ADDITIONS & RENOVATIONS TO
HEATING & COOLING PLANT - A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

COMMONWEALTH OF KENTUCKY

DEPARTMENT of FINANCE
DIVISION of ENGINEERING

MASON & HANGER - SILAS MASON CO., INC.
LEXINGTON, KENTUCKY

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C- 2	SITE SURVEY
C- 3	SITE PLAN-STRUCTURAL
C- 4	SUBSURFACE INVESTIGATION
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S- 2	ELEVATIONS & GENERAL NOTES
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S- 4	FIRST FLOOR PLAN & DETAILS
S- 5	MEZZANINE FLOOR PLAN & COL. BASE
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E- 4	DISTRIBUTION SCHEMATIC
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E-11	NEW ADDITION MEZZANINE FLOOR PLAN
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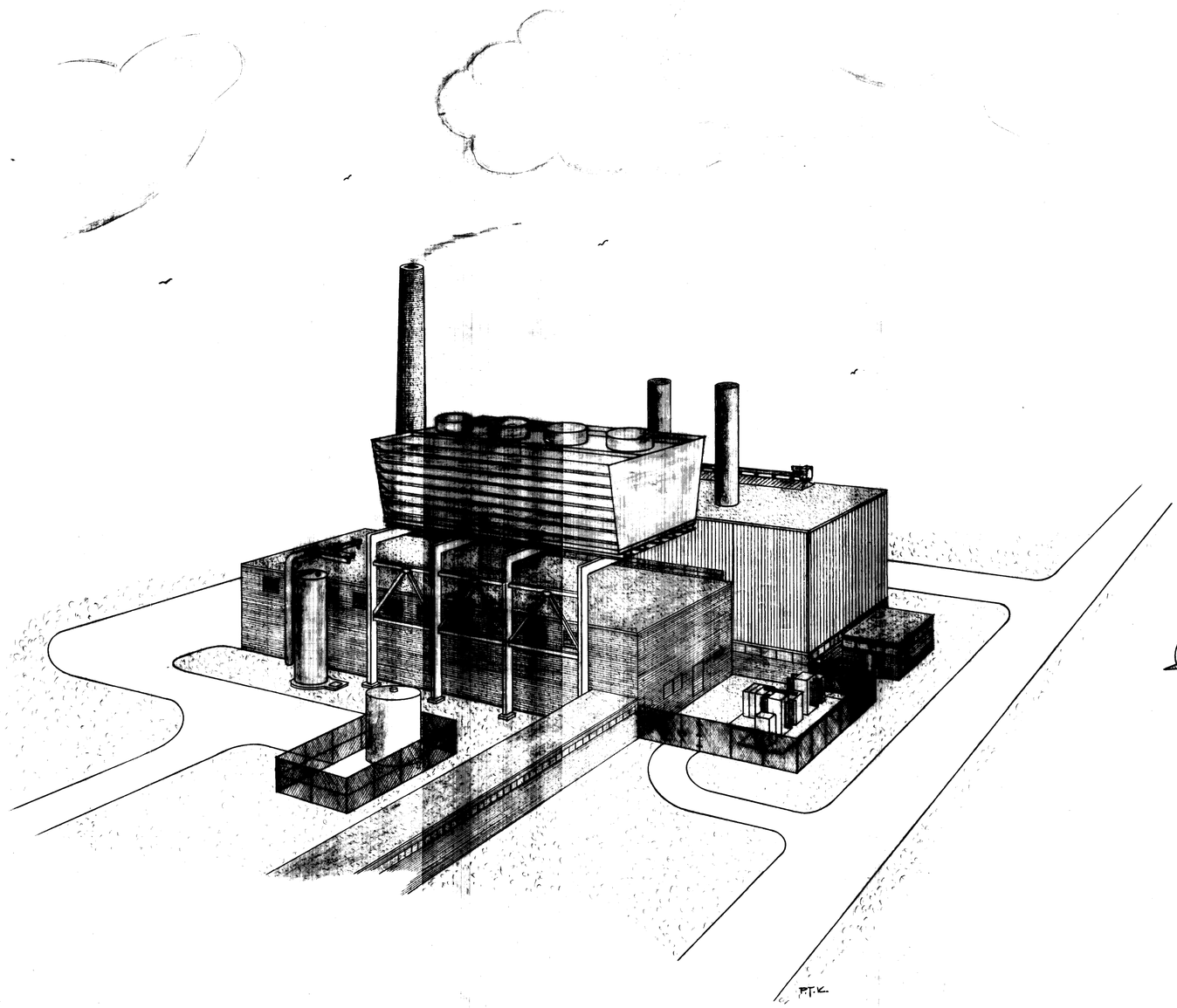
E-13	ROOF PLAN
E-14	WEIGH LARRY, LIGHTING & GROUNDING DETAILS
E-15	DETAILS
E-16	MOTOR CONTROL DETAILS
E-17	MOTOR CONTROL DETAILS

Cab.# 131 Shot A-1 Document# 015294

U-4985



NORTH

P.T.K.

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

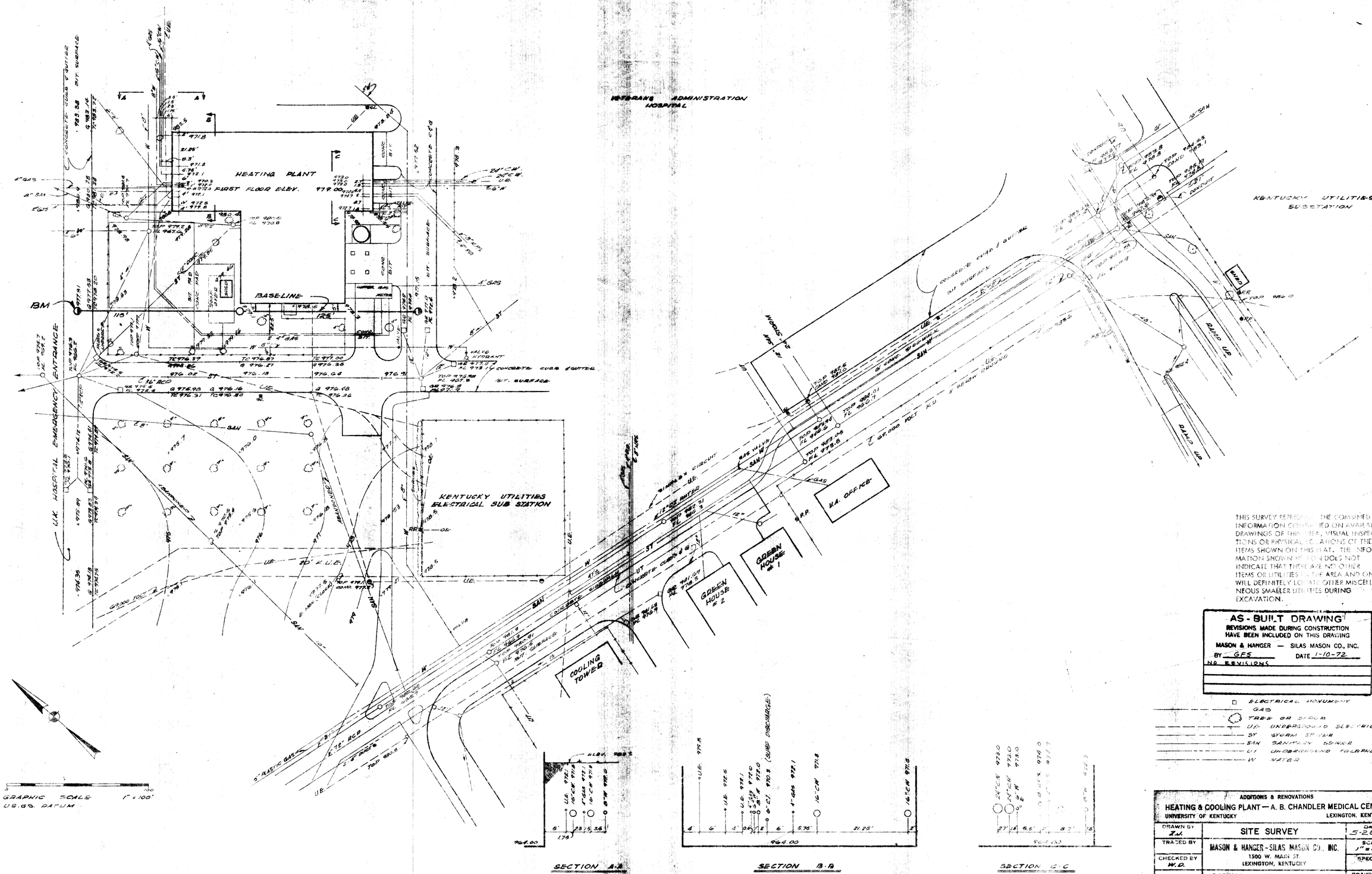
DRAWN BY P.T.K.	PERSPECTIVE VIEW OF PLANT	DATE 5-28-70
TRACED BY P.T.K.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. C-1

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-7

APPROVED BY W. J. McConnell DIRECTOR DIVISION OF ENGINEERING DATE 6-1-70

U-4986

Cab # 131 Slot A-1 Document # 015295



THIS SURVEY REPRESENTS THE COMBINED INFORMATION CONTAINED ON AVAILABLE DRAWINGS OF THIS AREA, VISUAL INSPECTIONS OR PHYSICAL LOCATIONS OF THE ITEMS SHOWN ON THIS PLAT. THE INFORMATION SHOWN HEREON DOES NOT INDICATE THAT THERE ARE NO OTHER ITEMS OR UTILITIES IN THE AREA AND ONE WILL DEFINITELY LOCATE OTHER MISCELLANEOUS SMALLER UTILITIES DURING EXCAVATION.

AS-BUILT DRAWING

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

NO REVISIONS

- ELECTRICAL MONUMENT
- GAS
- TREE OR SHRUB
- UE UNDERGROUND ELECTRIC
- ST STORM SEWER
- SAN SANITARY SEWER
- UT UNDERGROUND TELEPHONE
- W WATER

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY R.J.	SITE SURVEY	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1" = 30'
CHECKED BY W.D.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. C-2

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70

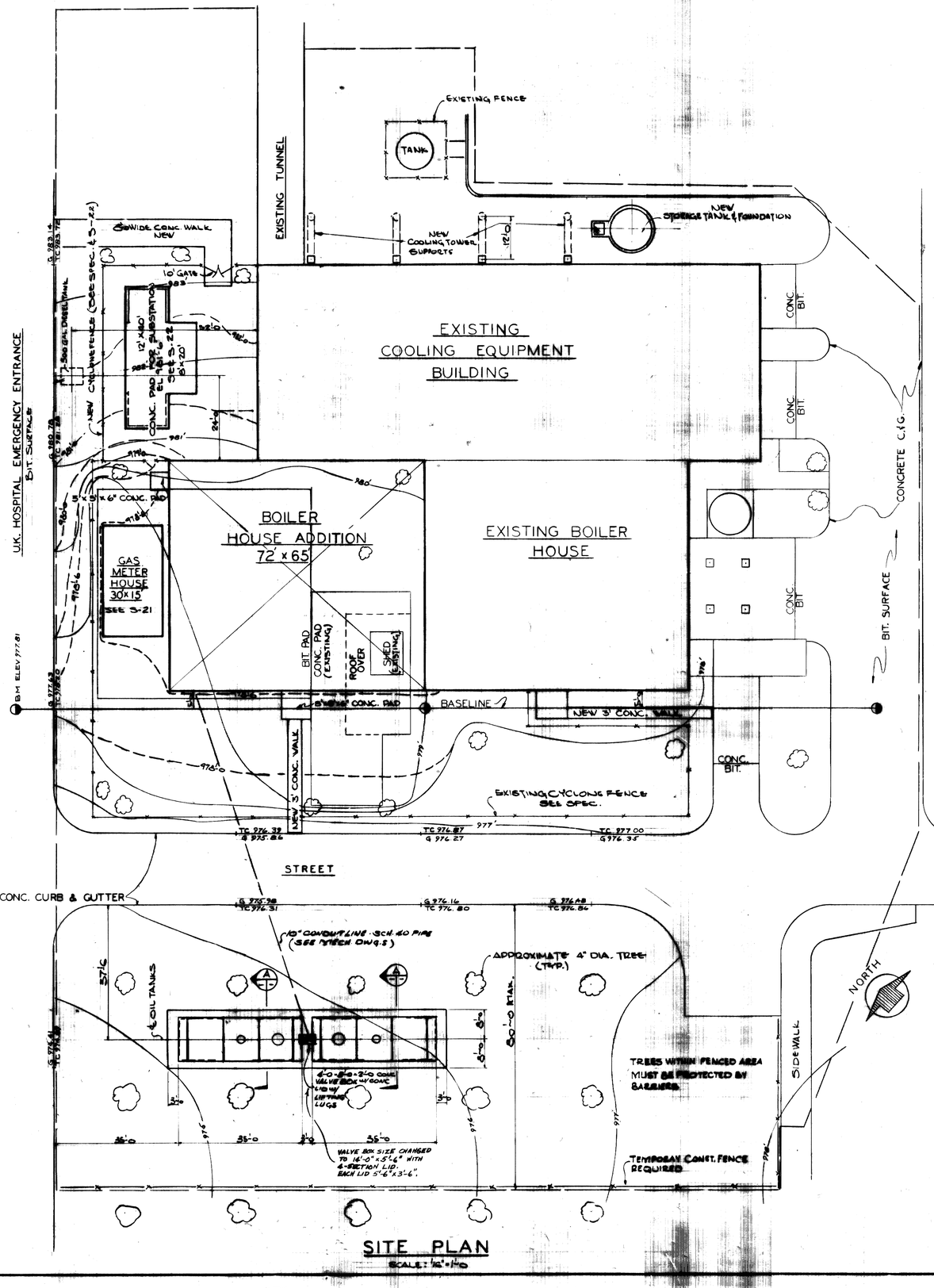
APPROVED BY W.F. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

SITE SURVEY PREPARED BY
DAUGHERTY ENGINEERS
366 WALLER AVENUE
LEXINGTON KENTUCKY

STATE OF KENTUCKY WILLIAM DAUGHERTY 447 REGISTERED LAND SURVEYOR

Cab. # A-1 Slot 151 Document # 015296

U-4987



SITE PLAN

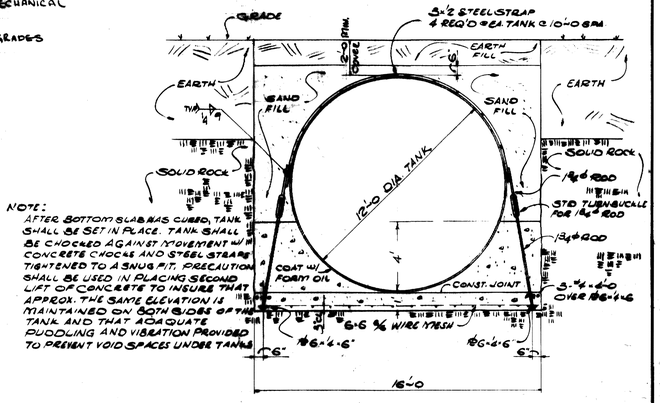
SCALE: 16'=1'-0

NOTES:

SEE SPECIFICATIONS FOR REMOVAL OF EXISTING ITEM WITHIN CONSTRUCTION LIMITS

———— INDICATES CONSTRUCTION LIMITS EXCEPT FOR ELECTRICAL AND MECHANICAL WIRING AND PIPING.

DASHED CONTOURS ARE FOR PROPOSED GRADES



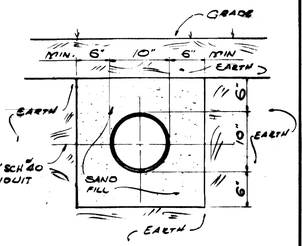
NOTE:
AFTER BOTTOM SLAB HAS CURED, TANK SHALL BE SET IN PLACE. TANK SHALL BE CHOCKED AGAINST MOVEMENT W/ CONCRETE CHOCKS AND STEEL STRAPS TIGHTENED TO A SNUG FIT. PRECAUTION SHALL BE USED IN PLACING SECOND LIFT OF CONCRETE TO INSURE THAT APPROX. THE SAME ELEVATION IS MAINTAINED ON BOTH SIDES OF THE TANK AND THAT ADEQUATE PUDDLING AND VIBRATION PROVIDED TO PREVENT VOID SPACES UNDER TANK.

SECTION (A)

SCALE: 1'-1'-0

NOTES:

1) 10" FUEL OIL CONDUIT LINE IS TO BE LAID ON A STRAIGHT GRADE. INVERT ELEVATIONS AT VALVE BOX = 978.9' AND AT EDGE OF BUILDING = 974.6'. CONDUIT TRENCH IS TO BE UNDER CUT 6" BELOW INVERT ELEVATION AND BACKFILLED TO INVERT ELEV. WITH SAND BEFORE CONDUIT IS PLACED. CONDUIT TRENCH IS TO BE BACKFILLED WITH SAND TO AN ELEVATION 6" ABOVE CONDUIT AND REMAINING DEPTH FILLED WITH COMPACTED EARTH. UNDER EXISTING STREET, CONDUIT TRENCH IS TO BE BACKFILLED WITH SAND AND TAMPED TO AN ELEVATION 4" BELOW TOP OF PAVEMENT. FILL REMAINING DEPTH OF TRENCH WITH TWO LAYERS OF COMPACTED BLACKTOP.
2) FUEL OIL TANKS ARE TO BE SET ON A GRADE. TOP OF TANKS ELEVATION AT VALVE BOX END = 978.2' AND AT OTHER END = 978.9'



TYP. TRENCH & CONDUIT DETAIL

SCALE: 1"=1'-0

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GES DATE 1-10-72
REVISED DIMENSIONS ON CONCRETE DEPTHS UNDER TANKS
REVISED VALVE BOX SIZE TO OIL TANKS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

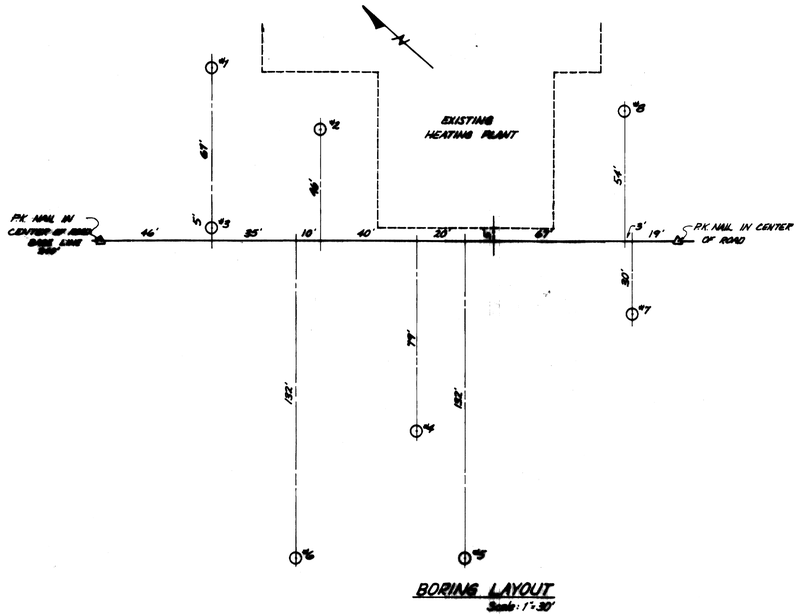
DRAWN BY B.C.	SITE PLAN — STRUCTURAL	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1800 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. C-3

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY — PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER

Cab # Slot Document # 01507 A-1 131

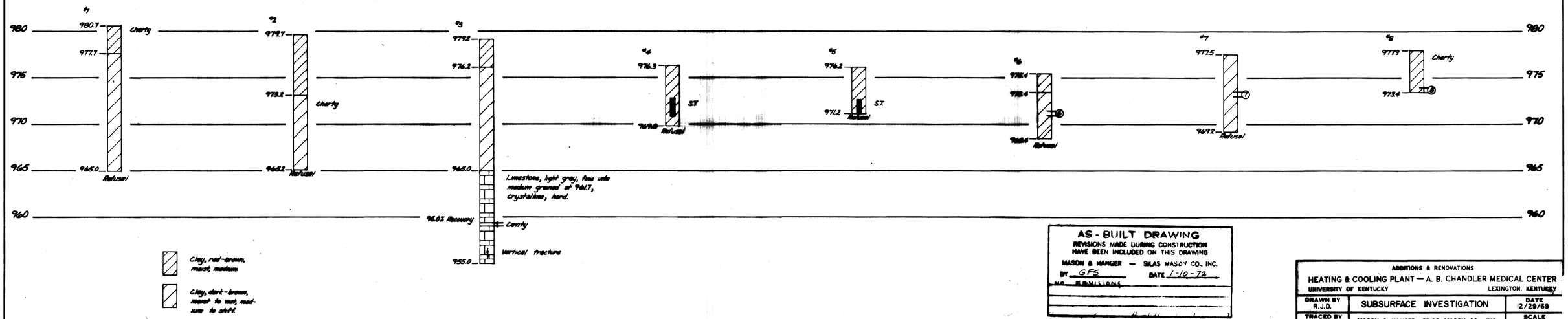
U-4988



BORING LAYOUT
Scale: 1"=30'

CHEMICAL ANALYSES TEST RESULTS

BORING NO.	SAMPLE DEPTH	SAMPLE ELEVATION	Parts Per Million Na	K	Ca	Mg	Cl	SO_4	pH	CONDUCTIVITY (micromho/cm)	RESISTIVITY (millohms-cm)
6	4.0'	971.4'	51	140	3250	190	55	5	5.7	0.4	2.50
7	4.0'	973.4'	56	127	3350	180	106	74	6.8	0.8	1.25
8	4.0'	973.9'	64	90	3850	310	50	46	7.2	0.6	1.67



LOGS OF BORINGS
Scale: 1"=5' (VERTICAL)

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY R.J.D.	SUBSURFACE INVESTIGATION	DATE 12/29/69
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. C-4

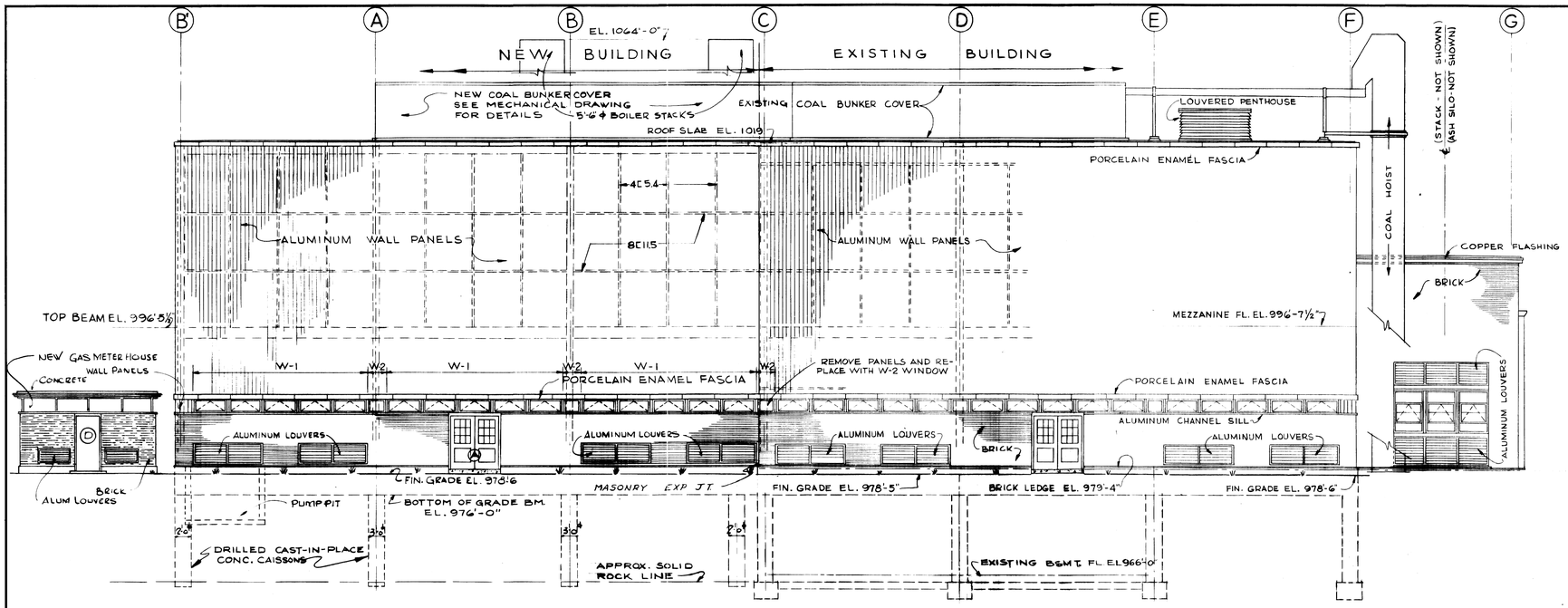
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

FULLER, MOSSBARGER & SCOTT
CIVIL ENGINEERS INC.
LEXINGTON, KENTUCKY

STATE OF KENTUCKY — DON W. FULLER — W. A. MOSSBARGER, JR. — 6016 5827 — REGIS. ERED. PROFESSIONAL ENGINEER

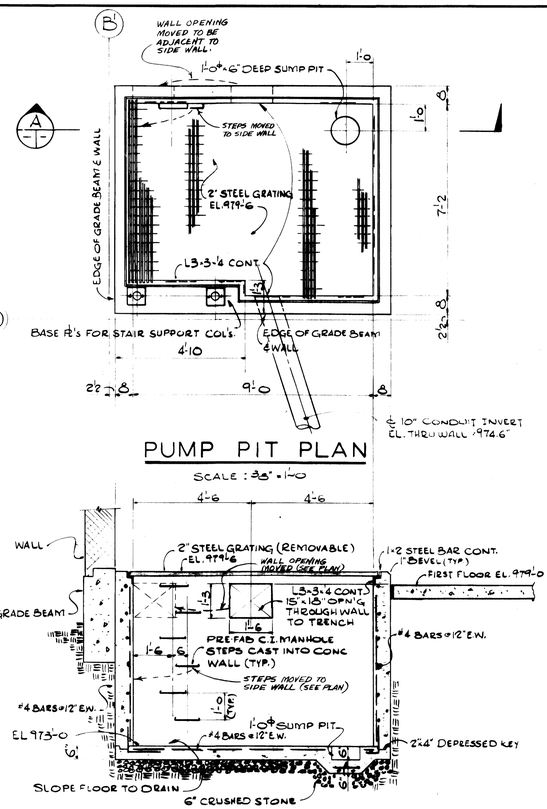
Cab.# 131 Slot A-1 Document # 015298

U-4989



SOUTH ELEVATION

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

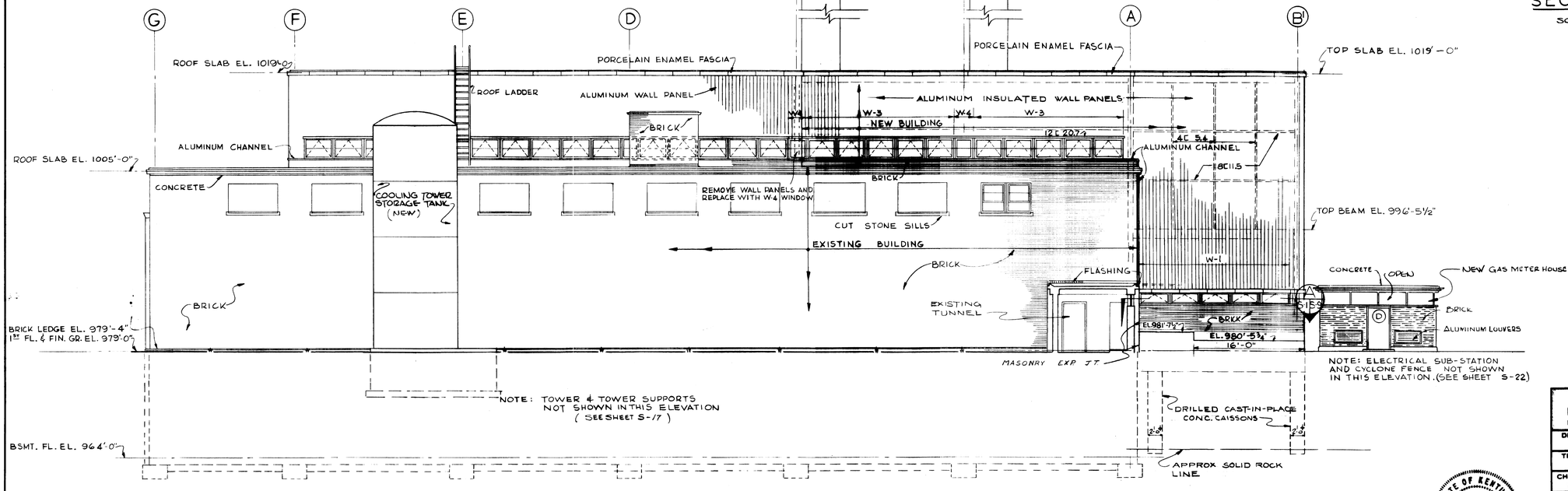


PUMP PIT PLAN

SCALE : 3/8" = 1'-0

SECTION (A)

SCALE : 3/8" = 1'-0



NORTH ELEVATION

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

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
RELOCATED PUMP PIT STEPS & WALL OPENING

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

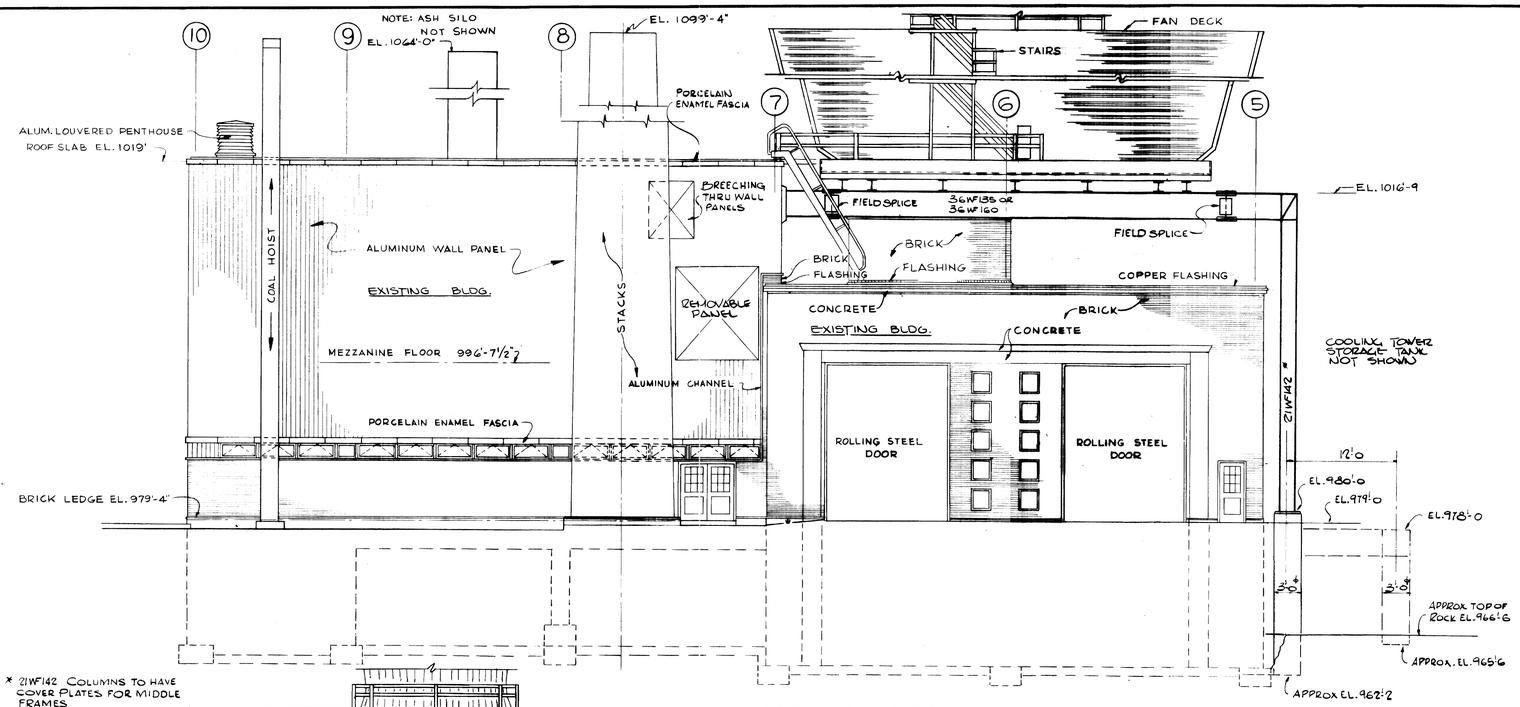
DRAWN BY A.P.	ELEVATIONS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-1

APPROVED BY _____ AGENCY HEAD DATE 5-28-70
APPROVED BY _____ DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER — STATE OF KENTUCKY

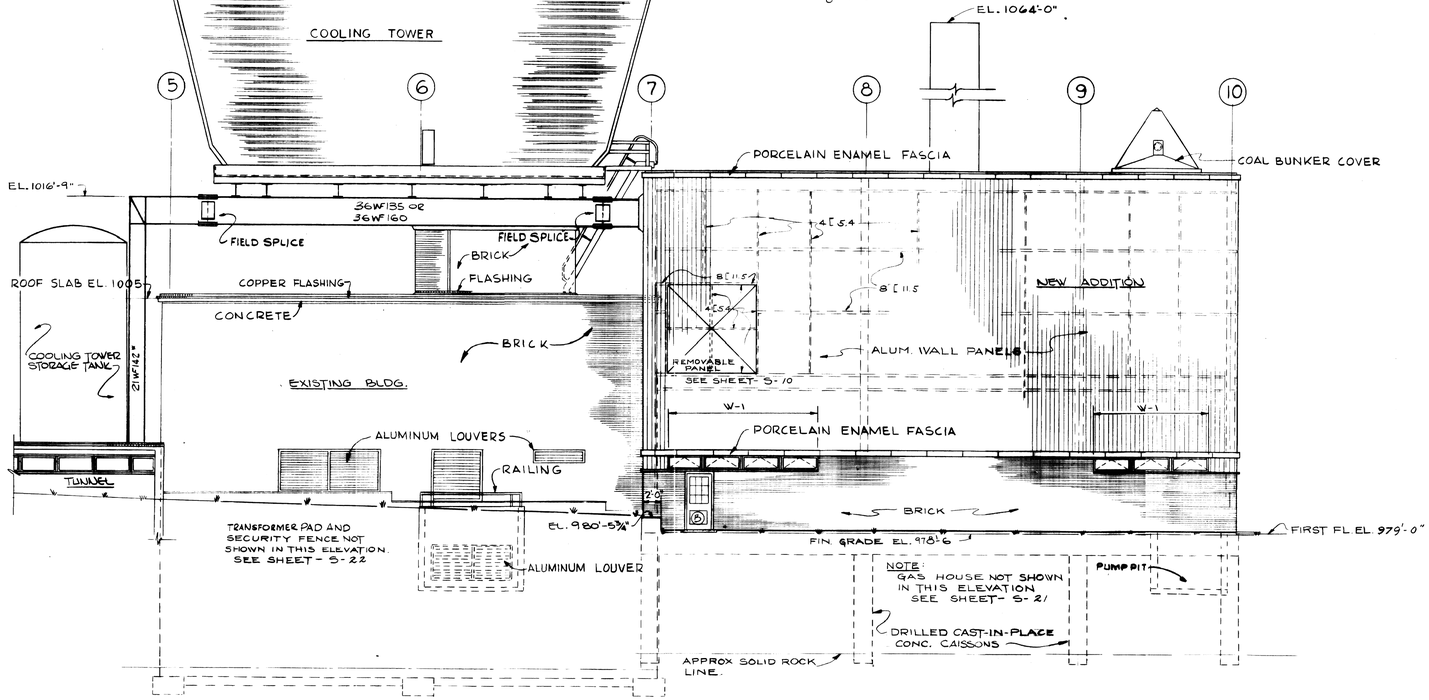
Cab.# 131 Slot B-1 Document # 015299

U-4990



EAST ELEVATION

SCALE: ⅛"=1'-0"



WEST ELEVATION

SCALE ⅛=1'-0"

GENERAL STRUCTURAL NOTES

① FOUNDATIONS:
A. BEARING VALUE OF ROCK SHALL BE 40,000 LBS. PER SQ. FT.
B. BEARING VALUE OF SOIL SHALL BE 3,000 LBS. PER SQ. FT.

② DESIGN STRESSES
f'_c CONCRETE AT 28 DAYS 3,000 LBS. PER SQ. INCH EXCEPT,
f'_c CONCRETE AT 28 DAYS 5,000 LBS. PER SQ. INCH, TO BE USED FOR COOL. TOWER FOUNDATIONS
f_s REINFORCING STEEL 20,000 LBS. PER SQ. INCH. STRUCTURAL STEEL STRESSES ARE FOR A36 STEEL AND ARE GOVERNED BY A.I.S.C. CODE.

③ CODES USED FOR DESIGN:
BUILDING OFFICIALS CONFERENCE OF AMERICA BASIC BUILDING CODE, (1965).
A.I.S.C. MANUAL OF STEEL CONSTRUCTION, (1963).
A.C.I. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (A.C.I. 318-63)
A.W.S. CODE FOR WELDING IN BUILDING CONSTRUCTION, (1967).

④ A.C.I. CODE OF STANDARD PRACTICE TO GOVERN FABRICATION OF ALL REINFORCEMENT.

⑤ FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS GOVERNED BY A.I.S.C. CODE OF STANDARD PRACTICE.

⑥ ALL REINFORCEMENT TO BE STANDARD A305 REINFORCING BARS.

⑦ ALL REINFORCING BARS SHALL BE TIED AND SUPPORTED IN SUCH A MANNER AS TO PREVENT DISPLACEMENT DURING POURING OPERATIONS. REINFORCEMENT VENDOR TO FURNISH ALL ACCESSORIES, CHAIRS, SPACER BARS AND SUPPORTS NECESSARY TO SECURE STEEL IN ACCORDANCE TO ACI. CODE OF STANDARD PRACTICE AND AS DETAILED ON PLANS.

⑧ 1" BEVEL ON ALL EXPOSED CORNERS OF COLUMNS AND BEAMS UNLESS OTHERWISE SHOWN.

⑨ SPLICE IN TENSION REINFORCEMENT = 30 BAR DIAMETERS.

⑩ ALL SLABS ON GRADE TO BE POURED ON FIRM UNDISTURBED EARTH OR ON WELL COMPACTED FILL. PROVIDE 6" CRUSHED STONE AND VAPOR BARRIER UNDER ALL SLABS. SLABS TO BE REINFORCED WITH 6"x6" - 4/4 WELDED WIRE FABRIC, UNLESS OTHERWISE INDICATED.

⑪ PROVIDE DOWELS OR EXTENSION OF MAIN REINFORCEMENT IN WALLS, BEAMS, ETC., FOR ANY CONCRETE WORK NOT POURED AT THE TIME ORGINAL WORK IS POURED. DOWELS TO BE SAME SIZE AS MAIN REINFORCING CONNECTED WORK AND SHALL LAP 24 BAR DIAMETERS UNLESS OTHERWISE DETAILED.

⑫ DURING THE CONSTRUCTION PERIOD ALL WALLS ARE TO BE HELD PLUMB AND IN LINE UNTIL SLABS CONNECTING TO WALLS ARE IN PLACE.

⑬ ALL PLUMBING THAT DOES NOT HAVE A FRAMED OPENING LOCATED OR SHOWN ON DRAWINGS IS TO BE SLEEVED THROUGH CONCRETE.

