



State of Utah

GARY R. HERBERT
Governor

GREGORY S. BELL
Lt. Governor

Department of Administrative Services

KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON
Director

ADDENDUM NO. 1

Date: March 24, 2010

To: Contractors

From: Wayne Smith – Project Manager

Reference: Fire Sprinkler Upgrade – Taylorsville Deaf Center
Division of Services to the Deaf and Hard of Hearing – Taylorsville, Utah
DFCM Project No. 09215230

Subject: **Addendum No. 1**

Pages	Addendum Cover Sheet	1 page
	Revised Bid Form	2 pages
	<u>Consultant's Addendum No. 1</u>	4 pages
	Total	7 pages

Note: *This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.*

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

1.1 **SCHEDULE CHANGES:** No Project Schedule changes.

1.2 **GENERAL ITEMS:**

1.2.1 See attached revised bid form – includes Additive Alternate No. 1.

1.2.2 See attached Consultant's Addendum No. 1 dated March 23, 2010.



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

BID FORM – REVISED
PER ADDENDUM NO. 1 DATED MARCH 24, 2010

NAME OF BIDDER _____ DATE _____

To the Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Contractors" and in accordance with the "Instructions to Bidders", in compliance with your invitation for bids for the FIRE SPRINKLER UPGRADE - TAYLORSVILLE DEAF CENTER - DIVISION OF SERVICES TO THE DEAF AND HARD OF HEARING - TAYLORSVILLE, UTAH - DFCM PROJECT NO: 09215230 and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: _____

BASE BID: For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

_____ DOLLARS (\$)
(In case of discrepancy, written amount shall govern)

ADDITIVE ALTERNATE NO. 1: For all work shown on the Drawings and described in the Specifications and Contract Documents provide fire sprinklers under stage area in table/chair storage, I/we agree to perform for the sum of:

_____ DOLLARS (\$)
(In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by August 20, 2010, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of \$200.00 per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of _____

The undersigned Contractor's License Number for Utah is _____

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract.

The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:

(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

Respectfully submitted,

Name of Bidder

ADDRESS:

Authorized Signature



Date: March 23, 2010

To: Wayne Smith
State of Utah DFCM

From: Greg Jones
Protection Consultants, Inc.

Project: Fire Sprinkler Upgrade – Taylorsville Deaf Center
DFCM # 09215230

Subject: Revisions to Drawings for Addendum 1

The following revisions were made to Sheet FP1, FP2 and FP3 and should be issued with Addendum 1.

Sheet FP1:

1. Indicate alternate location for FDC on west wall of building in the event that Utah State Fire Marshal will not allow installation of FDC at the fire sprinkler riser.
2. Added water flow bell on the exterior of the building at the fire sprinkler riser.
3. Edited key note 6 to indicate that existing FACP is an addressable Simplex 4100.
4. Edited general note 6 to indicate the correct date for the water flow test (February 3, 2010).
5. Revised sprinkler symbol for 2 sprinklers in fitness room to indicate installation of 401 type escutcheons.
6. Relocated 2 sprinklers in Kitchen to minimized potential for obstruction to sprinkler discharge due to presence of existing mirror.

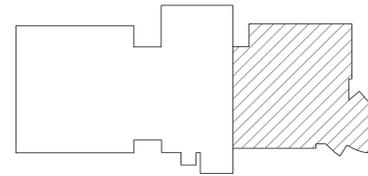
Sheet FP2:

1. Edited key note 6 to indicate that existing FACP is an addressable Simplex 4100.
2. Edited general note 6 to indicate the correct date for the water flow test (February 3, 2010).

Sheet FP3:

1. Added Bid Alternate #1 which includes installation of fire sprinklers in storage spaces below platform in Multi Purpose Room.
 2. Revised detail 1 to indicate correct size (4") for underground fire sprinkler water supply.
 3. Revised detail 2 to reflect correct size (4") of supply to fire sprinkler system from riser.
 4. Updated legend to include new symbols for sidewall sprinkler and pendent sprinkler with 401 type escutcheon.
-

