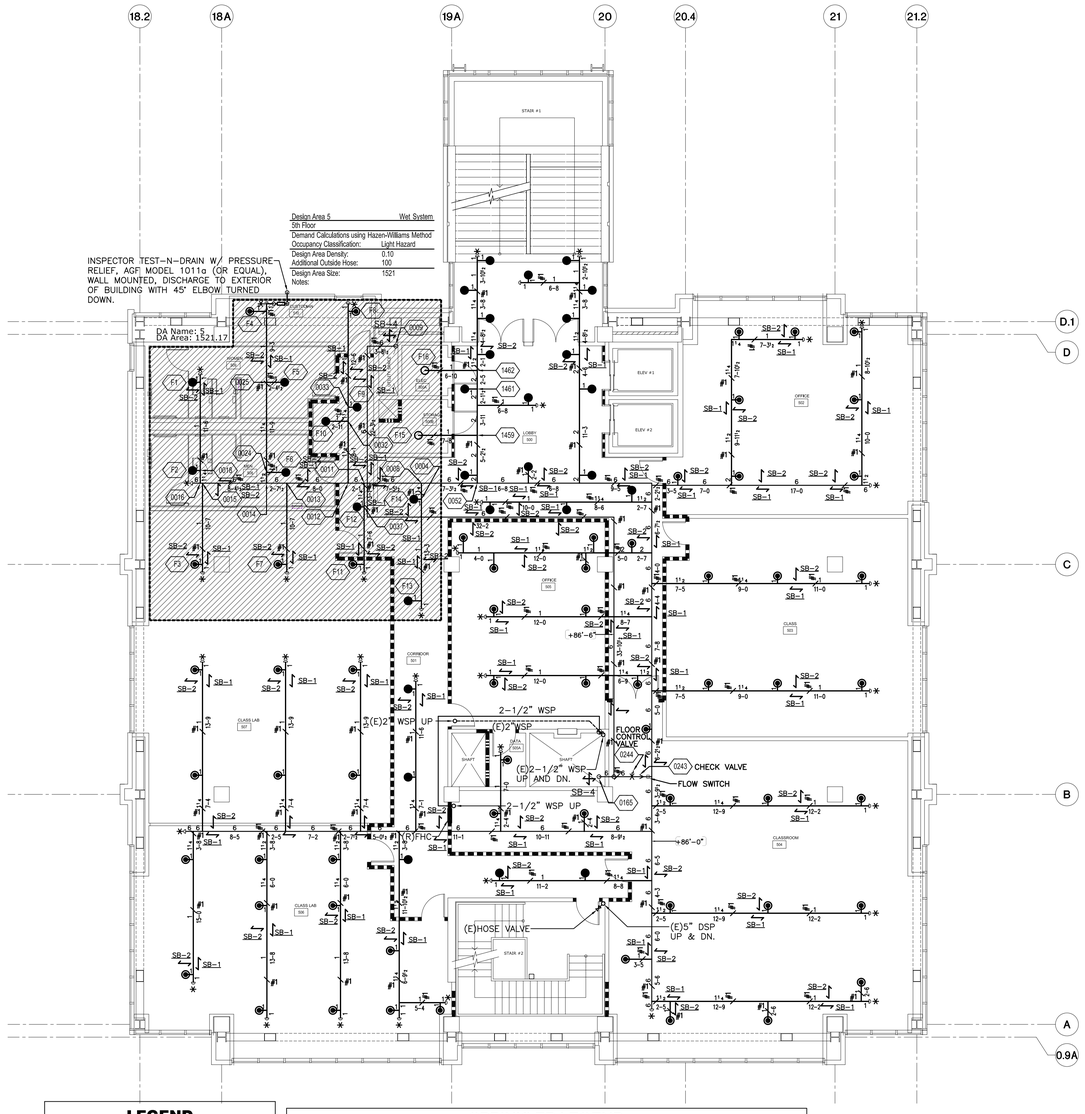

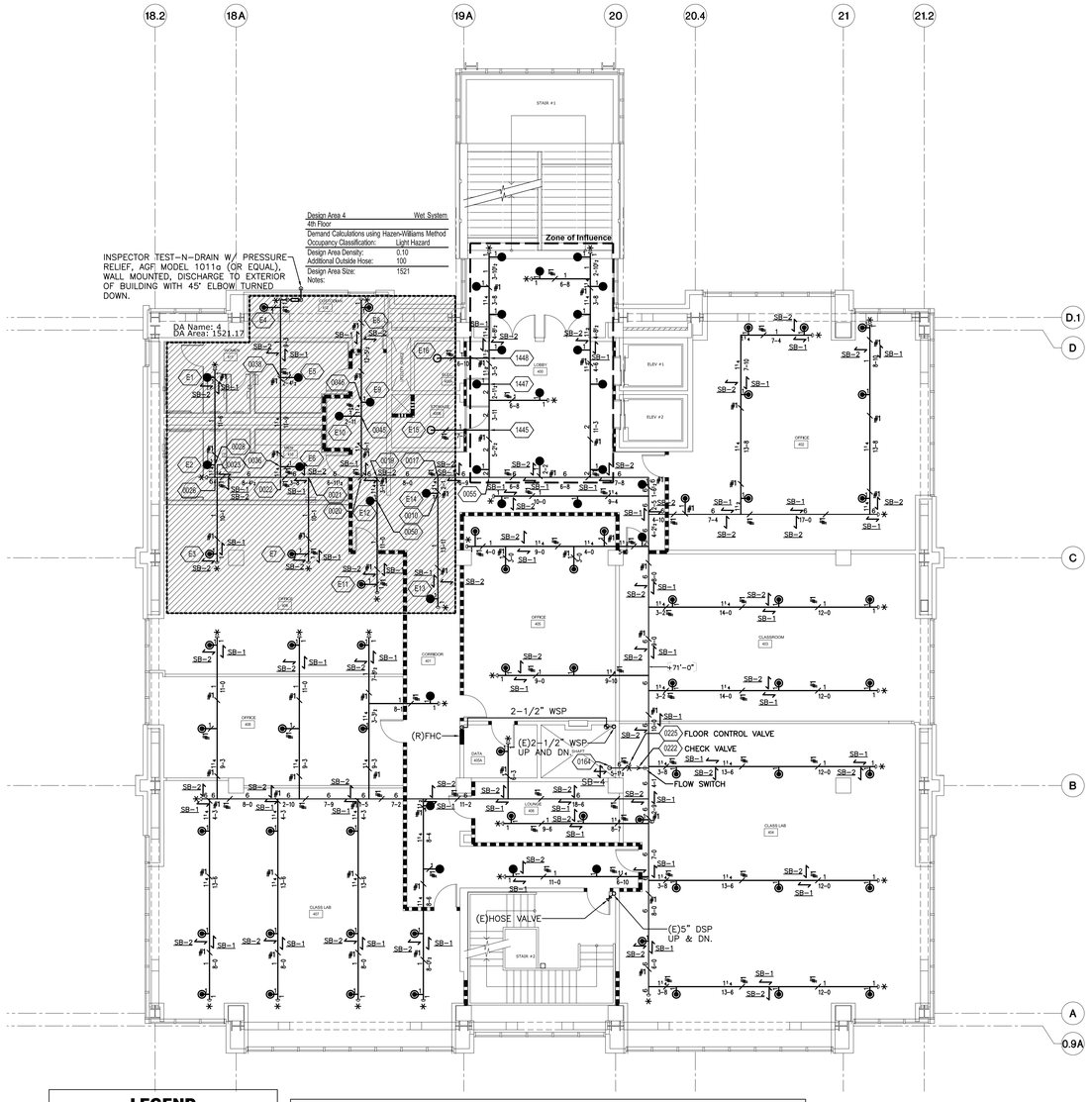

LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- # / # — REPRESENTS DETAIL NUMBER / REPRESENTS FIRE PROTECTION SHEET
- W1 — REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'–#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4–WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1'-0" — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	60	5.6	PENDENT	1/2"	CHROME	155°F	SEMI–RECESSED
◉	TY 3531	32	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 94						

COORDINATE W/ FIRE ALARM DRAWINGS FOR ALL FLOW & TAMPER SWITCHES (TYP.)

FOR SB–1 AND SB–2 SWAY BRACE DETAILS, SEE SHEET FP302

MAXIMUM SPACING (FT.) OF STL. BRANCH LINE RESTRAINTS

	SEISMIC COEFFICIENT (Cp) PROJECT Cp = 1.11
PIPE SIZE	Cp>0.71
1"	26
1–1/4"	27
1–1/2"	29
2"	31

PER NFPA 13 (2013) TABLE 9.3.6.4(a)

PIPE HANGER SPACING TABLE

PIPE SIZE	MAX. DISTANCE
1" – 1–1/4"	12'–0"
1–1/2" – 8"	15'–0"

PER NFPA 13 (2013) TABLE 9.2.2.1(a)

Calculation results for Design Area 5 – 5th Floor
This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd.
contract no _____ is designed to discharge at a rate of 0.1 gpm/ft² (L/min/m²) of floor area over a maximum area of 1521 ft² when supplied with water at a rate of 408.7 gpm at 81.5 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Light Hazard
Commodity classification: Wet
Maximum storage height:
Storage arrangement:
Number of heads flowing: 16
System Type:
Maximum velocity: 15.71 ft/s

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	408.7 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	408.7 gpm
Additional flow at/beyond source:	100 gpm
Total of all flows:	508.7 gpm

Pressure Required at Source:	81.5 psi
Pressure Available at Source:	89.9 psi
Surplus Pressure at Source:	8.4 psi

0 2 4 8 16'
TRUE NORTH

