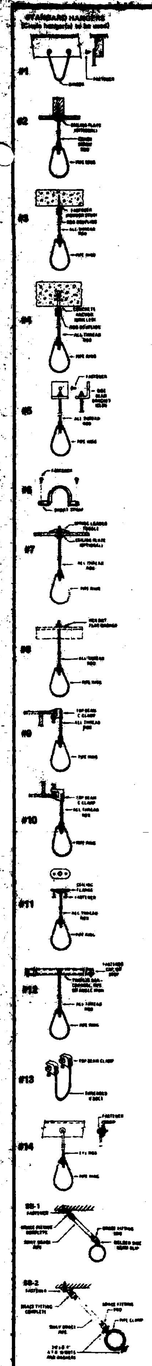
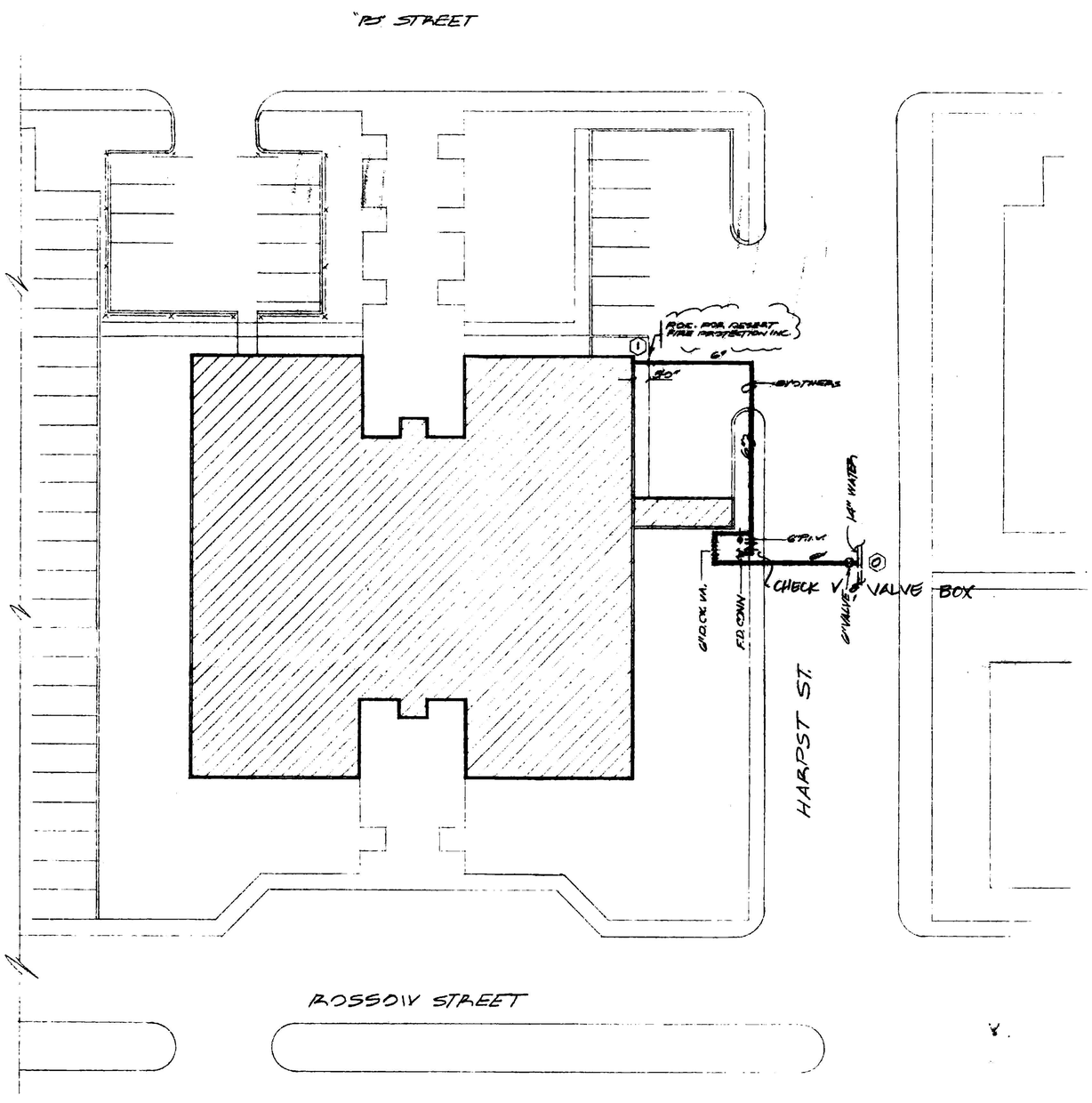
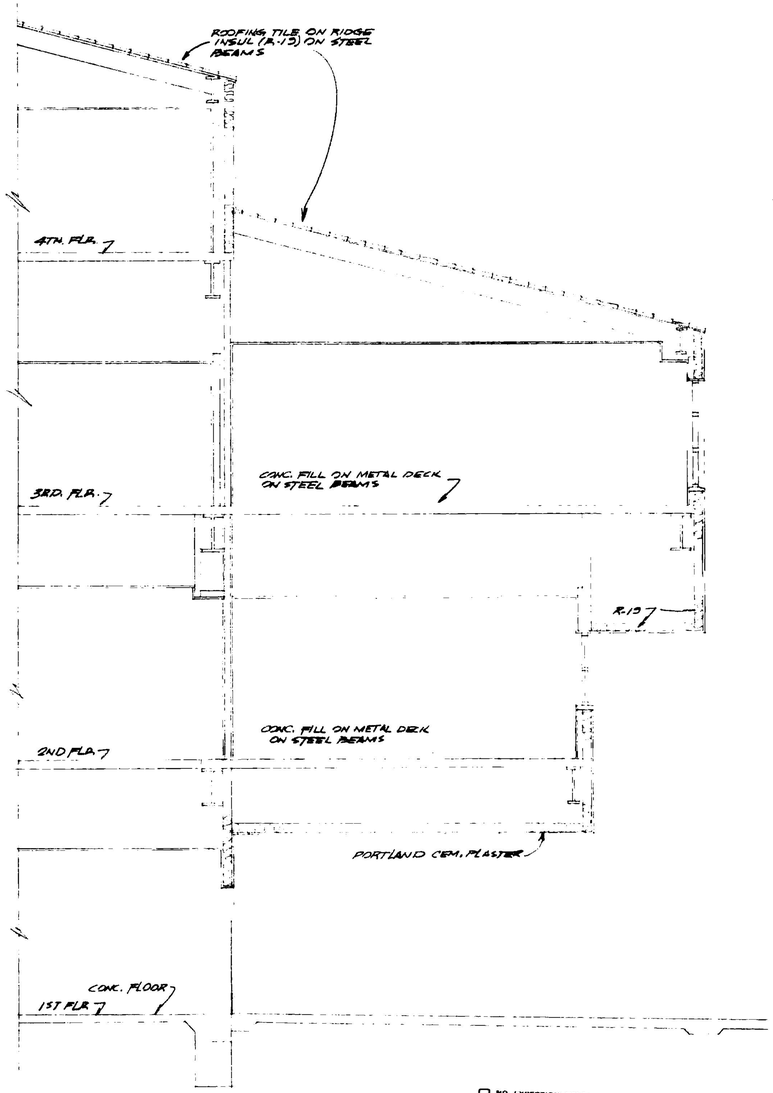