4 KEY PLAN
NO SCALE



3 FIRE SPRINKLER KEY NOTES

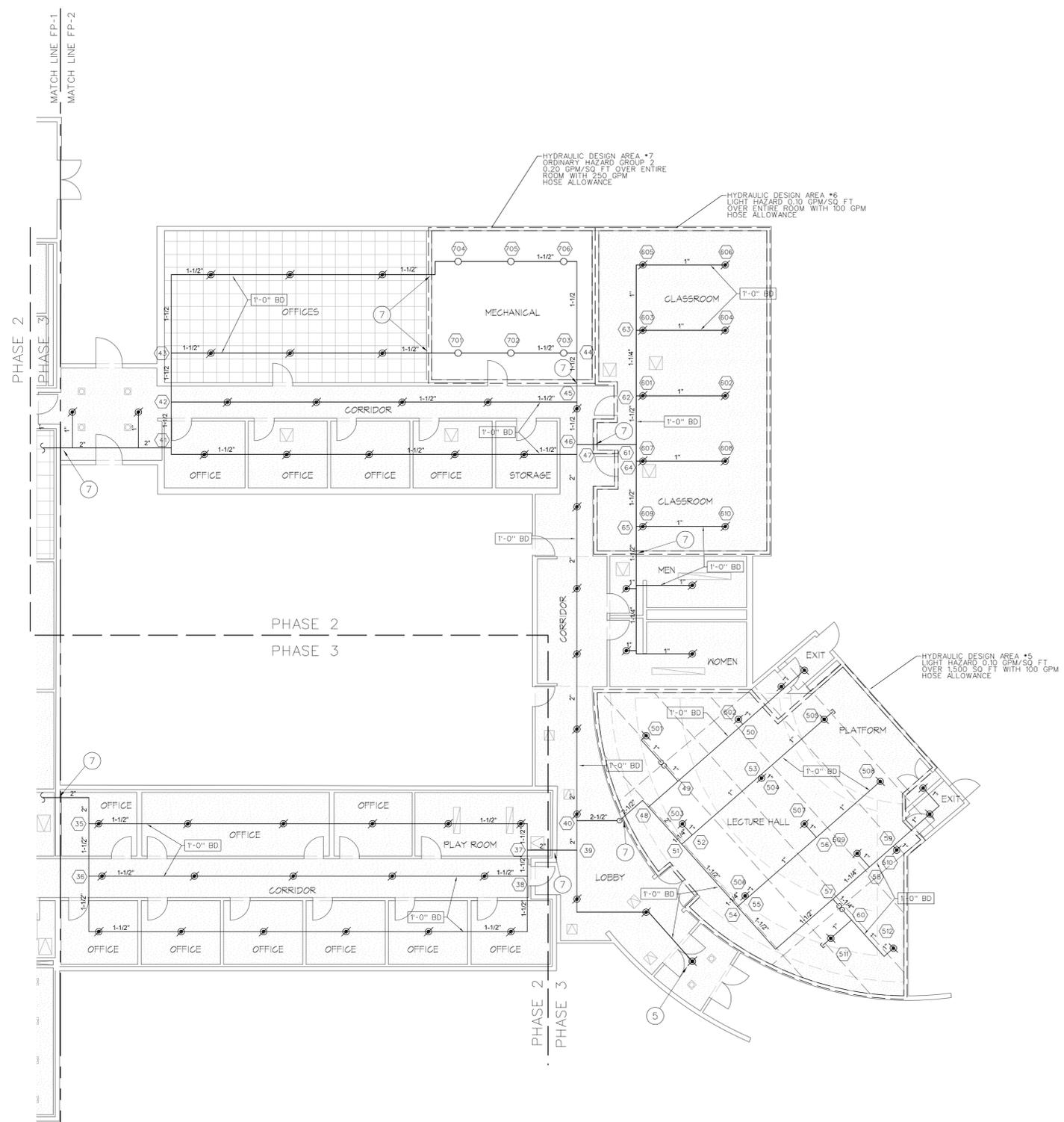
- INSTALL NEW 6" UNDERGROUND FIRE SERVICE TO SUPPLY NEW FIRE SPRINKLER SYSTEM IN BUILDING. PIPE/Joint MATERIALS, THRUST RESTRAINT, DEPTH OF BURY, INSTALLATION, TESTING AND BACK FILL SHALL BE IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF NFPA 13, NFPA 34, THE INTERNATIONAL PLUMBING CODE, AND LOCAL WATER PURVEYOR REQUIREMENTS. CONTRACTOR SHALL PREPARE SHOP DRAWINGS FOR SUBMITTAL AND OBTAIN ALL REQUIRED INSTALLATION PERMITS AND INSPECTIONS. RESTORE ALL GRADE SURFACES (ASPHALT PAVING, CONCRETE, GRASS LANDSCAPING ETC.) TO ORIGINAL CONDITION AFTER INSTALLATION AND TESTING OF WATER SERVICE.
- FIRE SPRINKLER RISER. SEE DETAIL 2 ON SHEET FP-3. DO NOT CONNECT ABOVEGROUND PIPING TO UNDERGROUND PIPING UNTIL UNDERGROUND PIPING HAS BEEN FLUSHED AND PRESSURE TESTED IN ACCORDANCE WITH NFPA 13 AND NFPA 24.
- INSTALL 2-WAY WALL MOUNTED FIRE DEPARTMENT CONNECTION (FDC). SEE DETAIL 2 ON SHEET FP-3. MOUNT FDC 36" ABOVE FINISHED EXTERIOR GRADE. INSTALL ESCUTCHEON TO COVER WALL PENETRATION.
- INSTALL SIDE DISCHARGE FIRE SPRINKLERS TO PROTECT SKYLIGHTS IN ACCORDANCE WITH NFPA 13 8.6.7. INSTALL DEFLECTOR OF SIDE DISCHARGE SPRINKLER WITHIN 6" OF TOP OF SKYLIGHT. 1" PIPING TO SPRINKLER MAY BE INSTALLED EXPOSED BUT SHALL BE TIGHT TO SIDE OF SKYLIGHT OPENING AND SHALL BE PAINTED TO MATCH THE WALL SURFACE.
- INSTALL DRY PENDENT TYPE FIRE SPRINKLERS IN VESTIBULES. SPRINKLERS SHALL BE SUPPLIED BY PIPING INSTALLED IN CONCEALED SPACE ABOVE VESTIBULE CEILING. PROTECT PIPING FROM FREEZING AS REQUIRED BY NFPA 13.
- CONNECT NEW FIRE SPRINKLER WATER FLOW AND VALVE SUPERVISORY SWITCHES TO EXISTING FIRE ALARM SYSTEM FOR BUILDING. EXISTING FACP IS AN ADDRESSABLE SIMPLEX 4100. PROGRAM ACTIVATION OF WATER FLOW SWITCH AS A FIRE ALARM SIGNAL. PROGRAM ACTIVATION OF VALVE SUPERVISORY SWITCH AS A SUPERVISORY