⑭ FOR SIZE AND LOCATION OF OPENINGS SEE MECHANICAL DRAWINGS. ALL DIMENSIONS FOR MECHANICAL EQUIPMENT SHALL BE CHECKED AND VERIFIED BY MECHANICAL CONTRACTOR.

⑮ CONCRETE COVERAGE FOR REINFORCEMENT:

BEAMS	1½"
COLUMNS	1½"
DRILLED IN CASSIONS	2"
WALLS	2" UNLESS DIMENSIONED
FOOTINGS	3"
SLABS	¾"

⑯ PROVIDE 2-#6 BARS EACH SIDE OF ALL OPENINGS IN CONCRETE WALLS, SLABS, ETC., UNLESS OTHERWISE SHOWN. BARS TO EXTEND 2'-0" PAST FACE OF OPENING.

⑰ AT CORNERS OF CONCRETE FOUNDATION BEAMS, WALLS, PITS, ETC., PROVIDE 5'-0" LONG #5 CORNER BARS ON 12" CENTERS.

⑱ TEMPERATURE REINFORCEMENT FOR SLABS, WALLS, ETC., TO BE #4 @ 15" C/C AND AT RIGHT ANGLES TO MAIN REINFORCEMENT, UNLESS OTHERWISE SHOWN.

⑲ DURING THE CONSTRUCTION PERIOD IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK ALL DIMENSIONS AND SECTIONS SHOWN ON THE STRUCTURAL DRAWINGS AND TO REPORT TO THE ENGINEER ANY DISCREPANCIES FOUND.

⑳ THESE STRUCTURAL DRAWINGS AND DETAILS REPRESENT THE DESIRED RESULT OF CONSTRUCTION. THE METHODS OF CONSTRUCTION AND THE RISKS INVOLVED DURING CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL ADOPT A METHOD OF CONSTRUCTION WHICH WILL MINIMIZE THE INTERFERENCE WITH THE OPERATION OF EXISTING BOILER PLANT.

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CORRECTED INT. PL. ELEVATION

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

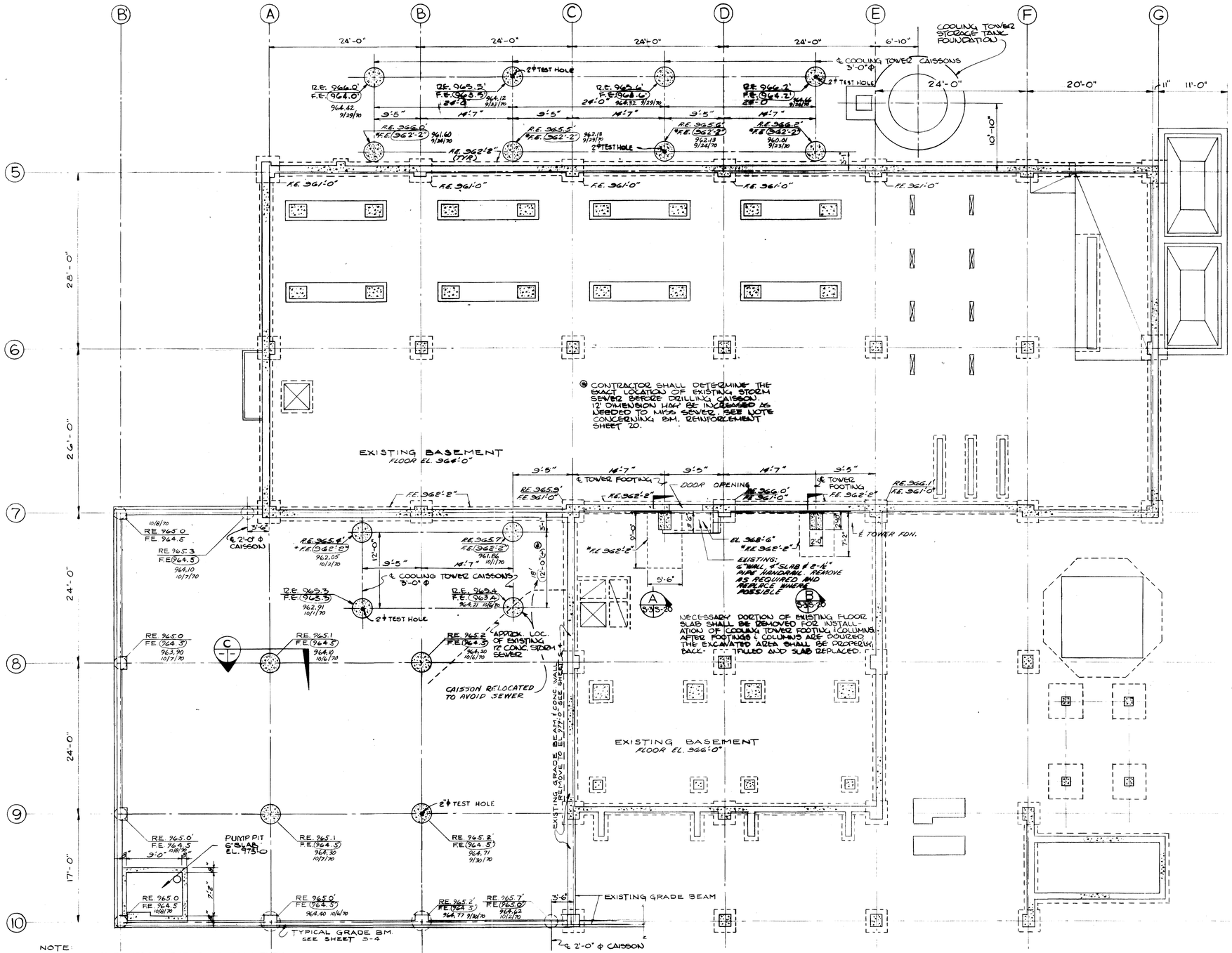
DRAWN BY A.P.	ELEVATIONS & GENERAL NOTES	DATE 5-28-70
TRACED BY J.B.W.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY D.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-2

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W. F. McCann DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY · PAUL F. HAGGARD · 6748 · REGISTERED PROFESSIONAL ENGINEER

Cab. # Slot Document # 115310 B-1 121

U-4991



NOTE:
R.E. DENOTES ESTIMATED SOLID ROCK ELEV.
F.E. DENOTES ESTIMATED BOTTOM OF FOOTING OR CAISSON ELEV.

◯ DENOTES 3'-0" Φ CAISSON

◯ DENOTES 2'-0" Φ CAISSON

* R.E. SHOWN WAS BEFORE INITIAL CONSTRUCTION. IF ROCK AT R.E. IS BROKEN DUE TO INITIAL CONSTRUCTION THE FOOTING IS TO BE LOWERED TO AN ELEVATION WHERE ROCK IS SOUND.

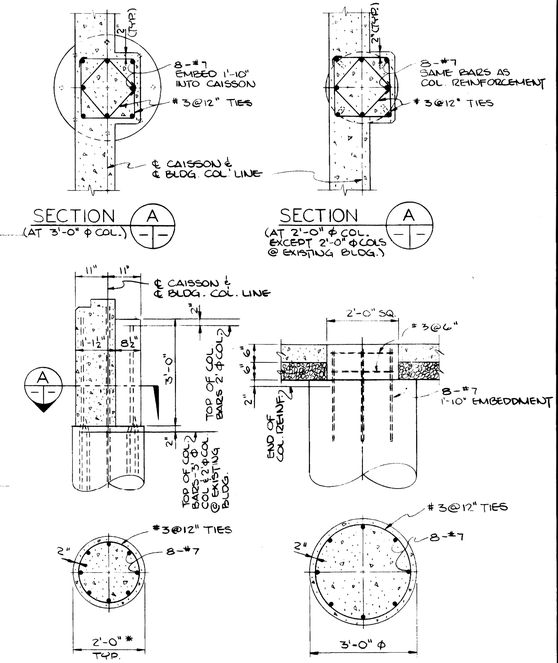
TEST HOLES TO BE 8'-0 BELOW BOTT. OF CAISSON

AS-BUILT NOTE

REVISED ELEVATIONS NEAR CIRCLED F.E. FIGURES DENOTE ACTUAL ELEVATIONS RECORDED BY PROJECT INSPECTOR DURING CONSTRUCTION. ACCOMPANYING DATES INDICATE DAY CONCRETE WAS POURED.

BASEMENT PLAN & FOUNDATION

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



* 3'-0" FOR COLS. A-10 & B-10

TYPICAL EXTERIOR BLDG CAISSON

SCALE ~ ½" = 1'-0"

GFS 1-10-72
NOTED: RELOCATED CAISSON
ACTUAL FOOTING ELEVATIONS & CONC. POURING DATES

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

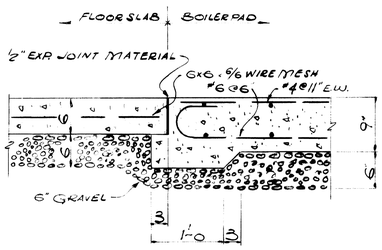
DRAWN BY J.B.W.	FOUNDATION PLAN & DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-3

APPROVED BY O.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McClanahan DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

Cab # Slot Document # 015301 131 B-1

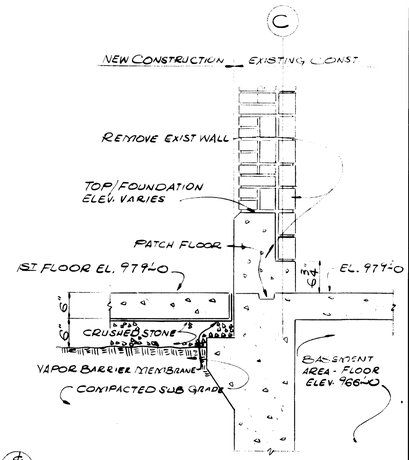
U-4992



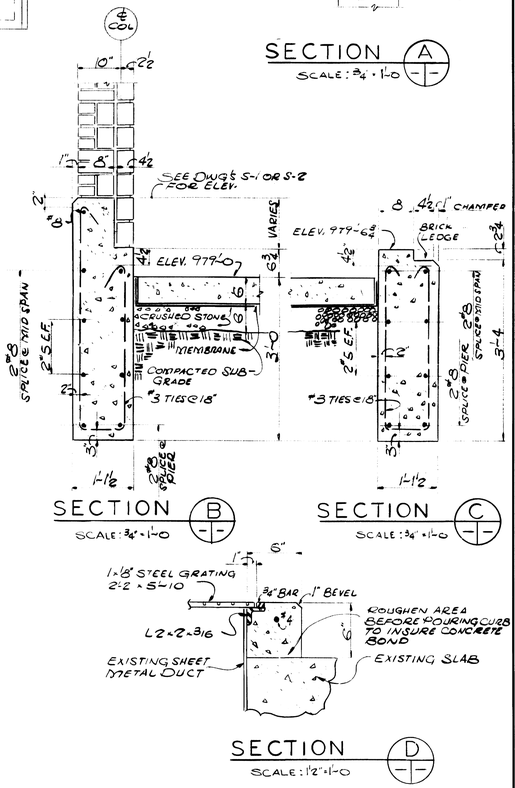
SECTION E
SCALE: 1"-1'-0

NOTE: 1) C.J. INDICATES A CONSTRUCTION JOINT
2) FOR DETAILS AND LOCATION OF FLOOR DRAINS SEE PLUMBING DWGS.
3) SLAB REIF NOT SHOWN TO BE 6x6 - 6/6 WIRE MESH

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



SECTION A
SCALE: ¾"-1'-0



SECTION B
SCALE: ¾"-1'-0

SECTION C
SCALE: ¾"-1'-0

SECTION D
SCALE: 1½"-1'-0

NORTH

PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER
STATE OF KENTUCKY

CHANGES MADE DURING CONSTRUCTION
G.F.S. 1-10-72
MOVED TRENCH TO OIL PUMP
ONE DIMENSION REVISION

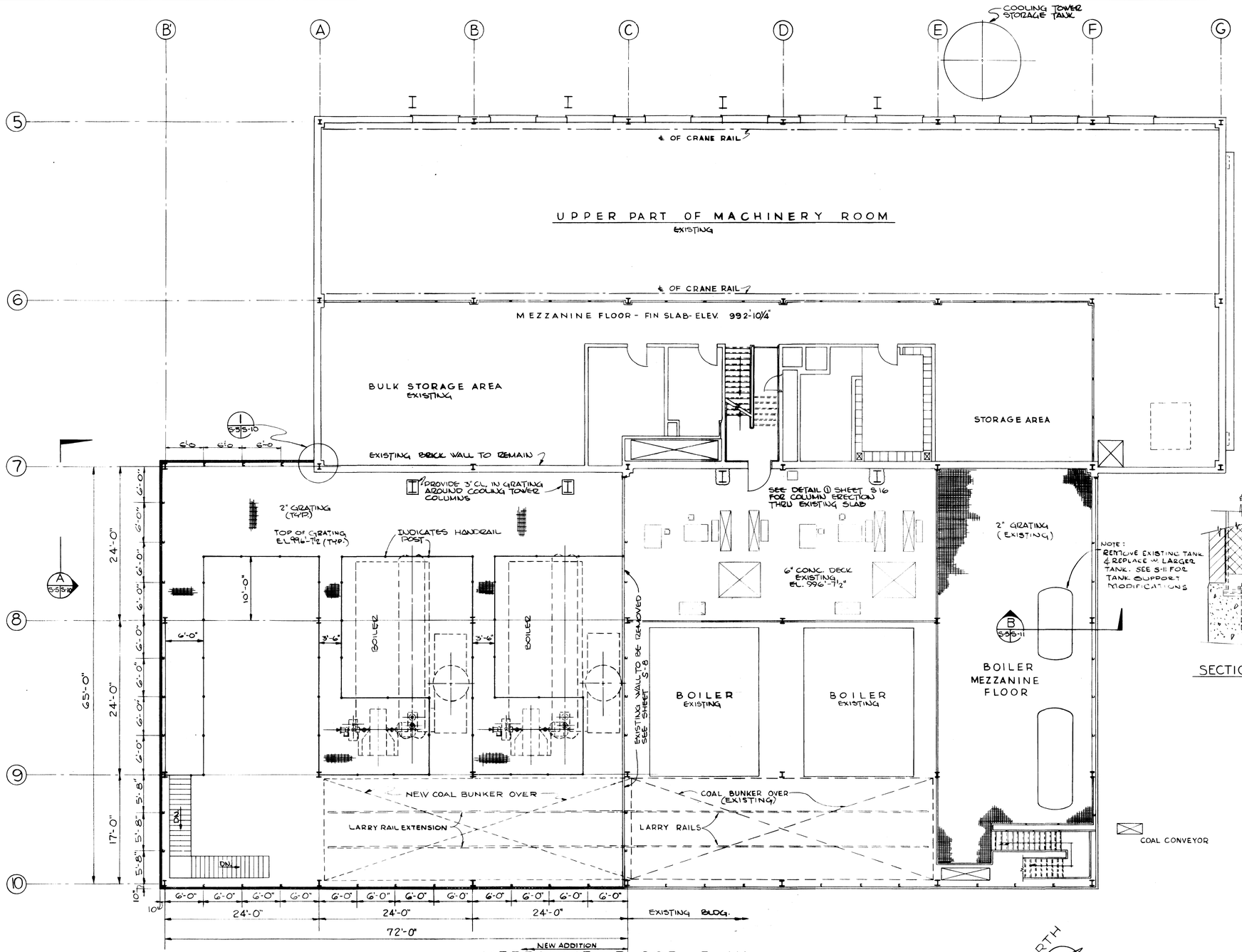
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY A.P.	FIRST FLOOR PLAN & DETAILS	DATE 5-28-70
TRACED BY S.M.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-4

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

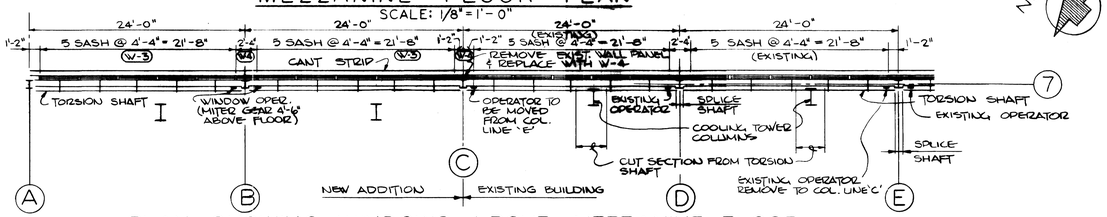
Cab # Slot Document # 015302 B-1 1-1

U-4993



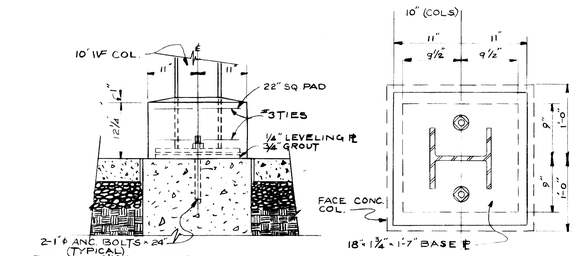
MEZZANINE FLOOR PLAN

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

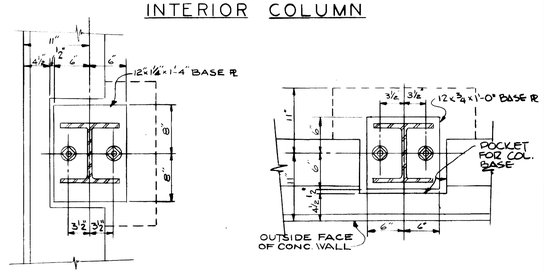


PLAN SHOWING WINDOWS ABOVE MEZZANINE FLOOR

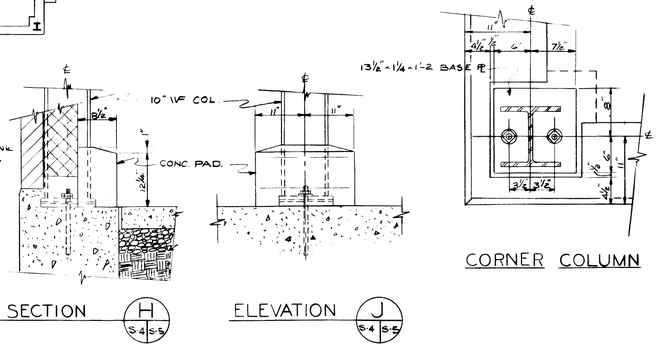
SCALE 1/8" = 1'-0"



INTERIOR COLUMN



EXTERIOR COLUMN



SECTION (H) S4 S5

ELEVATION (J) S4 S5

CORNER COLUMN

COLUMN BASE DETAILS

AS - BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY B.C.	MEZZANINE FLOOR PLAN & COL. BASE	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-5

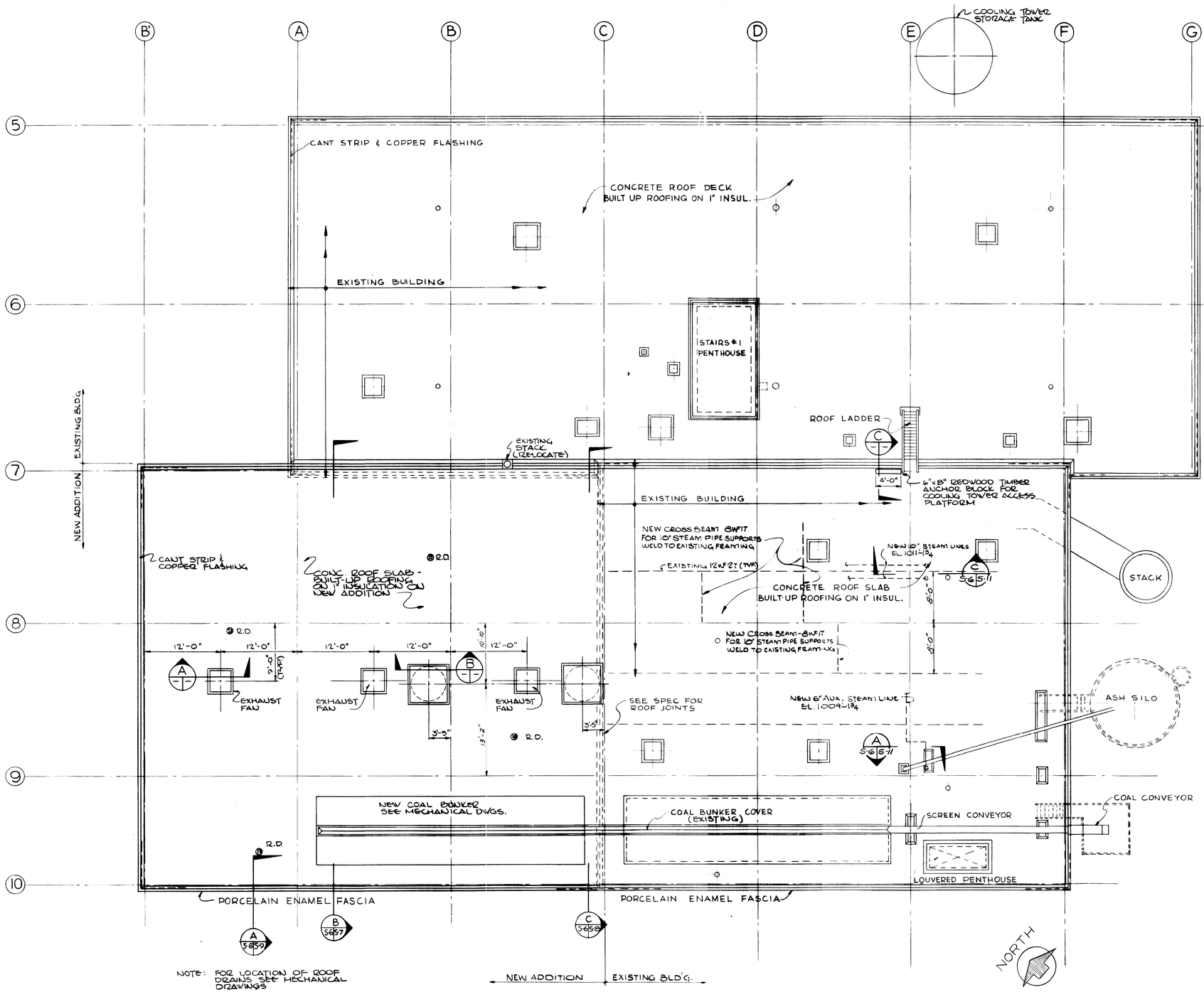
PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER — STATE OF KENTUCKY

APPROVED BY C. J. Marshall AGENCY HEAD DATE 5-28-70

APPROVED BY W. M. Combs DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

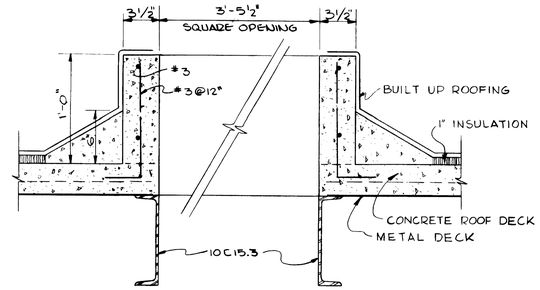
Cab # 131 Slot B-1 Document # 015303

U-4994



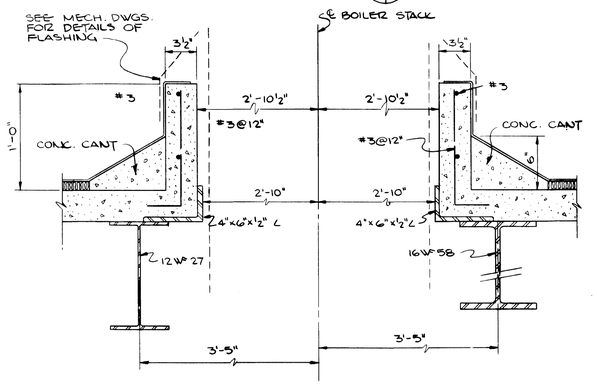
ROOF PLAN

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



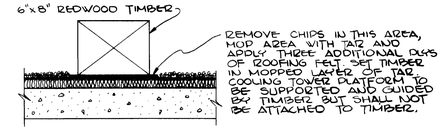
SECTION A

SCALE ~ 1 1/2" = 1'-0"



SECTION B

SCALE ~ 1 1/2" = 1'-0"



SECTION C

SCALE ~ 1 1/2" = 1'-0"

AS-BUILT DRAWINGS

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THESE DRAWINGS.

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

DIMENSION REVISION ON STACK

OPENING LOCATION

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY A.P.	ROOF PLAN & OPENING DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1/8" = 1'-0"
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-6

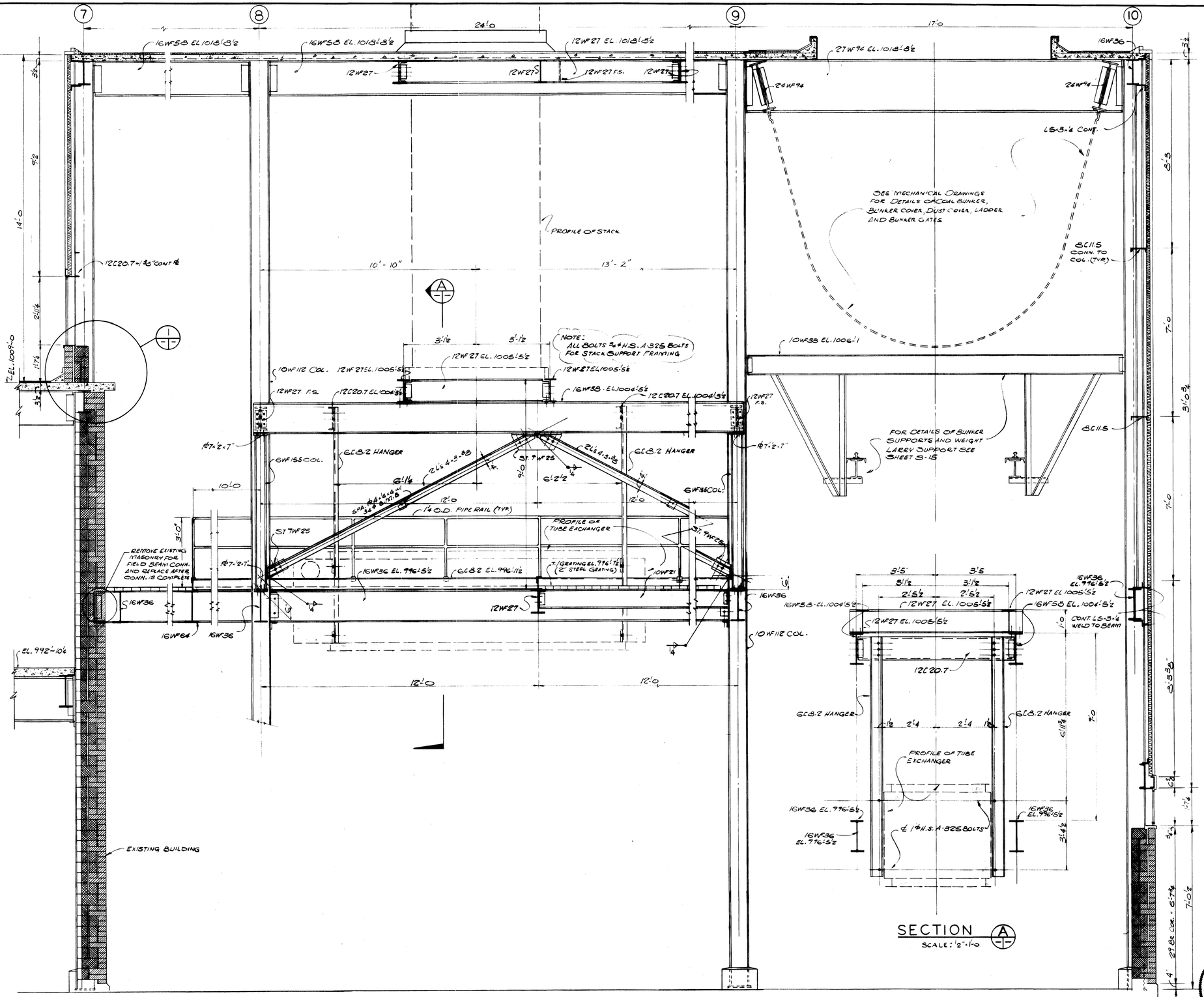
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-29-70

APPROVED BY DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY — PAUL F. HAGGARD 6746 REGISTERED PROFESSIONAL ENGINEER

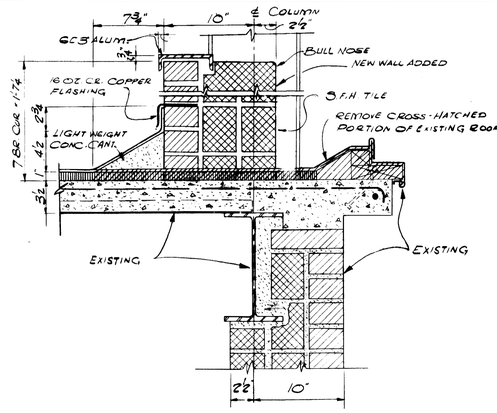
Cab # Slot Document # 015314 B-1 131

U-4995

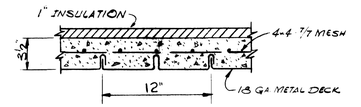


SECTION (B)
SCALE: ½"=1'-0

SECTION (A)
SCALE: ½"=1'-0



DETAIL (1)
SCALE: 1½"=1'-0"



TYPICAL ROOF SECTION
SCALE: 1½"=1'-0"

AS-BUILT DRAWINGS
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
REVISED DIMENSIONS OF STAGE OPENING LOCATION

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

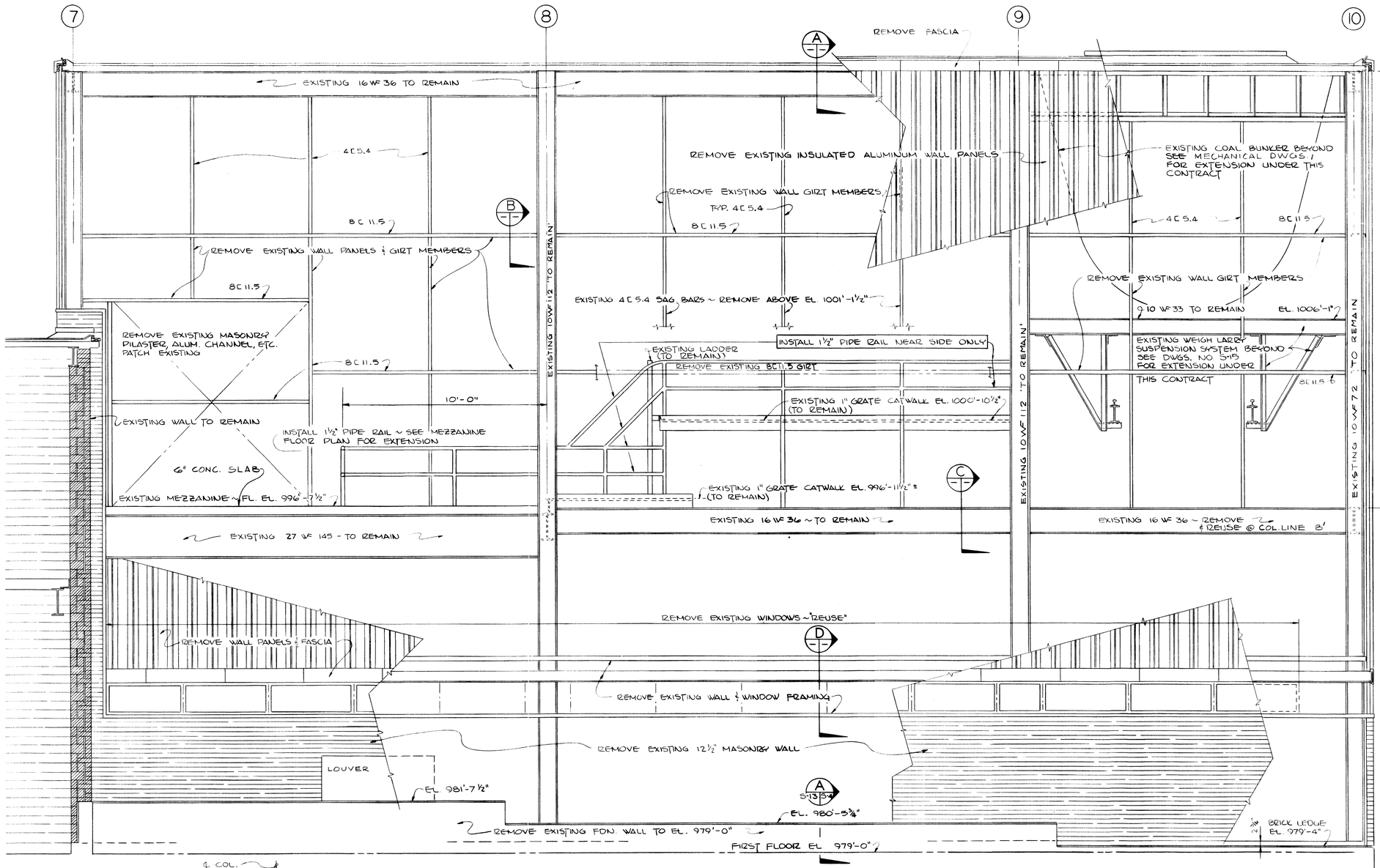
DRAWN BY D.W.	BUILDING SECTION & DETAILS	DATE 5-28-70
TRACED BY J.S.M.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY D.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-7

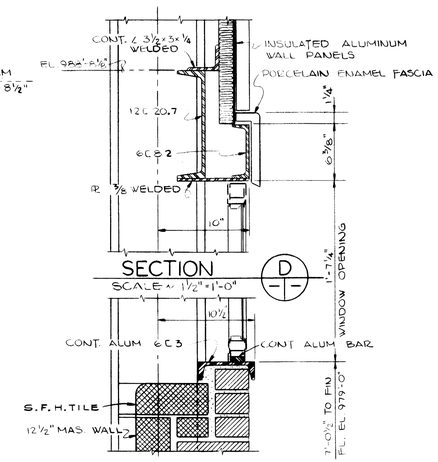
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McCann DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

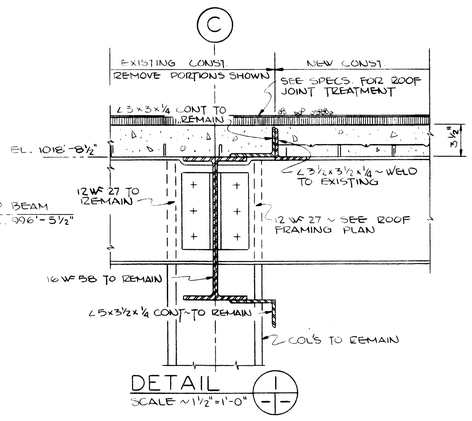
STATE OF KENTUCKY — PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER

Cab.# 131 Slot B-1 Document # 015505

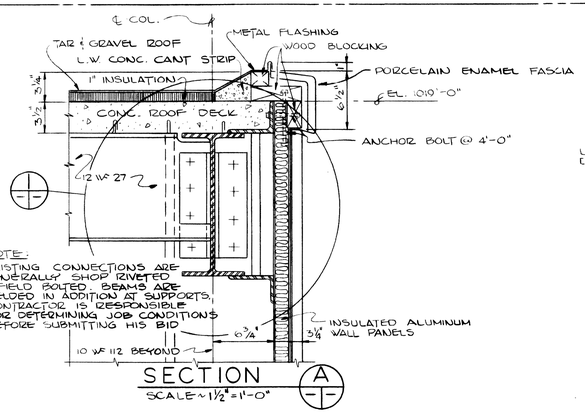
U-4996





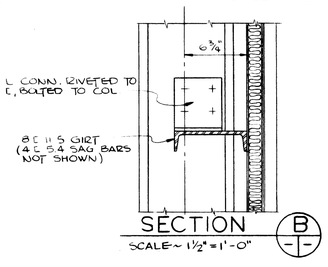


DETAIL 1 — SCALE ~ 1½" = 1'-0"

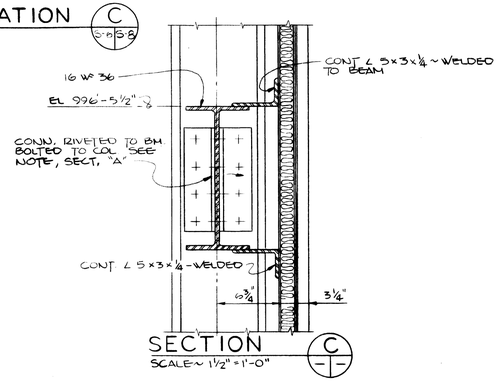


SECTION A — SCALE ~ 1½" = 1'-0"

SECTIONAL ELEVATION C — SCALE ~ ⅜" = 1'-0"



SECTION B — SCALE ~ 1½" = 1'-0"



SECTION C — SCALE ~ 1½" = 1'-0"

AS-BUILT DRAWINGS
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

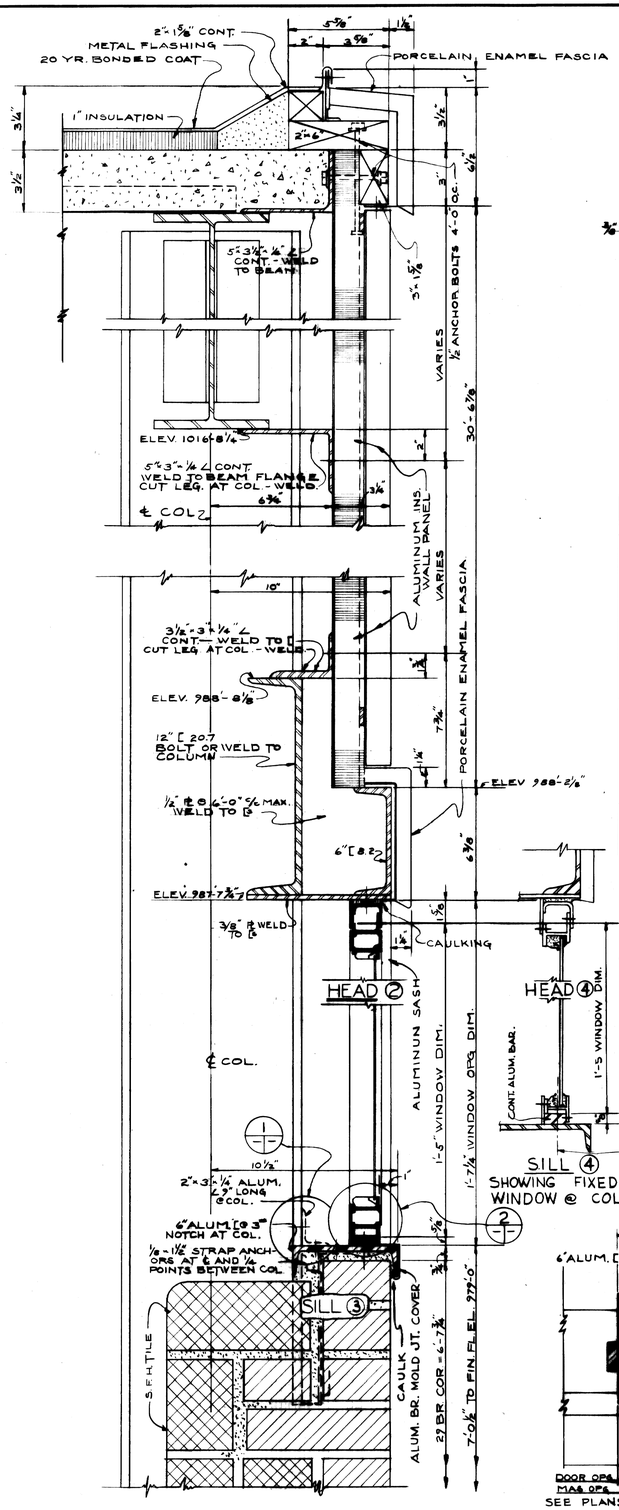
DRAWN BY D.W.	SECTIONAL END ELEVATION, EXISTING BLDG. & DETAILS	DATE 5-28-70
TRACED BY J.B.W.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-8