FIRE PROTECTION FIFTH FLOOR PIPING PLAN SCALE: 1/8" = 1'-0" 2

LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- # / # — REPRESENTS DETAIL NUMBER / REPRESENTS FIRE PROTECTION SHEET
- W1 — REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'–#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGAR
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4–WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3 — REPRESENTS PIPE SIZE
- 1'-0" — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◉	TY 3231	56	5.6	PENDENT	1/2"	CHROME	155°F	SEMI–RECESSED
◉	TY 3531	33	5.6	PENDENT	1/2"	WHITE	155°F	CONCEALED
○	TY 3131	2	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 91						

COORDINATE W/ FIRE ALARM DRAWINGS FOR ALL FLOW & TAMPER SWITCHES (TYP.)

FOR SB–1 AND SB–2 SWAY BRACE DETAILS, SEE SHEET FP302

MAXIMUM SPACING (FT.) OF STL. BRANCH LINE RESTRAINTS

	SEISMIC COEFFICIENT (Cp) PROJECT Cp = 1.11
PIPE SIZE	Cp>0.71
1"	26
1–1/4"	27
1–1/2"	29
2"	31

PER NFPA 13 (2013) TABLE 9.3.6.4(a)

PIPE HANGER SPACING TABLE

PIPE SIZE	MAX. DISTANCE
1" – 1–1/4"	12'–0"
1–1/2" – 8"	15'–0"

PER NFPA 13 (2013) TABLE 9.2.2.1(a)

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

Calculation results for Design Area 4 – 4th Floor
This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd.
contract no _____ is designed to discharge at a rate of 0.1 gpm/ft² (L/min/m²) of floor area over a maximum area of 1521 ft² when supplied with water at a rate of 410.1 gpm at 74.3 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Light Hazard
Commodity classification: Wet
Maximum storage height:
Storage arrangement:
Number of heads flowing: 16
System Type:
Maximum velocity: 16.14 ft/s

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	410.1 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	410.1 gpm
Additional flow at/beyond source:	100 gpm
Total of all flows:	510.1 gpm