SIGNAL. WORK SHALL BE PERFORMED BY STATE LICENSED FIRE ALARM CONTRACTOR WHO IS AN AUTHORIZED REPRESENTATIVE OF THE FIRE ALARM CONTROL PANEL MANUFACTURER. PREPARE SHOP DRAWINGS AND OBTAIN ALL REQUIRED PERMITS FOR THE FIRE ALARM SYSTEM MODIFICATION AS REQUIRED. CORE DRILL EXISTING MASONRY WALLS AS REQUIRED FOR THE INSTALLATION OF NEW FIRE SPRINKLER PIPING. LOCATION AND REQUIRED NUMBER OF CORE DRILLS INDICATED ON DRAWINGS IS APPROXIMATE AND SHOULD BE VERIFIED BY CONTRACTOR. PROVIDE ANNUAL CLEAR SPACE AROUND PIPING AS REQUIRED BY NFPA 13 9.3.4. INSTALL FLEXIBLE COUPLING ON PIPING ON BOTH SIDES OF WALL IN ACCORDANCE WITH NFPA 13 9.3.2 WHERE PIPING IS 2-1/2" OR GREATER IN NOMINAL DIAMETER. SEAL ALL PENETRATIONS OF FIRE RATED WALLS WITH FIRE RESISTIVE CAULKING.
- INSTALL PIPING DROPS TO SUPPLY FIRE SPRINKLERS PROTECTING PORTIONS OF BUILDING BELOW LOW ROOF AREAS EAST OF MULTIPURPOSE ROOM IN EXISTING RETURN AIR SHAFTS. COORDINATE EXACT LOCATION OF DROPS WITH EXISTING EQUIPMENT IN SHAFTS.
- INSTALL FIRE SPRINKLER MAIN FOR FIRE SPRINKLERS IN MULTIPURPOSE ROOM CONCEALED ABOVE EXISTING CORRIDOR CEILING. REMOVE AND REPLACE CEILING OR INSTALL NEW ACCESS PANELS AS REQUIRED TO FACILITATE INSTALLATION OF THE PIPING. COORDINATE WITH EXISTING EQUIPMENT SYSTEMS ABOVE CEILING AND ADJUST LOCATION OF CEILING PIPING AS REQUIRED.
- EXISTING CONVENTIONAL ZONED RELEASING PANEL FOR AEFV MONITOR SYSTEM TO BE DEMOLISHED. REMOVE RELEASING PANEL, MODULE, BATTERIES, CABINET INITIATING DEVICE CIRCUITS, NOTIFICATION APPLIANCE CIRCUITS, OUTPUT RELAYS, SOLENOIDS AND ALL OTHER UNUSED EQUIPMENT. EXISTING MOUNTING FRAME, 120 VAC POWER SUPPLY AND CIRCUITS FOR INTERCONNECTION WITH BUILDING FIRE ALARM SYSTEM WILL BE REUSED AND MAY REMAIN.
- FIRE SPRINKLER PIPING FOR PLATFORM AREA MAY BE INSTALLED EXPOSED BELOW CEILING. PIPING SHALL BE INSTALLED TIGHT TO CEILING AND PAINTED TO MATCH COLOR OF CEILING.