SITE PLAN
SCALE 1"=20'-0"



SECTION "A"
SCALE 1/4"=1'-0"

NOTES:

1. ALL PIPE, FITTINGS, HANGERS, SPRINKLER HEADS & DEVICES TO BE UL & FM APPROVED.
2. EARTHQUAKE BRACING PER NFPA #13
3. SYSTEM DESIGN LIGHT HAZARD - LARGE ROOM
4. WATER INFORMATION PER SPEC'S: SECTION 15500
   1.1.1.2 STATIC - 52 PSI.
   RESIDUAL - 43 #1
   FLOW - 2530 GPM.

RECEIVED
OCT 3 1989
TAKAHASHI CONSULTING ENGINEERS, INC.

☐ NO EXCEPTION TAKEN
☒ MAKE CORRECTIONS NOTED
☐ RESUBMITTAL NOT REQ'D
☐ REJECTED
☐ SUBMIT SPECIFIED ITEM
☐ RESPONSE AND RESUBMIT

CHECKING IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR QUANTITIES, DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND SATISFACTORY PERFORMANCE OF HIS WORK.

TAKAHASHI CONSULTING ENGINEERS, INC.
BY [signature] DATE 10/16/89

CLARK & SULLIVAN CONSTRUCTORS
SUBMITTAL # 46
FORWARDED TO ARCHITECT
Date 10/5/89 Initials [illegible]
Review of the Contractor's submittal does not relieve subcontractor or supplier from responsibility for dimensions, quantities, omissions or deviations from the contract documents.
( ) REVIEWED FOR A/E APPROVAL
( ) APPROVED AS NOTED
( ) REJECTED, REVISE & RESUBMIT

100_(1_of_5)_Site_plan_&_section_&_notes_1989-09-22

REVISIONS

NO	DATE	DESCRIPTION	BY

CONTRACT RESPONSIBILITIES

ITEM	D.F.P	OTHERS
STREET WATER CONNECTION		
UNDERGROUND WATER MAINS		
EXCAVATION & BACKFILL		
PAVING		
WIRING		
PAINTING		
CORING		
ANTI-FREEZE PROT		

SPRINKLERS

TYPE	ORIF.	TEMP.	FINISH	CANOPY	SYMB	QTY.