Pressure Required at Source:	74.3 psi
Pressure Available at Source:	89.9 psi
Surplus Pressure at Source:	15.6 psi

0 2 4 8 16'
TRUE NORTH

FIRE PROTECTION FOURTH FLOOR PIPING PLAN SCALE: 1/8" = 1'-0" 1

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PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:
RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:
REGISTERED PROFESSIONAL ENGINEER MATTHEW M. PEZZETTI No. M 29925 Exp. 6–30–2016 MECHANICAL STATE OF CALIFORNIA

STATE:
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-____
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE ____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION FOURTH AND FIFTH FLOOR PIPING PLANS

SHEET NO:
OF: FP202

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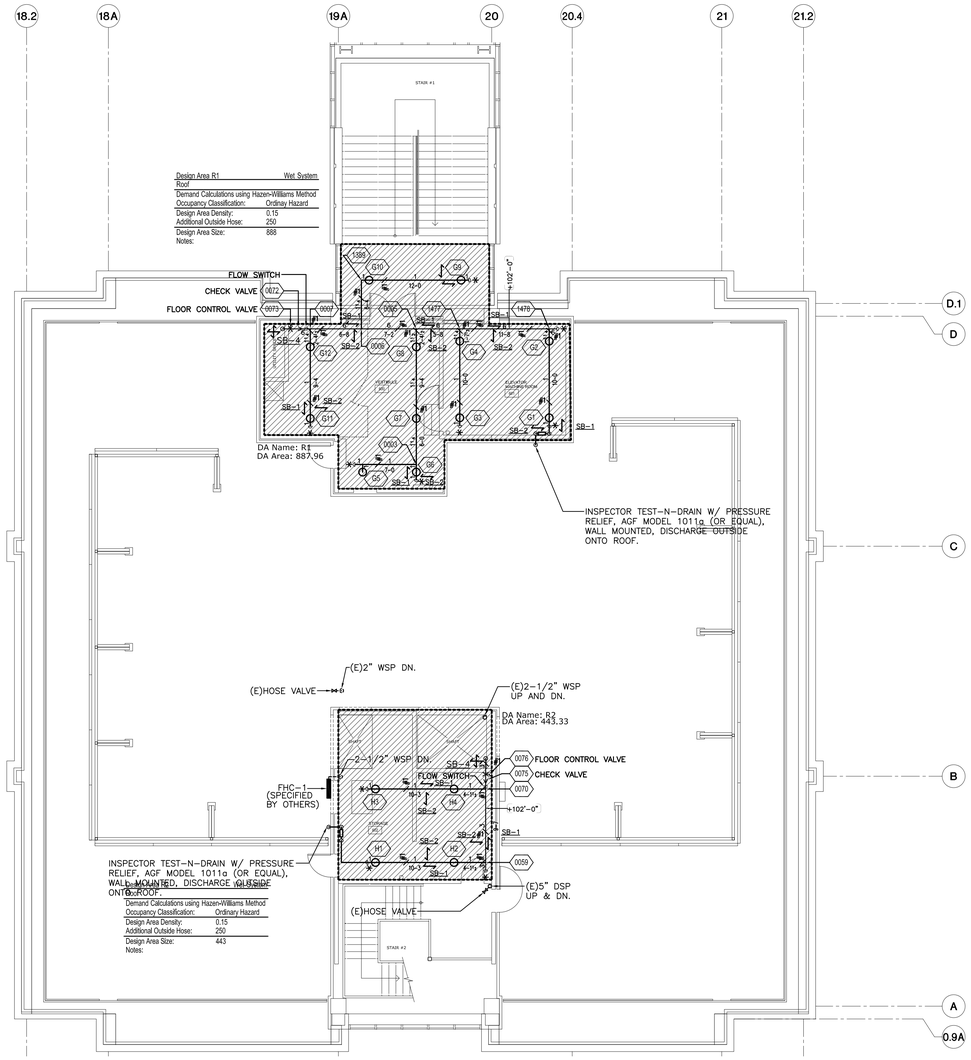

Design Area R2 Wet System
Roof
Demand Calculations using Hazen-Williams Method
Occupancy Classification: Ordinay Hazard
Design Area Density: 0.15
Additional Outside Hose: 250
Design Area Size: 443
Notes:

LEGEND

A.F.F.: ABOVE FINISH FLOOR
BFP: BACKFLOW PREVENTER
BOP: BOTTOM OF PIPE
DSP: DRY STANDPIPE
(E): EXISTING
GPM: GALLONS PER MINUTE
FDC: FIRE DEPARTMENT CONNECTION
FH: FIRE HYDRANT
FHC: FIRE HOSE CABINET
L.F.: LINEAR FEET
N.I.C.: NOT IN CONTRACT
PSI: POUNDS PER SQUARE INCH
PVC: POLYVINYL CHLORIDE
(R): RELOCATED
SQ. FT.: SQUARE FEET
TYP.: TYPICAL
WSP: WET STANDPIPE

- # / # — REPRESENTS DETAIL NUMBER / REPRESENTS FIRE PROTECTION SHEET
- W1 — REPRESENTS WATER SUPPLY NODE NOTED ON HYDRAULIC CALCULATIONS
- # — REPRESENTS NODE NOTED ON HYDRAULIC CALCULATIONS
- +#'-#" — REPRESENTS PIPE ELEVATION
- #2 #1 — REPRESENTS PIPE HANGER
- REPRESENTS END LINE RESTRAINT
- REPRESENTS 4-WAY BRACE WHERE OCCURS
- REPRESENTS LATERAL OR LONGITUDINAL SWAY BRACE WHERE OCCURS
- 3" — REPRESENTS PIPE SIZE
- 1'-0" — REPRESENTS PIPE LENGTH
- REPRESENTS PIPE SLOPE DIRECTION
- REPRESENTS PIPE END CAP
- REPRESENTS PIPE RISE
- REPRESENTS PIPE DROP
- REPRESENTS EXISTING PIPING
- REPRESENTS POINT OF CONNECTION

SYMBOLS AND ABBREVIATIONS ARE SHOWN FOR REFERENCE; NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

SPRINKLER LEGEND

SYMBOL	SIN/MODEL	QUANTITY	K-FACTOR	TYPE	ORIFICE	FINISH	TEMP.	NOTE
◯	TY 3131	16	5.6	UPRIGHT	1/2"	BRASS	155°F	EXPOSED
		TOTAL = 16						

COORDINATE W/ FIRE ALARM DRAWINGS FOR ALL FLOW & TAMPER SWITCHES (TYP.)