4 FIRE SPRINKLER SYSTEM GENERAL NOTES

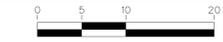
- GENERAL SCOPE OF WORK: FURNISH ALL MATERIALS, EQUIPMENT AND SUPPLIES AND PERFORM ALL WORK AND OPERATIONS TO DESIGN, CONSTRUCT AND MAKE FUNCTIONAL A NEW FIRE SPRINKLER SYSTEM FOR FIRE PROTECTION OF ALL PORTIONS OF THE PROJECT EXISTING CENTER FOR THE DEAF IN TAYLORSVILLE, UT. THE SYSTEM DESIGN SHALL MEET THE REQUIREMENTS OF NFPA 13 2007 EDITION AND BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. WORK INCLUDES BUT IS NOT LIMITED TO:
 - UNDERGROUND FIRE SERVICE
 - FIRE SPRINKLERS, PIPING, SUPPORTS AND BRACES
 - FIRE ALARM SYSTEM INTERFACE
 - CEILING REMOVAL AND REPAIR
 - INSTALLATION OF NEW CEILING ACCESS PANELS
- THE DESIGN OF THE FIRE SPRINKLER SYSTEM CONTAINED ON THESE DRAWINGS IS CONCEPTUAL IN NATURE. THE LOCATIONS SHOWN ON THESE DRAWINGS FOR SPRINKLERS, PIPING AND OTHER FIRE PROTECTION EQUIPMENT ARE APPROXIMATE AND MUST BE ADJUSTED WHERE REQUIRED TO MATCH ACTUAL BUILDING CONDITIONS. THE FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE TO DEVELOP THE FINAL DESIGN FOR THE FIRE SPRINKLER SYSTEM, PREPARE SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND OBTAIN APPROVAL FROM AUTHORITY HAVING JURISDICTION.
- THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:
 - INTERNATIONAL BUILDING CODE (IBC) - 2006 EDITION
 - INTERNATIONAL FIRE CODE (IFC) - 2006 EDITION
 - INTERNATIONAL PLUMBING CODE (IPC) - 2006 EDITION
 - NFPA 13 INSTALLATION OF FIRE SPRINKLER SYSTEMS (2007)
 - NFPA 24 INSTALLATION OF PRIVATE FIRE SERVICE MAINS (2007)
 - NFPA 72 NATIONAL FIRE ALARM CODE (2007)
 - STATE OF UTAH FIRE MARSHAL REQUIREMENTS
 - STATE OF UTAH DFCM REQUIREMENTS
- QUALITY ASSURANCE: ALL EQUIPMENT, MATERIAL AND DEVICES USED FOR THE FIRE SPRINKLER SYSTEM SHALL BE UL LISTED AND/OR FM APPROVED FOR USE IN FIRE PROTECTION SYSTEMS.
- SUBMITTALS: CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS, MATERIAL DATA SHEETS AND CALCULATIONS FOR FIRE SPRINKLER SYSTEM TO ALL AUTHORITIES HAVING JURISDICTION FOR REVIEW/ APPROVAL PRIOR TO ORDERING OR INSTALLING ANY EQUIPMENT. SUBMITTALS SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF REFERENCED CODES AND STANDARDS.
- WATER SUPPLY AVAILABLE FOR FIRE SPRINKLER SYSTEM ACCORDING TO WATER FLOW TEST CONDUCTED AT PROJECT SITE BY PCI FEB 3, 2010. PROVIDE A MINIMUM 10% PRESSURE MARGIN IN HYDRAULIC CALCULATIONS.