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY E.W. McGowan DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

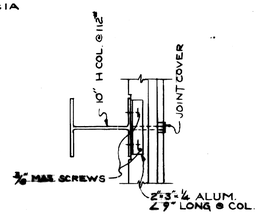
PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER — STATE OF KENTUCKY

Cab. # Slot Document # 69-5306 B-1 13-1

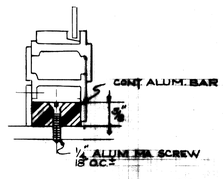
U-4997



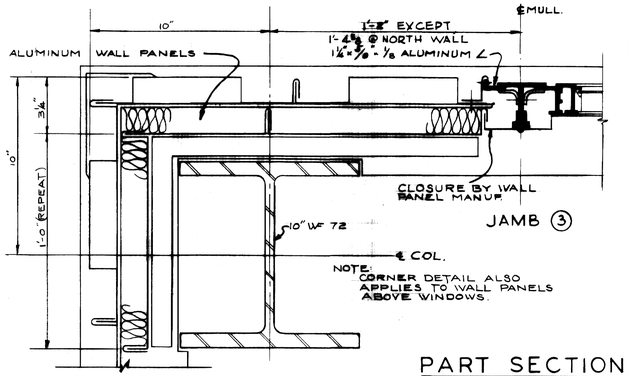
PART SECTION (A) S6S9
SCALE: 3"=1'-0"



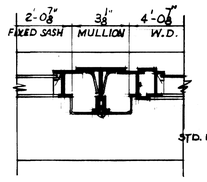
DETAIL (1) SCALE 1"=1'-0"



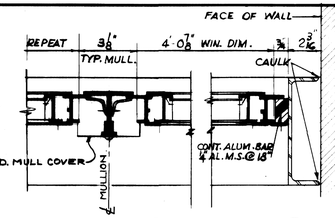
DETAIL (2) SCALE: HALF



JAMB (3)



MULLION (1)



MULLION (2)

JAMB (4) @ COL. A-7

PART SECTION (A) S1 S9
SCALE: 3"=1'-0"

** SEE SPECS. FOR DESCRIPTION OF HARDWARE

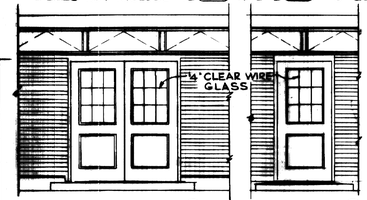
DOOR & FRAME SCHEDULE

MARK	DOOR SIZE	DOOR MATERIAL	ELEVATION	FRAME HEAD	FRAME JAMB	FRAME SILL	FRAME MATERIAL	MISC. GLASS	MISC. HARDWARE	MISC. INSULATION
(A)	2'-3'-0"×6'-8"×1¾	STEEL	①	①	①	①	STEEL	AS SHOWN	SET #1	MINERAL WOOL
(B)	3'-0"×6'-8"×1¾	STEEL	②	①	①	①	STEEL	AS SHOWN	SET #2	" "
(C)	2'-4"×6'-8"×1¾	STEEL(FIRE)	④	STD. FRAME (RATED)			STEEL	AS SHOWN	SET #3	1½ HR RATE
(D)	3'-0"×6'-4"	STEEL	③	②	②	②	STEEL	——	SET #4	

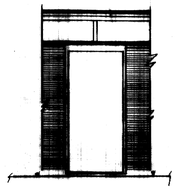
WINDOW SCHEDULE

MARK	QUANTITY	SIZE	TYPE	HEAD	JAMB	SILL	MULLION	REMARKS
(W-1)	15*	4'-0⅞"×1'-5"	ARCH PROJECTED	③	③ OR ④	③	① OR ②	POLE OPERATED
(W-2)	1 *	2'-0⅞"×1'-5"	FIXED	④	——	④	①	
(W-3)	10	4'-0⅞"×2'-9"	ARCH PROJECTED	⑤	③	⑤	① OR ②	MITER GEAR OPER.
(W-4)	2	2'-0⅞"×2'-9"	FIXED	④	——	④	①	

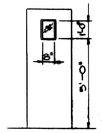
* DOES NOT INCLUDE 12 (W-1) AND 2 (W-2) TO BE REMOVED AND REUSED FROM EXISTING BUILDING



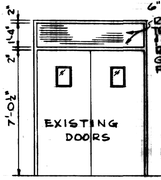
ELEVATION (1) ELEVATION (2)
SCALE - ¼"=1'-0"



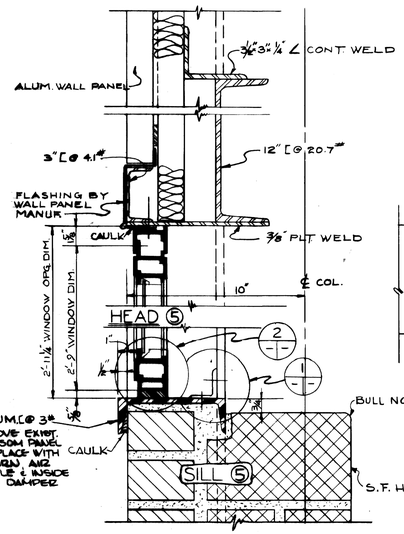
ELEVATION (3)
SCALE: ¼"=1'-0"



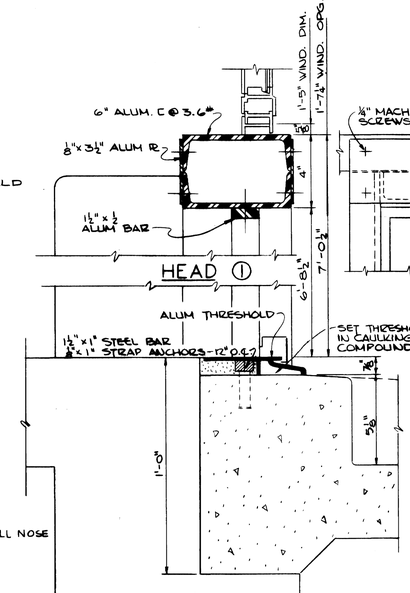
ELEVATION (4)
SCALE: ⅛"=1'-0"



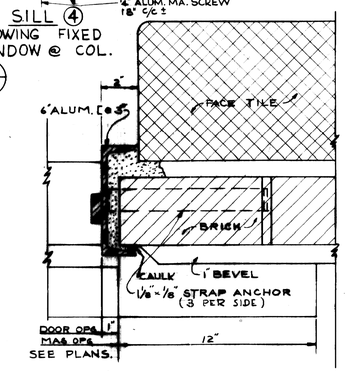
ELEVATION (F) S-4 S-9



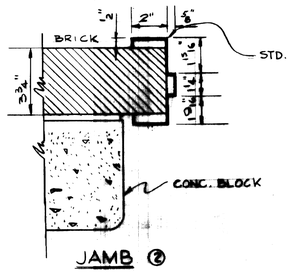
SECTION (A) S-6 S-9
SCALE: 3"=1'-0"



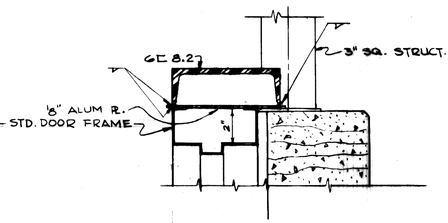
SILL (1)
SCALE: 3"=1'-0"

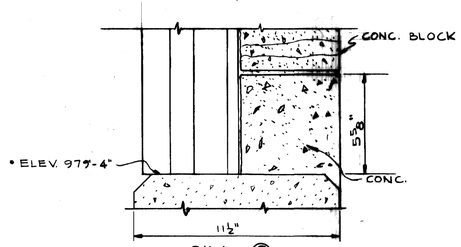


JAMB (1)
SCALE: 3"=1'-0"



JAMB (2)
SCALE: 3"=1'-0"





SILL (2)
SCALE: 3"=1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

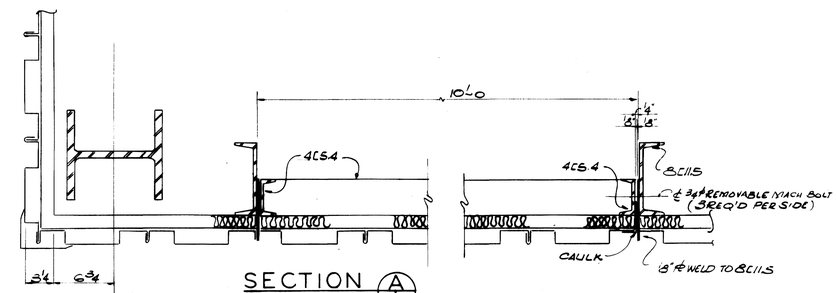
DRAWN BY B.C.	DOOR, FRAME & WINDOW SCHEDULE & DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-9

PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER — STATE OF KENTUCKY

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY C.J. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

Cab. # 131 Slot B-1 Document # 015307

U-4998



SECTION A
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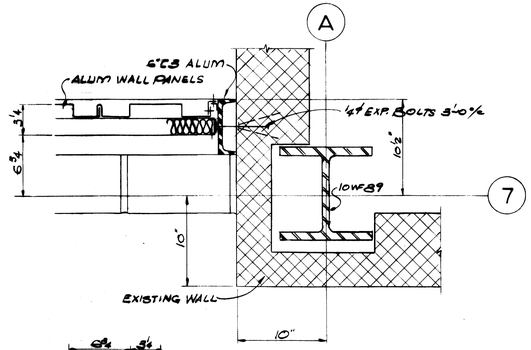

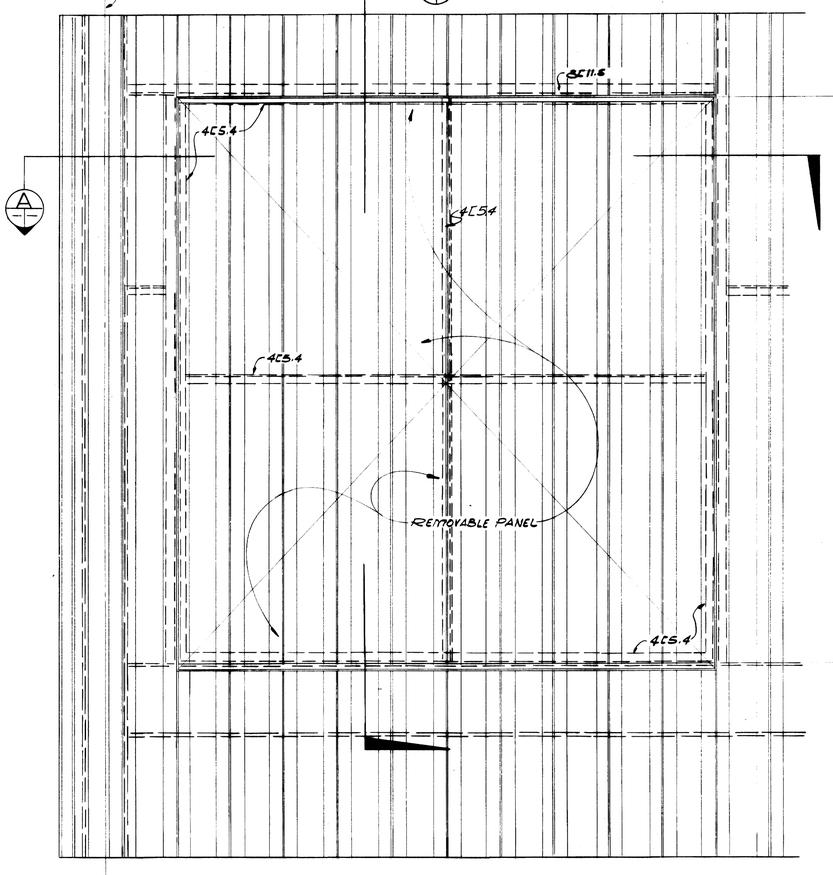

ELEVATION A
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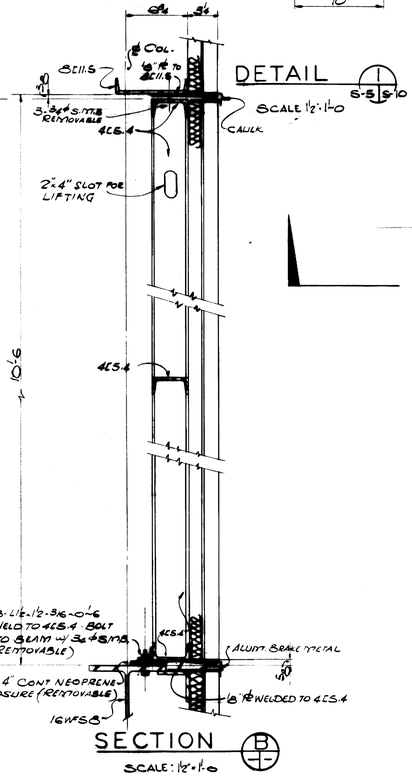
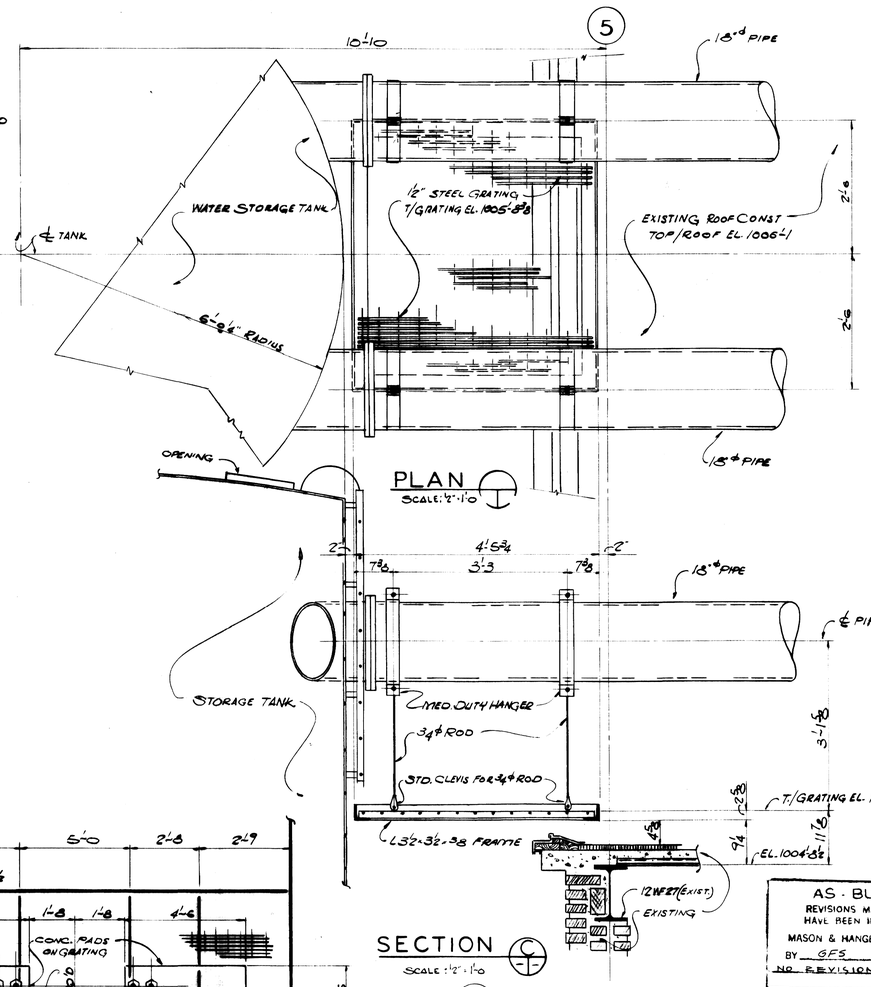


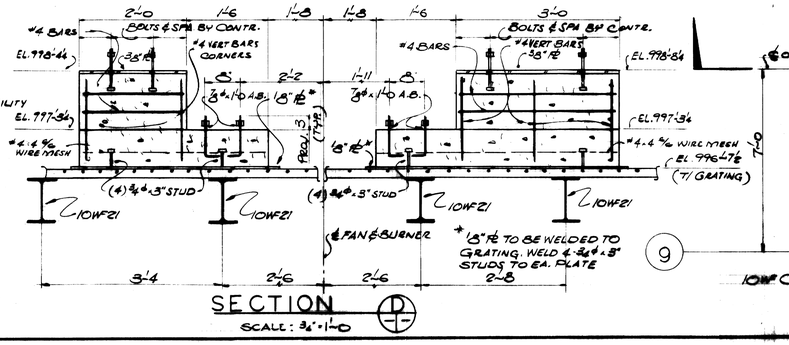
DETAIL 1 S-5 S-10
SCALE 1/2"=1'-0

SECTION B
SCALE: 1/2"=1'-0



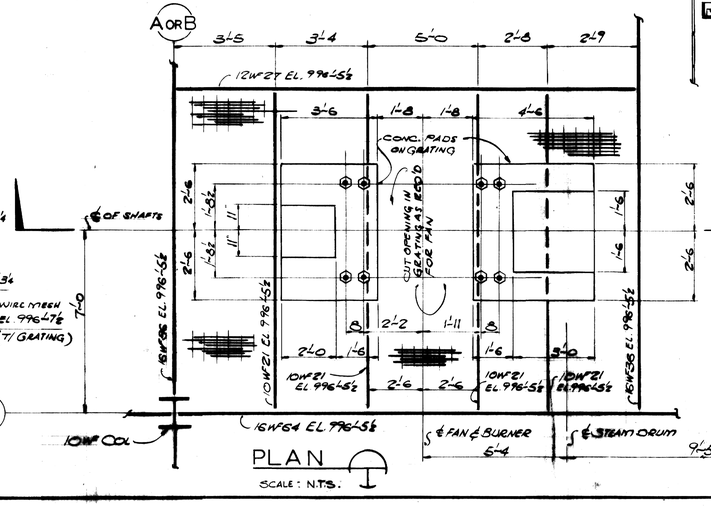
PLAN 5
SCALE: 1/2"=1'-0

SECTION C
SCALE: 1/2"=1'-0



SECTION D
SCALE: 3/4"=1'-0

NOTES:
1) 3/8" BASE PLATE FOR TURBINE AND MOTOR ARE TO BE SET LEVEL. PLATES ARE TO BE DRILLED FOR ANCHOR BOLTS
2) PAD ELEVATIONS SHOWN ARE APPROX. ONLY AND ARE TO BE ADJUSTED BY THE CONTRACTOR AS REQUIRED FOR COMPATIBILITY BETWEEN TURBINE, FAN, AND MOTOR.
3) SIZE AND LOCATION OF ANCHOR BOLTS FOR MOTOR AND TURBINE ARE TO BE AS REQUIRED BY MFG'S.



PLAN
SCALE: N.T.S.

B OR C

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

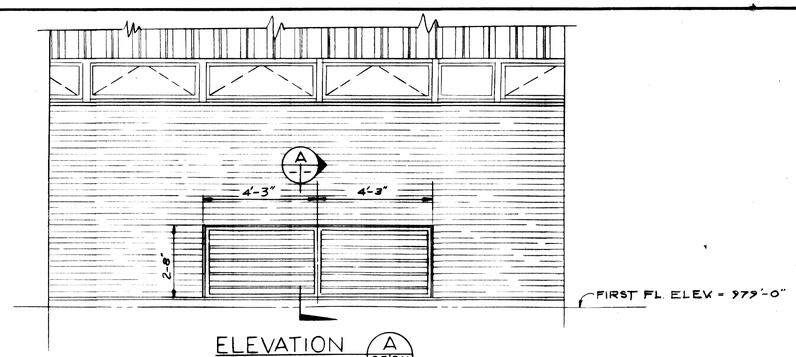
DRAWN BY J.S.M	REMOVABLE WALL PANEL-DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-10

APPROVED BY [signature] AGENCY HEAD DATE 5-28-70
APPROVED BY [signature] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

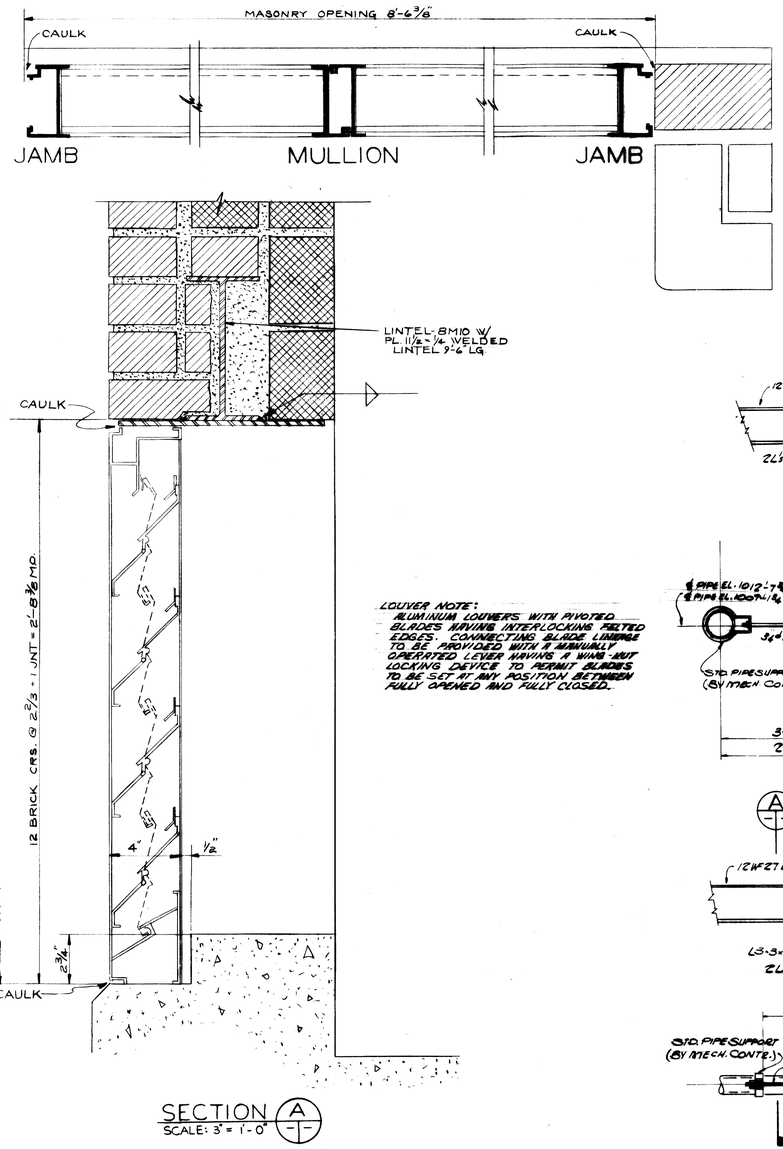
PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

Cab.# 131 Slot B-1 Document# 015518

U-4999

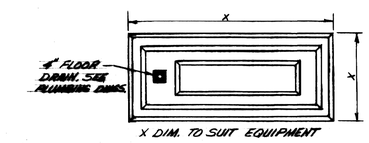


ELEVATION (A) S-5 | S-11
SCALE: 3/4" = 1'-0"

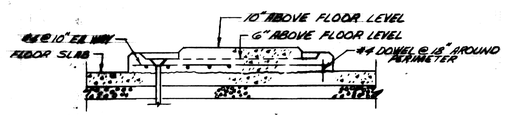


LOUVER NOTE:
ALUMINUM LOUVERS WITH PIVOTED BLADES HAVING INTERLOCKING FELTED EDGES. CONNECTING BLADE LINKAGE TO BE PROVIDED WITH A MANUALLY OPERATED LEVER HAVING A WING-NUT LOCKING DEVICE TO PERMIT BLADES TO BE SET AT ANY POSITION BETWEEN FULLY OPENED AND FULLY CLOSED.

SECTION (A) SCALE: 3" = 1'-0"

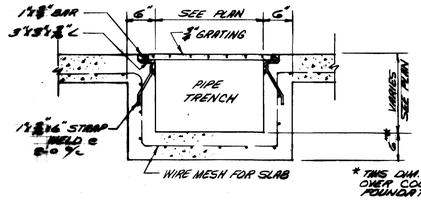


PLAN

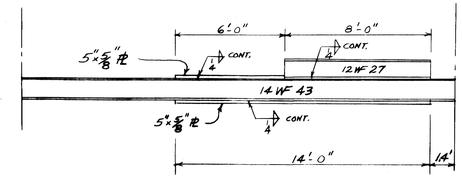


DETAIL OF CONCRETE BASE FOR FEED PUMP
NO SCALE

LOCATION AND SIZE OF ANCHOR BOLTS ARE TO BE AS REQUIRED BY EQUIPMENT

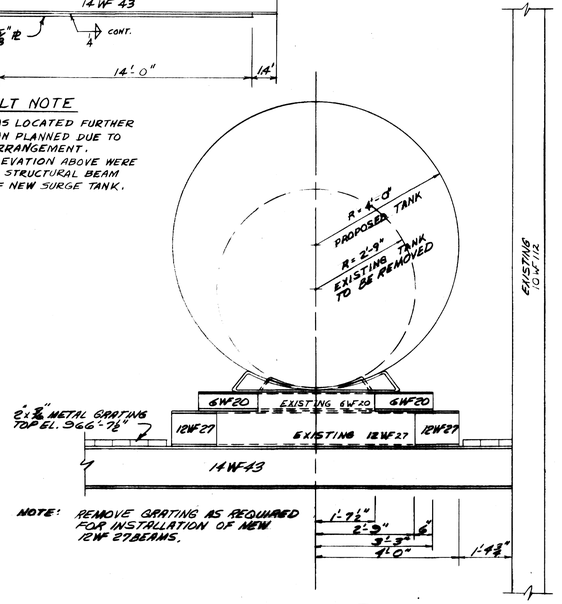


SECTION (G) S-4 | S-11
SCALE: 3/4" = 1'-0"

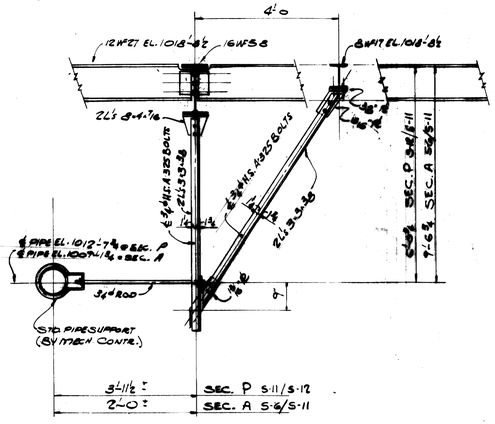


AS-BUILT NOTE

NEW SURGE TANK WAS LOCATED FURTHER FROM EAST WALL THAN PLANNED DUE TO EXISTING PIPING ARRANGEMENT. PLATES SHOWN IN ELEVATION ABOVE WERE ADDED TO EXISTING STRUCTURAL BEAM NEAR SOUTH END OF NEW SURGE TANK.

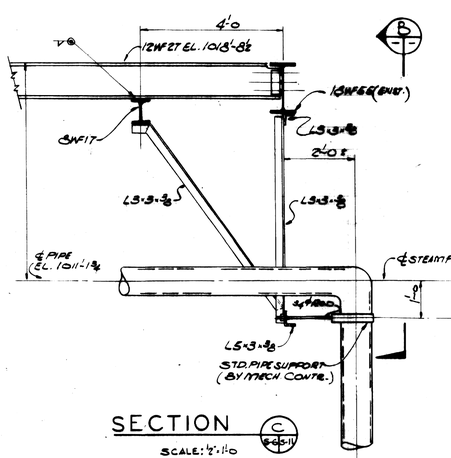


SECTION (B) S-5 | S-11
SCALE: 1/2" = 1'-0"

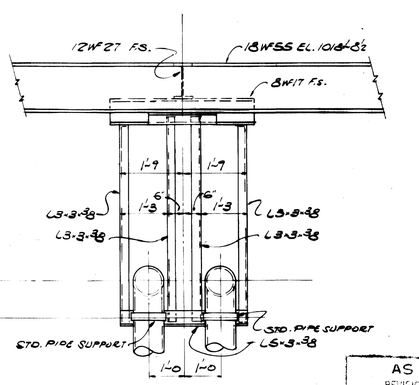


SECTION (P) S-12 | S-11
SCALE: 1/2" = 1'-0"

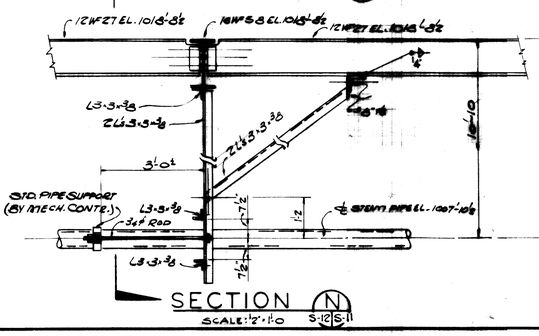
SECTION (A) S-6 | S-11
SCALE: 1/2" = 1'-0"



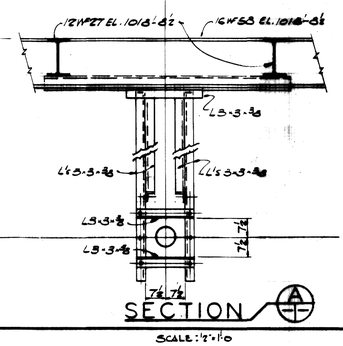
SECTION (C) S-6 | S-11
SCALE: 1/2" = 1'-0"



SECTION (B) S-6 | S-11
SCALE: 1/2" = 1'-0"



SECTION (N) S-12 | S-11
SCALE: 1/2" = 1'-0"



SECTION (A) S-6 | S-11
SCALE: 1/2" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
ADDED REINFORCING PLATES TO SURGE TANK SUPPORTING BEAM

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

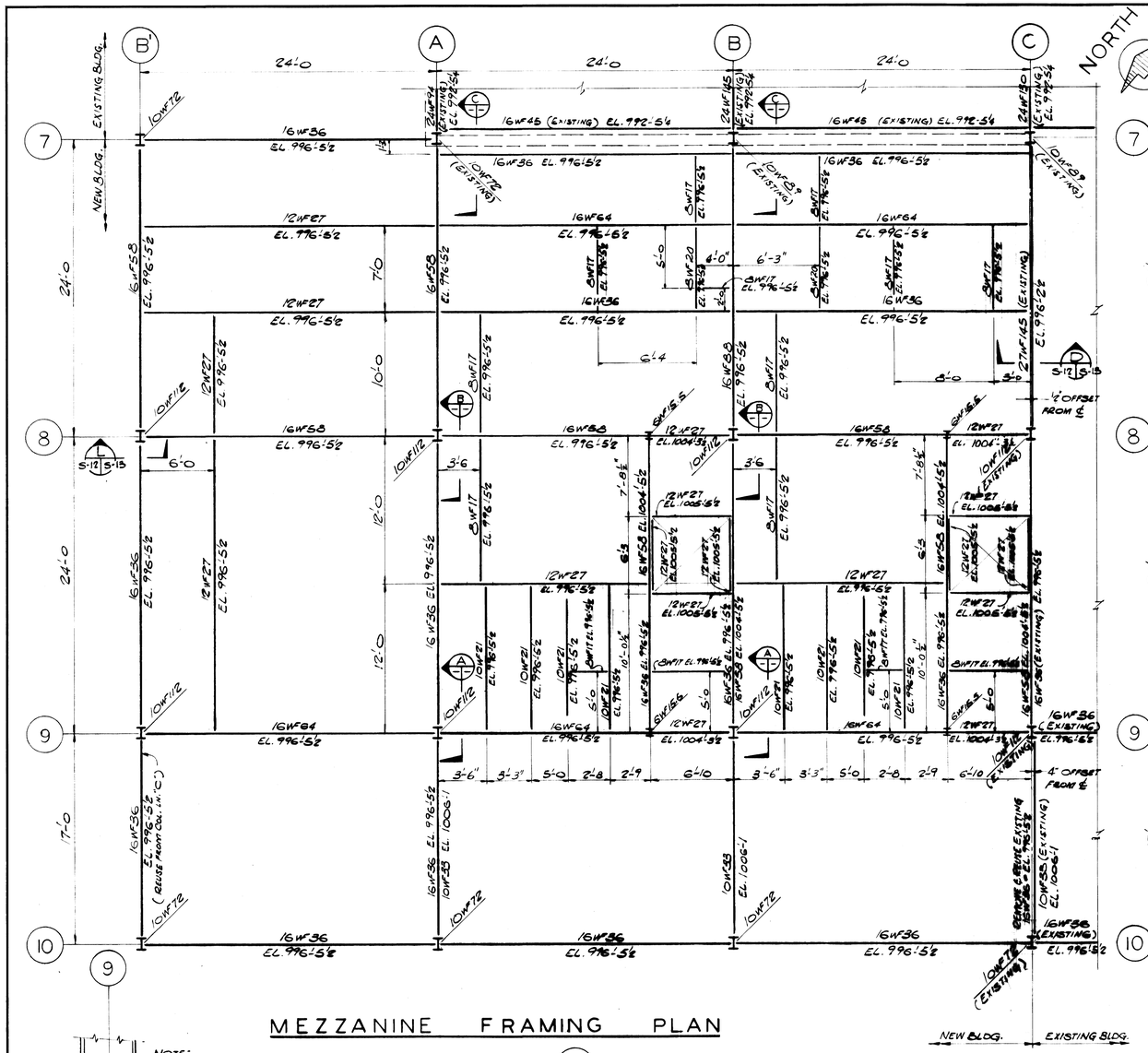
DRAWN BY O.C.M.	MISCELLANEOUS DETAILS	DATE 5-26-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-11

APPROVED BY C J Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W F McCormick DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY — PAUL F. HAGGARD — 6748 — REGISTERED PROFESSIONAL ENGINEER

Cab.# 131 Slot B-1 Document # 015309

U-5000

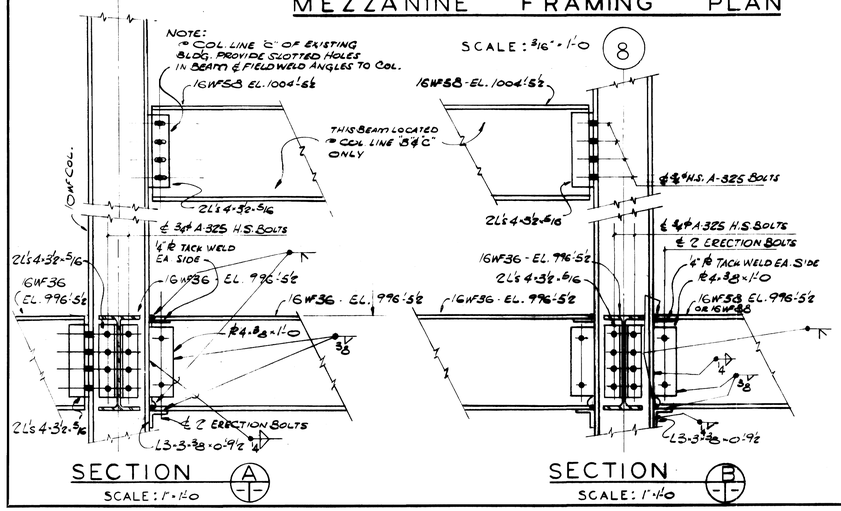


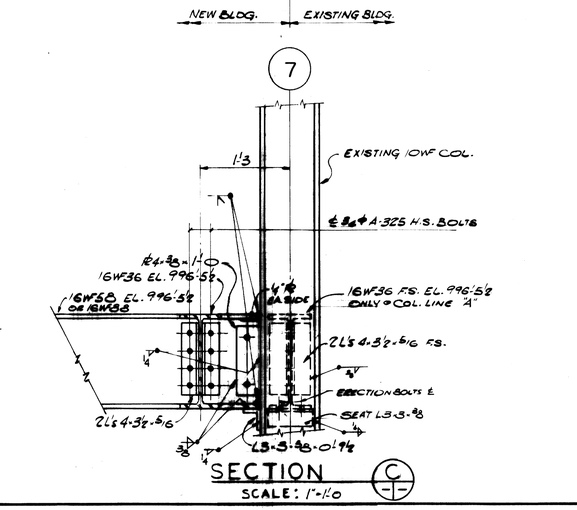
MEZZANINE FRAMING PLAN

SCALE: 3/16" = 1'-0

ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0





AS - BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
REVISED BEAM SIZES & LOCATION NEAR B-7½ ON MEZZANINE PLAN
NOTED RELOCATION 8WF IN DSB BUILDING AND THERE 12 WF @ ROUSE STAGE OPENINGS
REVISED DIMENSIONS FOR STAIR OPNG. LOCATION

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

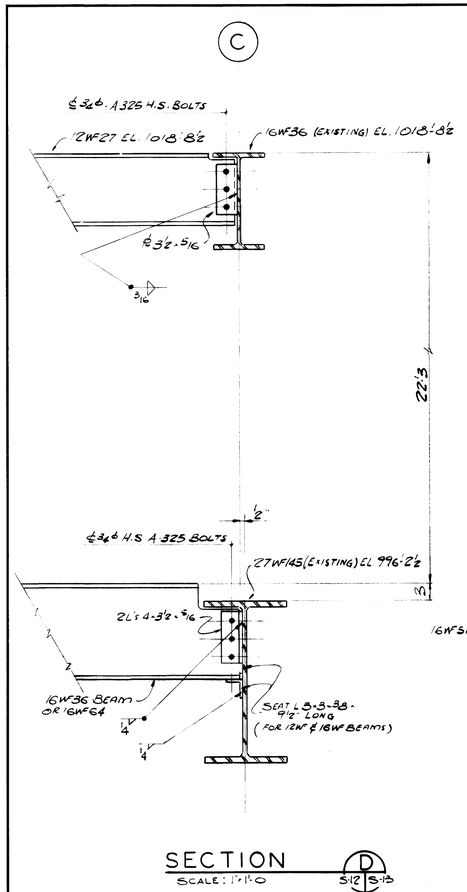
DRAWN BY J.S.M.	BLDG. FRAMING PLANS & DTLS.	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY P.F.H.		SPEC. NO. AS NOTED
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-12

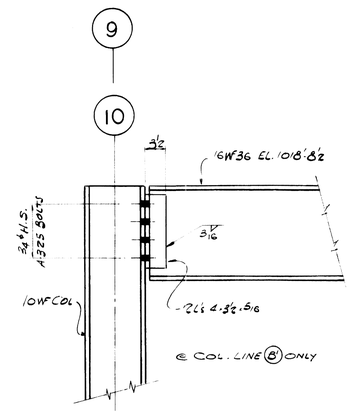
STATE OF KENTUCKY — PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER

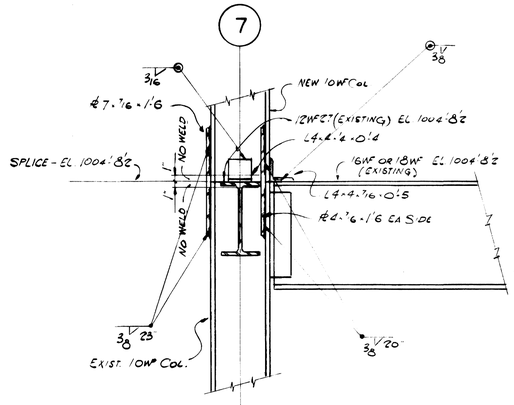
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY [illegible] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