FOR SB-1 AND SB-2 SWAY BRACE DETAILS, SEE SHEET FP302

MAXIMUM SPACING (FT.) OF STL. BRANCH LINE RESTRAINTS	
	SEISMIC COEFFICIENT (Cp) PROJECT Cp = 1.11
PIPE SIZE	Cp>0.71
1"	26
1-1/4"	27
1-1/2"	29
2"	31

PER NFPA 13 (2013)
TABLE 9.3.6.4(a)

PIPE HANGER SPACING TABLE	
PIPE SIZE	MAX. DISTANCE
1" - 1-1/4"	12'-0"
1-1/2" - 8"	15'-0"

PER NFPA 13 (2013)
TABLE 9.2.2.1(a)

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING

Calculation results for Design Area R1 – Roof
This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd,
contract no _____ is designed to discharge at a rate of 0.15 gpm/ft² (L/min/m²) of floor area over a maximum area of 888 ft² when supplied with water at a rate of 273.1 gpm at 79.8 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Ordinay Hazard
Commodity classification: _____
Maximum storage height: _____
Storage arrangement: _____
Number of heads flowing: 12
System Type: Wet
Maximum velocity: 16.5 ft/s

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	273.1 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	273.1 gpm
Additional flow at/beyond source:	250 gpm
Total of all flows:	523.1 gpm

Pressure Required at Source:	79.8 psi
Pressure Available at Source:	69.8 psi
Surplus Pressure at Source:	10.1 psi

Calculation results for Design Area R2 – Roof
This system as shown on _____ company print no _____ dated 11-09-15
for Rio Hondo College "L" Tower at 3600 Workman Mill Rd,
contract no _____ is designed to discharge at a rate of 0.15 gpm/ft² (L/min/m²) of floor area over a maximum area of 443 ft² when supplied with water at a rate of 80 gpm at 71.6 psi at the base of the riser.
Hose stream allowance of _____ is included in the above.
Occupancy classification: Ordinay Hazard
Commodity classification: _____
Maximum storage height: _____
Storage arrangement: _____
Number of heads flowing: 4
System Type: Wet
Maximum velocity: 14.85 ft/s

Flow from In-Rack sprinklers:	0 gpm
Flow from Overhead sprinklers:	80 gpm
Flow from Inside Hoses:	0 gpm
Flow from Outside Hoses:	0 gpm
Other fixed flows:	0 gpm
Total flow in system piping:	80 gpm
Additional flow at/beyond source:	250 gpm
Total of all flows:	330 gpm

Pressure Required at Source:	71.6 psi
Pressure Available at Source:	69.9 psi
Surplus Pressure at Source:	18.4 psi

0 2 4 8 16'
TRUE NORTH

2

FIRE PROTECTION ROOF PENTHOUSE PIPING PLAN

SCALE: 1/8" = 1'-0"

1

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PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:
RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

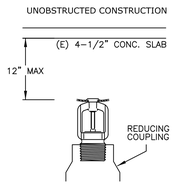
CONSULTANT:
REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. PEDERSEN
No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

STATE:
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE _____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION ROOF PENTHOUSE PIPING PLAN

SHEET NO:
OF: FP203



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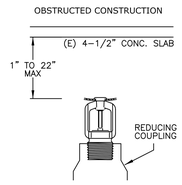
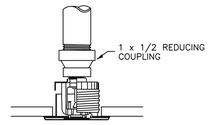


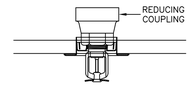
TYCO
MODEL TY-FRB
UPRIGHT
TY 3131

NOT TO SCALE | 11



TYCO
MODEL TY-FRB
UPRIGHT
TY 3131

NOT TO SCALE | 10

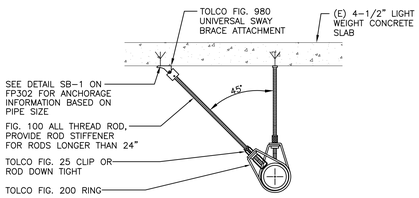


TYCO
MODEL RF-II (ROYAL FLUSH) (WHITE CONCEALED ESCUTCHEON)
TY 3531

NOT TO SCALE | 9

TYCO
MODEL TY-FRB
SEMI-RECESSED PENDENT
TY 3231

NOT TO SCALE | 8



ROD SIZING TABLE	
PIPE SIZE	ROD SIZE
1" – 4"	3/8"
5" – 8"	1/2"

PER NFPA 13 (2013)
TABLE 9.1.2.1

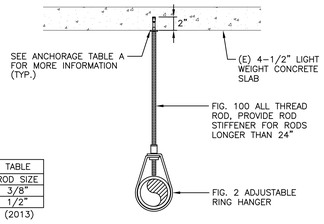
PLAN SYMB

(PRIMARY METHOD)
END OF LINE RESTRAINT
(NFPA 13, 2013 ED, 9.3.6.1A)
PER FIG A.9.3.6.1(C), DETAIL A

NOT TO SCALE | 7

TYPICAL DROP TO SPRINKLER HEAD

NOT TO SCALE | 6



ROD SIZING TABLE	
PIPE SIZE	ROD SIZE
1" – 4"	3/8"
5" – 8"	1/2"