STATIC PRESSURE: 88 PSI
RESIDUAL PRESSURE: 82 PSI
FLOW: 900 GPM
- FIRE SPRINKLER DESIGN DENSITIES:
 - MECHANICAL, BOILER, STORAGE ROOMS, PLATFORM AND SIMILAR AREAS - ORDINARY HAZARD GROUP 2 2.0 GPM/SQ FT OVER 1,500 SQ FT (OR LARGEST AREA WITH 250 GPM HOSE ALLOWANCE)
 - MULTIPURPOSE ROOM, ELECTRICAL ROOM, KITCHEN AND SIMILAR AREAS - ORDINARY HAZARD GROUP 1 1.0 GPM/SQ FT OVER 1,500 SQ FT (OR LARGEST AREA) WITH 250 GPM HOSE ALLOWANCE
 - ALL OTHER AREAS - LIGHT HAZARD 0.10 GPM/SQ FT OVER 1,500 SQ FT WITH 100 GPM HOSE ALLOWANCE
 - SIZE OF ROOM AREAS MAY BE REDUCED PER NFPA 13 WHERE QUICK RESPONSE SPRINKLERS ARE INSTALLED.
- SPRINKLER SPACING:
 - ORDINARY HAZARD: 130 SQ FT MAXIMUM, 15' MAXIMUM AND 6' MINIMUM BETWEEN SPRINKLERS
 - LIGHT HAZARD: 225 SQ FT MAXIMUM, 15' MAXIMUM AND 6' MINIMUM BETWEEN SPRINKLERS
- OFF-PREMISE SUPERVISION SHALL BE PROVIDED FOR ALL FIRE SPRINKLER SYSTEM CONTROL VALVES AND FLOW SWITCHES. CONNECT TO EXISTING FIRE ALARM SYSTEM IN BUILDING.
- INSTALL PIPING CONCEALED ABOVE CEILINGS WHERE CEILINGS ARE PROVIDED. WHERE NO CEILING IS PROVIDED PIPING MAY BE EXPOSED. INSTALL PIPING WITHIN TRUSS SPACE AND APPROXIMATELY 1-0" BELOW ROOF DECK TO AVOID CONFLICTS WITH EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT INSTALLED ABOVE CEILINGS BUT BELOW TRUSSES. OFFSET PIPING AS REQUIRED TO AVOID CONFLICTS WITH EXISTING BUILDING ELEMENTS.
- FIRE SPRINKLER PIPING SHALL BE STEEL PIPE CONFORMING TO ANSI/ASTM A53, ASTM A135 OR A795 2-1/2" AND LARGER (NOMINAL) PIPING SHALL BE SCHEDULE 10, 2" AND SMALLER (NOMINAL) SHALL BE ALLIED DYNATIREAD PIPING OR APPROVED EQUAL. ALL PIPING SHALL HAVE A COR (L) CORROSION RESISTANCE RATIO) EQUAL TO OR GREATER THAN 1.0.
- FITTINGS: PROVIDE CAST IRON FITTINGS FOR THREADED PIPE. PROVIDE RUBBER GASKETED FITTINGS FOR ROLL GROOVED SCHEDULE 10 MAINS. PROVIDE WELDED OUTLETS FOR BRANCH LINE ATTACHMENTS TO MAINS. PLAIN END FITTINGS ARE NOT ACCEPTABLE.
- HANGERS: 1-1/4" AND SMALLER PIPE: MINIMUM ONE HANGER PER LENGTH OF PIPE AND MAXIMUM 12'-0" BETWEEN HANGERS. 1-1/2" AND LARGER: MINIMUM ONE HANGER PER LENGTH OF PIPE AND MAXIMUM 15'-0" BETWEEN HANGERS.
- SEISMIC BRACING: BRACING SHALL BE PROVIDED FOR ALL NEW CROSS MAIN PIPING AS REQUIRED BY NFPA 13. RIGHT ANGLE BRACING SHALL BE USED ON ALL CROSS MAINS.
- PIPING SHALL BE INSTALLED IN AREAS WHERE TEMPERATURE IS RELIABLY MAINTAINED ABOVE 40F. IN AREAS WHERE PIPING IS NOT RELIABLY MAINTAINED ABOVE 40F, FILL PIPING WITH AN ANTI-FREEZE SOLUTION AND ISOLATE FROM WATER FILLED PIPING.
- INSTALL NEW CEILING ACCESS PANELS OR REMOVE AND REPLACE EXISTING CEILINGS AS REQUIRED TO FACILITATE THE INSTALLATION OF NEW FIRE SPRINKLER PIPING. NEW ACCESS PANELS SHALL MATCH TYPE AND SIZE OF EXISTING AND SHALL MAINTAIN EXISTING FIRE RATING OF CEILING. PATCH AND PAINT ACCESS PANELS AND NEW CEILINGS TO MATCH EXISTING.
- BUILDING WILL CONTINUE NORMAL OPERATIONS DURING INSTALLATION OF THE FIRE SPRINKLER SYSTEM. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE WORKS AT LEAST 24 HOURS IN ADVANCE AND SUBMIT SCHEDULE TO BUILDING COORDINATOR FOR REVIEW AND APPROVAL. WORK SHALL BE COMPLETED IN PHASES AS INDICATED ON DRAWINGS AND AS DEFINED BELOW WITH ALL SIGNIFICANT OPERATIONS IN ANY PHASE BEING COMPLETED BEFORE MOVING ON TO THE NEXT PHASE. REFER TO SPECIFICATION SECTIONS 017300 AND 211313 FOR ADDITIONAL EXECUTION REQUIREMENTS.