TOTAL THIS SHEET

SYMBOLS

- Hydraulic Reference Point
- Line Designation
- ℄ of Pipe Below Bottom of Deck
- ℄ of Pipe Above Ref. Plane
- Main Designation
- Earthquake Bracing: 2 & 4 Way
- Hanger
- Union
- Screwed Cap
- Grooved Cap
- Screwed Plug
- Elevation Change in Pipe (not thru floor)
- Gate Valve - N.R.S. (GV)
- OS & Y Gate Valve (OS & Y)
- Flow Switch (FS)
- Monitor Switch
- Butterfly Valve
- Alarm Valve (ALV)
- Electric Bell
- Water Motor Gong (WMG)
- Water Check Valve
- Swing Check Valve
- System Riser
- Fire Dept. Conn. (Standard) (FDC)
- Fire Dept. Conn. (Flush) (FDC)
- Fire Dept. Conn. (Sidewalk) (FDC)
- Post Indicator Valve (PIV)
- Fire Hydrant (3 Way)
- Thrust Block
- Key Gate Sectional Valve with Roadway Box
- Fire Hose Assembly (see notes)
- Inspectors Test
- Grooved Coupling (GC)
- Flanged Connection
- Globe Valve
- Angle Valve
- Dry Pipe Valve

ABBREVIATIONS

BB	Bottom of Beam
BD	Bottom of Deck
BJ	Bottom of Joist
DO	Drop
TB	Top of Beam
TJ	Top of Joist
TS	Top of Steel
TG	Top of Slab
BG	Bottom of Slab
FF	Finish Floor
℄	Centerline
NIC	Not in Contract
NTS	Not to Scale
UON	Unless Otherwise Noted

APPROVALS

☐ ISO	OUT	IN
☐ IRI	OUT	IN
☐ FM	OUT	IN
☐ LOCAL AUTH.	OUT	IN
☐ CONT	OUT	IN
☐ OWNER	OUT	IN
☐ ARCH ENGR	OUT	IN
☐	OUT	IN

AUTOMATIC SPRINKLER SPECIALISTS

CONTRACT NAME: STUDENT & BUSINESS SERVICES BUILDING FOR HUMBOLDT STATE UNIVERSITY: ARCATA, CALIF.
CONTRACT WITH: CLARK & SULLIVAN CONSTRUCTORS
305 INDUSTRIAL WAY
SPARKS, NEVADA 89431

DESERT FIRE PROTECTION
505 VALLEY ROAD RENO, NEVADA 89512

Date 9-22-89
Scale AS SHOWN
Drawn CN, NOMMET
Job No 955
Hazard LIGHT
Sheet No 1 of 5

127269

STANDARD HANGERS
(Circle hanger(s) to be used)

#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14 SB 1 SB 2

SEE 15500-2.1.5

FIRST FLOOR PIPING PLAN

NORTH

€ 10'-0" ABV. F. FLR. (3.7±0.5.)

€ 10'-0" ABV. F. FLR. (3.7±0.5.)

LARGE RCCA

SPR. BOTTOM OF GLOV. SHAFT

3-STAIRWELLS

ANTI-FREEZE ZONE

CLARK & SULLIVAN CONSTRUCTORS
SUBMITTAL # 15
FORWARDED TO ARCHITECT
Date 10/16/89 Initials JMH

RECEIVED
OCT 3 1989

☐ NO EXCEPTION TAKEN
☒ MAKE CORRECTIONS NOTED
☐ RESUBMITTAL NOT REQ'D
☐ REJECTED
☐ SUBMIT SPECIFIED ITEM

CHECKING IS FOR GENERAL CONFORMANCE WITH THE DESIGN AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY DEVIATIONS MUST BE CALLED TO THE ARCHITECT'S ATTENTION IN WRITING. ACCEPTANCE OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN SHOP DRAWINGS OR DEVIATIONS FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FOR SELECTING FABRICATION PROCESSES AND FOR COORDINATING THE WORK OF ALL TRADES. THE CONTRACTOR SHALL PERFORM NO PORTION OF THE WORK WITHOUT APPROVED SHOP DRAWINGS AND SATISFACTORY PERFORMANCE OF THIS WORK.

TAKAHASHI CONSULTING ENGINEERS, INC.
BY: [signature] DATE 10/16/89

☐ REVIEWED FOR RE APPROVAL
☐ APPROVED AS NOTED
☐ REJECTED. REVISE & RESUBMIT

100_(2_of_5)_First_floor_piping_plan_1989-09-22

REVISIONS

NO	DATE	DESCRIPTION	BY

CONTRACT RESPONSIBILITIES ITEM	DFP	OTHERS
STREET WATER CONNECTION		
UNDERGROUND WATER MAINS		
EXCAVATION & BACKFILL		
PAVING		
WIRING		
PAINTING		
CORING		
ANTI-FREEZE PROT		

SPRINKLERS TYPE	ORIF	TEMP	FINISH	CANOPY	SYMB	QTY
REC'D P.	1/2"	165°	BRASS	CHROME	●	156
TOTAL THIS SHEET						156

SYMBOLS

- Hydraulic Reference Point
- Line Designation
- ℄ of Pipe Below Bottom of Deck
- ℄ of Pipe Above Ref. Plane
- Main Designation
- Earthquake Bracing 2 & 4 Way
- Hanger
- Union
- Screwed Cap
- Grooved Cap
- Screwed Plug
- Elevation Change in Pipe (not thru floor)
- Gate Valve - N.R.S. (GV)
- OS & Y Gate Valve (OS & Y)
- Flow Switch (FS)
- Monitor Switch
- Butterfly Valve
- Alarm Valve (ALV)
- Electric Bell
- Water Motor Gong (WMG)
- Wafer Check Valve
- Swing Check Valve
- System Riser
- Fire Dept. Conn. (Standard) (FDC)
- Fire Dept. Conn. (Flush) (FDC)
- Fire Dept. Conn. (Sidewall) (FDC)
- Post Indicator Valve (PIV)
- Fire Hydrant (3 Way)
- Thrust Block
- Key Gate Sectional Valve with Roadway Box
- Fire Hose Assembly (see notes)
- Inspectors Test
- Grooved Coupling (GC)
- Flanged Connection
- Globe Valve
- Angle Valve
- Dry Pipe Valve