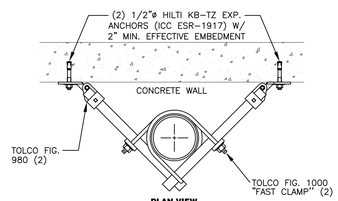
PER NFPA 13 (2013)
TABLE 9.1.2.1

ANCHORAGE TABLE A			
PIPE SIZE	ROD SIZE	MAX. HANGER SPAN	ANCHOR (ICC ESR-1917)
1" – 4"	3/8"	10'-0"	3/8"ø x 2" EMBEDMENT HILTI KB-TZ WITH COUPLER
5" – 8"	1/2"	10'-0"	1/2"ø x 2" EMBEDMENT HILTI KB-TZ WITH COUPLER

#1
PLAN SYMB

ROD AND RING
(PRIMARY HANGER)

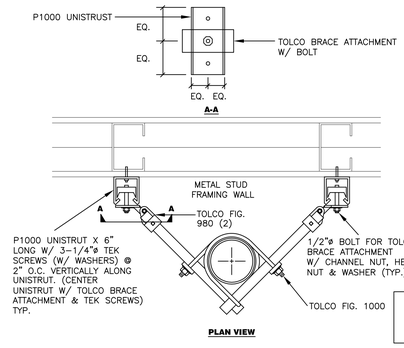
NOT TO SCALE | 5



PLAN SYMB

4-WAY BRACE AT TOP OF RISERS
SB-3

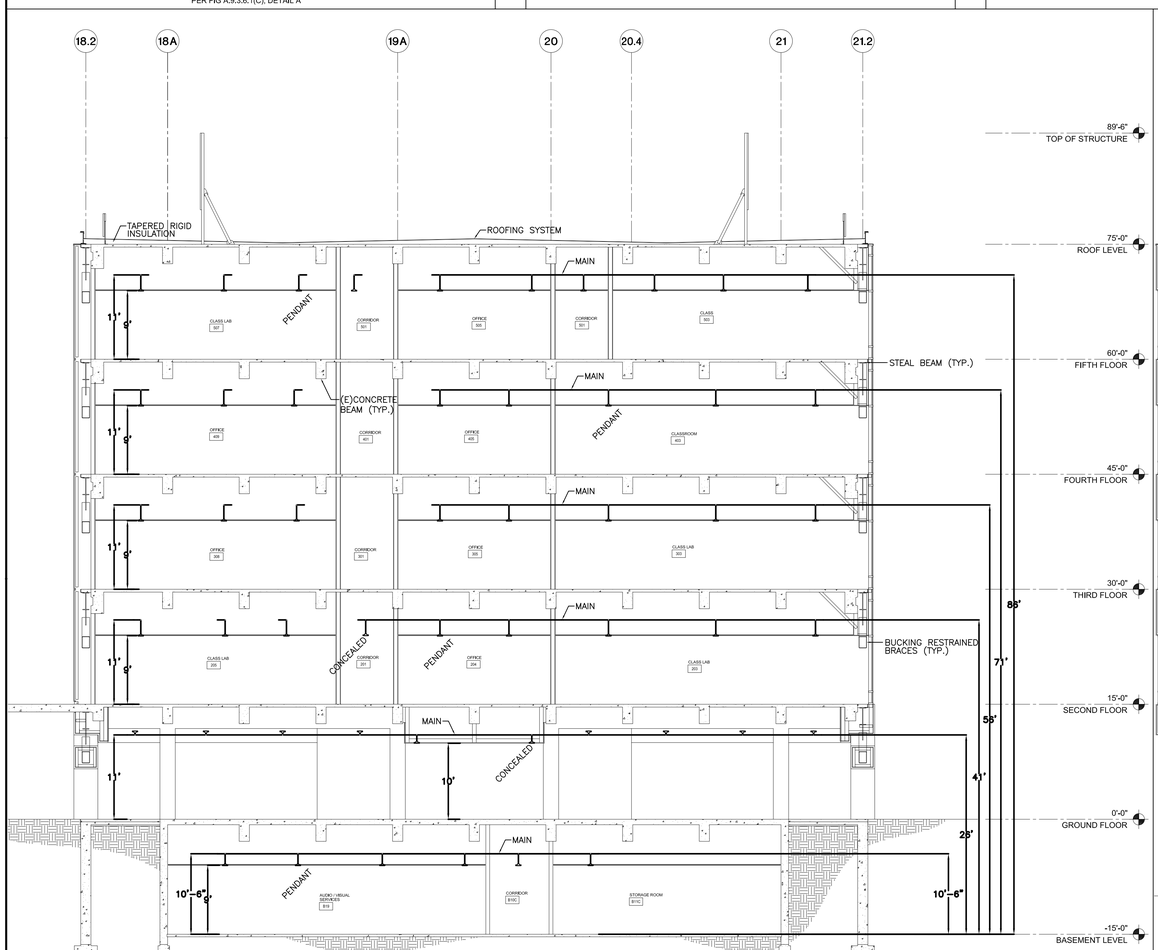
NOT TO SCALE | 4



PLAN SYMB

4-WAY BRACE AT TOP OF RISERS
SB-4

NOT TO SCALE | 3

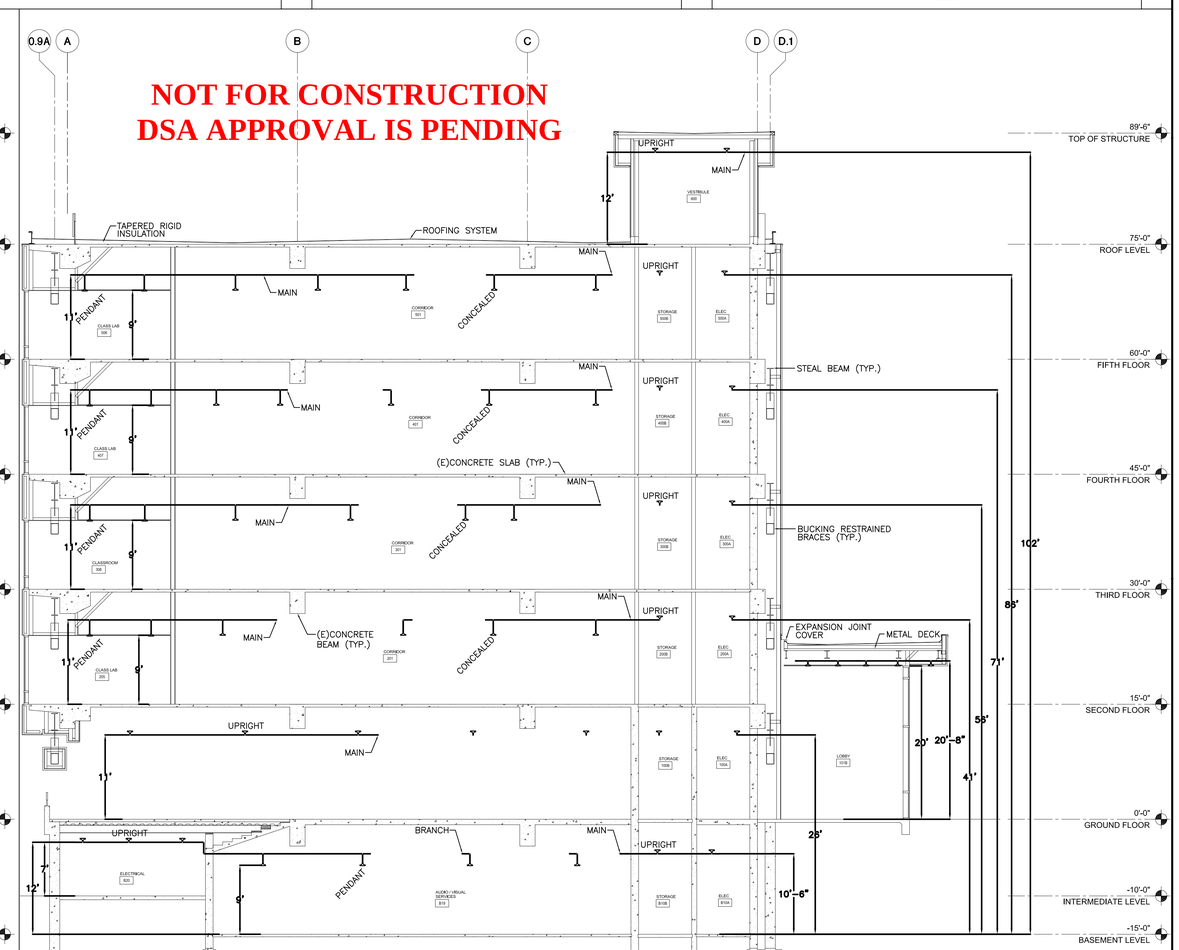


CROSS SECTION

SCALE: 1/8" = 1'-0"

2

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING



LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"

1

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1775 HANCOCK ST, SUITE 120
SAN DIEGO, CA 92110
(619) 542-1188 542-1663 FAX

CONSULTANT:
4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
△		
△		
△		
△		

JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW M. FEESTER
No. M 29925
Exp. 6-30-2016
MECHANICAL
STATE OF CALIFORNIA

STATE:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-____
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE ____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION DETAILS & BUILDING SECTIONS

SHEET NO:
OF: FP301

P:\530-Westberg\530-065_Rio_Hondo_College_L_Tower\B_Production\1_Drawings\Fire Protection\FP001.DWG Dec 22, 2015 - 10:25am Hernandez

Tol-Brace Seismic Calculations

Project Address: Rio Hondo College - L Tower
3600 Workman Mill Road