PHASE 1: MULTIPURPOSE ROOM AND ADJACENT RESTROOM/KITCHEN/PLATFORM AREAS.
PHASE 2: CENTRAL PORTION OF BUILDING INCLUDING WEST OFFICE WING
PHASE 3: LECTURE HALL/CLASSROOM AREAS AND EAST OFFICE WING
EXPOSED PIPING AND FITTINGS IN PLATFORM AND MULTIPURPOSE ROOMS SHALL BE PAINTED TO MATCH SURROUNDINGS.



1 FIRE SPRINKLER PLAN - SOUTH
1/8" = 1'-0"



DATE: 03/01/10

104480
JOB NO.
DWG ISSUE: ADD #1

ABH
DRAWN BY:
GTJ
CHECKED BY:

REVISIONS:

1
2/24/10
ADD #1

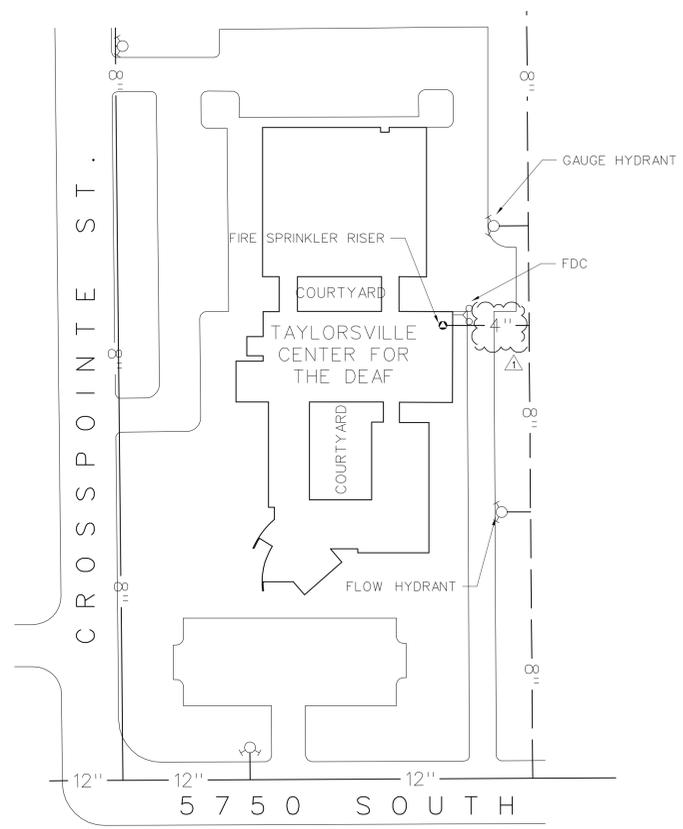
DRAWING DATE:
03/01/10

REVISION DATE:
03/24/10

TAYLORSVILLE DEAF CENTER
TAYLORSVILLE, UTAH

FIRE SPRINKLER SYSTEM RETROFIT
DFCM PROJECT #09215230

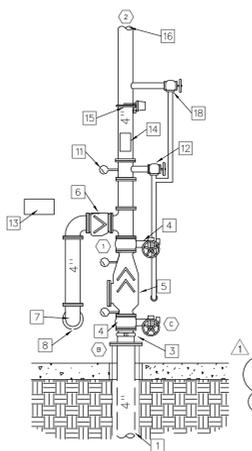
FP-2



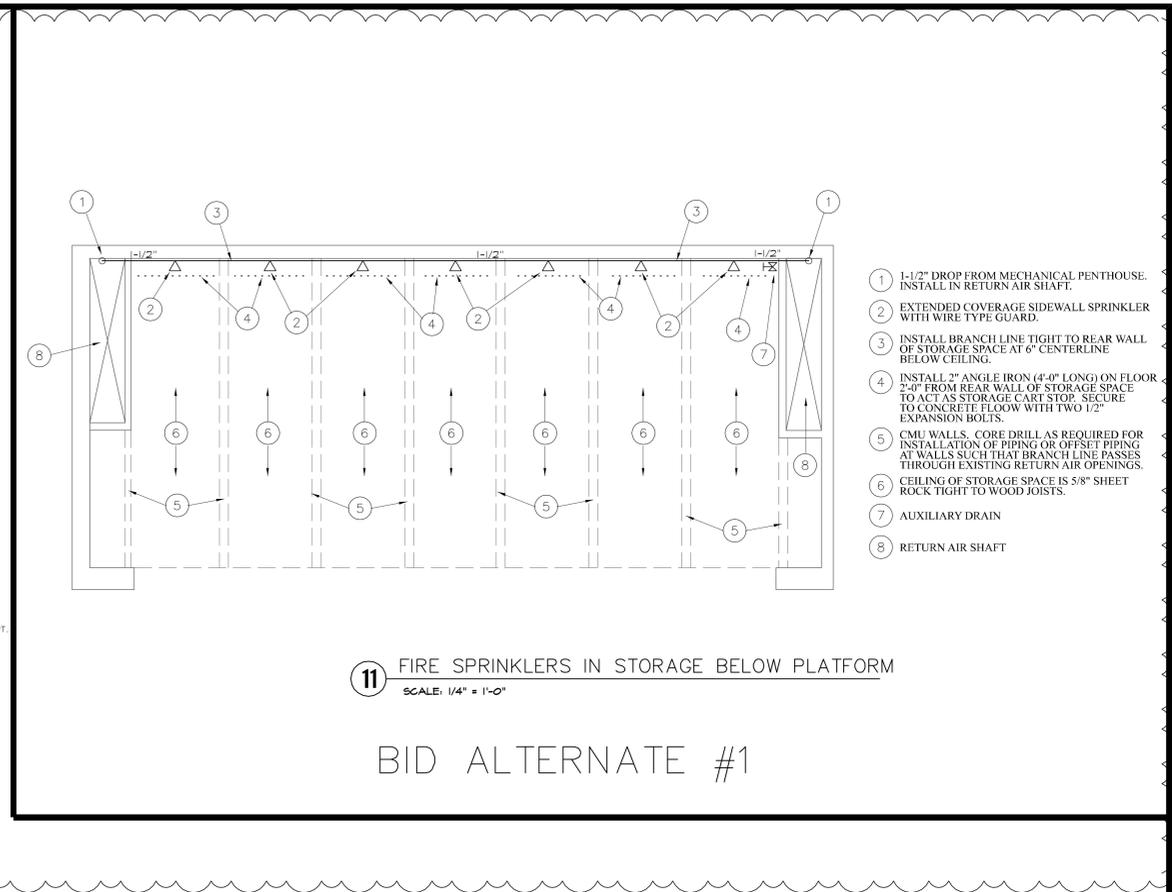
1 FIRE PROTECTION SITE PLAN
1" = 50'-0" (APPROX.)

WATER SUPPLY AVAILABLE FROM 8" CIRCULATING WATER LINE AT REAR OF BUILDING:
 STATIC: 88PSI
 RESIDUAL: 82 PSI
 FLOW: 950 GPM
 TEST DATE: 02/03/10
 TEST BY: PROTECTION CONSULTANTS, INC.
 *MINIMUM 10% PRESSURE MARGIN PROVIDED IN HYDRAULIC CALCULATIONS.

3 WATER SUPPLY INFORMATION
NO SCALE



- 1 - 4" FIRE SPRINKLER SUPPLY LINE. INSTALL THRUST RESTRAINT PER NFPA 13.
- 2 - NOT USED
- 3 - 4" FLEXIBLE COUPLING WITHIN 24" OF FLOOR
- 4 - 4" BUTTERFLY PATTERN CONTROL VALVE WITH BUILT-IN SUPERVISORY SWITCH VALVE SHALL BE PART OF USC APPROVED BACKFLOW PREVENTER
- 5 - 4" DOUBLE CHECK ASSEMBLY
- 6 - 4" SWING CHECK VALVE
- 7 - 4" OUT TO 2-1/2" X 2-1/2" X 4" SINGLE CLAPPER FIRE DEPT. CONNECTION. WALL MOUNT. FDC APPROXIMATELY 36" ABOVE EXTERIOR GRADE.
- 8 - 1/2" AUTO BALL DRIP
- 9 - NOT USED
- 10 - NOT USED
- 11 - PRESSURE GAUGE
- 12 - 2" ANGLE VALVE FOR MAIN DRAIN DISCHARGE TO BUILDING EXTERIOR.
- 13 - SPARE SPRINKLER CABINET. STOCK WITH 12 SPRINKLERS
- 14 - HYDRAULIC DESIGN INFORMATION PLACARD
- 15 - WALK TYPE MAIN FLOW SWITCH
- 16 - 4" SUPPLY TO FIRE SPRINKLERS
- 17 - NOT USED
- 18 - INSPECTOR'S TEST VALVE. CONNECT DISCHARGE TO MAIN DRAIN PIPING