ABBREVIATION	
BB	Bottom of Beam
BD	Bottom of Deck
BJ	Bottom of Joist
DO	Ditto
TB	Top of Beam
TJ	Top of Joist
TS	Top of Slab
TG	Top of Grating
BG	Bottom of Grating
EF	Each Face
S	Screen
NIC	Not in Contract
NTS	Not to Scale
UON	Unless Otherwise Noted

AUTOMATIC SPRINKLER SPECIALISTS

STUDENT & BUSINESS SERVICES BUILDING
FOR
HUMBOLDT STATE UNIVERSITY: ARCATA, CALIF.
CONTRACT WITH
CLARK & SULLIVAN CONSTRUCTORS
3085 INDUSTRIAL WAY
SPARKS NEVADA 89431

DESERT FIRE PROTECTION
505 VALLEY ROAD RENO, NEVADA 89512

Date 9-22-89
Scale 1/8"=1'-0"
Drawn C.N. McINTEE
Job No. 955
Hazard CLASS 1
Sheet No. 2 of 5

137269

STANDARD HANGERS
(Circle hanger(s) to be used)

#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14 SB-1 SB-2

SEE 15500-2.1.5

"A"

(LARGE ROOM)

OPEN

DUCT CHASE

±10'-0" ABV. F.F.FLR (3-7&8.5)

±10'-0" ABV. FIN FLR (3-7&8.5)

SECOND FLOOR PIPING PLAN

SCALE 1/8"=1'-0"

NORTH

100_(3_of_5)_Second_floor_piping_plan_1989-09-22

CHECKING IS FOR GENERAL ARRANGEMENT ONLY. CONTRACTOR IS RESPONSIBLE FOR ACCURACY OF DIMENSIONS AND QUANTITIES. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATION OF THE WORK OF ALL TRADES. APPROVAL IS FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FABRICATING PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATING HIS WORK WITH THAT OF ALL OTHER TRADES AND PERFORMING HIS WORK IN A SATISFACTORY AND WORKMANLIKE MANNER.

TAKAHASHI CONSULTING ENGINEERS, INC.
BY _____ DATE 10/16/89

RECEIVED
OCT 3 1989
TAKAHASHI CONSULTING

CLARK & SULLIVAN CONSTRUCTORS
SUBMITTAL # 2HC
FOR ARCHITECT/ENGINEER
DATE 9-22-89
Reviewed by the Contractor and found to conform to the Contract Documents, except as noted. Review of this submittal does not relieve the Contractor of responsibility for dimensions which are to be confirmed and correlated at the job site. Fabrication may proceed only on those portions from the Contract Documents.
( ) REVISE & RESUBMIT FOR APPROVAL
( ) APPROVED AS NOTED
( ) REJECTED. REVISE & RESUBMIT

REVISIONS

NO	DATE	DESCRIPTION	BY

CONTRACT RESPONSIBILITIES ITEM	DFP	OTHERS
STREET WATER CONNECTION		
UNDERGROUND WATER MAINS		
EXCAVATION & BACKFILL		
PAVING		
WIRING		
PAINTING		
CORING		
ANTI-FREEZE PROT.		

SPRINKLERS TYPE	ORIF.	TEMP	FINISH	CANOPY	SYMB	QTY
RECD P.	1/2"	165°	BRASS	CHROME	●	121
TOTAL THIS SHEET						121

SYMBOLS

- Hydraulic Reference Point
- Line Designation
- ℄ of Pipe Below Bottom of Deck
- ℄ of Pipe Above Ref. Plane
- Main Designation
- Earthquake Bracing 2 & 4 Way
- Hanger
- Union
- Screwed Cap
- Grooved Cap
- Screwed Plug
- Elevation Change in Pipe (not thru floor)
- Gate Valve (N.R.S.) (GV)
- OS & Y Gate Valve (OS & Y)
- Flow Switch (FS)
- Monitor Sweirt
- Butterfly Valve
- Alarm Valve (ALV)
- Electric Bell
- Water Motor Gong (WMG)
- Wafer Check Valve
- Swing Check Valve
- System Riser
- Fire Dept. Conn. (Standard) (FDC)
- Fire Dept. Conn. (Flush) (FDC)
- Fire Dept. Conn. (Sidewalk) (FDC)
- Post Indicator Valve (PIV)
- Fire Hydrant (3 Way)
- Thrust Block
- Key Gate Sectional Valve with Roadway Box
- Fire Hose Assembly (see notes)
- Inspector Test
- Grooved Coupling (GC)
- Flanged Connection
- Globe Valve
- Angle Valve
- Dry Pipe Valve