Whittier, CA
Job # 530.065

Pezeshki Engineering, Inc.
4611 Teller Ave., Suite A
Newport Beach, CA 92660
949-861-3396

B-Line by EATON

Calculations based on 2013 NFPA Pamphlet #13

Brace Information

Maximum Spacing	20' 0" (6.1 m)
Maximum Brace Length	7' 0" (2.13 m)
Bracing Material	1" Sch.40
Angle from Vertical	45° Min.
Least Rad. of Gyration	0.42" (11 mm)
L/R Value	200
Max Horizontal Load	1310 lbs (594 kg)
Force Factor (Cp)	1.11
Other Requirements - FM Approved Loads	

Fastener Information

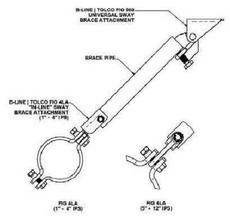
Fastener Orientation	NFPA Type B
Maximum Load	3140 lbs (1424 kg)
Diameter	3/8"
Length	2"
Type	(4) Hilti Kwik KB-TZ

Tolco Brace Components

Tolco Component Fig. Number	Adjusted Load
Fig. 4LA Clamp	2300 lbs (1043 kg)
Fig.980 Universal Swivel	1970 lbs (894 kg)

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for Tolco components only. Use of any other components voids these calculations and the listing of the assembly.

Assembly Detail



Brace Identification	SB-1
Orientation of Brace	Lateral

Size and Type of Pipe	Total Length	Total Calculated Load
6" Sch.10 Steel Pipe (152.4 mm)	20ft (6.1 m)	511 lbs (232 kg)
2" Sch.40 Steel Pipe (50.8 mm)	26ft (7.9 m)	148 lbs (67 kg)
1.5" Sch.40 Steel Pipe (38.1 mm)	15ft (4.6 m)	60 lbs (27 kg)
1.25" Sch.40 Steel Pipe (31.75 mm)	15ft (4.6 m)	49 lbs (22 kg)
1" Sch.40 Steel Pipe (25.4 mm)	60ft (18.3 m)	137 lbs (62 kg)
Percentage added for Fittings and Sprinklers	15%	136 lbs (61.69 kg)
Total Adjusted Load of all pipe within Zone of Influence		1040 lbs (472 kg)