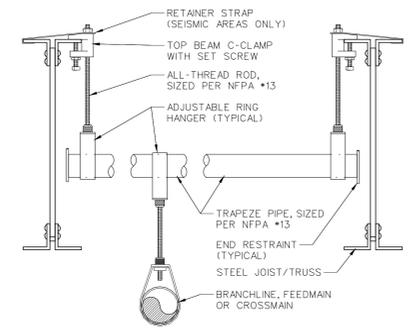


11 FIRE SPRINKLERS IN STORAGE BELOW PLATFORM
SCALE: 1/4" = 1'-0"

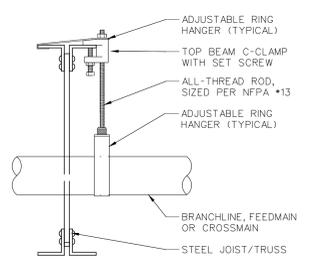
BID ALTERNATE #1

- 1 - 1-1/2" DROP FROM MECHANICAL PENTHOUSE. INSTALL IN RETURN AIR SHAFT.
- 2 - EXTENDED COVERAGE SIDEWALL SPRINKLER WITH WIRE TYPE GUARD.
- 3 - INSTALL BRANCH LINE TIGHT TO REAR WALL OF STORAGE SPACE AT 6" CENTERLINE BELOW CEILING.
- 4 - INSTALL 2" ANGLE IRON (4'-0" LONG) ON FLOOR 2'-0" FROM REAR WALL OF STORAGE SPACE TO ACT AS STORAGE CART STOP. SECURE TO CONCRETE FLOOR WITH TWO 1/2" EXPANSION BOLTS.
- 5 - CMU WALLS. CORE DRILL AS REQUIRED FOR INSTALLATION OF PIPING OR OFFSET PIPING AT WALLS SUCH THAT BRANCH LINE PASSES THROUGH EXISTING RETURN AIR OPENINGS.
- 6 - CEILING OF STORAGE SPACE IS 5/8" SHEET ROCK TIGHT TO WOOD JOISTS.
- 7 - AUXILIARY DRAIN
- 8 - RETURN AIR SHAFT

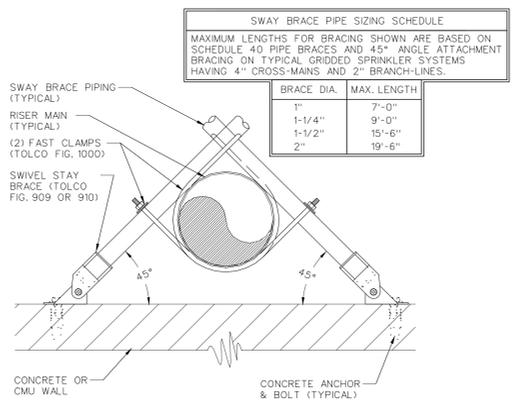
2 FIRE SPRINKLER RISER
NO SCALE



5 TRAPEZE HANGER DETAIL
NO SCALE



4 TOP CHORD HANGER DETAIL
NO SCALE



6 4-WAY RISER BRACE DETAIL
NO SCALE

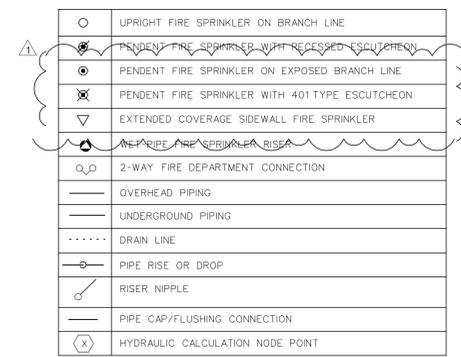
SWAY BRACE PIPE SIZING SCHEDULE

MAXIMUM LENGTHS FOR BRACING SHOWN ARE BASED ON SCHEDULE 40 PIPE BRACES AND 45° ANGLE ATTACHMENT BRACING ON TYPICAL GRIDDED SPRINKLER SYSTEMS HAVING 4" CROSS-MAINS AND 2" BRANCH-LINES.

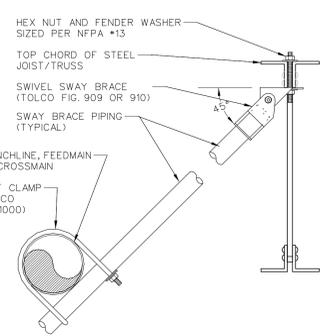
BRACE DIA.	MAX. LENGTH
1"	7'-0"
1-1/4"	9'-0"
1-1/2"	15'-6"
2"	19'-6"