ABBREVIATIONS

BB	Bottom of Beam
BD	Bottom of Duct
BJ	Bottom of Joist
DN	Down
TB	Top of Beam
TD	Top of Duct
TJ	Top of Joist
TS	Top of Slab
BW	Bottom of Wall
FF	Finish Floor
G	Gallon(s)
NIC	Not in Contract
NTS	Not to Scale
UON	Unless Otherwise Noted

ADDITIONAL

SD	
RD	
SLOPE	
FLOOR	
CEILING	
ARCH	

AUTOMATIC SPRINKLER SPECIALISTS

PROJECT NAME
STUDENT # BUSINESS SERVICES BUILDING
FOR
HUMBOLDT STATE UNIVERSITY: ARCATA, CALIF.
CONTRACT WITH
CLARK & SULLIVAN CONSTRUCTORS

DESERT FIRE PROTECTION
505 VALLEY ROAD RENO, NEVADA 89512

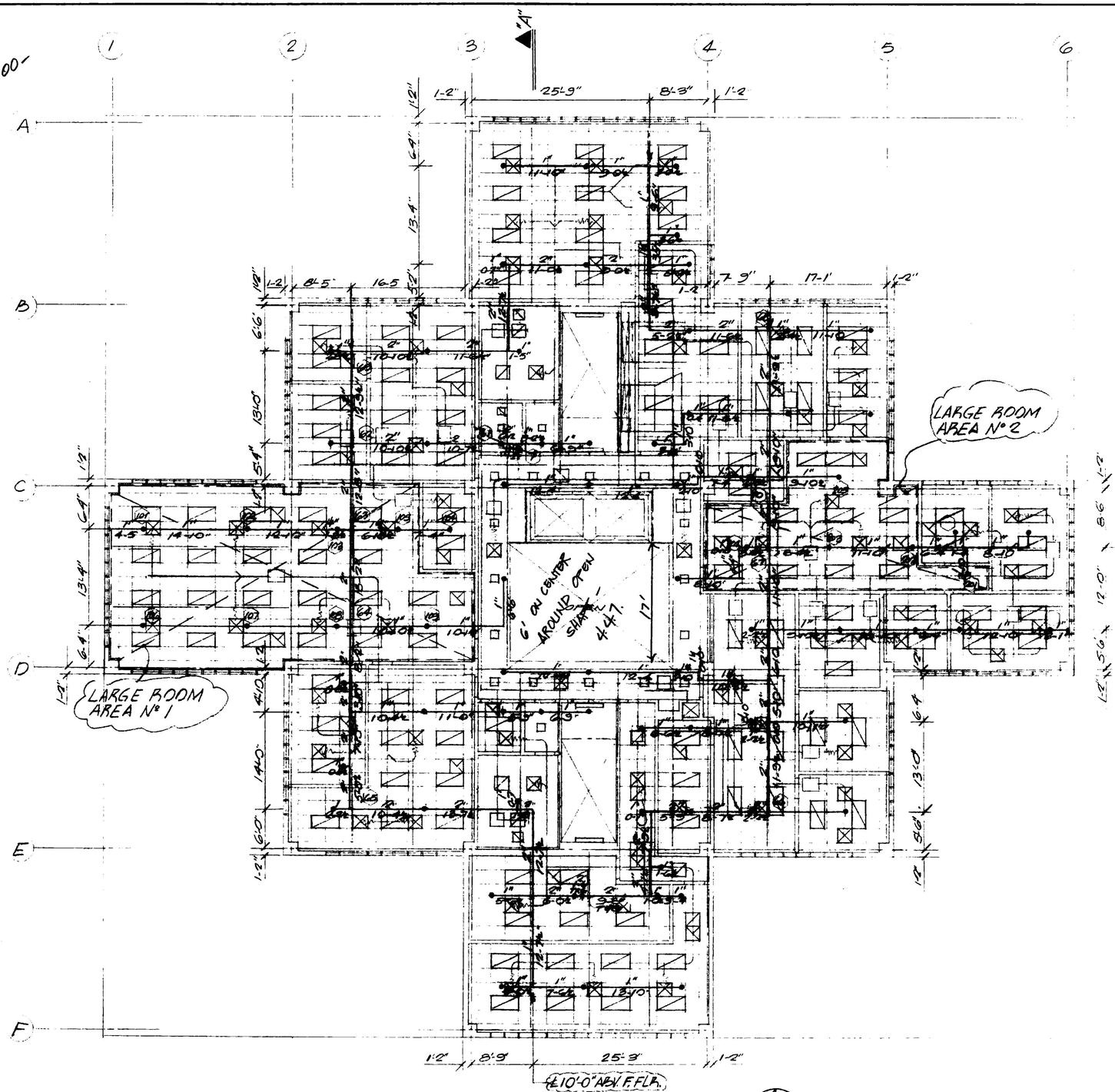
Date 9-22-89
Scale 1/8"=1'-0"
Drawn N. MOWREY
Job No. 955
Hazard LIGHT
Sheet No. 3 of 5

127269

STANDARD HANGERS
(Cindir hanger(s) to be used)

#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14 SB-1 SB-2

SEE 15500-2.1.5



THIRD FLOOR PIPING PLAN

SCALE 1/8"=1'-0"

☐ NO EXCEPTION TAKEN
☒ MAKE CORRECTIONS NOTED
☐ RESUBMITTAL NOT REQ'D
☐ REJECTED
☐ SUBMIT SPECIFIED ITEM
☐ REVISE AND RESUBMIT

CHECKING IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF HIS WORK.