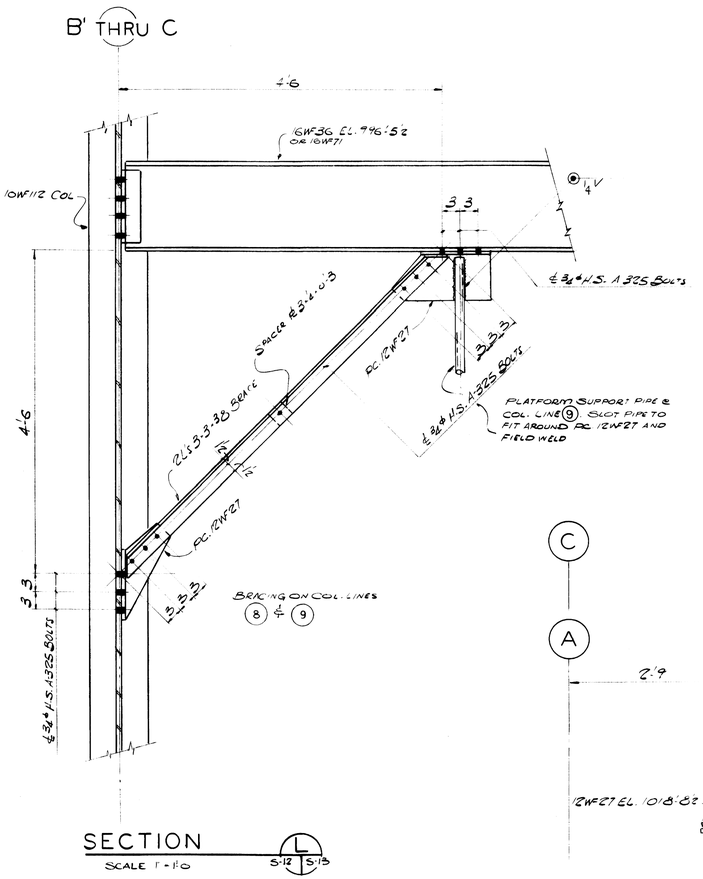
Cab # 131 Slot B-1 Document # 015310

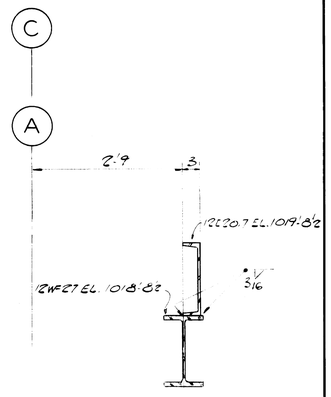
U-5001



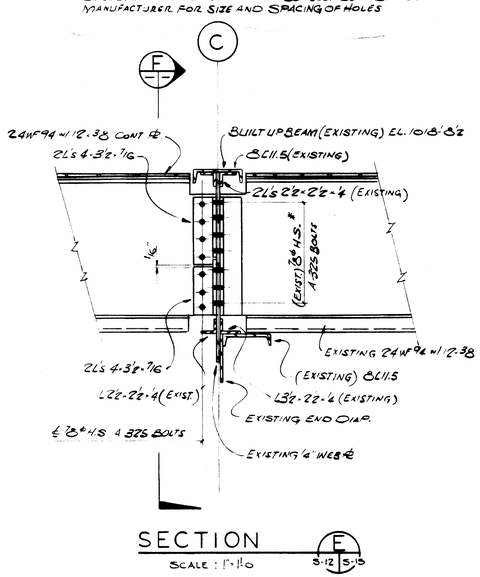


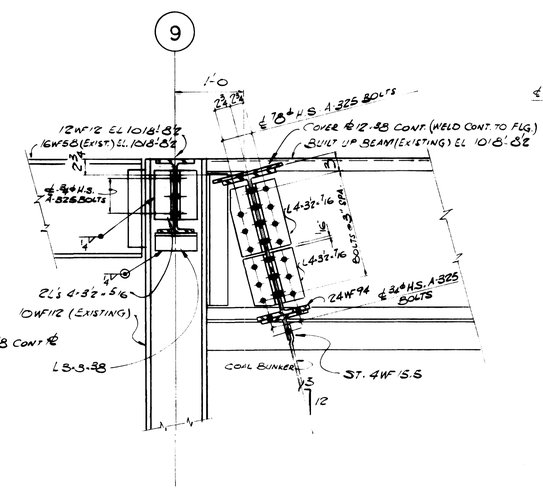


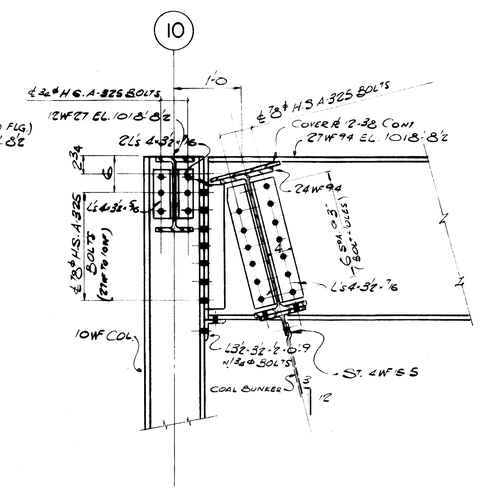




NOTE:
* ONLY ONE HALF OF EXISTING BOLTS TO BE REMOVED AT ANY ONE TIME FOR THE INSTALLATION OF NEW BEAM CONN. IF LONGER BOLTS ARE REQUIRED REPLACE WITH NEW BOLTS CONN. TO BE MADE ONLY WHEN COAL BUNKER IS ONE HALF FULL OR LESS OF COAL. HOLES TO BE PROVIDED FOR CONN. OF COAL BUNKER. STRUCTURAL STEEL VENDOR TO CONSULT COAL BUNKER MANUFACTURER FOR SIZE AND SPACING OF HOLES







AS-BUILT DRAWINGS
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

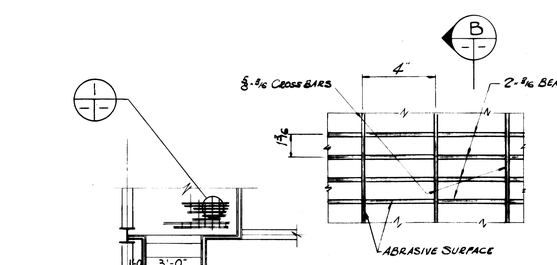
DRAWN BY J.S.M.	BUILDING CONNECTION DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY P.F.H.		SPEC. NO. AS NOTED
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-13

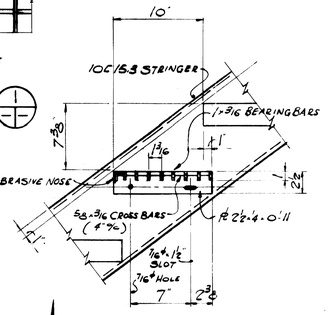
APPROVED BY C. J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W. V. McClanahan DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

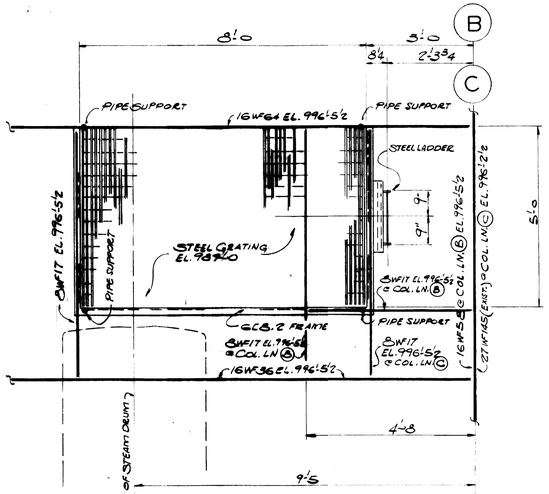
STATE OF KENTUCKY · PAUL F. HAGGARD · 6748 · REGISTERED PROFESSIONAL ENGINEER

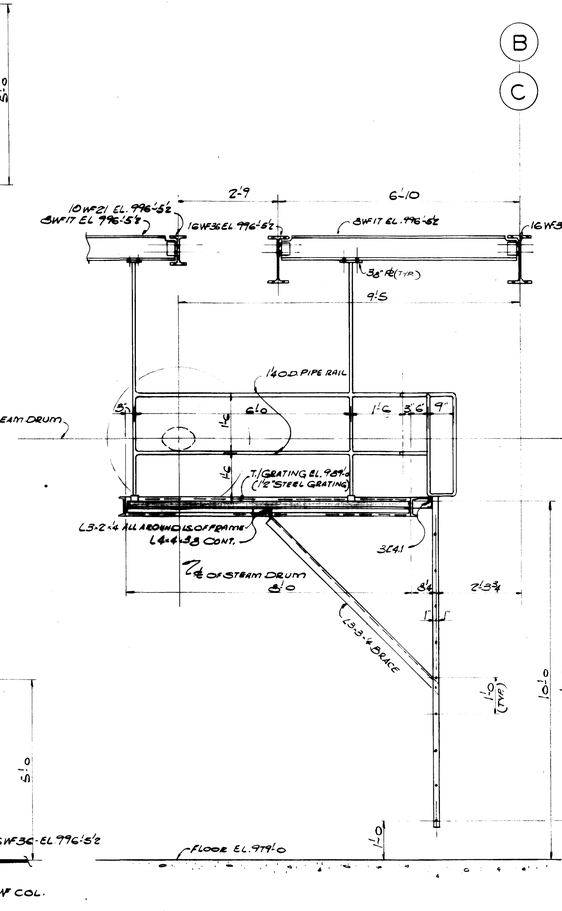
Cab # Slot Document # 131 B-1 015311

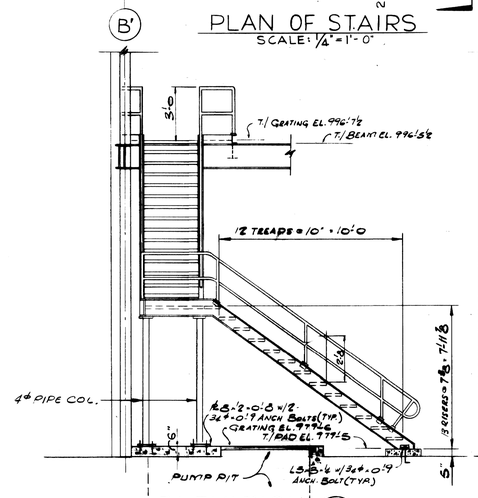
U-5002



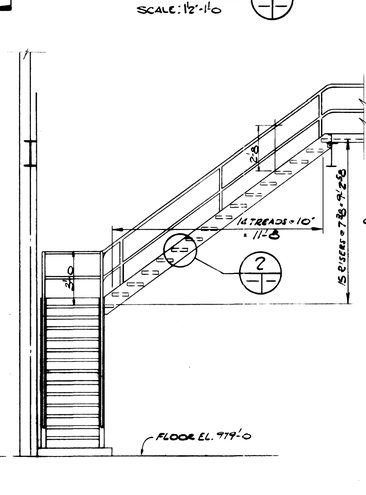




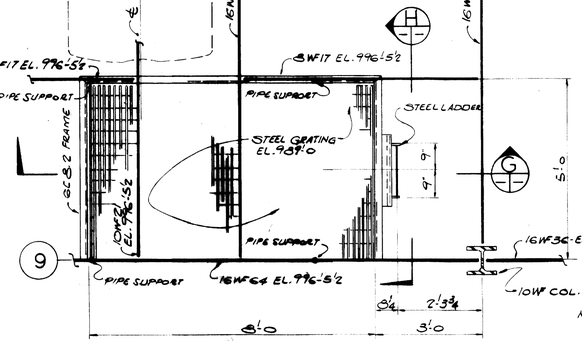




ELEVATION (A)
SCALE: ¼" = 1'-0"



ELEVATION (B)
SCALE: ¼" = 1'-0"

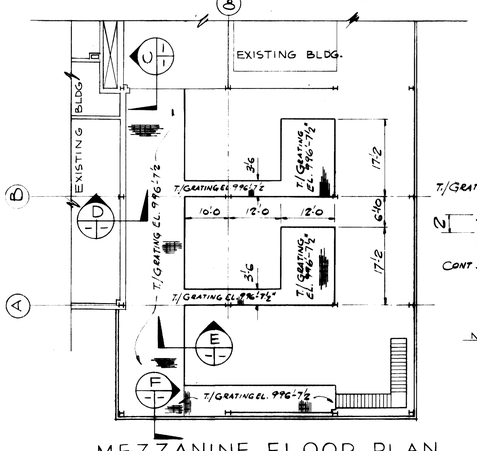


PLAN OF SERVICE PLATFORMS
SCALE: ½" = 1'-0"

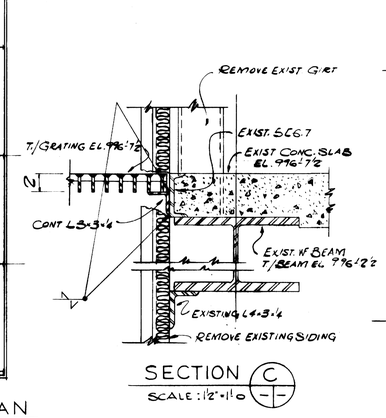
NOTE:
FRONT AND REAR PLATFORMS SIMILAR EXCEPT FOR PIPE SUPPORT LOCATIONS

SECTION (G)
SCALE: ½" = 1'-0"

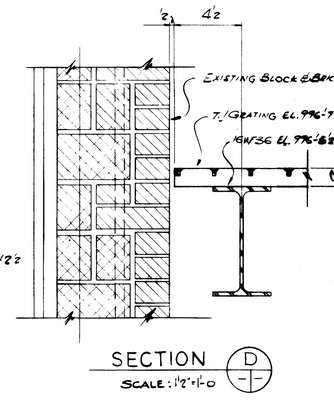
SECTION (H)
SCALE: ½" = 1'-0"



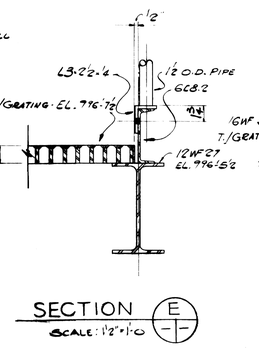
MEZZANINE FLOOR PLAN
SCALE: 1/16" = 1'-0"



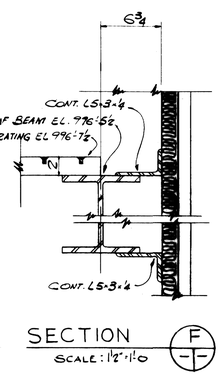
SECTION (C)
SCALE: 1½" = 1'-0"



SECTION (D)
SCALE: 1½" = 1'-0"



SECTION (E)
SCALE: 1½" = 1'-0"



SECTION (F)
SCALE: 1½" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

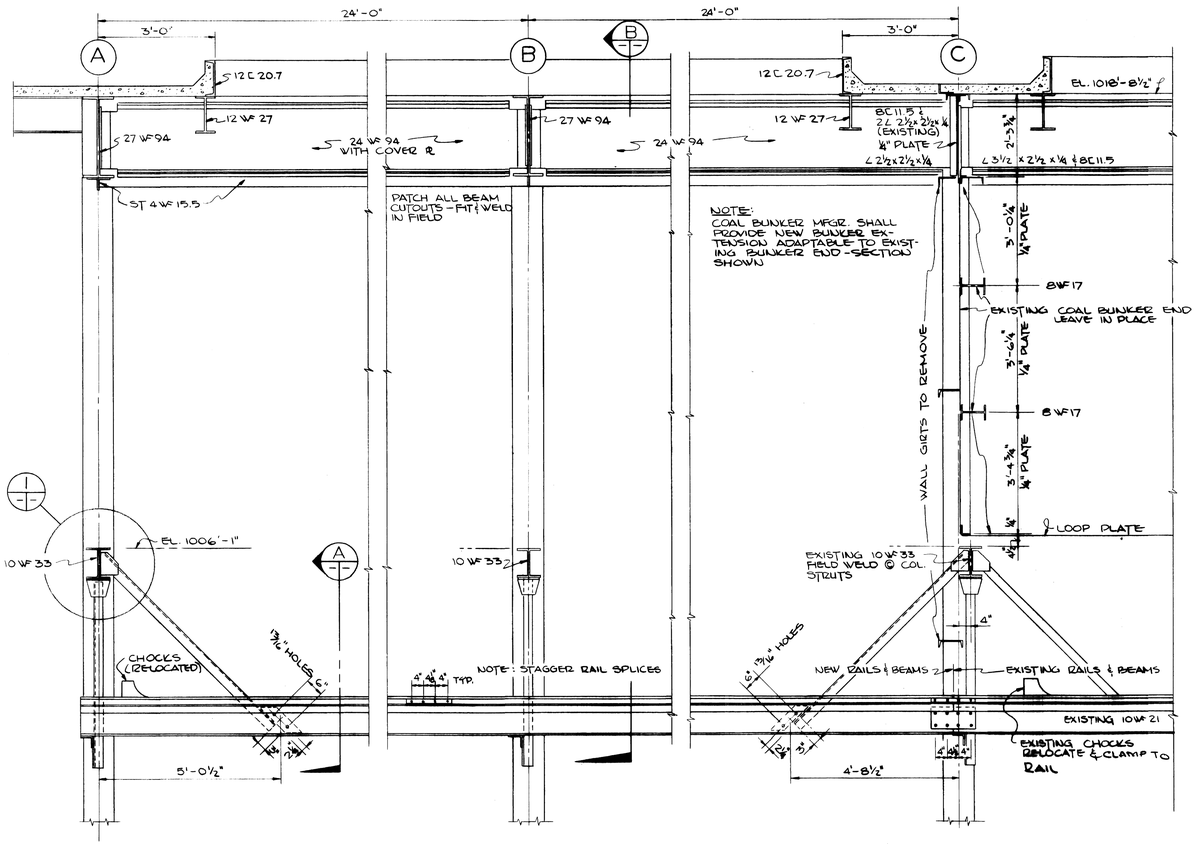
DRAWN BY J.S.M.	FLOOR GRATING, PLATFORM & DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1300 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY D.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-14

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

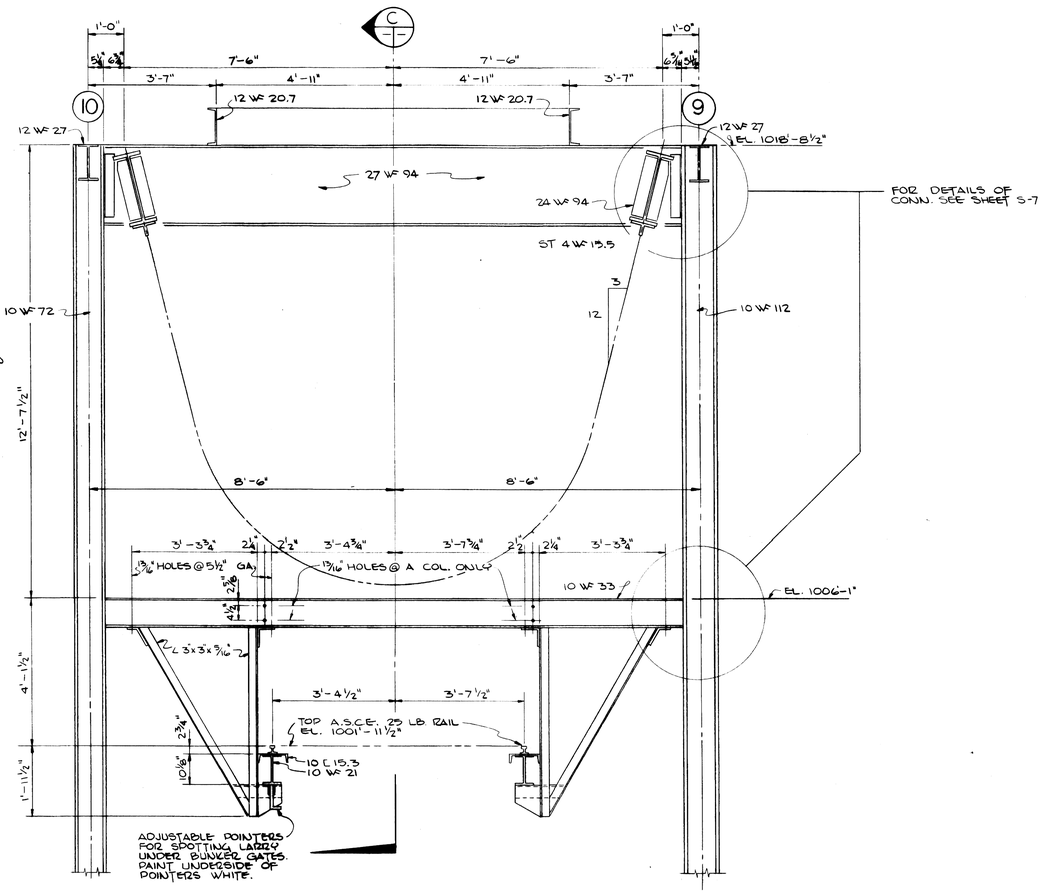
PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

Cab.# 131 Slot B-1 Document # 015312

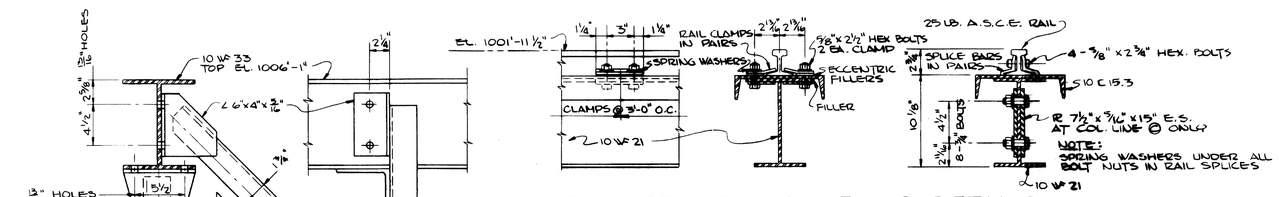
U-5003



LONGITUDINAL SECTION THRU COAL BUNKER EXTENSION FRAMING (C)
SCALE ~ ½" = 1'-0"

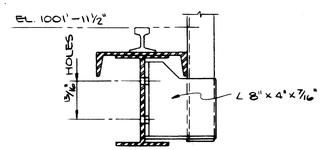


TRANSVERSE SECTION (B)
SCALE ~ ½" = 1'-0"



RAIL SPLICE & FASTENING DETAILS
SCALE ~ 1½" = 1'-0"

DETAIL (1)
SCALE ~ 1½" = 1'-0"



SECTION (A)
SCALE 1½" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

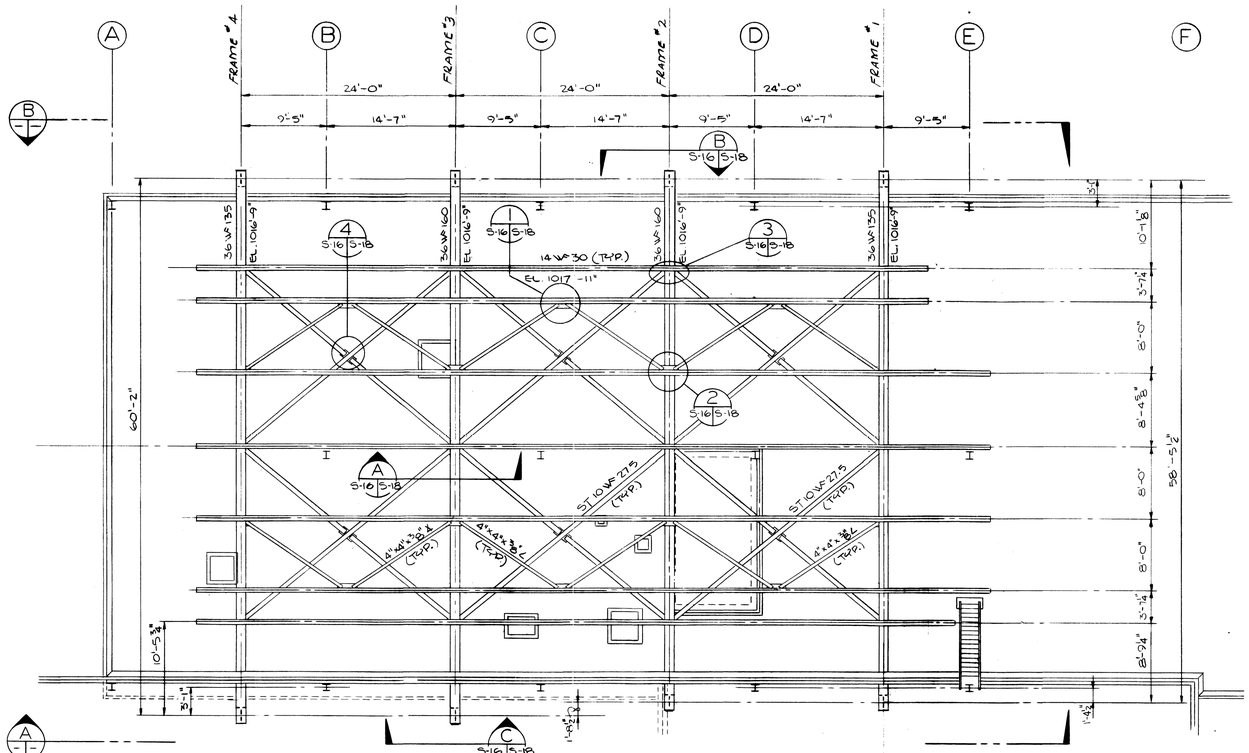
DRAWN BY D.W.	COAL BUNKER SUPPORT & LARRY RAIL DETAILS	DATE 5-28-70
TRACED BY J.B.W.	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-15

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McCormick DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

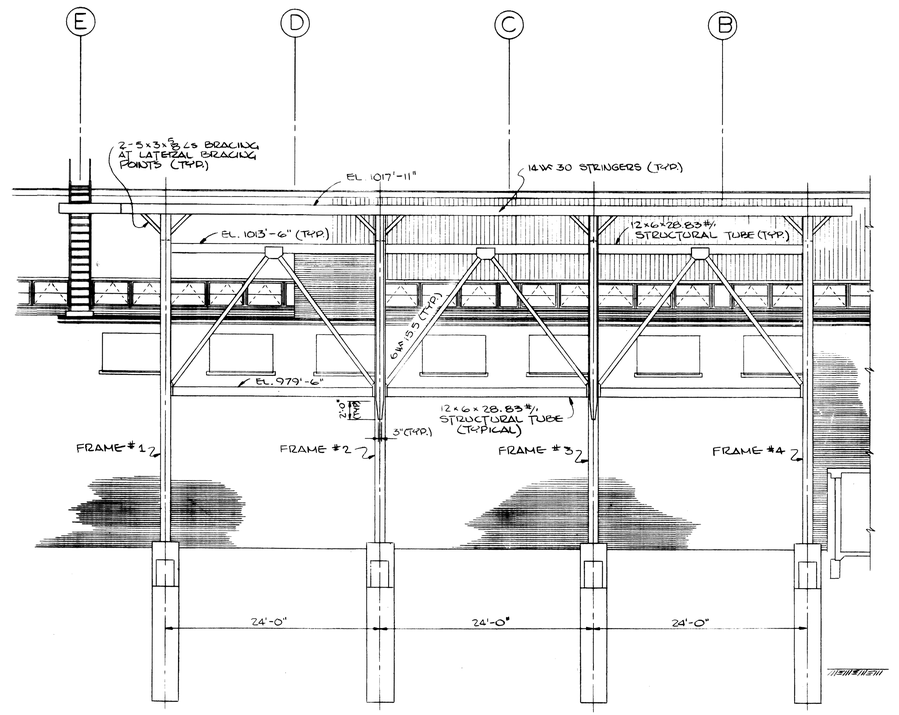
STATE OF KENTUCKY PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER

Coh # 131 Sht B-1 Document # 015313

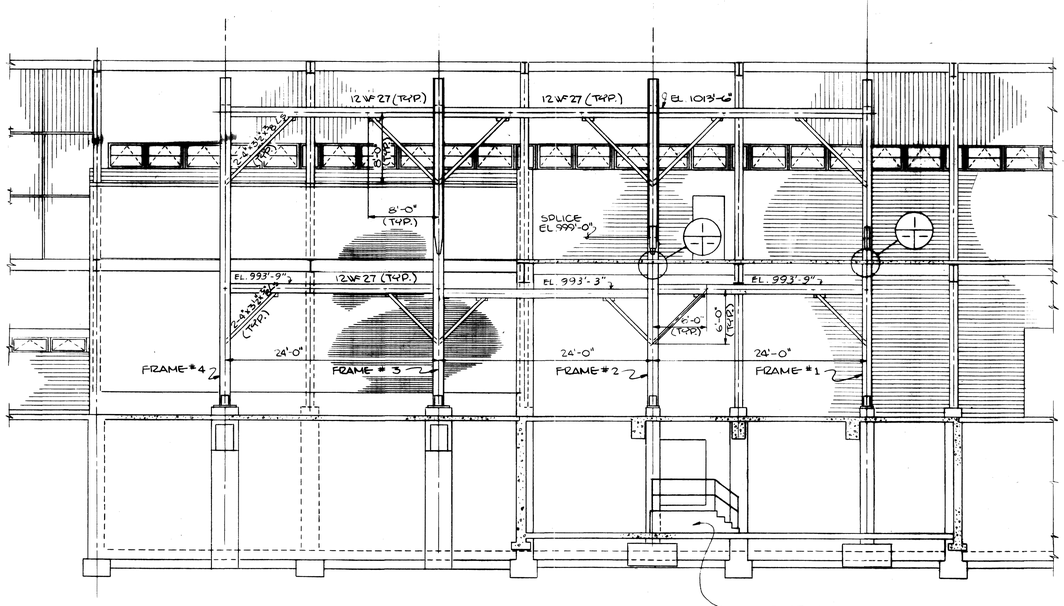
U-5004



FRAMING PLAN - COOLING TOWER
SCALE ~ 1/8" = 1'-0"

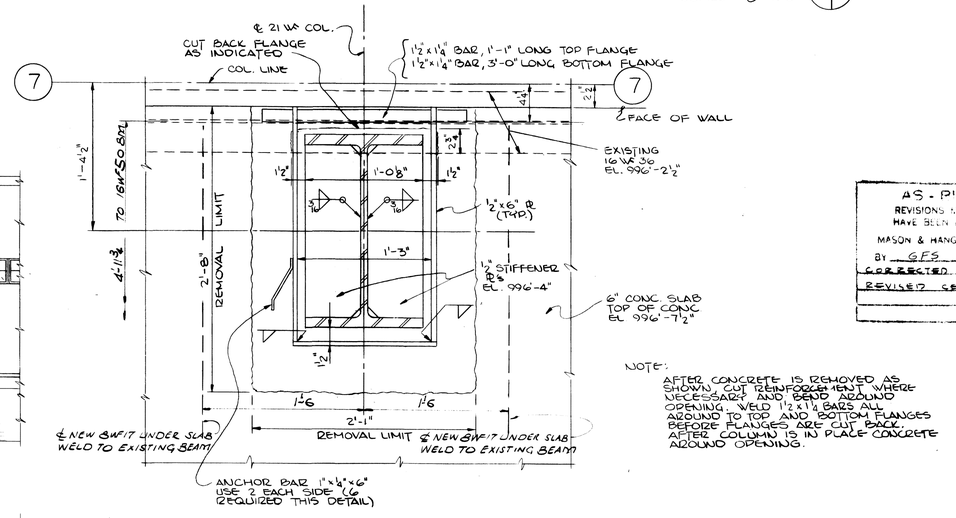


ELEVATION B
SCALE ~ 1/8" = 1'-0"



ELEVATION A
SCALE ~ 3/8" = 1'-0"

EXISTING: 6" WALL, 4' SLAB & 2'-1 1/2" DIPE HANDRAIL. REMOVE AS REQUIRED AND REPLACE AFTER COLUMN IS CONST. WHERE POSSIBLE.



DETAIL 1
SCALE ~ 1 1/2" = 1'-0"

NOTE:
AFTER CONCRETE IS REMOVED AS SHOWN, CUT REINFORCEMENT WHERE NECESSARY AND BEND AROUND OPENING. WELD 1/2"x1 1/4" BARS ALL AROUND TO TOP AND BOTTOM FLANGES BEFORE FLANGES ARE CUT BACK. AFTER COLUMN IS IN PLACE CONCRETE AROUND OPENING.

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER - SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CORRECTED FRAME NUMBERS
REVISED CENTER BEAM TO 998'-3"

STATE OF KENTUCKY PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER

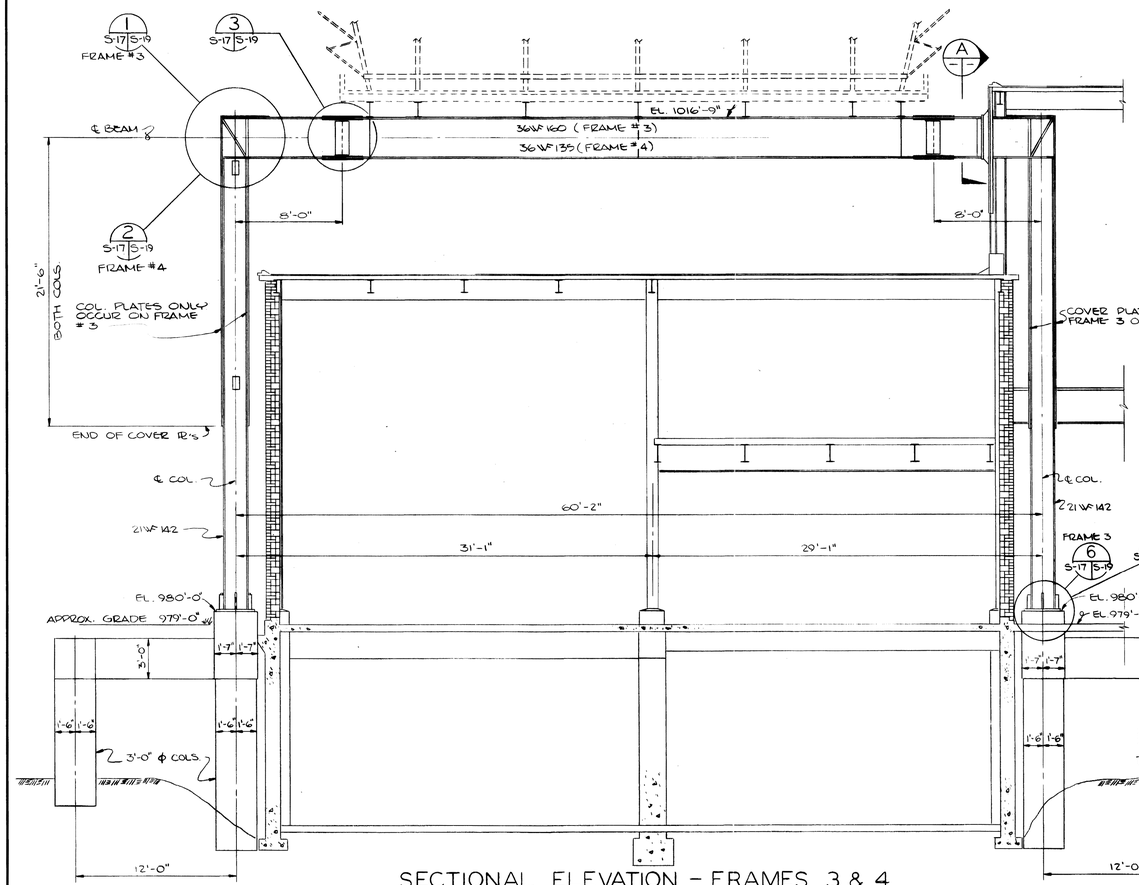
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY J.B.W	PLAN & ELEVATION-COOLING TOWER	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS SHOWN
CHECKED BY R.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-16

APPROVED BY A.J. Meushaw AGENCY HEAD DATE 5-28-70
APPROVED BY [illegible] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

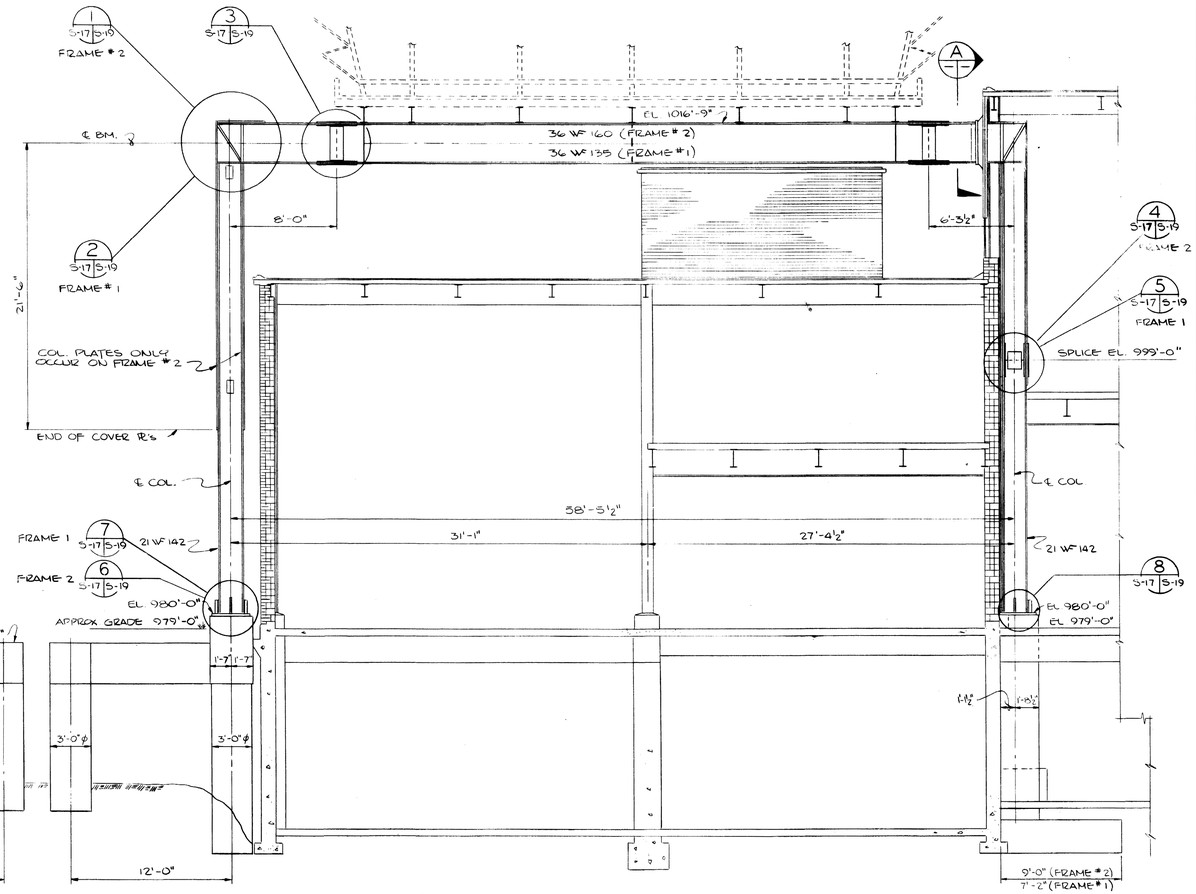
Cab # 151 Slot B-1 Document # 015114

U-5005



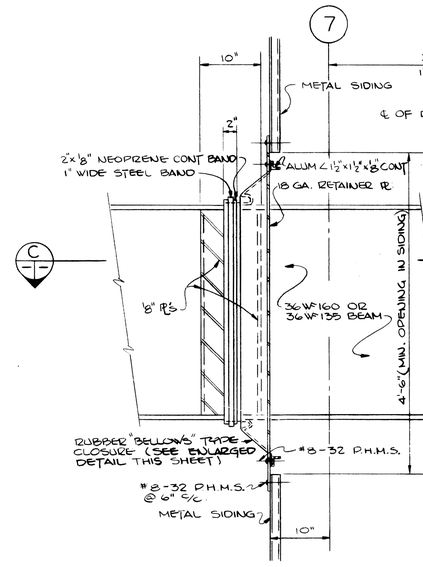
SECTIONAL ELEVATION – FRAMES 3 & 4

SCALE ~ 3/16" = 1'-0"