DESIGN AREA	OCCUPANCY CLASSIFICATION	HAZARD GROUP	DENSITY	AREA OF APPLICATION	NUMBER OF HEADS CALCULATED	SOFT. PER HEAD	SPRINKLER SYSTEM DEMAND	HOSE STREAM REQUIRED	TOTAL WATER REQUIRED	TOTAL WATER AVAILABLE
DESIGN AREA - 1 (MULTIPURPOSE ROOM)	OCCUPANCY CLASSIFICATION: ORDINARY	HAZARD GROUP 2	DENSITY: 0.80 GPM/50 FT.	AREA OF APPLICATION: 1500 SQ. FT.	NUMBER OF HEADS CALCULATED: 5	SOFT. PER HEAD: 100 (MAX.)	0 GPM (INSIDE) 250 GPM (OUTSIDE)	0 GPM (INSIDE) 100 GPM (OUTSIDE)	331.2 GPM AT 85.9 PSIA P.O.C.	331.2 GPM AT 85.9 PSIA P.O.C.
DESIGN AREA - 2 (MECHANICAL MEZANINE)	OCCUPANCY CLASSIFICATION: ORDINARY	HAZARD GROUP 2	DENSITY: 0.20 GPM/50 FT.	AREA OF APPLICATION: ENTIRE ROOM	NUMBER OF HEADS CALCULATED: 6	SOFT. PER HEAD: 100 (MAX.)	0 GPM (INSIDE) 250 GPM (OUTSIDE)	0 GPM (INSIDE) 100 GPM (OUTSIDE)	431.8 GPM AT 85.9 PSIA P.O.C.	431.8 GPM AT 85.9 PSIA P.O.C.
DESIGN AREA - 3 (RELATION ROOM)	OCCUPANCY CLASSIFICATION: ORDINARY	HAZARD GROUP 2	DENSITY: 0.20 GPM/50 FT.	AREA OF APPLICATION: ENTIRE ROOM	NUMBER OF HEADS CALCULATED: 6	SOFT. PER HEAD: 100 (MAX.)	0 GPM (INSIDE) 250 GPM (OUTSIDE)	0 GPM (INSIDE) 100 GPM (OUTSIDE)	431.8 GPM AT 85.9 PSIA P.O.C.	431.8 GPM AT 85.9 PSIA P.O.C.
DESIGN AREA - 4 (CONFERENCE ROOM)	OCCUPANCY CLASSIFICATION: LIGHT	HAZARD GROUP 2	DENSITY: 0.20 GPM/50 FT.	AREA OF APPLICATION: ENTIRE ROOM	NUMBER OF HEADS CALCULATED: 7	SOFT. PER HEAD: 225 (MAX.)	0 GPM (INSIDE) 250 GPM (OUTSIDE)	0 GPM (INSIDE) 100 GPM (OUTSIDE)	217.8 GPM AT 87.6 PSIA P.O.C.	217.8 GPM AT 87.6 PSIA P.O.C.
DESIGN AREA - 5 (LECTURE HALL)	OCCUPANCY CLASSIFICATION: LIGHT	HAZARD GROUP 2	DENSITY: 0.20 GPM/50 FT.	AREA OF APPLICATION: 1500 SQ. FT.	NUMBER OF HEADS CALCULATED: 12	SOFT. PER HEAD: 225 (MAX.)	0 GPM (INSIDE) 250 GPM (OUTSIDE)	0 GPM (INSIDE) 100 GPM (OUTSIDE)	331.2 GPM AT 87.1 PSIA P.O.C.	331.2 GPM AT 87.1 PSIA P.O.C.
DESIGN AREA - 6 (CLASSROOM)	OCCUPANCY CLASSIFICATION: LIGHT	HAZARD GROUP 2	DENSITY: 0.20 GPM/50 FT.	AREA OF APPLICATION: ENTIRE ROOM	NUMBER OF HEADS CALCULATED: 10	SOFT. PER HEAD: 225 (MAX.)	0 GPM (INSIDE) 250 GPM (OUTSIDE)	0 GPM (INSIDE) 100 GPM (OUTSIDE)	271.5 GPM AT 86.8 PSIA P.O.C.	271.5 GPM AT 86.8 PSIA P.O.C.
DESIGN AREA - 7 (MECHANICAL ROOM)	OCCUPANCY CLASSIFICATION: LIGHT	HAZARD GROUP 2	DENSITY: 0.20 GPM/50 FT.	AREA OF APPLICATION: ENTIRE ROOM	NUMBER OF HEADS CALCULATED: 6	SOFT. PER HEAD: 100 (MAX.)	0 GPM (INSIDE) 250 GPM (OUTSIDE)	0 GPM (INSIDE) 100 GPM (OUTSIDE)	386.2 GPM AT 86.9 PSIA P.O.C.	386.2 GPM AT 86.9 PSIA P.O.C.

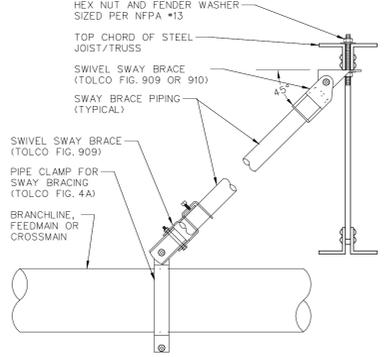
7 HYDRAULIC DESIGN INFORMATION PLACARDS
NO SCALE



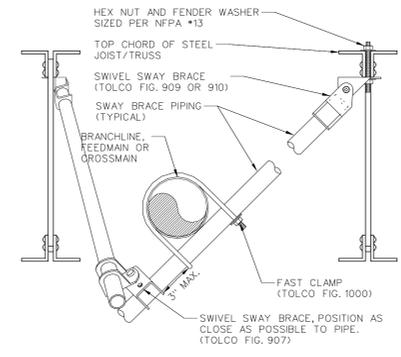
10 EQUIPMENT LEGEND
NO SCALE



8 LATERAL SWAY BRACE DETAIL
NO SCALE



9 LONGITUDINAL SWAY BRACE DETAIL
NO SCALE



10 4-WAY SWAY BRACE DETAIL
NO SCALE

DATE: 03/01/10

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JOB NO: 104480
 DWG ISSUE: ADD #1
 DRAWN BY: ABH
 CHECKED BY: GTJ

REVISIONS:
 1. ADDENDUM #1
 2/24/10

DRAWING DATE: 03/01/10
 REVISION DATE: 03/24/10

TAYLORSVILLE DEAF CENTER
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