TAKAHASHI CONSULTING ENGINEERS, INC.
BY _____ DATE 10/16/89

RECEIVED
OCT 3 1989
TAKAHASHI CONSULTING ENGINEERS, INC.

CLARK & SULLIVAN CONSTRUCTORS
SUBMITTAL # 45
FORWARDED TO ARCHITECT
Date 10/2/89 By JW
Review of the Contractor's submittal does not relieve subcontractor of all responsibility for dimensions, for adjacent construction or deviations from the contract documents.
( ) REVIEWED FOR A/E APPROVAL
( ) APPROVED AS NOTED
( ) REJECTED, REVISE & RESUBMIT

100_(4_of_5)_Third_floor_piping_plan_1989-09-22

REVISIONS

NO	DATE	DESCRIPTION	BY

CONTRACT RESPONSIBILITIES ITEM	D.F.P.	OTHERS
STREET WATER CONNECTION		
UNDERGROUND WATER MAINS		
EXCAVATION & BACKFILL		
PAVING		
WIRING		
PAINTING		
CORING		
ANTI-FREEZE PROT.		

SPRINKLERS

TYPE	ORIF	TEMP	FINISH	CANOPY	SYMB	QTY
RECD. P.	1/2	165°	BRASS	CHROME	•	77

TOTAL THIS SHEET 77

SYMBOLS

- Hydraulic Reference Point
- e10 Line Designation
- +18' ℄ of Pipe Below Bottom of Deck
- (E.P.) ℄ of Pipe Above Ref. Plane
- A Main Designation
- Earthquake Bracing 2 & 4 Way
- Hanger
- Union
- Screwed Cap
- Grooved Cap
- Screwed Plug
- Elevation Change in Pipe (not thru floor)
- Gate Valve - N.R.S. (GV)
- OS & Y Gate Valve (OS & Y)
- Flow Switch (FS)
- Monitor Switch
- Butterfly Valve
- Alarm Valve (ALV)
- Electric Bell
- Water Motor Gong (WMG)
- Wafer Check Valve
- Swing Check Valve
- System Riser
- Fire Dept. Conn. (Standard) (FDC)
- Fire Dept. Conn. (Flush) (FDC)
- Fire Dept. Conn. (Sidewalk) (FDC)
- Post Indicator Valve (PIV)
- Fire Hydrant (3 Way)
- Thrust Block
- Key Gate Sectional Valve with Roadway Box
- Fire Hose Assembly (see notes)
- Inspectors Test
- Grooved Coupling (GC)
- Flanged Connection
- Globe Valve
- Angle Valve
- Dry Pipe Valve

ABBREVIATIONS

BB	Bottom of Beam
BC	Bottom of Deck
BJ	Bottom of Joist
DO	Ditto
TB	Top of Beam
TJ	Top of Joist
TS	Top of Slab
TG	Top of Grid-Lam
BG	Bottom of Grid-Lam
FF	Finish Floor
℄	Centerline
NIC	Not in Contract
NTS	Not to Scale
UON	Unless Otherwise Noted

APPROVALS

☐ ISO	____ IN
☐ IRI	____ IN
☐ FM	____ IN
☐ LOCAL AUTH	____ IN
☐ CONT	____ IN
☐ OWNER	____ IN
☐ ARCH/ ENGR	____ IN
☐	____ IN

AUTOMATIC SPRINKLER SPECIALISTS

CONTRACT NAME
STUDENT BUSINESS SERVICES BUILDING
FOR
HUMBOLDT STATE UNIVERSITY; ARCATA, CALIF.
CONTRACT WITH
CLARK & SULLIVAN CONSTRUCTORS
305 INDUSTRIAL WAY
SPARKS NEVADA 89431

DESERT FIRE PROTECTION
505 VALLEY ROAD RENO, NEVADA 89512

Date 9-22-89
Scale 1/8"=1'-0"
Drawn C.N. MOVREY
Job No. 955
Hazard LIGHT
Sheet No 4 of 5