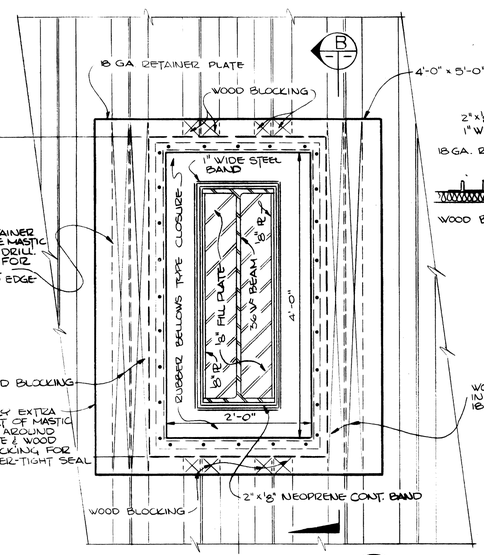
SECTIONAL ELEVATION – FRAMES 1 & 2

SCALE ~ 3/16" = 1'-0"



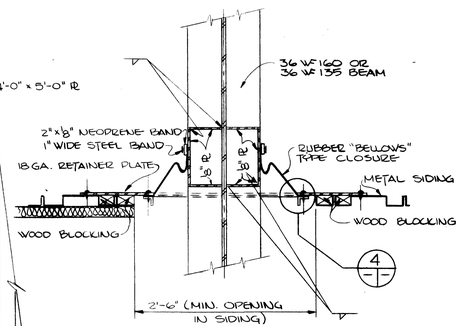
SECTION

SCALE ~ 1" = 1'-0"



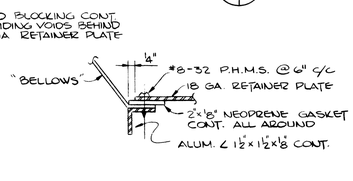
SECTION

SCALE ~ 1" = 1'-0"



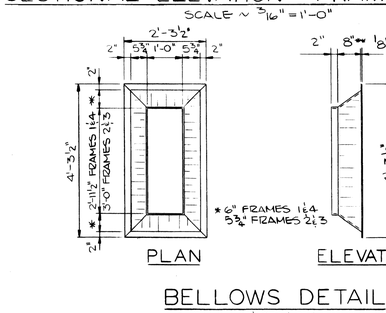
SECTION

SCALE ~ 1" = 1'-0"



DETAIL

SCALE ~ 3" = 1'-0"



* 6" FRAMES 1 & 4
5¾" FRAMES 2 & 3

** THIS DIMENSION IS TO BE COMPRESSED TO 4" FOR ERECTION OF BELLOWS

BELLOWS DETAIL

SCALE ~ ½" = 1'-0"

AS - BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

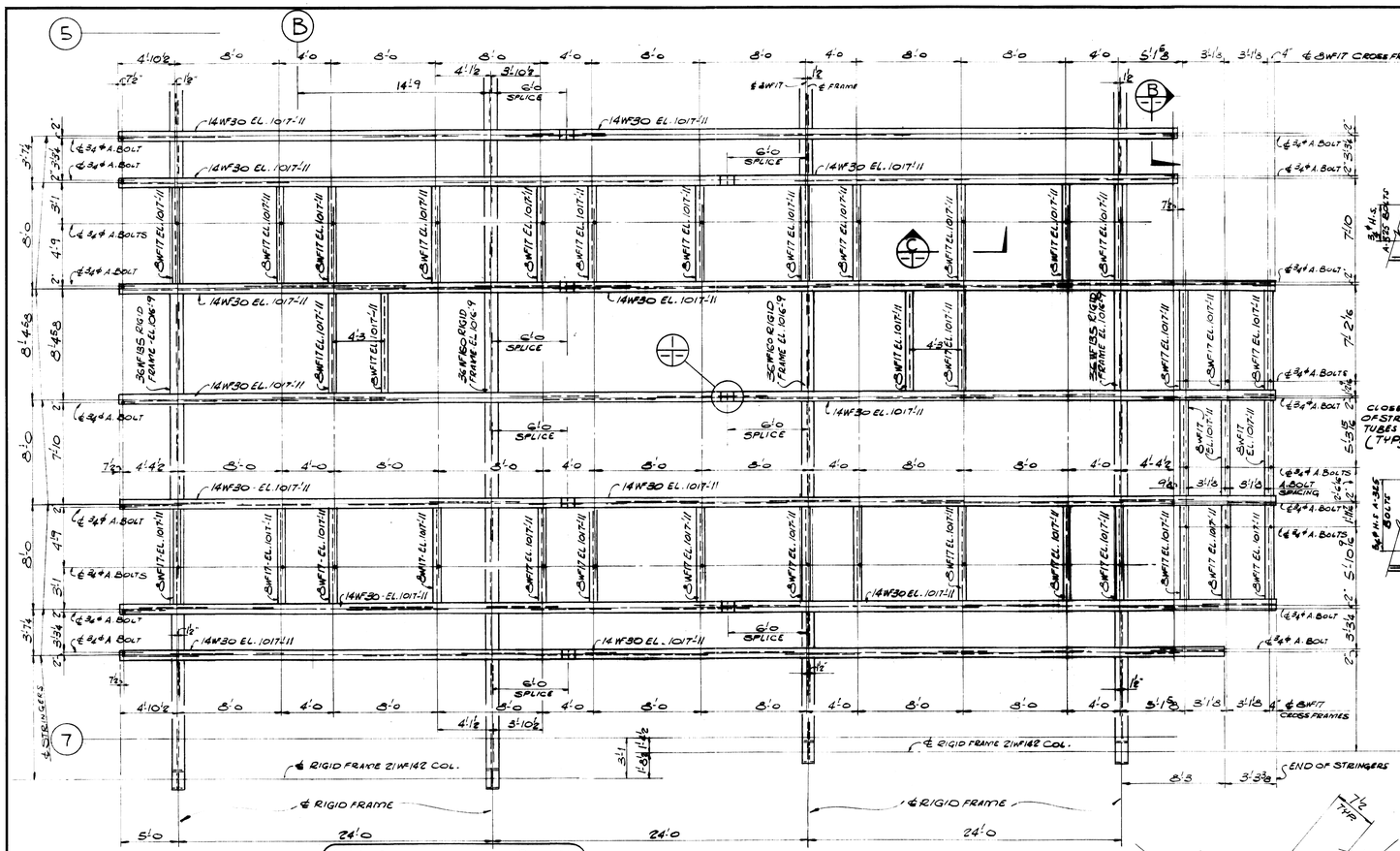
DRAWN BY J.B.W.	FRAME ELEVATIONS & DETAILS — COOLING TOWER	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS SHOWN
CHECKED BY D.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-17

APPROVED BY C. J. Marshall AGENCY HEAD DATE 5-29-70
APPROVED BY W. V. McCormick DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

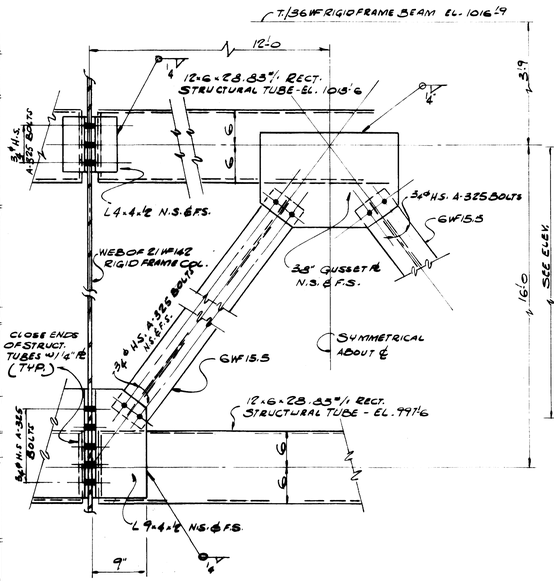
Cab. # Slot Document # 131 B-1 015515

U-5006



STRINGER PLAN — COOLING TOWER

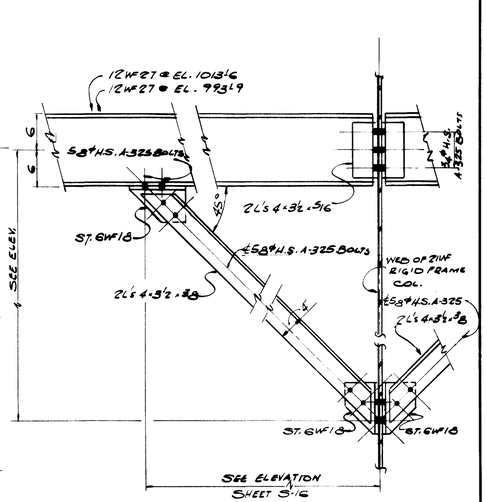
SCALE: 3/16"=1'-0"



BRACING ELEV. (B)

SCALE: 1"=1'-0"

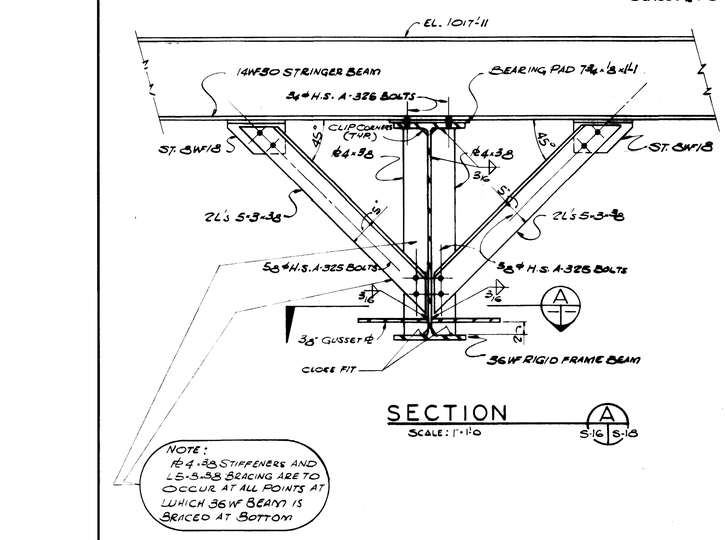
S-16 S-18



BRACING ELEV. (C)

SCALE: 1"=1'-0"

S-16 S-18

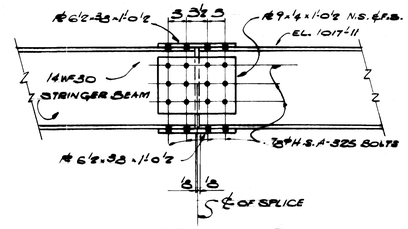


SECTION (A)

SCALE: 1"=1'-0"

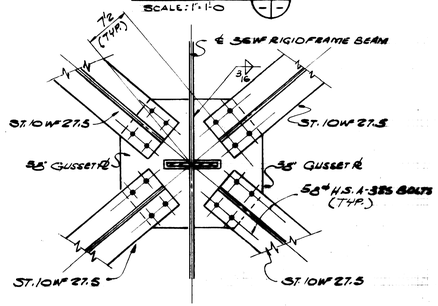
S-16 S-18

NOTE: ℄ 4"x3/8 STIFFENERS AND L 5"x3"x3/8 BRACING ARE TO OCCUR AT ALL POINTS AT WHICH 36WF BEAM IS BRACED AT BOTTOM



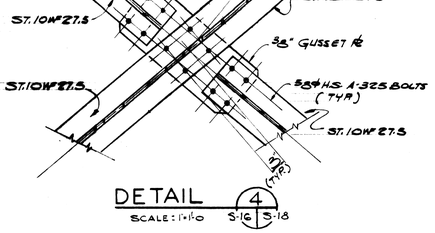
DETAIL (1)

SCALE: 1"=1'-0"



SECTION (A)

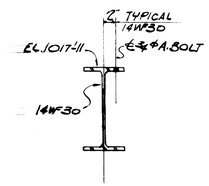
SCALE: 1"=1'-0"



DETAIL (4)

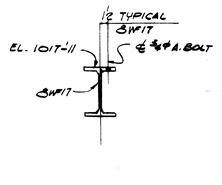
SCALE: 1"=1'-0"

S-16 S-18



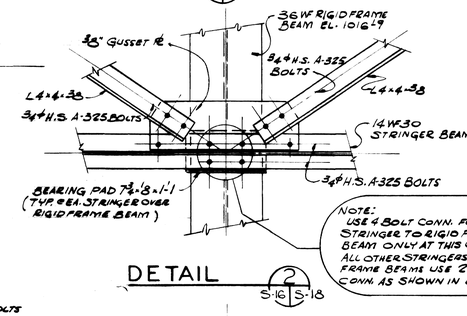
SECTION (B)

SCALE: 1"=1'-0"



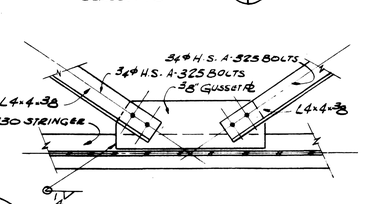
SECTION (C)

SCALE: 1"=1'-0"



DETAIL (2)

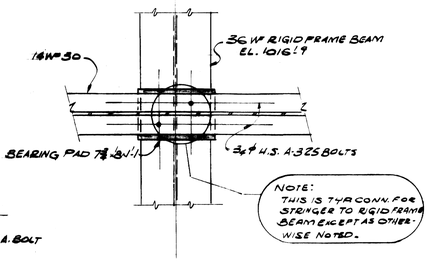
S-16 S-18



DETAIL (1)

SCALE: 1"=1'-0"

S-16 S-18



DETAIL (3)

SCALE: 1"=1'-0"

S-16 S-18

AS-BUILT DRAWING

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

NO. REVISIONS

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY J.S.M.	STRINGER PLAN & BRACING DETAILS-COOLING TOWER	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1560 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY D.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-18

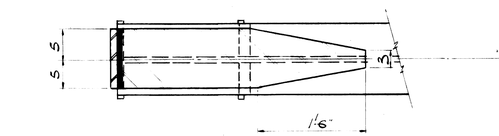
APPROVED BY C.J. Marshall (AGENCY HEAD) DATE 5-28-70

APPROVED BY W. M. Cramer (DIRECTOR: DIVISION OF ENGINEERING) DATE 6-1-70

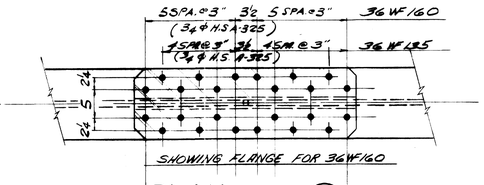
STATE OF KENTUCKY — PAUL F. HAGGARD 6748 REGISTERED PROFESSIONAL ENGINEER

Cab# Slot Document# 015316 B-1 131

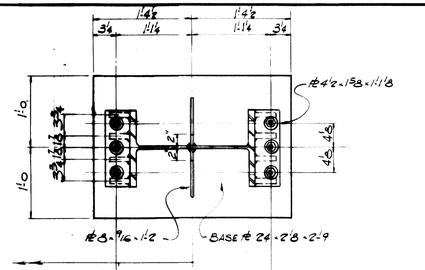
U-5007



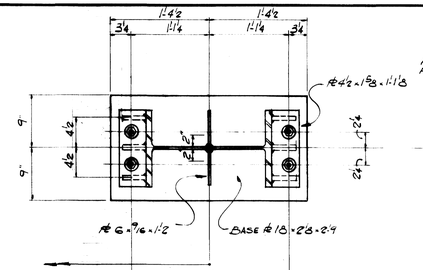
DETAIL
SCALE: 1"=1'-0" S-17 | S-19



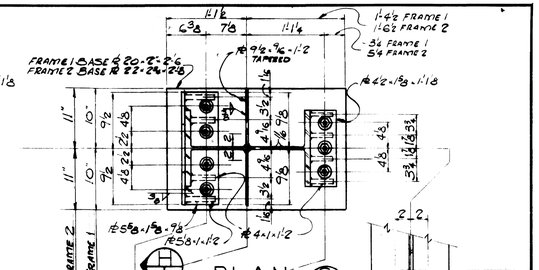
DETAIL
SCALE: 1"=1'-0" 3 S-17 | S-19



DETAIL
SCALE S-17 | S-19

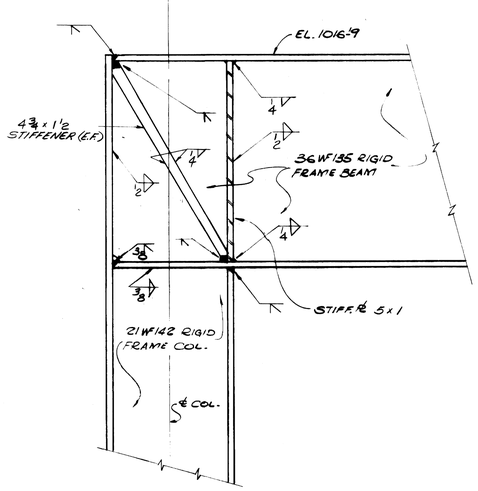


DETAIL
SCALE S-17 | S-19

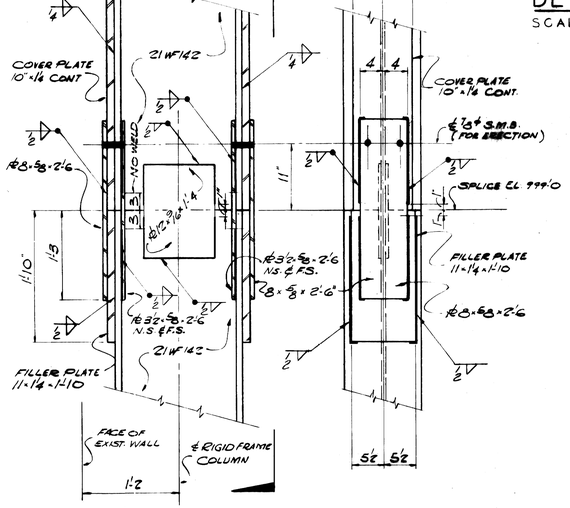


DETAIL
SCALE S-17 | S-19

SECTION
SCALE H

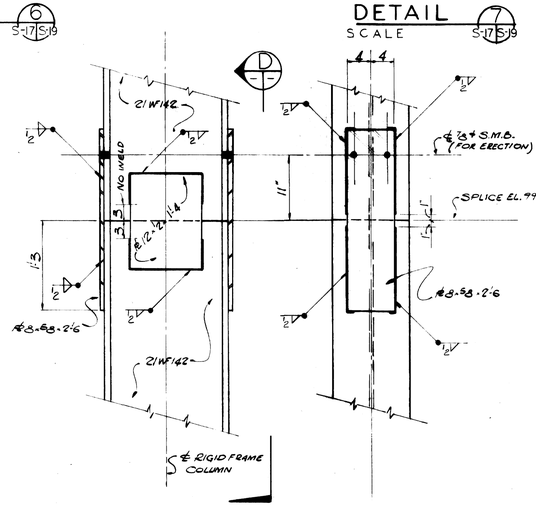


DETAIL
SCALE: 1"=1'-0" 2 S-17 | S-19



DETAIL
SCALE: 1"=1'-0" 4 S-17 | S-19

ELEVATION
SCALE: 1"=1'-0" C



DETAIL
SCALE: 1"=1'-0" 5 S-17 | S-19

ELEVATION
SCALE: 1"=1'-0" D

NOTE:
ANCHOR BOLTS FOR COOLING TOWER BASE PLATES ARE TO BE A-325 F_t = 40,000 psi

AS BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN RECORDED ON THESE DRAWINGS
MASON & HANGER-SILAS MASON CO., INC.
BY G.F.S. DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

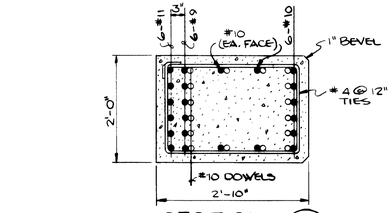
DRAWN BY J.S.M.	FRAME CONN. & BASE PLATES-COOLING TOWER	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS SHOWN
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO S-19

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

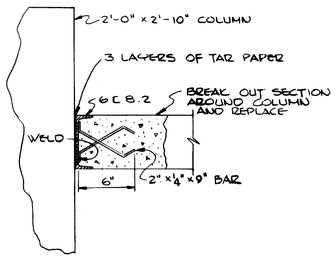
STATE OF KENTUCKY PAUL F. HAGGARD 6740 REGISTERED PROFESSIONAL ENGINEER

Cab # 131 Slot B-1 Document # 015517

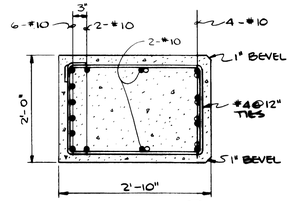
U-5008



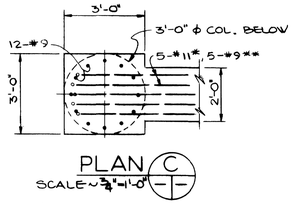
SECTION A
SCALE ~ 3/4" = 1'-0"



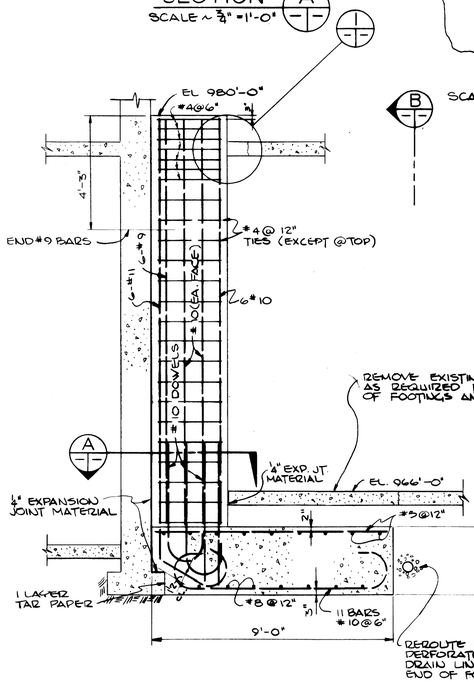
DETAIL I
SCALE ~ 1 1/2" = 1'-0"



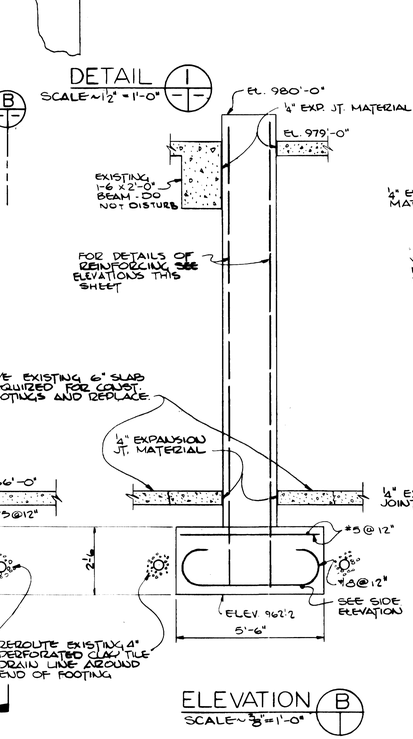
SECTION B
SCALE ~ 3/4" = 1'-0"



PLAN C
SCALE ~ 3/4" = 1'-0"



ELEVATION A
SCALE ~ 3/8" = 1'-0"



ELEVATION B
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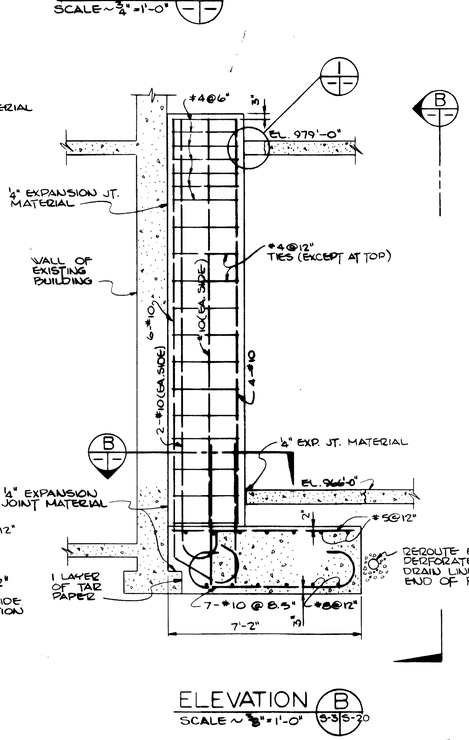
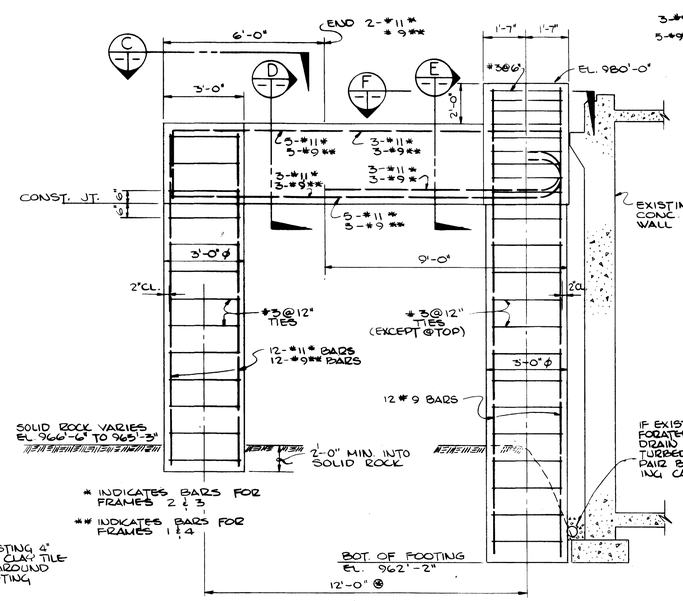


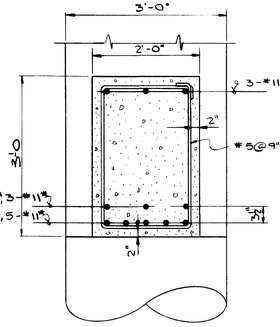
ELEVATION B
SCALE ~ 3/8" = 1'-0"



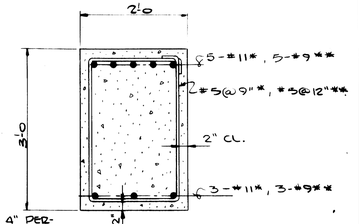
* INDICATES BARS FOR FRAMES 2 & 3

** INDICATES BARS FOR FRAMES 1 & 4

CAISSON FOUNDATION – ELEVATION
COOLING TOWER
SCALE ~ 3/8" = 1'-0"



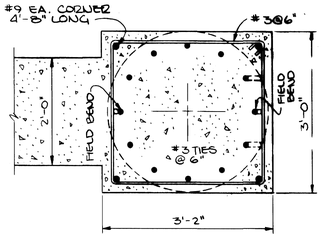
SECTION E
SCALE ~ 3/4" = 1'-0"



SECTION D
SCALE ~ 3/4" = 1'-0"

⑥ THIS DIMENSION FOR THE SOUTH FOUNDATION OF FRAME 3 MAY HAVE TO BE EXTENDED TO MISS STORM SEWER. IF DIMENSION IS INCREASED EXTEND OR SPLICE LONGITUDINAL BARS IN CROSS BEAM BY THE SAME AMOUNT. PROVIDE ADDITIONAL STIRRUPS AT THE SAME SPACING.

NOTE:
CONCRETE FOR TOWER FOUNDATIONS TO BE 5,000 PSI



SECTION F
SCALE ~ 3/4" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION
HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

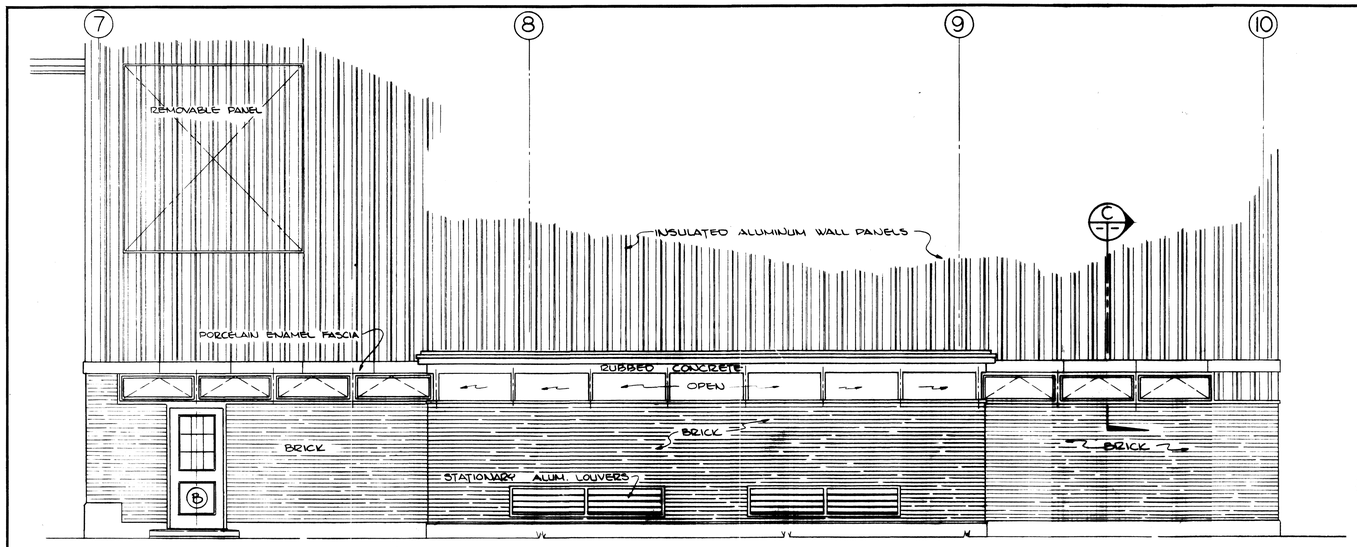
DRAWN BY J.B.W.	FOUNDATION DETAILS — COOLING TOWER	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS SHOWN
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-20

APPROVED BY [signature] AGENCY HEAD DATE 5-28-70
APPROVED BY [signature] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

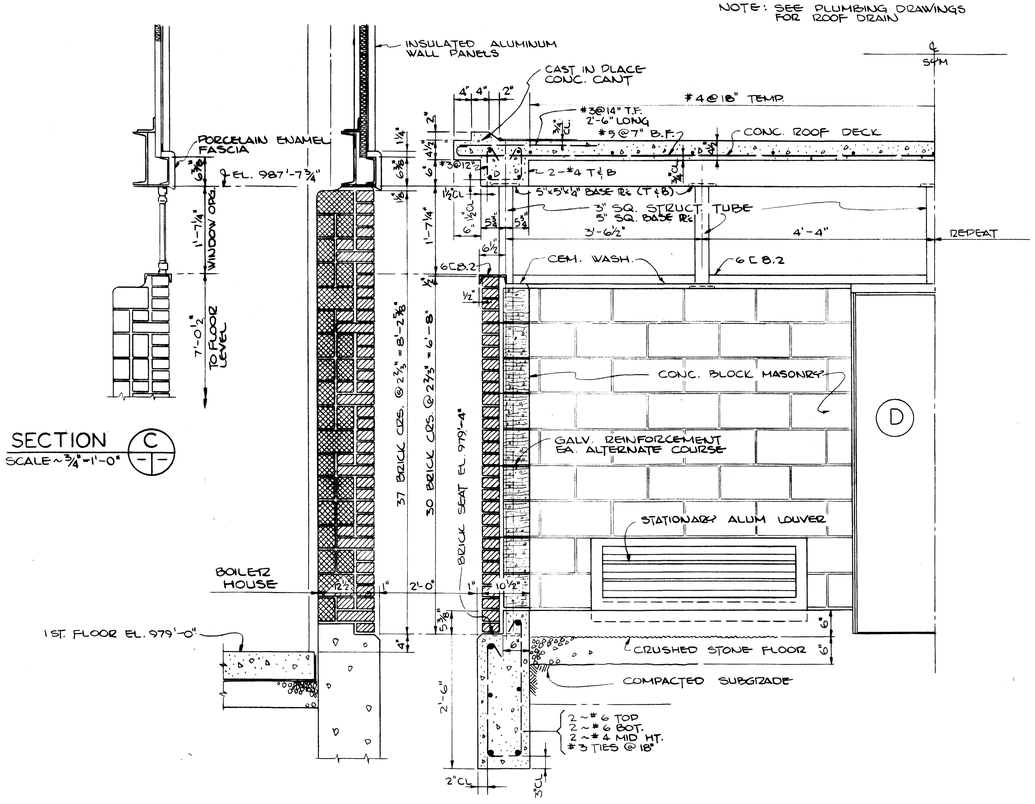
STATE OF KENTUCKY · PAUL F. HAGGARD · 6748 · REGISTERED PROFESSIONAL ENGINEER

Cab # Slot Document # 015318 B-1 131

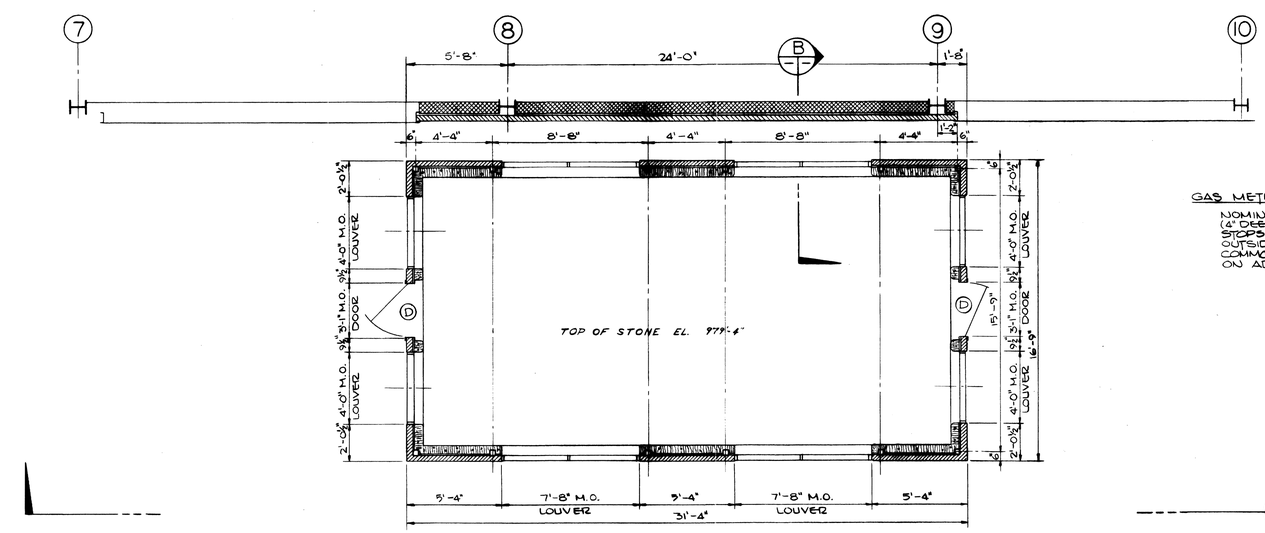
U-5009



ELEVATION (A) SCALE ~ 1/4"=1'-0"



SECTION (C) SCALE ~ 3/4"-1'-0"

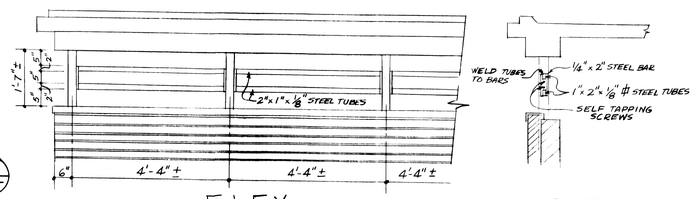


PLAN OF GAS METER HOUSE SCALE ~ 1/4" = 1'-0"

SECTION (B) SCALE ~ 3/4" -1'-0"

GAS METER HOUSE LOUVERS

NOMINAL 48" x 16" ALUMINUM WEATHER LOUVERS (4" DEEP) WITH BLADES (HAVING SINGLE WEATHER STOPS) SPACED ON 4" CENTERS. FRAMES TO HAVE OUTSIDE FLANGES. DOUBLE LOUVERS (WITH COMMON CENTER MULLIONS) TO OMIT FLANGES ON ADJOINING EDGES.