(Tol-Brace Verizon 8)

Tol-Brace Seismic Calculations

Project Address: Rio Hondo College - L Tower
3600 Workman Mill Road
Whittier, CA
Job # 530.065

Pezeshki Engineering, Inc.
4611 Teller Ave., Suite A
Newport Beach, CA 92660
949-861-3396

B-Line by EATON

Calculations based on 2013 NFPA Pamphlet #13

Brace Information

Maximum Spacing	20' 0" (6.1 m)
Maximum Brace Length	7' 0" (2.13 m)
Bracing Material	1" Sch.40
Angle from Vertical	45° Min.
Least Rad. of Gyration	0.42" (11 mm)
L/R Value	200
Max Horizontal Load	1310 lbs (594 kg)
Force Factor (Cp)	1.11
Other Requirements - FM Approved Loads	

Fastener Information

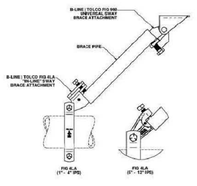
Fastener Orientation	NFPA Type B
Maximum Load	3140 lbs (1424 kg)
Diameter	3/8"
Length	2"
Type	(4) Hilti Kwik KB-TZ

Tolco Brace Components

Tolco Component Fig. Number	Adjusted Load
Fig. 4LA Clamp	2260 lbs (1025 kg)
Fig.980 Universal Swivel	1970 lbs (894 kg)

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for Tolco components only. Use of any other components voids these calculations and the listing of the assembly.

Assembly Detail

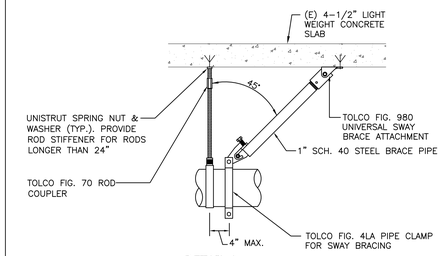


Brace Identification	SB-2
Orientation of Brace	Longitudinal

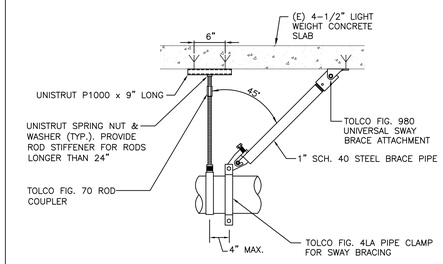
Size and Type of Pipe	Total Length	Total Calculated Load
6" Sch.10 Steel Pipe (152.4 mm)	20ft (6.1 m)	511 lbs (232 kg)
Percentage added for Fittings and Sprinklers	15%	77 lbs (34.93 kg)
Total Adjusted Load of all pipe within Zone of Influence		588 lbs (267 kg)

(Tol-Brace Verizon 8)

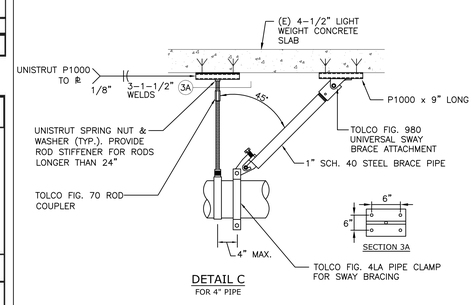
Sway Brace Detail (SB-2)



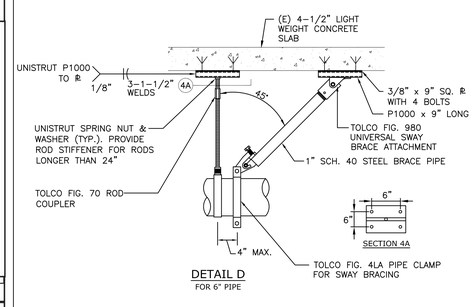
DETAIL A
FOR PIPES UP TO 2"



DETAIL B
FOR 3" PIPE



DETAIL C
FOR 4" PIPE



DETAIL D
FOR 6" PIPE

ANCHORAGE TABLE B				
PIPE SIZE	HANGER ANCHORAGE	HANGER SPACING	DETAIL NO.	BRACE ANCHORAGE
UP TO 2"	3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	20'-0"	A	3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ
3"	(2)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	20'-0"	B	3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ
4"	(4)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	20'-0"	C	(2)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ
6"	(4)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	10'-0"	C	(4)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ

ROD SIZING TABLE	
PIPE SIZE	ROD SIZE
1" – 4"	3/8"
5" – 8"	1/2"

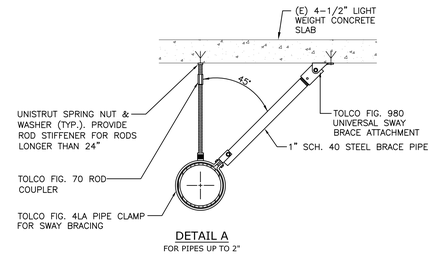
PER NFPA 13 (2013) TABLE 9.1.2.1

NOTES:
1. SPACING OF HANGERS AND BRACES ARE GOVERNED BY ANCHORAGE CAPACITIES INTO EXISTING 4-1/2" LT. WEIGHT CONCRETE SLABS.
2. ALL BOLTS SHALL BE HILTI KWIK KB-TZ BOLTS (ICC ESR-1917).