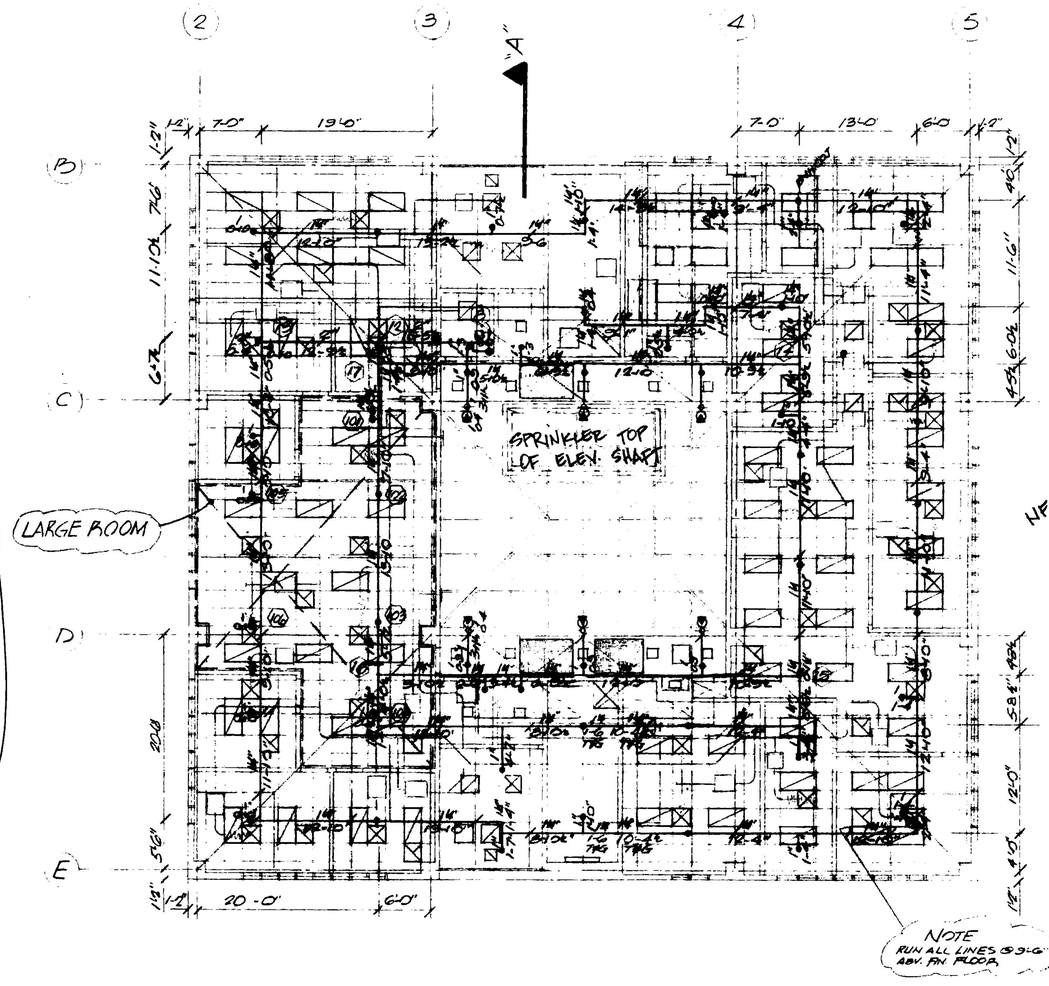
127369

STANDARD HANGERS
(Clevis hanger(s) to be used)

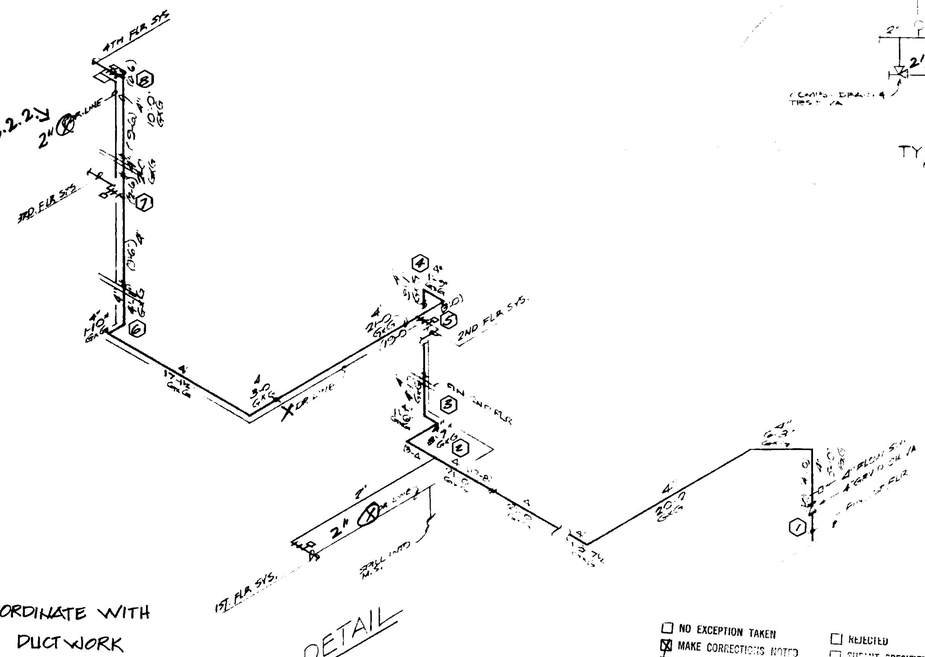
#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14

SS-1 SS-2

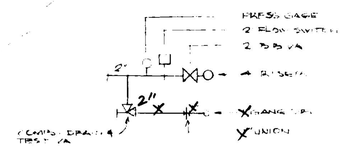
TILE OVER
INSULATION OVER
METAL DECK ROOF



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



RISER DETAIL
NOT TO SCALE



TYPICAL RISER DETAIL
NOT TO SCALE

RECEIVED
OCT 3 1989
TAKAHASHI CONSULTING ENGINEERS, INC.