ELEV. SCALE ½"=1'-0"

SECT. SCALE ½"=1'-0"

18 OPENINGS @ 4'-4± COL. SPA.
4 OPENINGS @ 3'-6½± COL. SPA.

SECURITY BARS FOR WALL OPENINGS

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS. DATE 1-10-72
ADDED SECURITY BAR DETAIL

STATE OF KENTUCKY · PAUL F. HAGGARD · 6748 · REGISTERED PROFESSIONAL ENGINEER

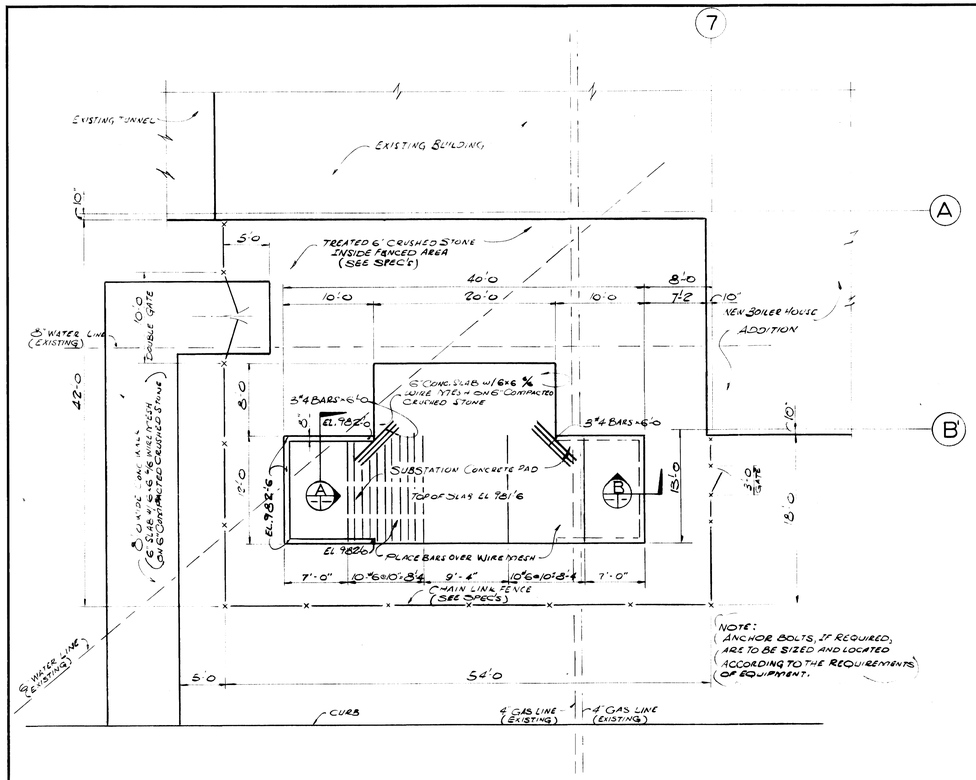
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY O.V.	GAS METER HOUSE DETAILS	DATE 5-28-70
TRACED BY J.B.V.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY P.F.H.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-21

APPROVED BY C. J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W. M. Bowman DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

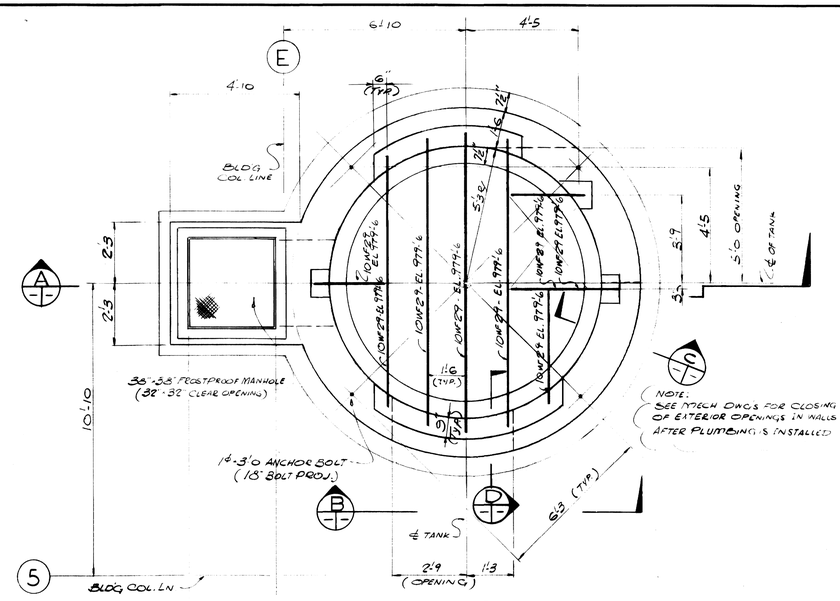
Cab # 131 Slot B-1 Document # 015319

U-5010



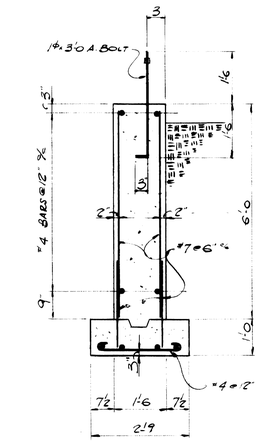
SUBSTATION CONCRETE PAD PLAN

SCALE: 1'8" = 1'-0



STORAGE TANK FOUNDATION PLAN

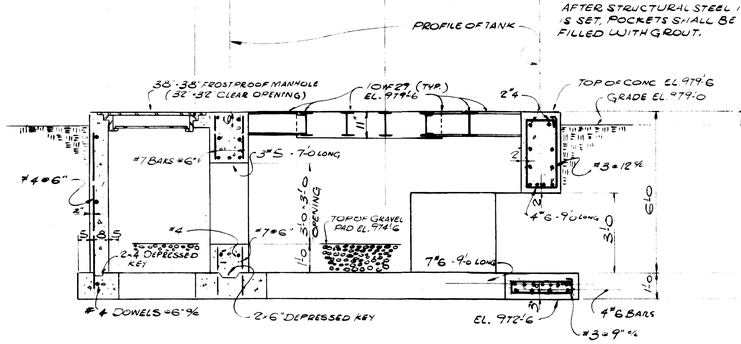
SCALE: 3/8" = 1'-0



SECTION

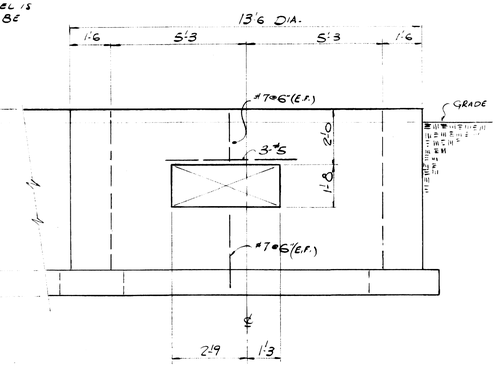
SCALE: 3/8" = 1'-0

NOTE:
AFTER STRUCTURAL STEEL IS IS SET, POCKETS SHALL BE FILLED WITH GROUT.



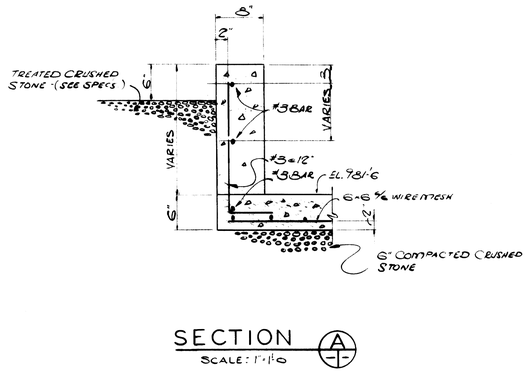
SECTION

SCALE: 3/8" = 1'-0



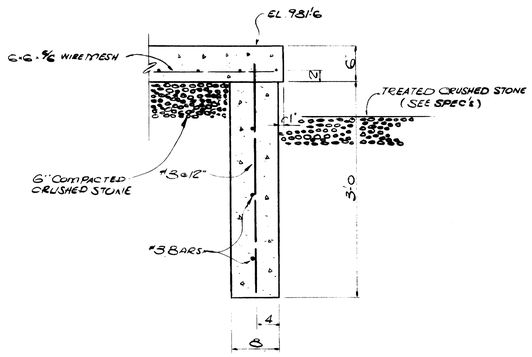
ELEVATION

SCALE: 3/8" = 1'-0



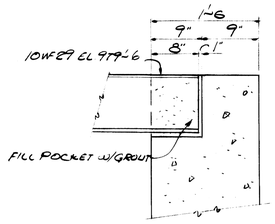
SECTION

SCALE: 1"=1'-0



SECTION

SCALE: 1"=1'-0



SECTION (TYP. BEAM IN POCKET DETAIL)

SCALE: 1"=1'-0

GFS 1-10-72
CORRECTED ELEVATION OF TANK FOUNDATION

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY J.S.M.	TRANSFORMER PAD & STORAGE TANK FOUNDATION	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY D.F.H.		SPEC. NO. AS NOTED
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. S-22

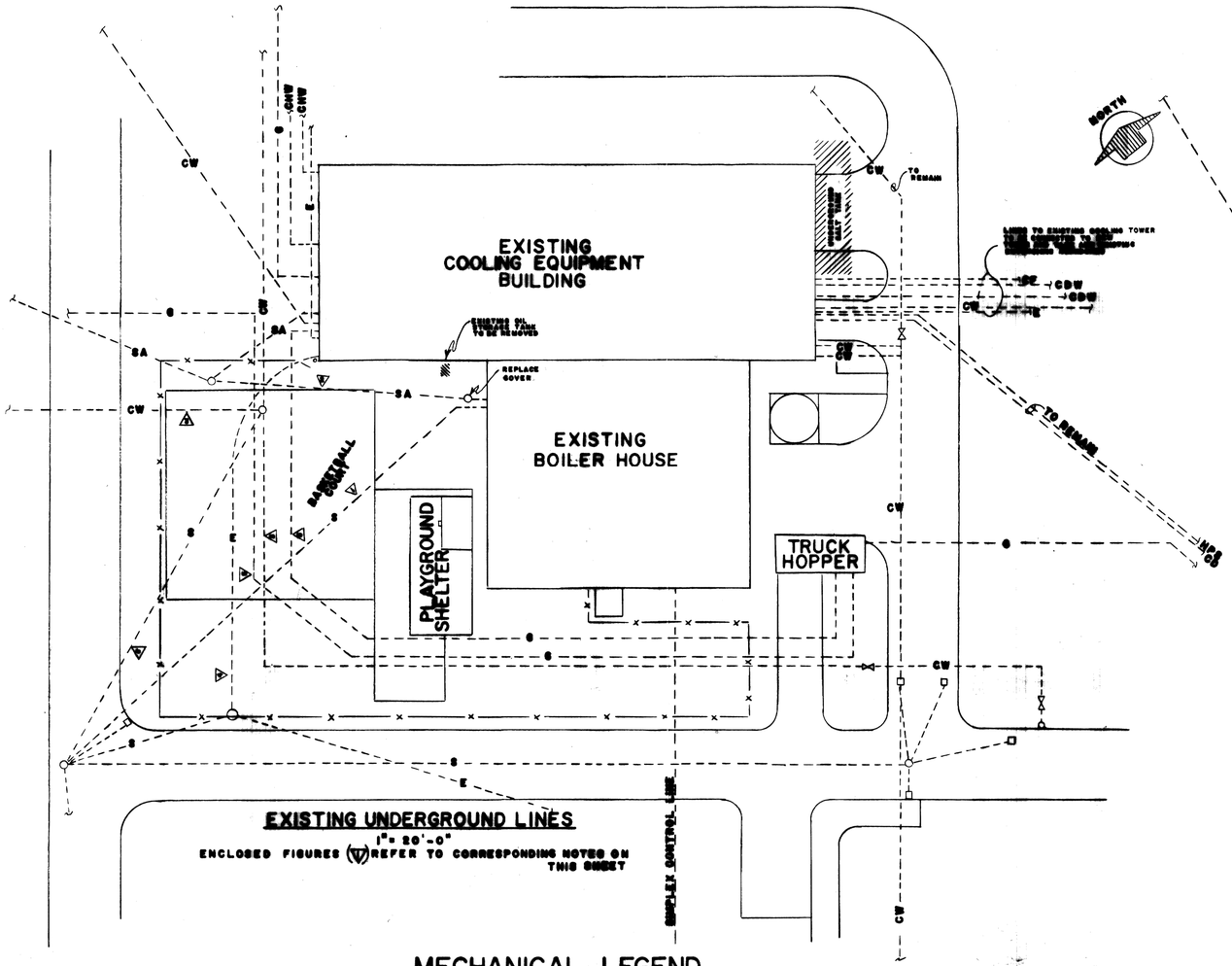
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70

APPROVED BY DIRECTOR: DIVISION OF ENGINEERING DATE 1-70

STATE OF KENTUCKY · PAUL F. HAGGARD · 6748 · REGISTERED PROFESSIONAL ENGINEER

Cab # Slot Document # 015520 131 B-1

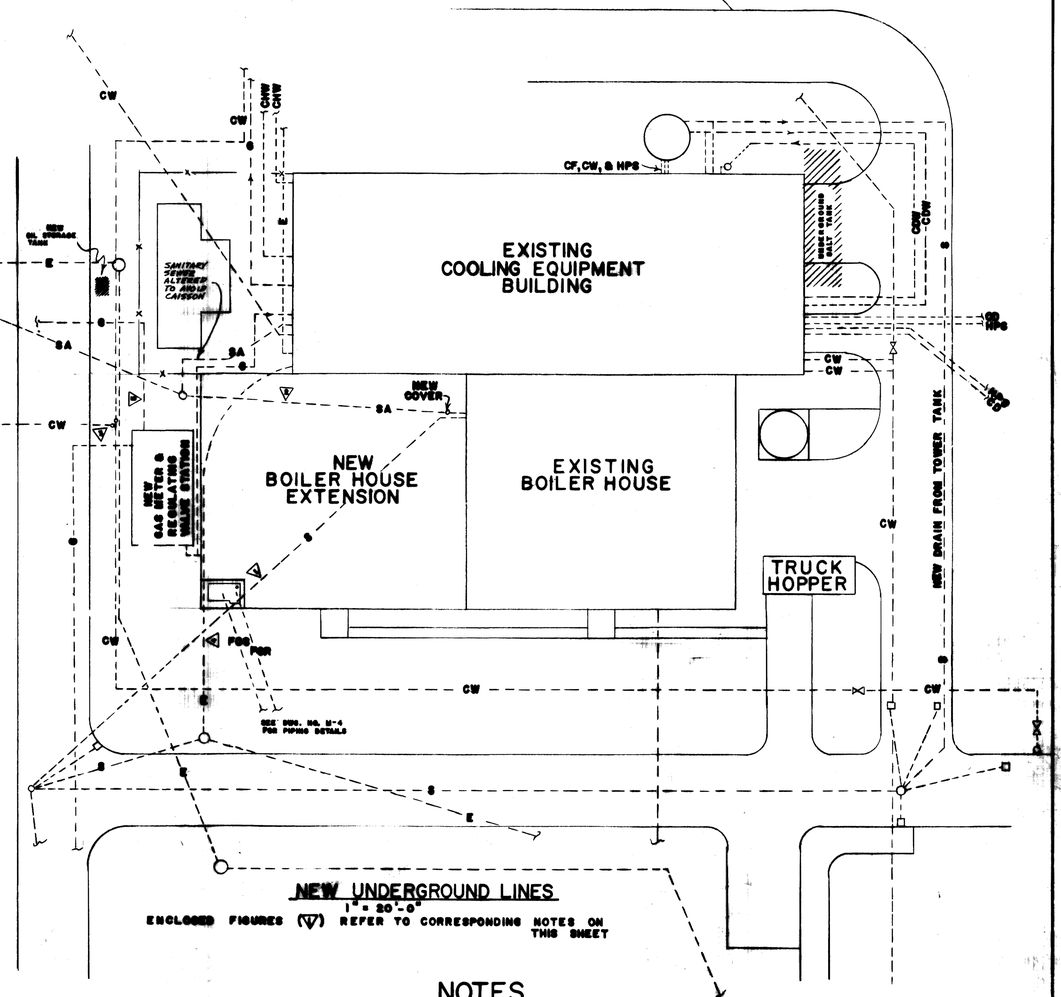
U-5011



EXISTING UNDERGROUND LINES

1" = 20'-0"

ENCLOSED FIGURES (▽) REFER TO CORRESPONDING NOTES ON THIS SHEET



NEW UNDERGROUND LINES

1" = 20'-0"

ENCLOSED FIGURES (▽) REFER TO CORRESPONDING NOTES ON THIS SHEET

MECHANICAL LEGEND

EXISTING PIPING (ABOVE GROUND OR FLOOR)	———
EXISTING PIPING (UNDER GROUND OR FLOOR)	— — — —
NEW PIPING (ABOVE GROUND OR FLOOR)	▬▬▬
NEW PIPING (UNDER GROUND OR FLOOR)	▬ ▬ ▬ ▬

PIPING USAGE SYMBOLS:

AIR	A
BLOWDOWN	BD
CONTINUOUS BLOWDOWN	CB
CONDENSATE (STEAM)	CD
CONDENSING WATER	CDW
CHEMICAL FEED	CF
CHILLED WATER	CHW
COLD SOFT WATER	CSW
CITY WATER	CW
FIRE LINE	F
FUEL OIL RETURN	FOR
FUEL OIL SUPPLY	FOS
FEEDWATER	FW
GAS	G
HOT WATER	HW
HIGH PRESSURE STEAM	HPS
LOW PRESSURE STEAM	LPS
HIGH PRESSURE CONDENSATE	HPCD
LOW PRESSURE CONDENSATE	LPCD
STORM SEWER	S
SANITARY SEWER	SA

STEAM TRAP ASSEMBLY	T
UTILITY MARKER	
ELBOW (PLAN, UP, DOWN)	
TEE (PLAN, UP, DOWN)	
GATE VALVE	
GLOBE VALVE	
HOSE COCK OR WALL HYDRANT	
MOTORIZED OR AUTOMATIC CONTROL VALVE	
PRESSURE REDUCING VALVE	
RELIEF VALVE	
CHECK VALVE	
STRAINER	
THERMOMETER	
PRESSURE GAUGE	
FLEXIBLE CONNECTOR IN PIPING	
GAS VALVE	
UNION	
FLOOR DRAIN	FD
OPEN RECEPTACLE	OR
CLEAN OUT	CO
FLUSH CLEAN OUT	FCO
WALL HYDRANT	WH

NOTES

1. EXISTING 12" CONCRETE STORM SEWER TO REMAIN.
2. EXISTING 8" SANITARY SEWER TO REMAIN EXCEPT THAT TOP OF MANHOLE NEAR EXISTING BUILDING TO BE LOWERED 1.5' TO FIRST FLOOR ELEVATION AND COVER REPLACED WITH A BOLTED AND GASKETED TYPE SIMILAR TO NEENAH R-1915-C.
3. WATER LINE MANHOLE (CONTAINING 2 VALVES) TO BE ABANDONED AND REPLACED BY TWO CAST-IRON VALVE BOXES SIMILAR TO CLOW F-2452. PORTIONS OF CONNECTING LINES TO BE RELOCATED, MOVING AWAY FROM AREA TO BE COVERED BY BUILDING ADDITION.
4. EXISTING ELECTRIC LINE TO REMAIN.
5. EXISTING GAS LINE FOR HOSPITAL TO BE TEMPORARILY ROUTED WITH TEMPORARY METER TO AVOID NEW BUILDING ADDITION AREA AND THEN RELOCATED FOLLOWING INSTALLATION OF NEW GAS SERVICE MAINS AND METER HOUSE. NEW GAS SERVICE WITH REDUCING VALVE AND METER FOR AGRICULTURE BUILDING TO BE CONNECTED TO MEDIUM PRESSURE LINE SERVING V.A. HOSPITAL.
6. EXISTING STORM DRAIN FROM WATER VALVE MANHOLE TO BE ABANDONED.

SEE DRAWING M-2 FOR INDIVIDUAL SERVICE CHANGES.

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NOTE: SEWER ALTERATION TO AVOID CAISSON.

STATE OF KENTUCKY — GEORGE F. SPRAGENS 1470 REGISTERED PROFESSIONAL ENGINEER

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY J.K. - J.E.G.	UNDERGROUND PIPING & LEGEND	DATE 5-28-70
TRACED BY J.E.G.	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1" = 20'-0"
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-1

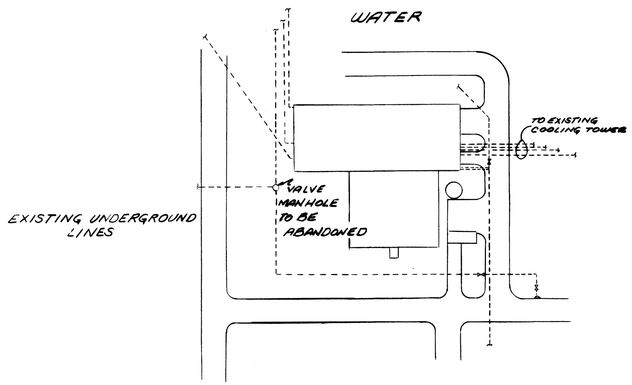
APPROVED BY _____ AGENCY HEAD DATE 5-28-70

APPROVED BY C.J. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

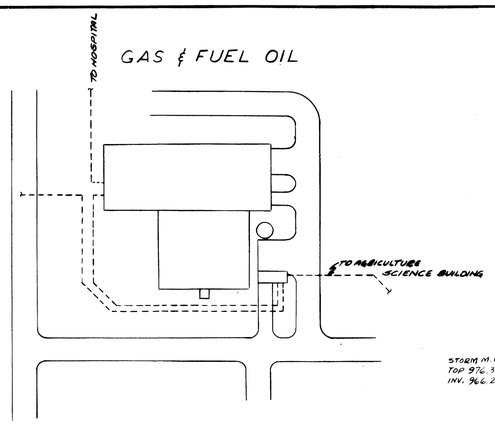
Cab# Slot Document# 151 A-1 015321

U-5012

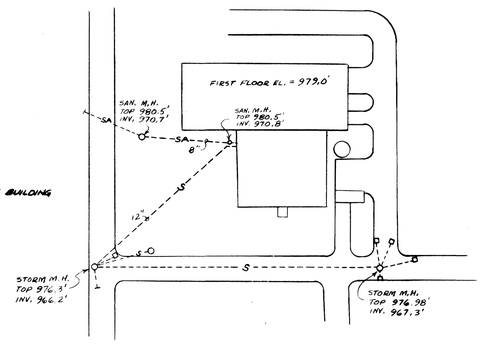
WATER



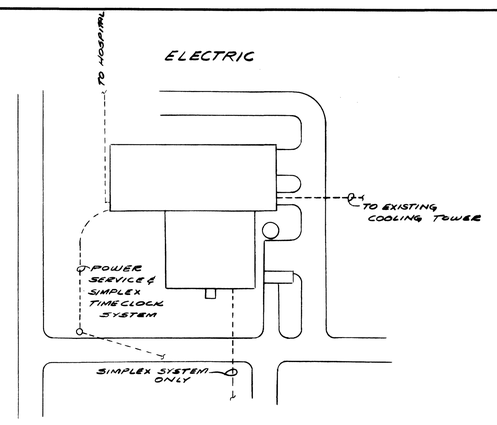
GAS & FUEL OIL

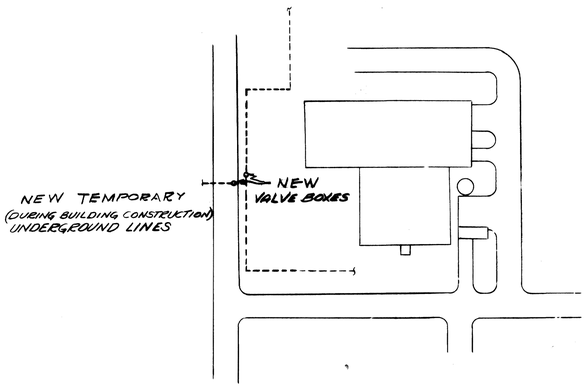


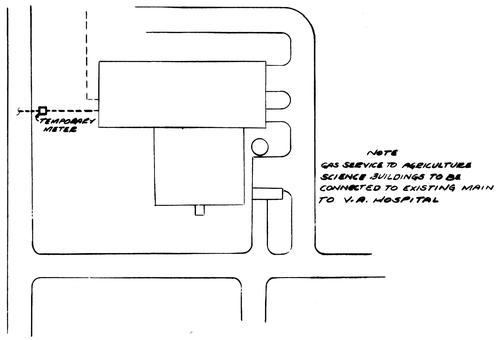
SEWERS

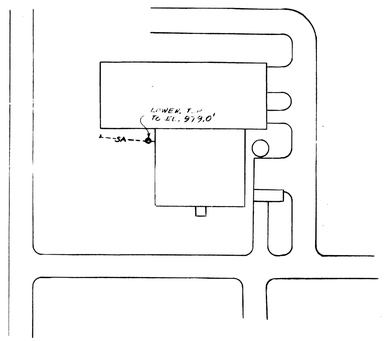


ELECTRIC



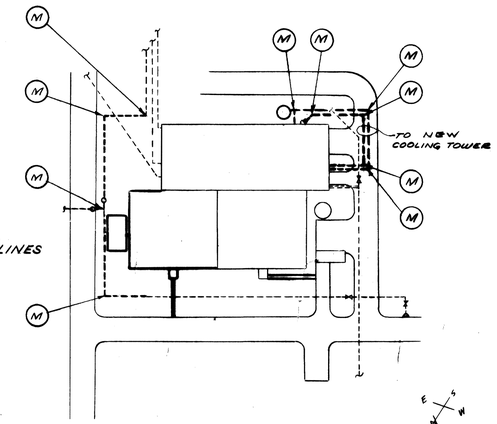


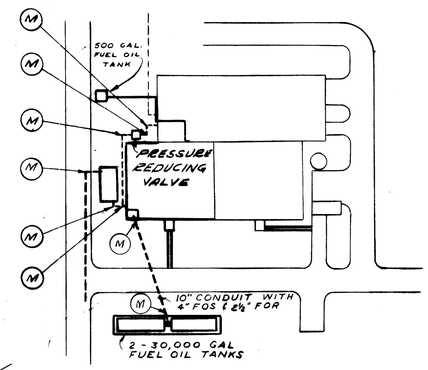


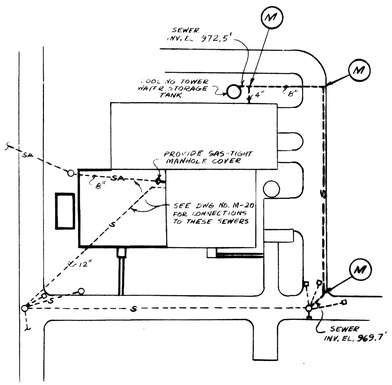


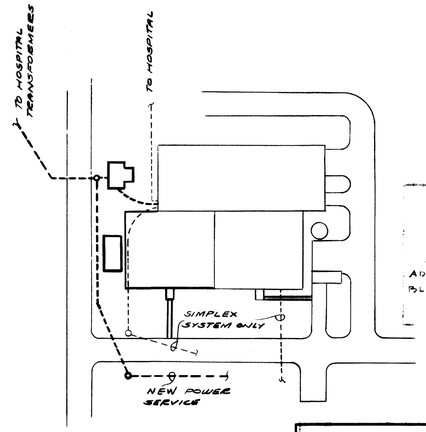
NOTE:

NEW WATER COOLING TOWER IS TO BE OPERATED PROPER JOB COMPLETION. ELECTRICAL WORK TO PROVIDE FOR OPERATION WITH EXISTING STARTERS AND CONTROLS IS TO BE PROVIDED FOR INTERIM OPERATION. FINAL ELECTRICAL SYSTEM INCORPORATING THIS INTERIM WIRING BUT BYPASSING THE SYSTEM TO INCLUDE VIBRATION INDICATORS ON NEW PANELBOARD.

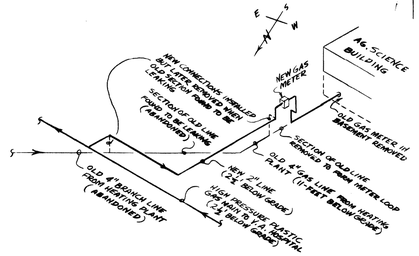








GFS 1-10-72
ADDED REVISIONS TO AGR.-SCIENCE BLDGS. GAS SERVICE



REVISIONS IN GAS SERVICE TO AG. SCIENCE BLDG.
AUGUST 26, 1970

NOTE

UTILITY MARKERS AS DETAILED ON DRAWING NO. M-17 TO BE FURNISHED & INSTALLED AT LOCTIONS DESIGNATED (M)

UTILITY MARKER LOCATIONS FOR ELECTRICAL LINES ARE SHOWN ON DRAWING NO'S. E-1 & E-2

STATE OF KENTUCKY — GEORGE F. SPRAGENS 1479 — REGISTERED PROFESSIONAL ENGINEER

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

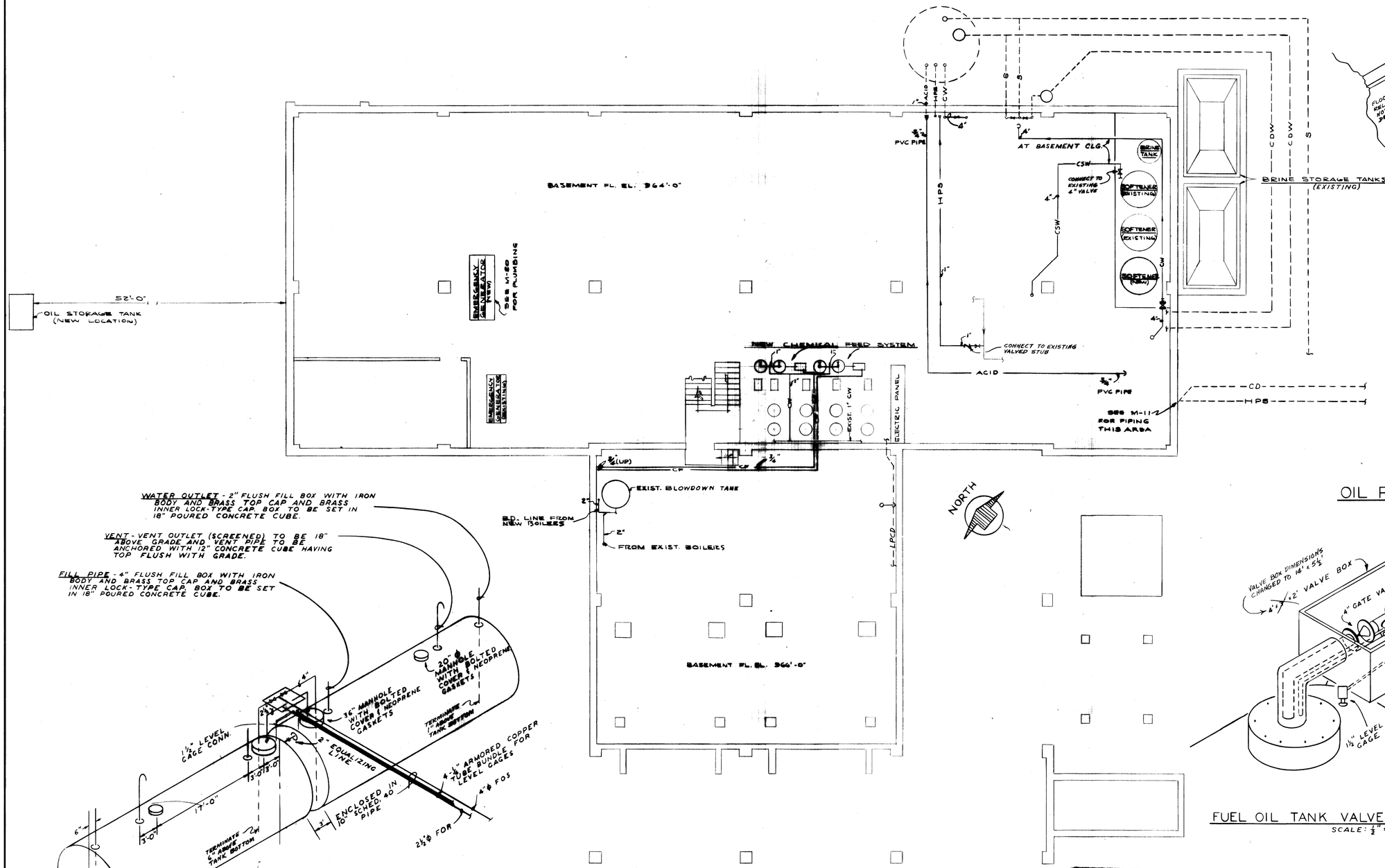
DRAWN BY JR	INDIVIDUAL UTILITIES UNDERGROUND LINES	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE NONE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-2

APPROVED BY C. J. McLeod AGENCY HEAD DATE 5-28-70

APPROVED BY W. J. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # 131 Slot A-1 Document # 015322

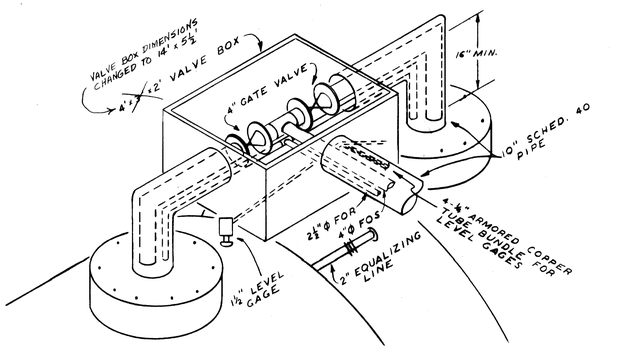
U-5013



OIL PUMP PIT ARRANGEMENT

FUEL OIL TANKS

SCALE: ⅜"=1'-0"



FUEL OIL TANK VALVE BOX ARRANGEMENT

SCALE: ½"=1'-0"

BASEMENT PLAN

SCALE: ⅛"=1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
ADDED LPCD LINE
VALVE BOX DIMENSIONS CHANGED
NOTED PIPE EXTENSIONS IN OIL TANKS
NOTED RELOCATION OF FLOOR TRENCH FROM PUMP PIT
ADDED CSW LINE TO SHOWER TANK

GEORGE F. SYNAGENS 1479 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

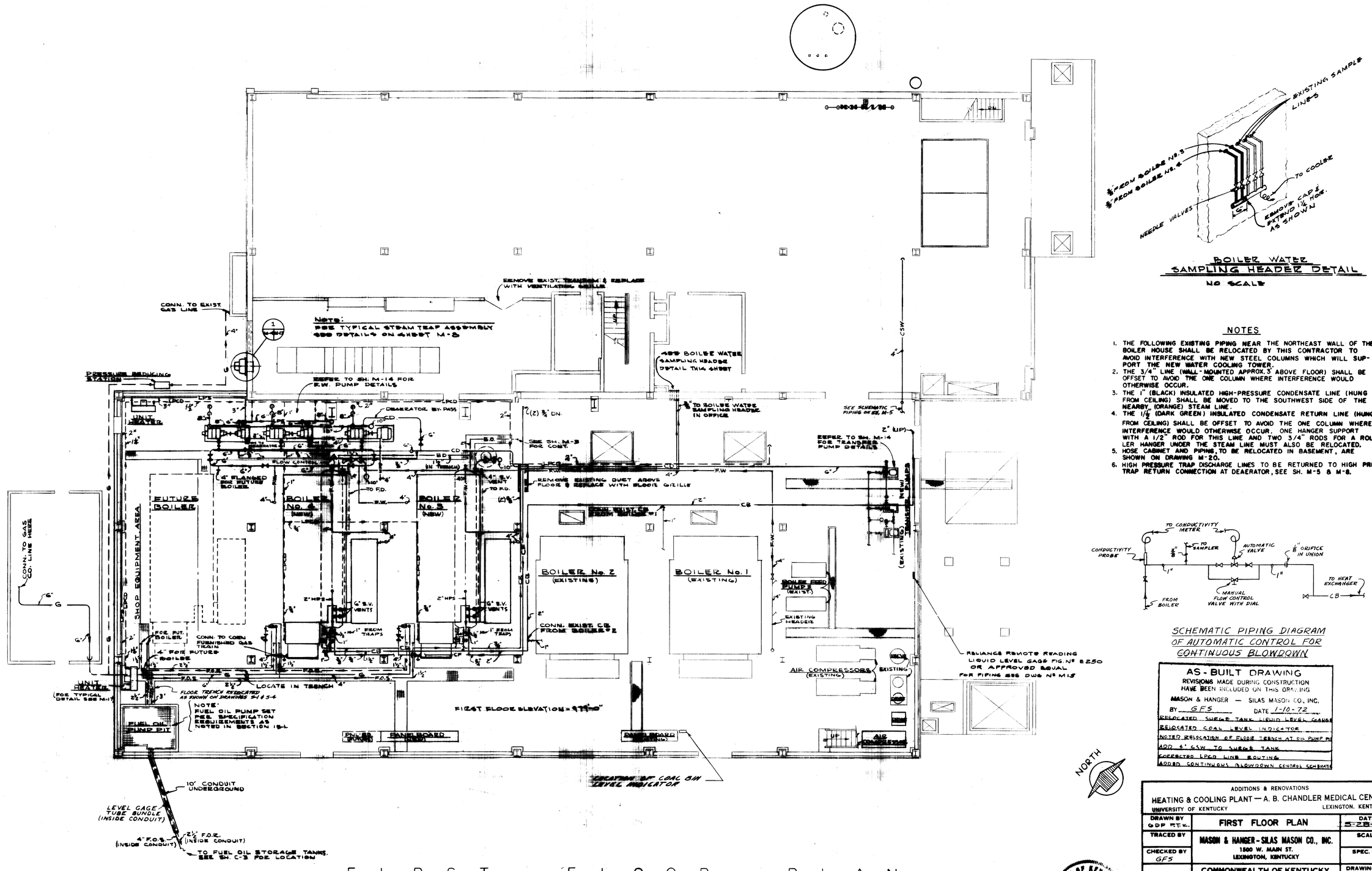
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY GDP	BASEMENT PLAN	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-3

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

Cab. # Slot Document # 015323 A-1 131

U-5014



FIRST FLOOR PLAN

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

BOILER WATER SAMPLING HEADER DETAIL

NO SCALE

NOTES

1. THE FOLLOWING EXISTING PIPING NEAR THE NORTHEAST WALL OF THE BOILER HOUSE SHALL BE RELOCATED BY THIS CONTRACTOR TO AVOID INTERFERENCE WITH NEW STEEL COLUMNS WHICH WILL SUPPORT THE NEW WATER COOLING TOWER.
2. THE 3/4" LINE (WALL-MOUNTED APPROX. 5' ABOVE FLOOR) SHALL BE OFFSET TO AVOID THE ONE COLUMN WHERE INTERFERENCE WOULD OTHERWISE OCCUR.
3. THE 1" (BLACK) INSULATED HIGH-PRESSURE CONDENSATE LINE (HUNG FROM CEILING) SHALL BE MOVED TO THE SOUTHWEST SIDE OF THE NEARBY, (ORANGE) STEAM LINE.
4. THE 1 1/2" (DARK GREEN) INSULATED CONDENSATE RETURN LINE (HUNG FROM CEILING) SHALL BE OFFSET TO AVOID THE ONE COLUMN WHERE INTERFERENCE WOULD OTHERWISE OCCUR. ONE HANGER SUPPORT WITH A 1/2" ROD FOR THIS LINE AND TWO 3/4" RODS FOR A ROLLER HANGER UNDER THE STEAM LINE MUST ALSO BE RELOCATED.
5. HOSE CABINET AND PIPING, TO BE RELOCATED IN BASEMENT, ARE SHOWN ON DRAWING M-20.
6. HIGH PRESSURE TRAP DISCHARGE LINES TO BE RETURNED TO HIGH PRESSURE TRAP RETURN CONNECTION AT DEAERATOR, SEE SH. M-5 & M-8.