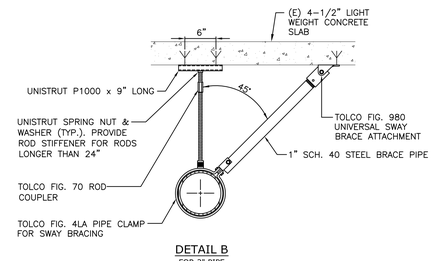
PLAN SYMB

Orientation of Brace: Longitudinal

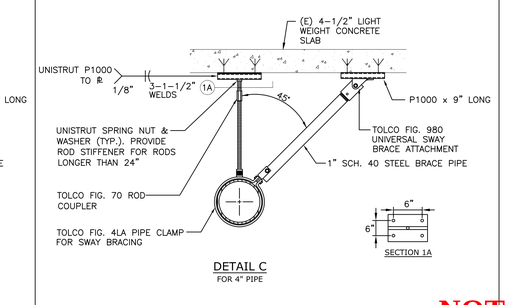
Sway Brace Detail (SB-1)



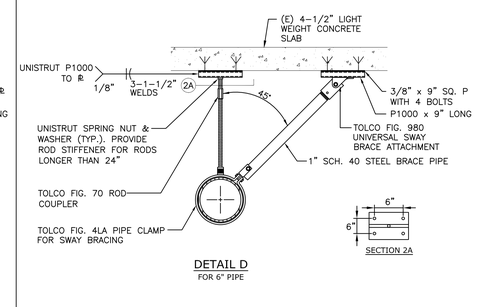
DETAIL A
FOR PIPES UP TO 2"



DETAIL B
FOR 3" PIPE



DETAIL C
FOR 4" PIPE



DETAIL D
FOR 6" PIPE

ANCHORAGE TABLE B				
PIPE SIZE	HANGER ANCHORAGE	HANGER SPACING	DETAIL NO.	BRACE ANCHORAGE
UP TO 2"	3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	20'-0"	A	3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ
3"	(2)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	20'-0"	B	3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ
4"	(4)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	20'-0"	C	(2)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ
6"	(4)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ	10'-0"	C	(4)3/8"ø x 2" EFFECT. EMBED. HILTI KB-TZ

ROD SIZING TABLE	
PIPE SIZE	ROD SIZE
1" – 4"	3/8"
5" – 8"	1/2"

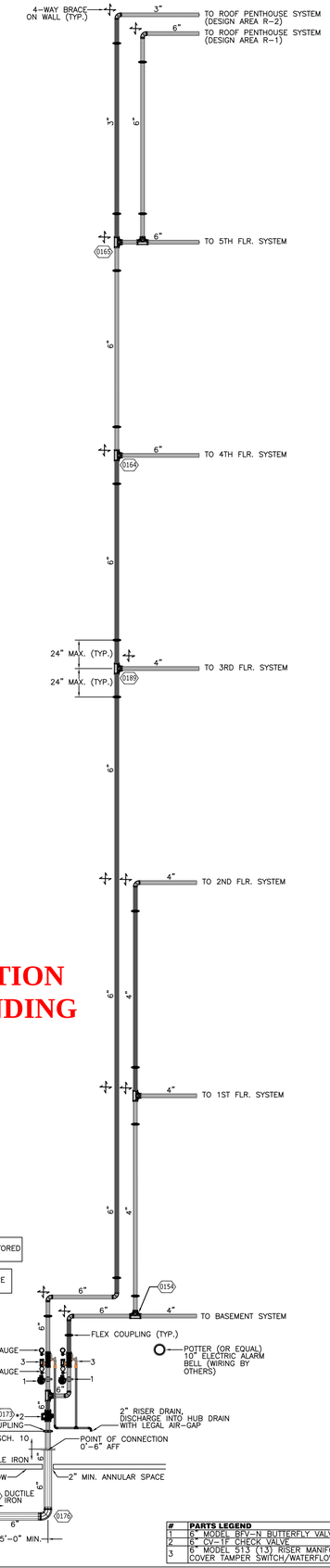
PER NFPA 13 (2013) TABLE 9.1.2.1

NOTES:
1. SPACING OF HANGERS AND BRACES ARE GOVERNED BY ANCHORAGE CAPACITIES INTO EXISTING 4-1/2" LT. WEIGHT CONCRETE SLABS.
2. ALL BOLTS SHALL BE HILTI KWIK KB-TZ BOLTS (ICC ESR-1917).

PLAN SYMB

Orientation of Brace: Lateral

NOT FOR CONSTRUCTION
DSA APPROVAL IS PENDING



NOTE:
SYSTEM TO BE MONITORED 24 HOUR-7 DAY

*: COORDINATE WITH FIRE ALARM DRAWINGS

#	PARTS LEGEND
1	6" MODEL BFV-N BUTTERFLY VALVE
2	6" CV-1F CHECK VALVE
3	6" MODEL 513 (13) RISER MANIFOLD WITH COVER TAMPER SWITCH/WATERFLOW SWITCH

SEISMIC BRACING DETAILS AND CALCULATIONS — NOT TO SCALE — 2

RISER DETAIL — NOT TO SCALE — 1

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SAN DIEGO, CA 92110
(619) 542-1188 542-1663 FAX

CONSULTANT:

4611 Teller Ave, Suite A
Newport Beach, CA 92660
Telephone (949) 861-3396
Fax (949) 861-3399
PEI # 530.065

PROJECT NAME:

RIO HONDO COLLEGE "L" TOWER
SEISMIC AND CODE UPGRADES
3600 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA 90601

CLIENT:

RIO HONDO COMMUNITY COLLEGE DISTRICT
3600 WORKMAN MILL ROAD,
WHITTIER, CALIFORNIA 90601

No.	Rev. Date	Description
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JOB NO: 15003
DATE: 12/22/2015
DRAWN:
CHECK:
ARCHITECT:
ENGINEER:
ARCHITECT:

CONSULTANT:

REGISTERED PROFESSIONAL ENGINEER MATTHEW M. PEZESHKI No. M 29925 Exp. 6-30-2016 MECHANICAL STATE OF CALIFORNIA

STATE:

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP NO: 03-
FILE NO: 19-C12
AC ____ FLS ____ SS ____
DATE ____

DSA SUBMITTAL

SHEET DESCRIPTION:
FIRE PROTECTION BUILDING CALCULATIONS

SHEET NO:
OF: FP302

P:\530-Westberg\530-065_Rio_Hondo_College_L_Tower\B_Production\1_Drawings\Fire Protection\FP001.DWG Dec 22, 2015 - 10:25am Hernandez