☐ NO EXCEPTION TAKEN
☒ MAKE CORRECTIONS NOTED
☐ RESUBMITTAL NOT REQ'D
☐ REJECTED
☐ SUBMIT SPECIFIED ITEM
☐ CORRECT AND RESUBMIT

CHECKING IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. ANY CONTRACTOR'S DEVIATIONS OR SUBSTITUTIONS NOTED AND CORRECTED AT THE TIME OF SHOP DRAWING REVIEW SHALL BE IN WRITING AND INDICATED ON THE SHOP DRAWINGS. REVIEW OF SHOP DRAWINGS NOTED HEREON DOES NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE SHOP DRAWINGS OR FOR PERFORMANCE OF THE WORK.

TAKAHASHI CONSULTING ENGINEERS, INC.
BY: [signature] DATE: 10/16/89

CLARK & SULLIVAN CONSTRUCTORS
SUBMITTAL # 46
FORWARDED TO ARCHITECT
DATE 10/16/89 BY [signature]
Review of shop drawings, product data, samples or similar submittals by the Contractor is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to the fabrication processes or to techniques of construction and installation, for coordination of the work of all subcontractors or trades, and for the satisfactory performance of their work. Any deviations from the Contract Documents must be brought to the attention of the Architect/Engineer in writing. Review shall not relieve Contractor from responsibility for deviations from the Contract Documents.
( ) REVISED FOR A/E APPROVAL
( ) APPROVED AS NOTED
( ) REJECTED. REVISE & RESUBMIT

100_(5_of_5)_Fourth_floor_piping_plan_1989-09-22

REVISIONS

NO	DATE	DESCRIPTION	BY

CONTRACT RESPONSIBILITIES ITEM	DFP	OTHERS
STREET WATER CONNECTION		
UNDERGROUND WATER MAINS		
EXCAVATION & BACKFILL		
PAVING		
WIRING		
PAINTING		
CORING		
ANTI-FREEZE PROT		

SPRINKLERS TYPE	ORIF	TEMP	FINISH	CANOPY	SYMB	QTY
REC'D P.	1/2	165° 212°	BRASS	CHROME	•	52
					◪	6
TOTAL THIS SHEET						58

SYMBOLS

- Hydraulic Reference Point
- #10 Line Designation
- #10 S of Pipe Below Bottom of Deck
- (12.5) S of Pipe Above Ref. Plane
- A Main Designation
- Earthquake Bracing 2 & 4 Way
- Hanger
- Union
- Screwed Cap
- Grooved Cap
- Screwed Plug
- Elevation Change in Pipe (not thru floor)
- Gate Valve - N.R.S. (GV)
- OS & Y Gate Valve (OS & Y)
- Flow Switch (FS)
- Monitor Switch
- Butterfly Valve
- Alarm Valve (ALV)
- Electric Bell
- Water Motor Gong (WMG)
- Wafer Check Valve
- Swing Check Valve
- System Riser
- Fire Dept. Conn. (Standard) (FDC)
- Fire Dept. Conn. (Flush) (FDC)
- Fire Dept. Conn. (Sidewalk) (FDC)
- Post Indicator Valve (PIV)
- Fire Hydrant (3 Way)
- Thrust Block
- Key Gate Sectional Valve with Roadway Box
- Fire Hose Assembly (see notes)
- Inspectors Test
- Grooved Coupling (GC)
- Flanged Connection
- Globe Valve
- Angle Valve
- Dry Pipe Valve

ABBREVIATIONS

AB	Anchor Bolt
BD	Bottom of Deck
BG	Bottom of Grade
DIA	Diameter
FB	Flat Bar
TD	Top of Deck
TG	Top of Grade
TS	Top of Steel
TOS	Top of Slab
BOS	Bottom of Slab
EA	Each Face
EL	Elevation
NIC	Not in Contract
NTS	Not to Scale
UON	Unless Otherwise Noted

ABBREVIATIONS

☐ VSL	Vertical Sprinkler Line
☐ FM	Fire Department Connection
☐ LOCAL ALARM	Local Alarm
☐ CENT	Central Station
☐ OWNER	Owner
☐ ARCH	Architect
☐	

AUTOMATIC SPRINKLER SPECIALISTS

STUDENT & BUSINESS SERVICES BUILDING
HUMBOLDT STATE UNIVERSITY ARCATA, CALIF.
CLARK & SULLIVAN CONSTRUCTORS
SEE INDUSTRIAL WAY, SPARKS, NEVADA 89431

DESERT FIRE PROTECTION
505 VALLEY ROAD RENO, NEVADA 89512

Date 9-22-89
Scale 1/8"=1'-0"
Drawn C.N.MOLVREY
Job No. 955
Hazard Light
Sheet No. 5 of 5