SCHEMATIC PIPING DIAGRAM OF AUTOMATIC CONTROL FOR CONTINUOUS BLOWDOWN

AS-BUILT DRAWING

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

- RELOCATED SURGE TANK, LIQUID LEVEL GAUGE
- RELOCATED COAL LEVEL INDICATOR
- NOTED RELOCATION OF FLOOR TRENCH AT OIL PUMP PIT
- ADD 4" C.S.W. TO SURGE TANK
- CORRECTED LPCD LINE ROUTING
- ADDED CONTINUOUS BLOWDOWN CONTROL SCHEMATIC

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY GDP PTC.	FIRST FLOOR PLAN	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-4

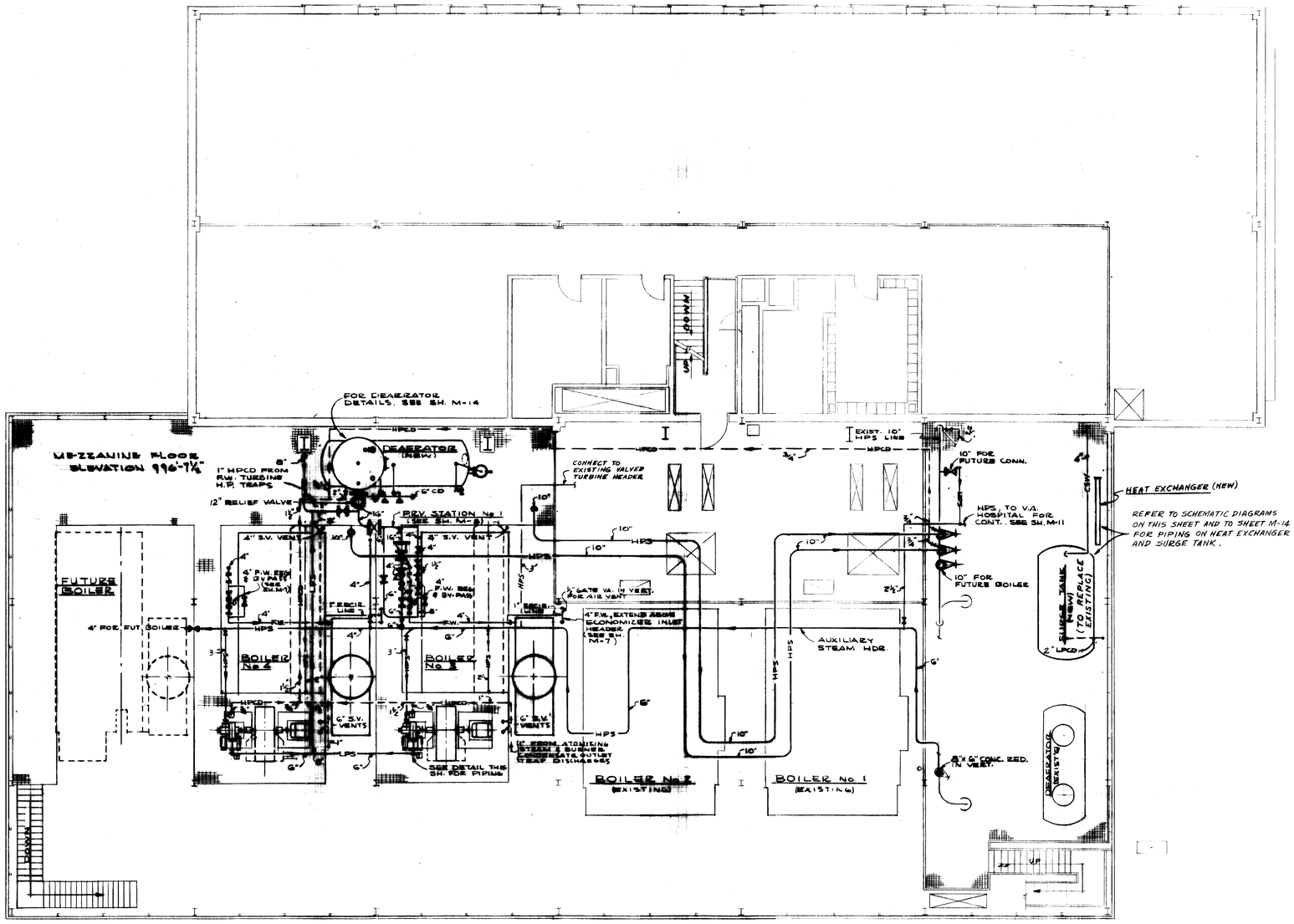
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70

APPROVED BY W.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY GEORGE F. SPRAGGINS 1479 REGISTERED PROFESSIONAL ENGINEER

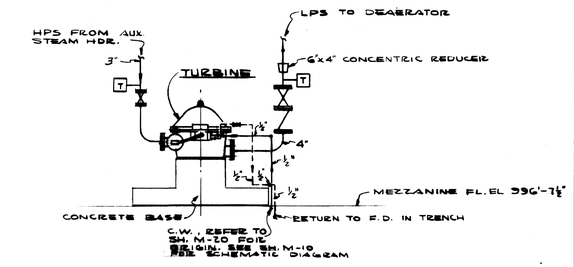
Cab. # 131 Slot A-1 Document # 015234

U-5015



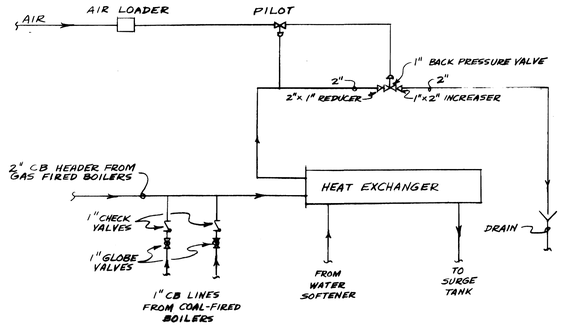
· M E Z Z A N I N E · F L O O R · P L A N ·

SCALE: ⅛"=1'-0"

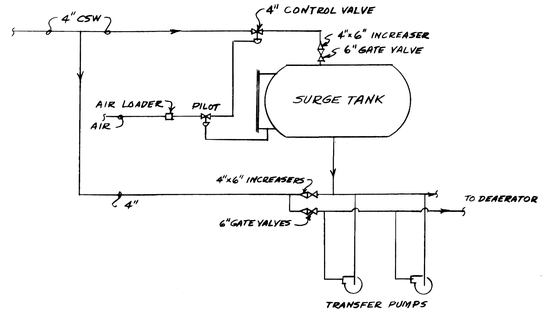


TYPICAL F.D. FAN TURBINE PIPING ARRANGEMENT

SCALE: ½"=1'-0"



SCHEMATIC HEAT EXCHANGER PIPING



SCHEMATIC SURGE TANK PIPING

AS-BUILT DRAWING

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

CHANGED DEAERATOR RELIEF VALVE FROM 10" TO 12"

ADDED SCHEMATIC PIPING DIAGRAMS

ADDED 4" CSW TO SURGE TANK

ADDED 3" HPS CROSSOVER BETWEEN AUX. HEADERS

CHANGED HPS LINE SIZE TO FAN TURBINE (2" TO 3")

NORTH

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY GDP JMS	MEZZANINE FLOOR PLAN	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE ⅛"-1'-0"
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-5

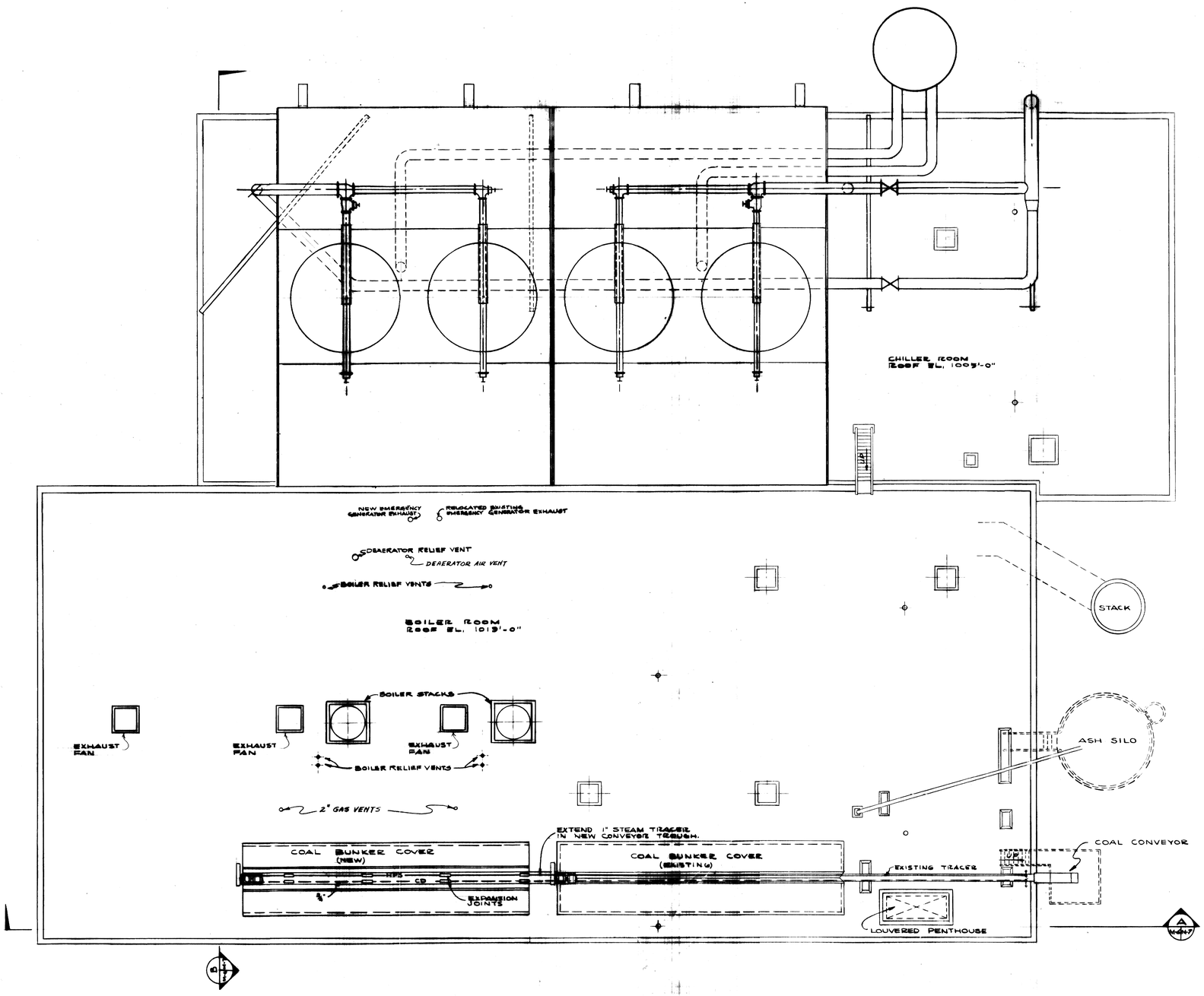
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70

APPROVED BY W.F. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

GEORGE F. SPRAGENS 1470 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

Cab.# 131 Slot A-1 Document# 015325

U-5016



R O O F P L A N

SCALE: $\frac{1}{8}$" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
REVISED COOLING TOWER PIPING
ADDED GAS & DEAERATOR AIR VENTS

NORTH

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

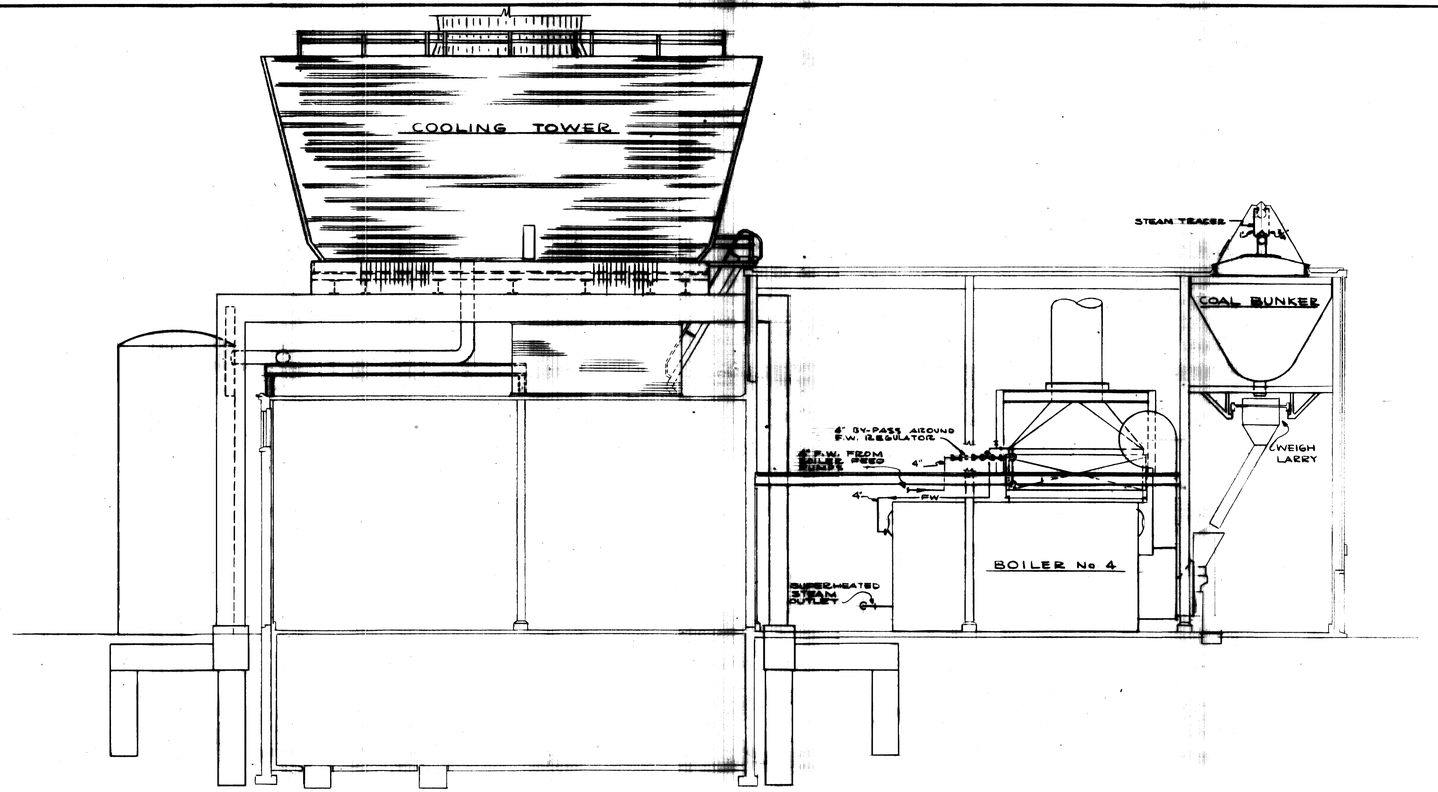
DRAWN BY GDP, WA	ROOF PLAN	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1/8" = 1'-0"
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-6

APPROVED BY _____ AGENCY HEAD DATE 5-28-70
APPROVED BY _____ DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

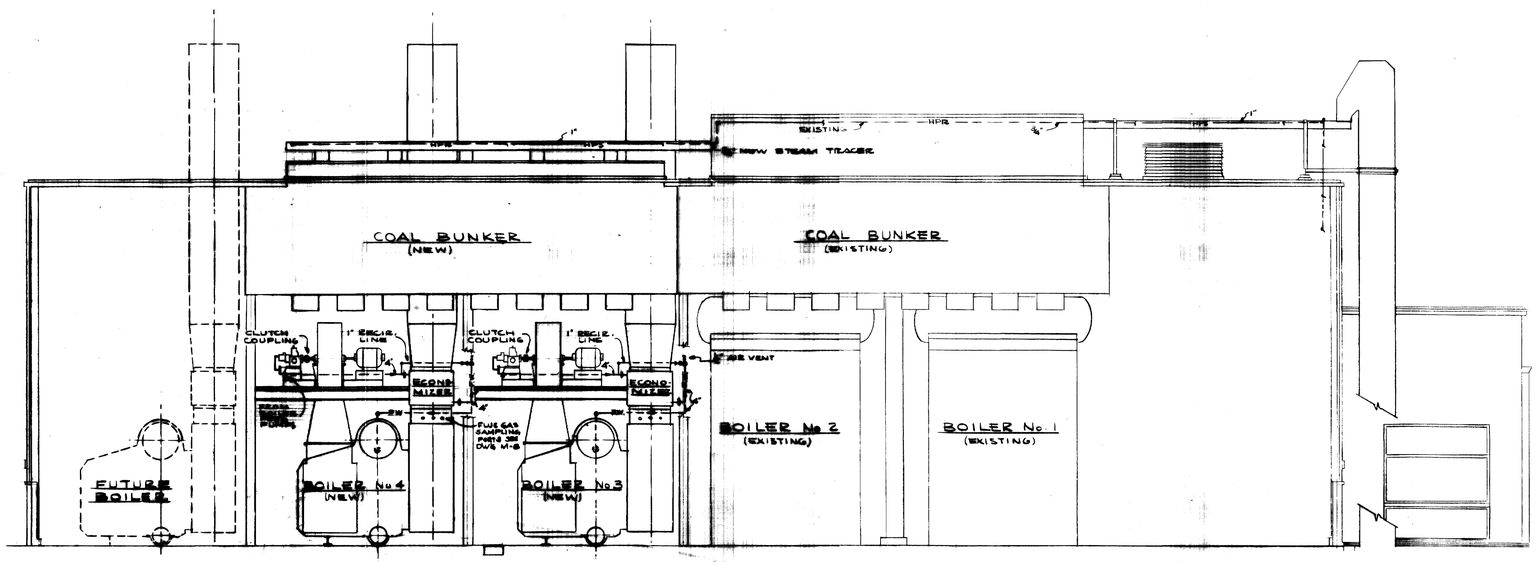
STATE OF KENTUCKY — GEORGE F. SCHAGENS — 1479 — REGISTERED PROFESSIONAL ENGINEER

Cab # Slot Document # 015726 A-1 131

U-5017



SECTION B
SCALE: 1/8" = 1'-0"
M-6 | M-7



SECTION A
SCALE: 1/8" = 1'-0"
M-6 | M-7

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY GDP, RMS	SECTIONAL ELEVATIONS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1/8"=1'-0"
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-7

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-29-70
APPROVED BY C.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

GEORGE F. SPRAGENS 1479 REGISTERED PROFESSIONAL ENGINEER

Cab # 131 Slot A-1 Document # 015227

U-5018

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
ADDED CROSSOVER LINES (6" LPS & 3" HPS)
BETWEEN OLD & NEW HEADERS
INCREASED FAN TURBINE SUPPLY LINES (2" TO 3")
CHANGED DEAERATER RELIEF VALVE (10" TO 12")

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY GDP, JK	PIPING & INSTRUMENT SCHEMATIC	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-8

APPROVED BY C J Marshall DATE 5-28-70
AGENCY HEAD
APPROVED BY W. J. McConnell DATE 6-1-70
DIRECTOR: DIVISION OF ENGINEERING

U-5019

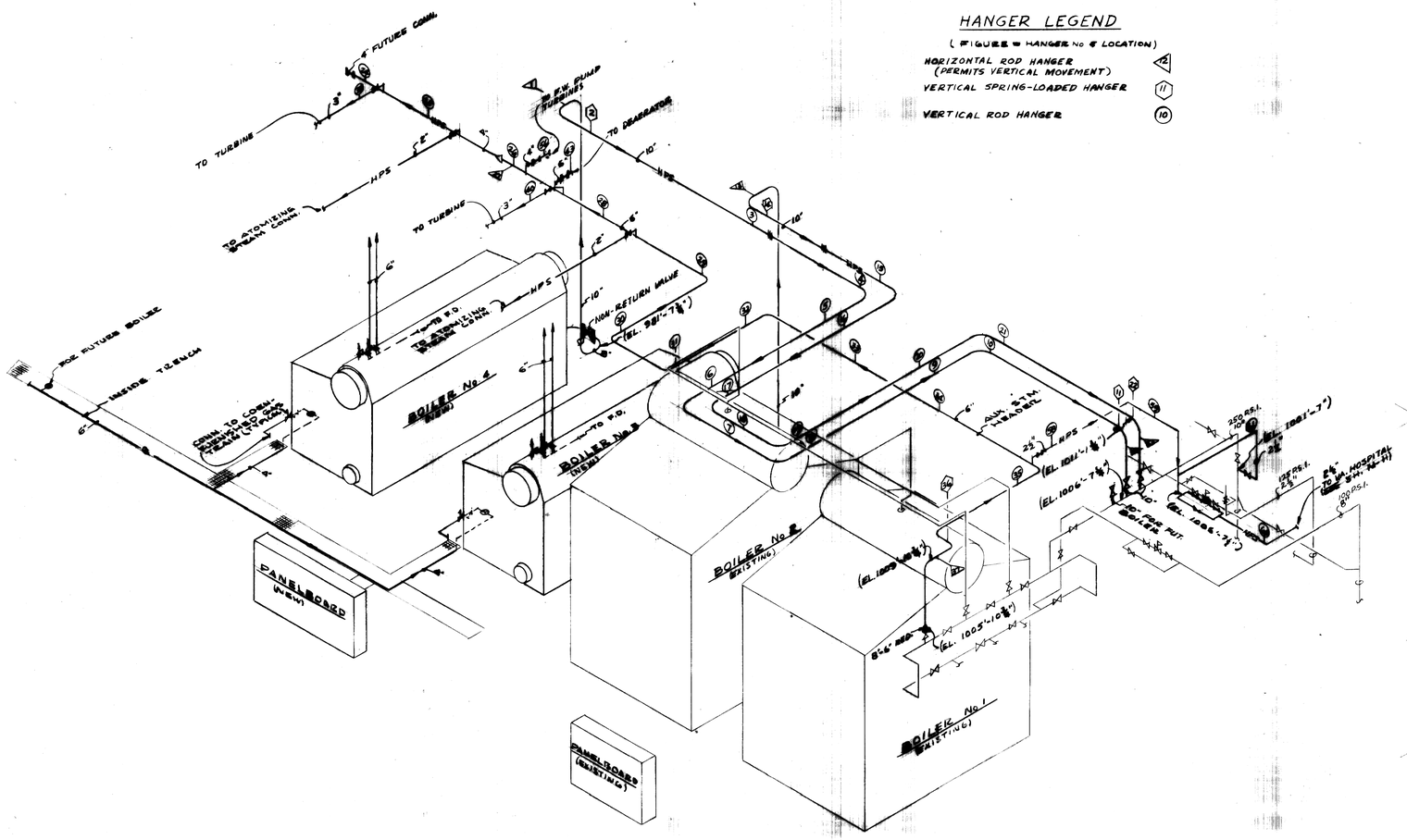
NOTES

1. ALL REDUCERS IN HORIZONTAL STEAM PIPING SYSTEM SHALL BE ECCENTRIC. FLAT SIDE SHALL BE ON BOTTOM.
2. INDICATED ELEVATIONS REFER TO PIPE CENTERLINES

HANGER LEGEND

(FIGURE = HANGER No & LOCATION)

HORIZONTAL ROD HANGER (PERMITS VERTICAL MOVEMENT)	(12)
VERTICAL SPRING-LOADED HANGER	(11)
VERTICAL ROD HANGER	(10)



NORTH

AS - BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CHANGED FAN TURBINE SUPPLY FROM 2" TO 3"

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY DP,	PIPING ISOMETRIC - LOOKING NORTH STEAM, CONDENSATE, GAS	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE NONE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-9

APPROVED BY [signature] AGENCY HEAD DATE 5-29-70
APPROVED BY [signature] DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY GEORGE F. SPRAGINS 1430 REGISTERED ENGINEER

Cab # 131 Shot A-1 Document # 015329

U-5020

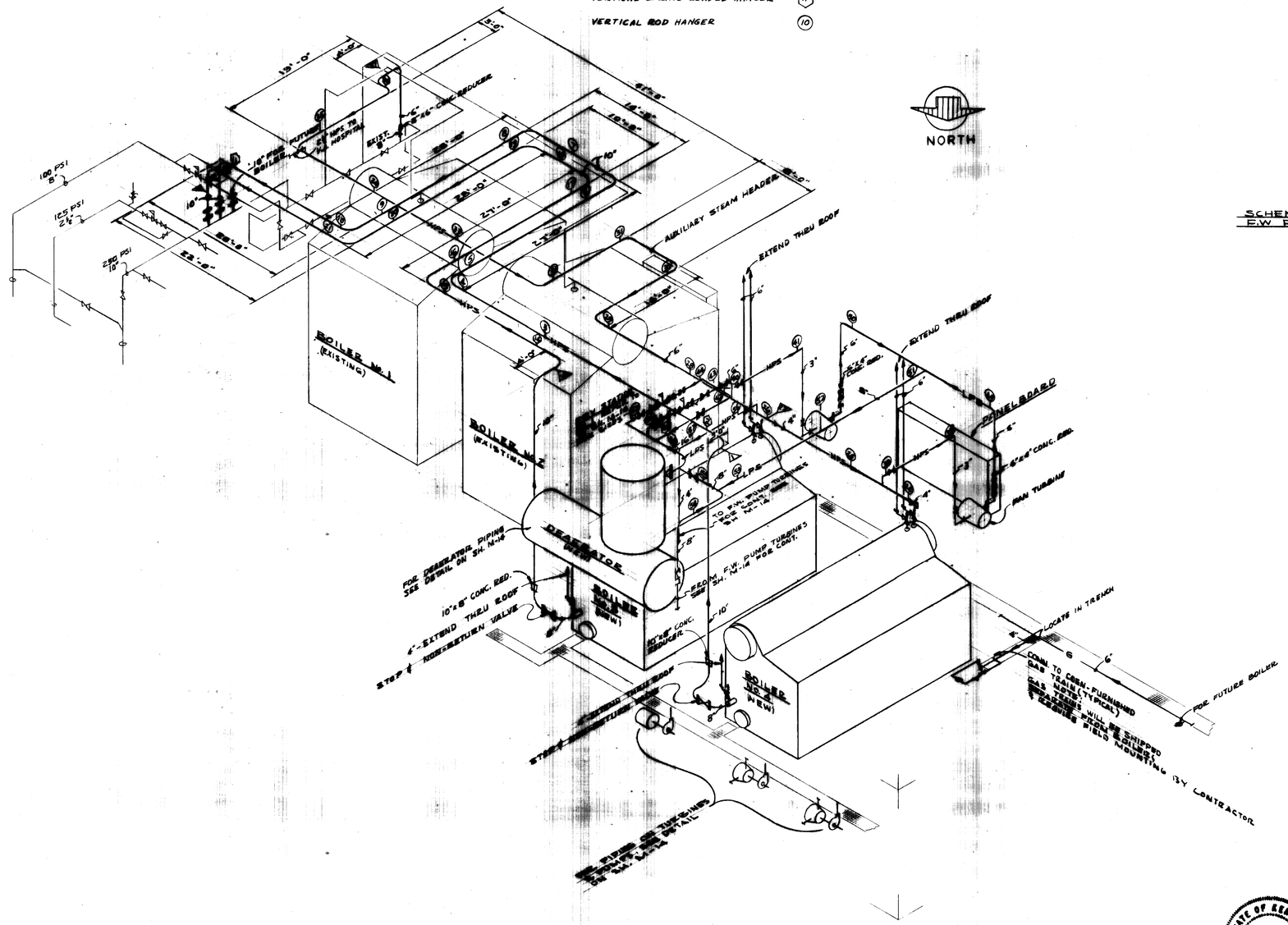
HANGER LEGEND

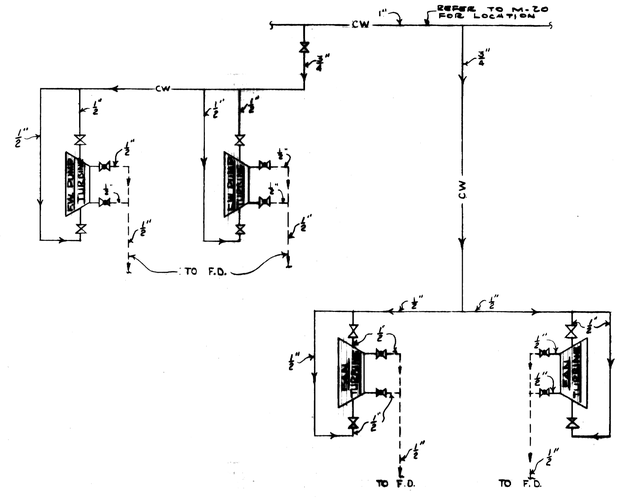
FIGURES HANGER No & LOCATION

HORIZONTAL ROD HANGER (PERMITS VERTICAL MOVEMENT) — 12

VERTICAL SPRING-LOADED HANGER — 11

VERTICAL ROD HANGER — 10





SCHEMATIC WATER PIPING DIAGRAM FOR F.W. PUMP & FAN TURBINE BEARING

NO SCALE

NOTES

1. ALL REDUCERS IN HORIZONTAL STEAM SYSTEMS SHALL BE ECCENTRIC. FLAT SIDE SHALL BE ON BOTTOM.
2. INDICATED DIMENSIONS REFER TO PIPE CENTERLINES

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CHANGED FAN TURBINE SUPPLY LINE FROM 2" TO 4"

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

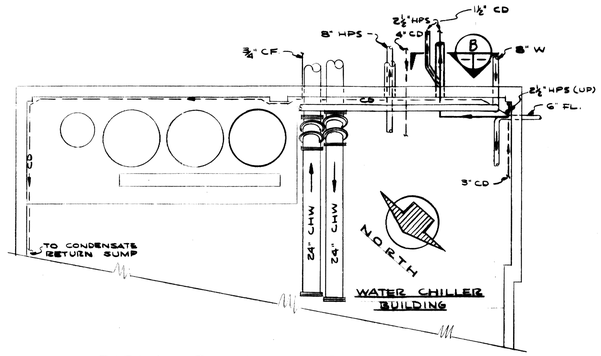
DRAWN BY GDP	PIPING ISOMETRIC - LOOKING SOUTH STEAM, CONDENSATE	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE NONE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-10

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.J. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY — GEORGE F. SPRAGENS — 1470 — REGISTERED PROFESSIONAL ENGINEER

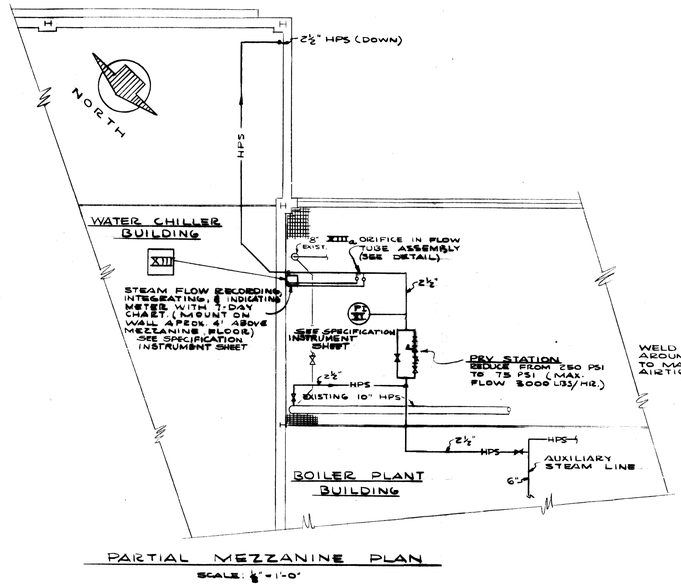
Cab # 131 Slot A-1 Document # 015330

U-5021



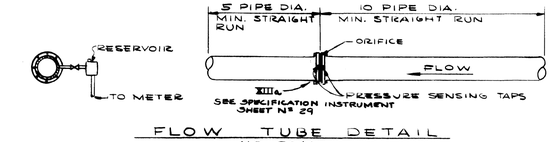
PARTIAL BASEMENT PLAN

SCALE: ⅛" = 1'-0"



PARTIAL MEZZANINE PLAN

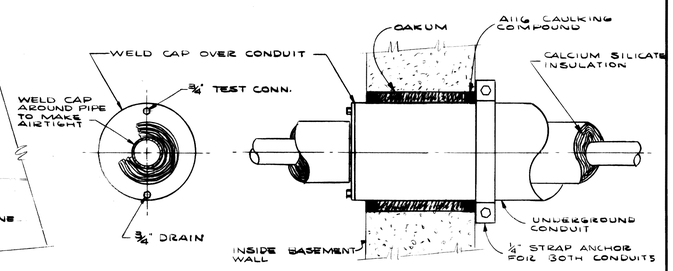
SCALE: ⅛" = 1'-0"



FLOW TUBE DETAIL

NO SCALE

NOTE
ORIFICE FLANGES SHALL BE 300 LB. WELD-NECK ORIFICE TAPPED



DETAIL OF CONDUIT AT BASEMENT WALL

NO SCALE

PARTIAL SITE PLAN

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

SECTION

SCALE: ⅛"=1'-0"

SECTION B

SCALE: 1½" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION
HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY GDP	STEAM & CONDENSATE FOR V.A. HOSPITAL V.A. PROJECT NO. 15-6177	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-11

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70

APPROVED BY W.T. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

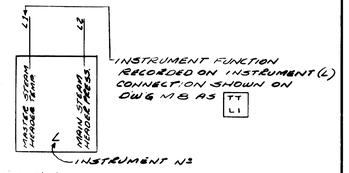
STATE OF KENTUCKY · GEORGE F. SPRAGENS · 1479 · REGISTERED PROFESSIONAL ENGINEER

Cab # 131 Slot A-1 Document # 015331

U-5022

NOTE "2

TYPICAL INSTRUMENT REFERENCE EXAMPLE



SEE DWG. M 8 FOR CONTROL OR FUNCTION LOCATION

NOTE "3

⫽ INDICATES PNEUMATIC SIGNAL TO PANELBOARD & SUPPLY AIR TO TRANSMITTER

NOTE #4

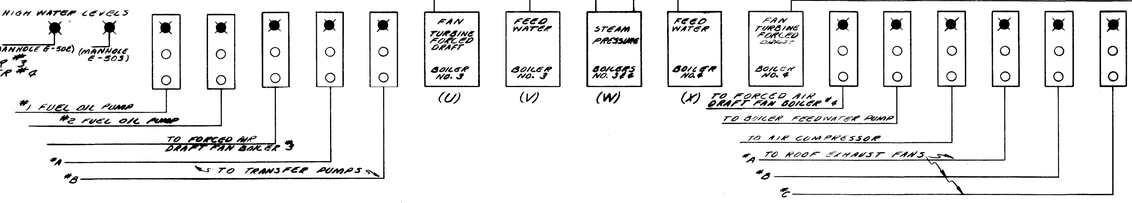
ALL INSTRUMENT COPPER & HIGH PRESSURE STEEL TUBING SHALL BE CONTINUOUSLY SUPPORTED BY TRAYS, CHANNELS, & BARS OR RACKS OF 16 GAGE MINIMUM THICKNESS WITH HEMMED EDGE REINFORCEMENT. CONTRACTOR SHALL FURNISH ALL HANGER RODS & SUPPORTS WITH ¾" MINIMUM ROD DIA. & SUPPORT SPACING 4' MIN.

ORIGINAL DRAWING FOR INFORMATION PURPOSES ONLY

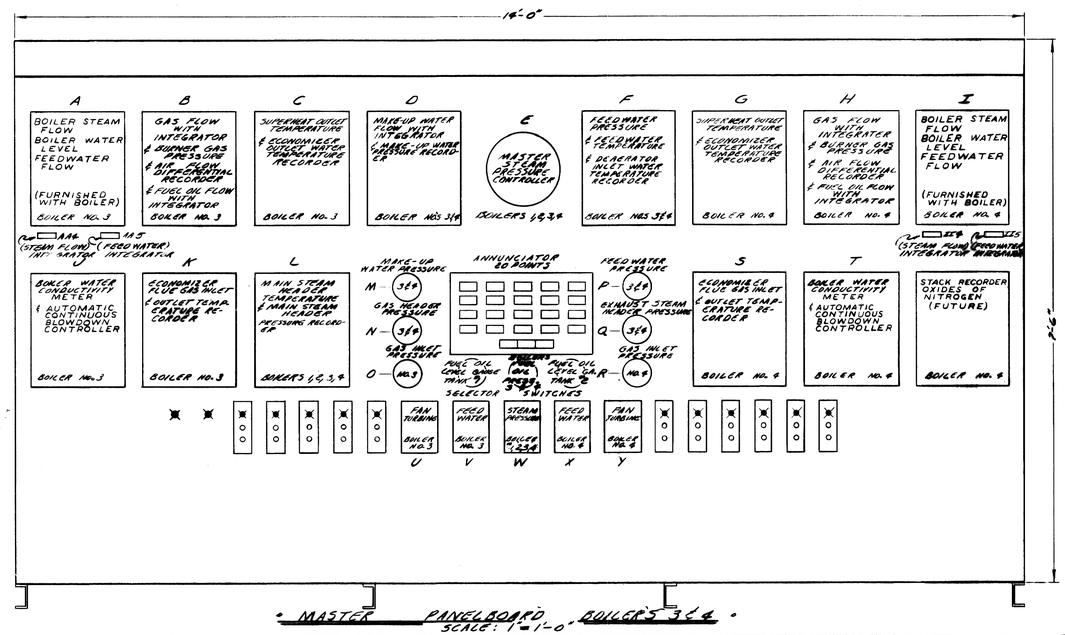
NOTE #1

ANNUNCIATOR POINTS (20)

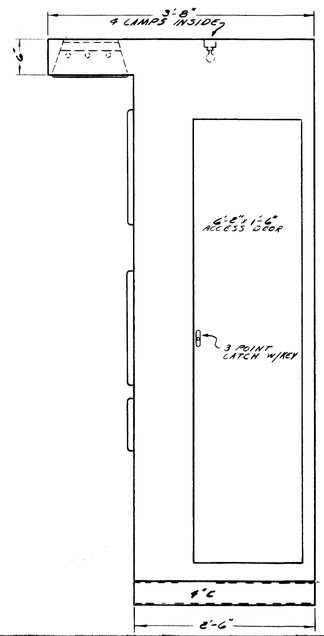
a LOW LEVEL ALARM - WATER IN COOLING TOWER
b HIGH TEMPERATURE ALARM WATER IN COOLING TOWER
c ECONOMIZER RECIRCULATING VALVE INCORRECTLY SET BOILER #3
d ECONOMIZER RECIRCULATING VALVE INCORRECTLY SET BOILER #4
e HIGH LEVEL ALARM-DEAERATOR WATER
f LOW LEVEL ALARM - DEAERATOR WATER
g LOW TEMPERATURE - DEAERATOR WATER
h LOW PRESSURE - FEEDWATER
i HIGH TEMPERATURE ALARM-MAIN STEAM HEADER
j LOW PRESSURE ALARM - COMPRESSOR AIR
k COOLING TOWER VIBRATION SHUT DOWN
l " " " " "
m " " " " "
n " " " " "
o FUEL OIL TANK NO.1 - LOW LEVEL ALARM
p FUEL OIL TANK NO. 2 - LOW LEVEL ALARM
q SPARE
r "
s "
t "

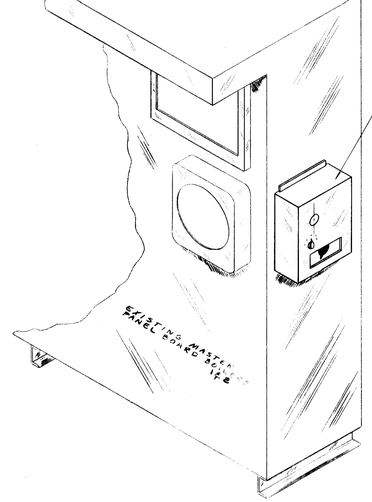


• INSTRUMENT DIAGRAM •
(NO SCALE)



• MASTER PANELBOARD SCALE: 1"=1'-0" BOILERS 3 & 4 •





AS - BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

NORTH

STATE OF KENTUCKY · GEORGE F. SPRAGENS 1479 · REGISTERED PROFESSIONAL ENGINEER

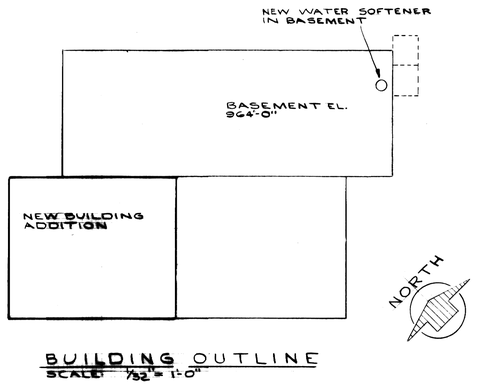
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY RKS	BOILER PANEL INSTRUMENTATION	DATE 5-29-70
TRACED BY RKS	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-12

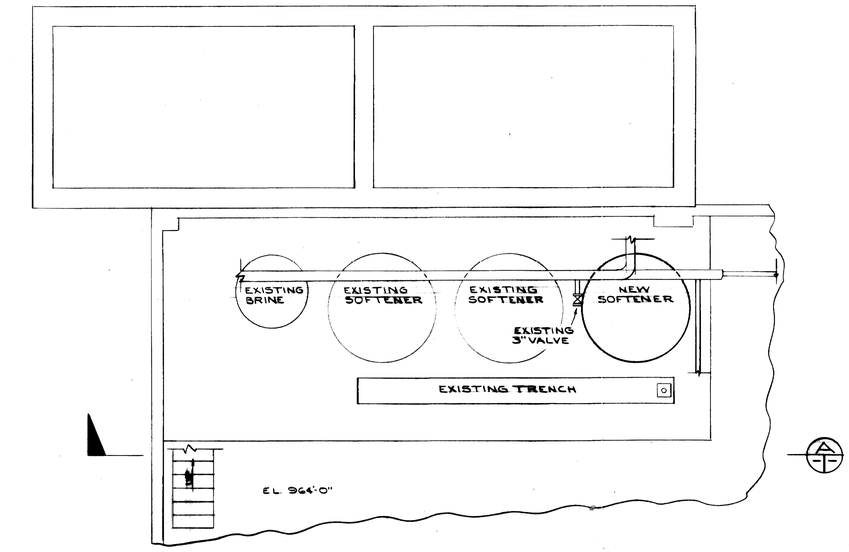
APPROVED BY C.J. Marshall AGENCY HEAD DATE 6-28-70
APPROVED BY W.T. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

U-5023

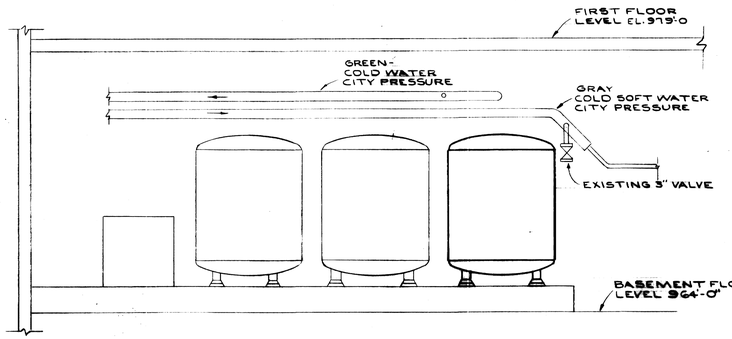
Call # 015332 Shot Document # A-1 1 1



BUILDING OUTLINE
SCALE: 1/32" = 1'-0"

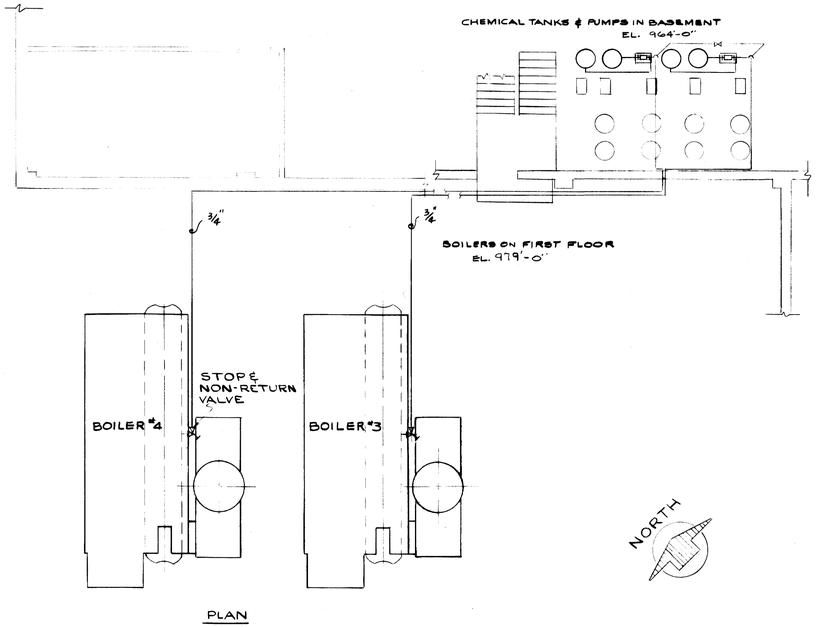


PLAN
SCALE: 1/4" = 1'-0"

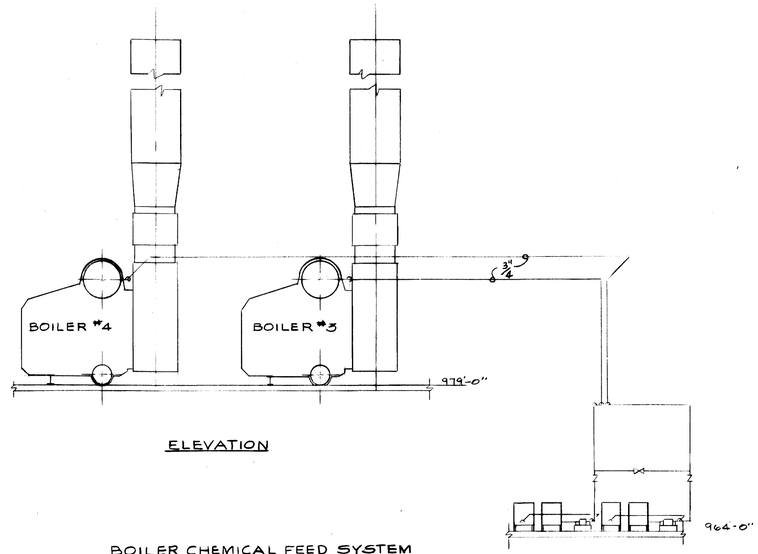


ELEVATION
SCALE: 1/4" = 1'-0"

NEW WATER SOFTENER



PLAN



ELEVATION

BOILER CHEMICAL FEED SYSTEM
1/8" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CHANGED CHEMICAL FEED LINES FROM ¾" TO ½"

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

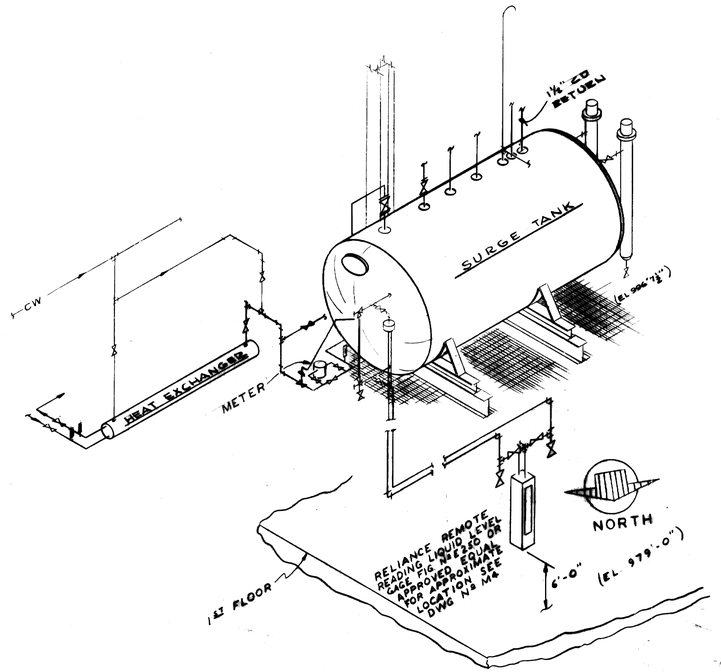
DRAWN BY	BOILER WATER TREATMENT	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-13

APPROVED BY O. J. Mundell AGENCY HEAD DATE 5-28-70
APPROVED BY W. J. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

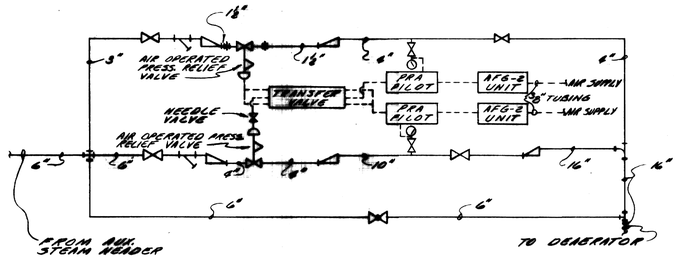
STATE OF KENTUCKY — GUY S. SIMMONS — 1479 — REGISTERED PROFESSIONAL ENGINEER

Cab # 131 Slot A-1 Document # 015332

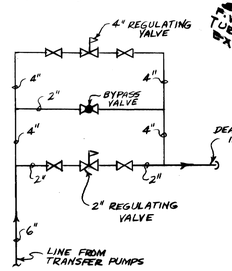
U-5024



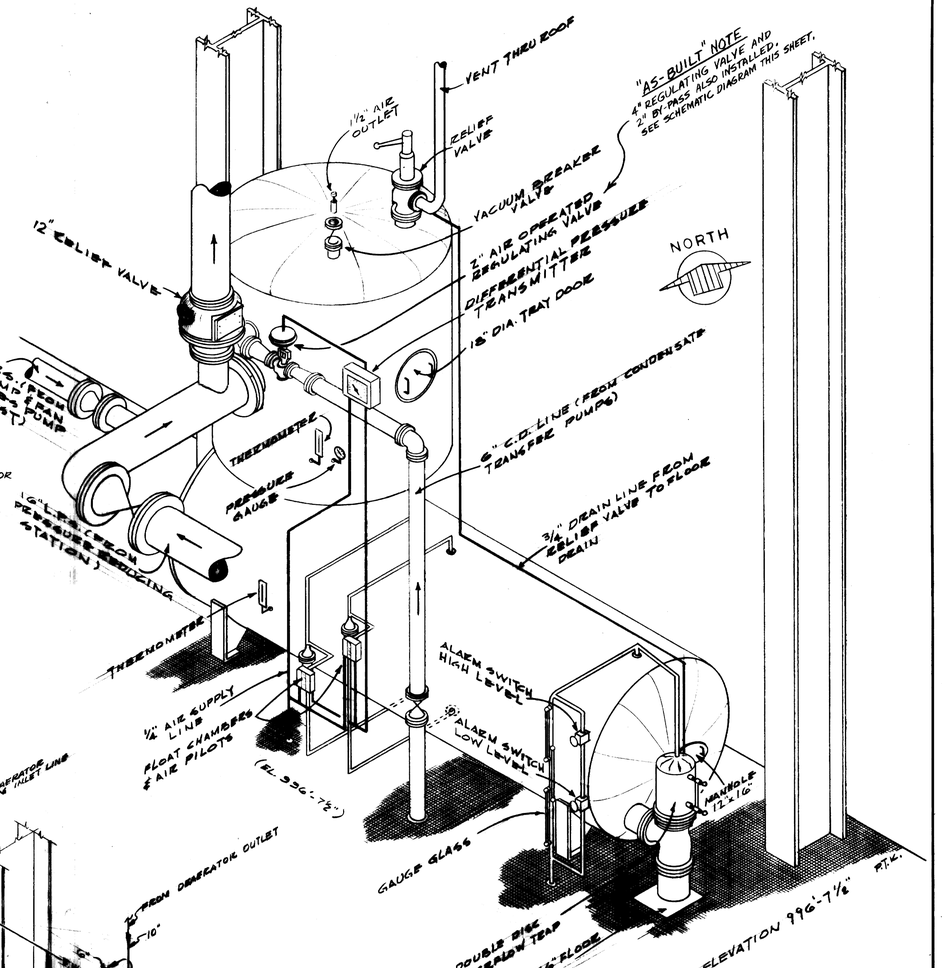
HEAT EXCHANGER & SURGE TANK DETAIL



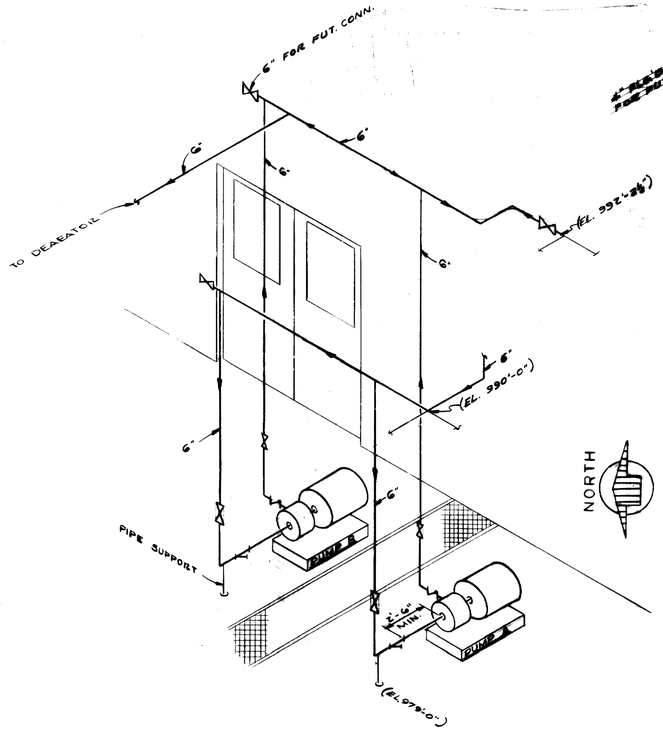
• STEAM PRESSURE REDUCING STATION •
(ECCENTRIC REDUCERS ON HORIZ. PIPING)
(DEAERATOR STEAM)



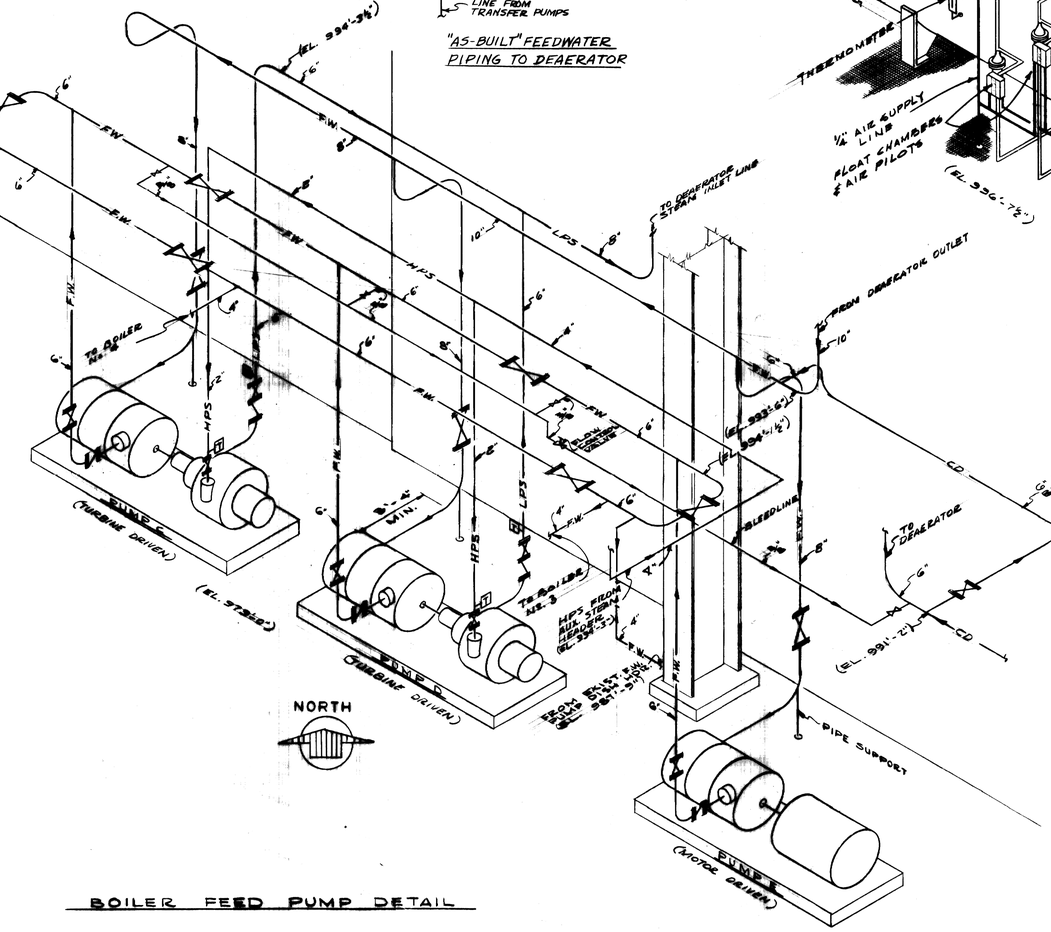
"AS-BUILT" FEEDWATER PIPING TO DEAERATOR



DEAERATOR DETAIL



CONDENSATE TRANSFER PUMP DETAIL



BOILER FEED PUMP DETAIL

NOTES

1. ALL ROTATING EQUIPMENT SHALL BE GROUTED WITH NON-SHRINK GROUT
2. REFER TO SH. M-8 FOR INSTRUMENTATION

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
ADDED 4" REGULATING VALVE & 2" BYPASS AT DEAERATOR FEEDWATER INLET
CHANGED DEAERATOR RELIEF VALVE FROM 10" TO 12"

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

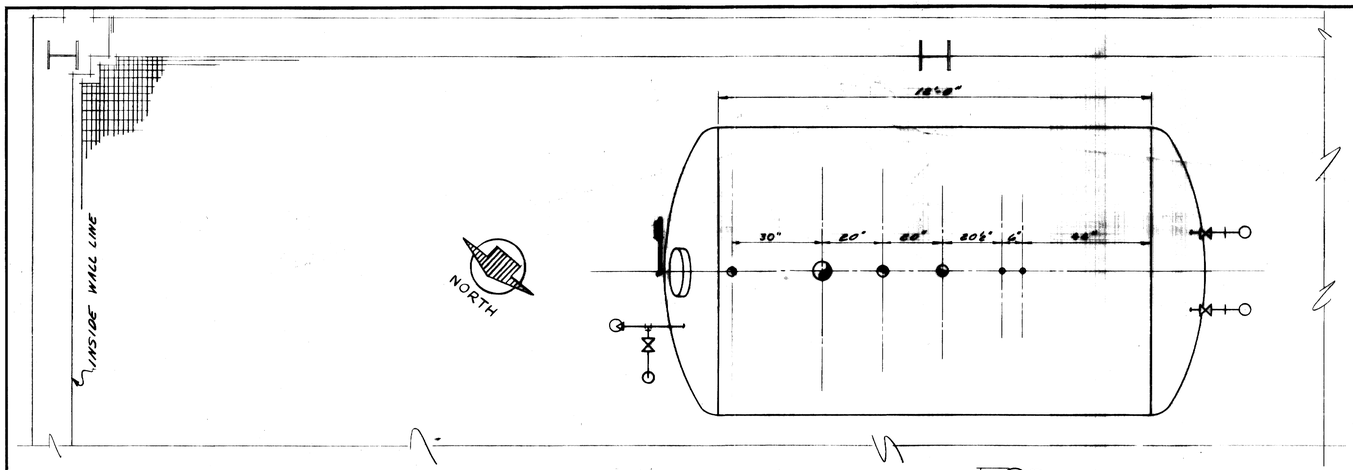
DRAWN BY GEO. F. M.S. P.E.	BOILER FEEDWATER SYSTEM	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE NONE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-14

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.F. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY GEORGE F. SPRAGINS 1470 REGISTERED PROFESSIONAL ENGINEER

Document # Slot Cab #

U-5025



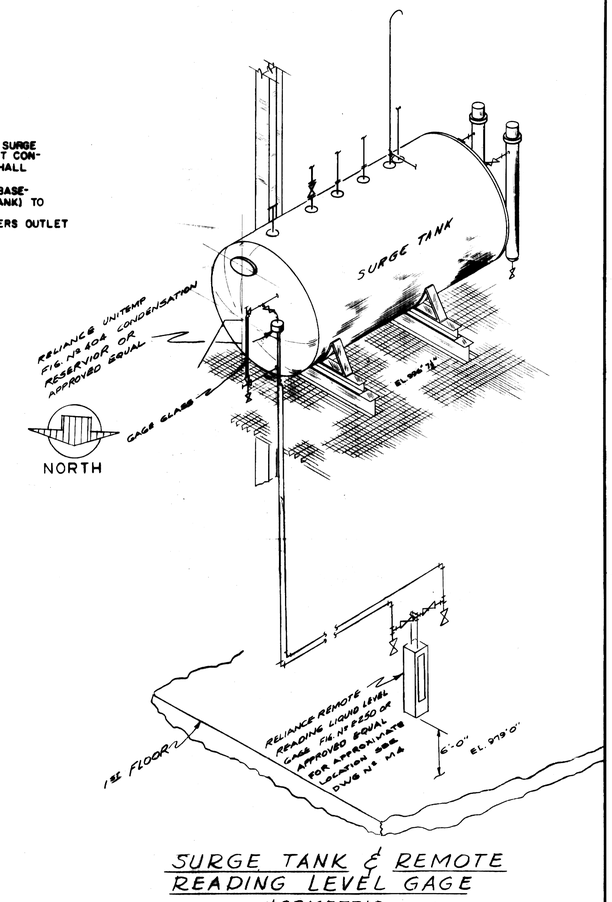
· PLAN ·

NOTE

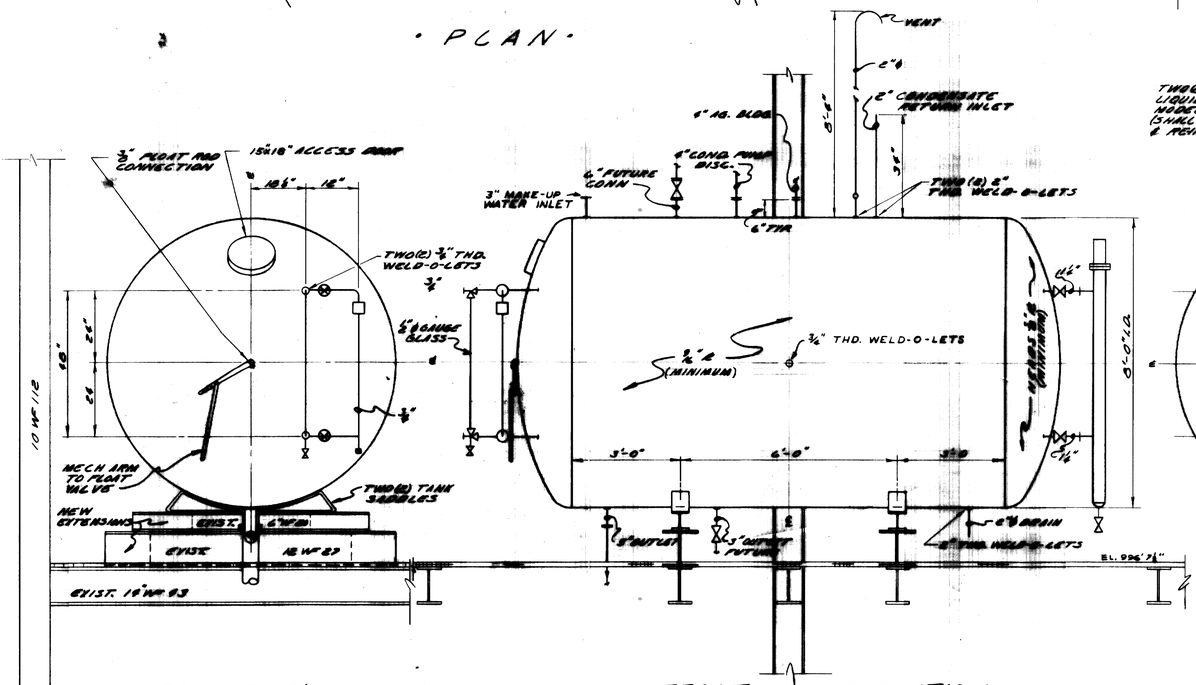
WHILE REPLACING THE EXISTING SURGE TANK WITH THE NEW SURGE TANK, CONTRACTOR SHALL PROVIDE TEMPORARY PIPING TO PERMIT CONTINUOUS OPERATION OF EXISTING BOILERS. TEMPORARY PIPING SHALL INCLUDE:

(1) A 4" LINE FROM THE CONDENSATE LINE (DISCHARGING FROM BASEMENT SUMP AND CONNECTED TO TOP OF EXISTING SURGE TANK) TO THE EXISTING TRANSFER PUMPS INLET MANIFOLD.

(2) A 2" VALVED WATER LINE FROM THE EXISTING WATER SOFTENERS OUTLET MANIFOLD TO THE BASEMENT CONDENSATE PUMP SUMP.



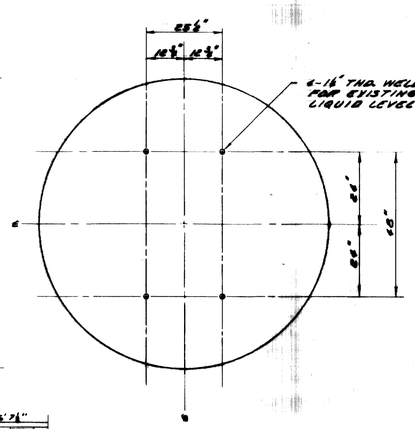
SURGE TANK & REMOTE READING LEVEL GAGE
ISOMETRIC
SCALE 1/4" = 1'-0"



LEFT END (NORTH EAST)

FRONT ELEVATION

· SURGE TANK ·
SCALE: ¼"-1'-0"



RIGHT END (SOUTH WEST)

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY G.F.S. DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY R.M.S.	SURGE TANK	DATE 5-28-70
TRACED BY R.M.S.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-15

APPROVED BY C.J. Bruckel AGENCY HEAD DATE 6-8-70
APPROVED BY W.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY · GEORGE F. SPRAGENS 1479 · REGISTERED PROFESSIONAL ENGINEER

Cab # Slot Document # 015535 A-1 131

U-5026

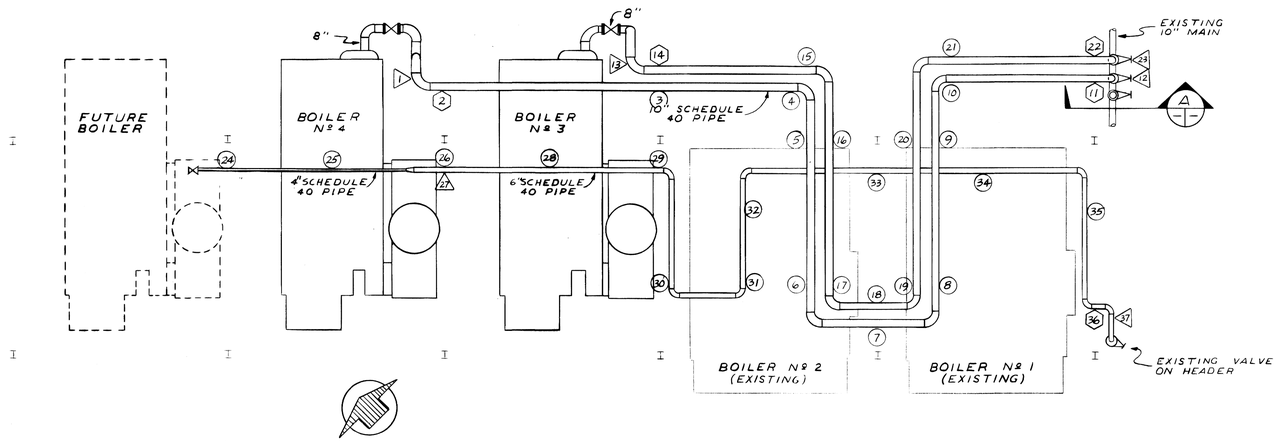
PIPE HANGER SCHEDULE

HANGER NO.	SHOWN ON DRAWING NO.	HANGER TYPE	ROD DIAM. (IN.)	SPRING K (LBS./IN.)	COLD HYDROSTATIC LOAD (LBS.)	HOT OPERATING LOAD (LBS.)	COLD TO HOT PIPE DEFLECTION UP (IN.)
2	M-9,10,16	SPRING-LOADED	1-1/2	600	6,650	4,661	1.08
11	"	" "	1	217-1/2	2,035	1,602	0.80
14	"	" "	1-1/2	600	6,200	4,364	1.08
22	"	" "	1	217-1/2	2,035	1,602	0.80
36	"	" "	3/4	70	753	557	0.80

HANGER NO.	SHOWN ON DRAWING NO.	HANGER TYPE	ROD DIAM. (IN.)
1	M-9,10,16	HORIZONTAL ROD	1/2
12	"	" "	1/2
13	"	" "	1/2
23	"	" "	1/2
27	"	" "	1/2
37	"	" "	1/2
3	M-9,10,16	VERTICAL ROD	3/4
4	"	" "	3/4
5	"	" "	3/4
6	"	" "	3/4
7	"	" "	3/4
8	"	" "	3/4
9	"	" "	3/4
10	"	" "	3/4
15	"	" "	3/4
16	"	" "	3/4
17	"	" "	3/4
18	"	" "	3/4
19	"	" "	3/4
20	"	" "	3/4
21	"	" "	3/4
24	"	" "	5/8
25	"	" "	5/8
26	"	" "	3/4
28	"	" "	3/4
29	"	" "	3/4
30	"	" "	3/4
31	"	" "	3/4
32	"	" "	3/4
33	"	" "	3/4
34	"	" "	3/4
35	"	" "	3/4
38	"	" "	3/8
39	"	" "	3/8
40	M-9,10	" "	3/8
41	M-10	" "	3/8
42	"	" "	3/4
43	M-9,10	" "	3/4
44	M-10	" "	1/2
45	"	" "	3/4
46	"	" "	3/4
47	"	" "	5/8
48	"	" "	1
49	"	" "	3/4
50	"	" "	3/4
51	"	" "	3/4
52	"	" "	3/4
53	"	" "	3/4
54	"	" "	3/4
55	M-9,10	" "	3/4
56	M-10	" "	5/8
57	"	" "	5/8
58	M-9	" "	1/2
59	"	" "	1/2
60	"	" "	1/2
61	"	" "	1/2

NOTES

1. HANGERS INDICATED ON DRAWINGS ARE MINIMUM REQUIRED ON MAINS AND CERTAIN BRANCHES. CONTRACTOR SHALL FURNISH SUPPORTING STEEL, SUPPORTS AND HANGERS FOR ALL NEW AND RELOCATED PIPING WITH SIZES AND SPACING CONFORMING WITH SPECIFICATIONS.
2. ALL STEAM AND CONDENSATE LINES TO BE PITCHED DOWN ½" PER FOOT IN DIRECTION OF FLOW
3. ALL INSTRUMENT COPPER TUBING AND HIGH PRESSURE STEEL TUBING SHALL BE CONTINUOUSLY SUPPORTED BY TRAYS, CHANNELS Z-3425 OR RACKS OF 16-GAUGE MINIMUM THICKNESS, WITH HEMMED EDGE REINFORCEMENT. CONTRACTOR SHALL FURNISH ALL HANGER RODS AND SUPPORTS WITH ¼" MINIMUM ROD DIAMETER AND SUPPORT SPACING 4' MAXIMUM.
4. REFER TO SH. M-8 FOR INSTRUMENTATION
5. ALL PIPE HANGER ASSEMBLIES TO BE HEAVY DUTY RIGID TYPE AS MANUFACTURED BY POWER PIPING, GRINNELL, BERGEN-PATERSON OR APPROVED EQUAL.
6. COLD HYDROSTATIC CONDITION IS COLD PIPE FILLED WITH WATER WITH NO INSULATION.
7. HOT OPERATING CONDITION IS INSULATED PIPE FILLED WITH STEAM AT 250 PSI AND 500°F.
8. SPRING-LOADED HANGERS ARE TO BE PROVIDED WITH INDICATING SCALE WITH RANGE FROM COLD TO HOT OPERATING LOAD
9. FORCES ON BOILER OUTLETS SHALL NOT EXCEED 1000 LBS. AND 4000 FT.-LBS. MOMENT.
10. HANGERS 2 & 14 SHALL BE CONTINUOUSLY MONITORED FOR LOAD CHANGES BETWEEN COLD HYDROSTATIC AND HOT OPERATING CONDITIONS TO INSURE LOAD LIMITS ON BOILER CONNECTIONS ARE NOT EXCEEDED.



PLAN VIEW

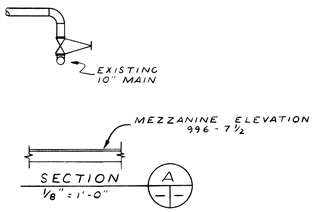
HANGER LEGEND

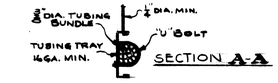
FIGURE - HANGER No & LOCATION

HORIZONTAL ROD HANGER (PERMITS VERTICAL MOVEMENT) ◁

VERTICAL SPRING-LOADED HANGER (11)

VERTICAL ROD HANGER (10)

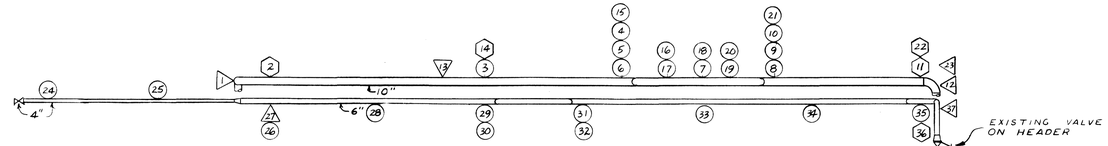


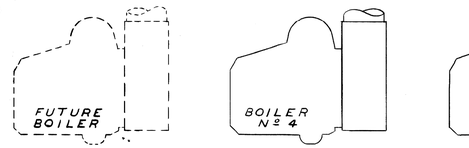


SECTION OF TYPICAL TUBING SUPPORT

PARTIAL INSTRUMENT TUBING TRAY SUPPORT (NO SCALE)

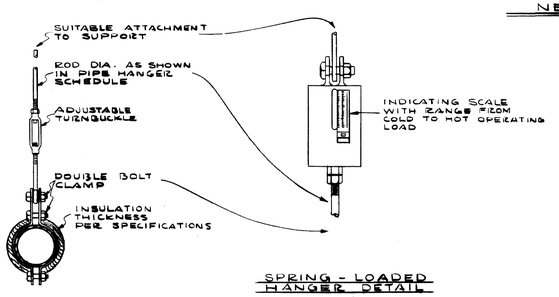
NORTH





ELEVATION

NEW STEAM MAINS (SCALE: ⅛" = 1'-0")



SPRING-LOADED HANGER DETAIL (NO SCALE)

HORIZONTAL OR VERTICAL ROD HANGER DETAIL (NO SCALE)

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

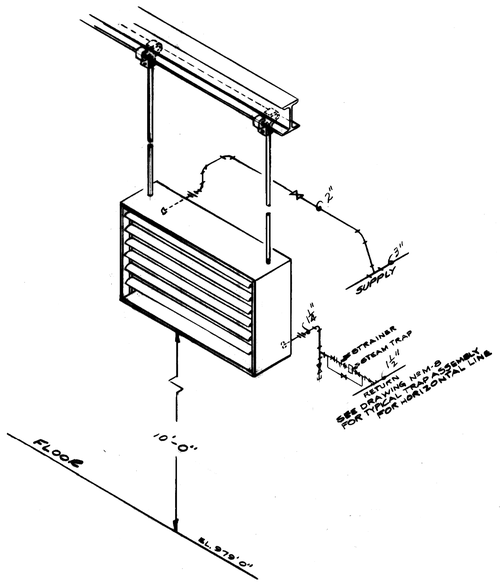
DRAWN BY ALLEN	PIPE SUPPORT DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE ⅛" = 1'-0"
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-16

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY C.T. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

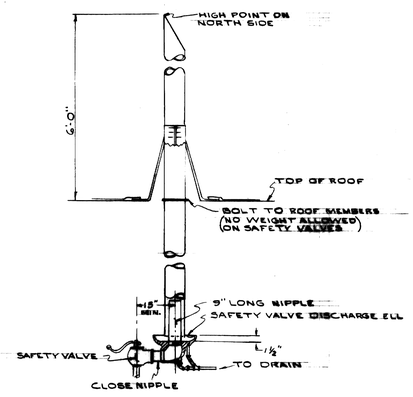
STATE OF KENTUCKY — GEORGE F. STRANGNS 1479 — REGISTERED PROFESSIONAL ENGINEER

U-5027

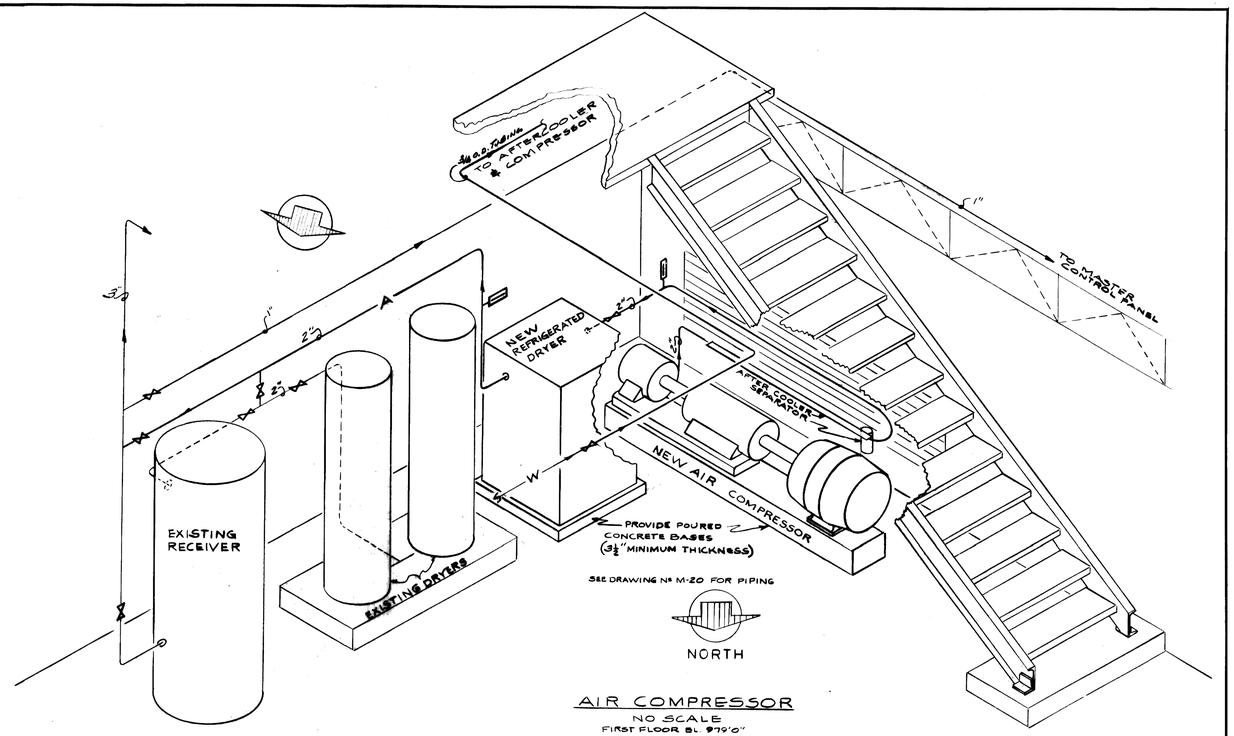
Cab # Slot Document # 015536 A-1 131



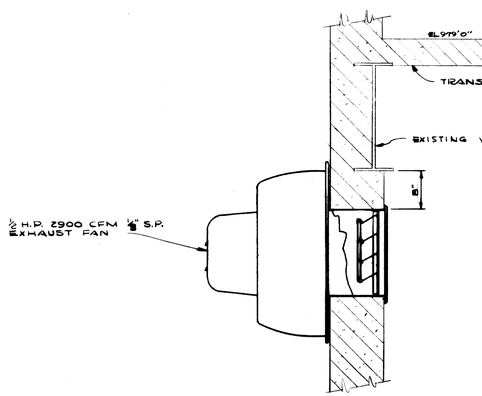
ISOMETRIC VIEW OF TYPICAL UNIT HEATER INSTALLATION
NO SCALE



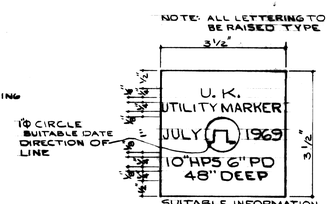
TYPICAL RELIEF VALVE VENT
SCALE- NONE



AIR COMPRESSOR
NO SCALE
FIRST FLOOR EL. 979'-0"

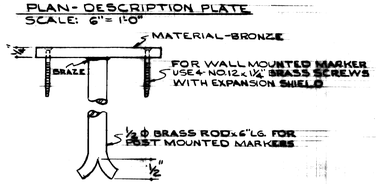


EXHAUST FAN SECTION
NO SCALE
1 / M-4&M-17

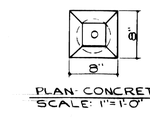


SUITABLE INFORMATION (LETTERING SHOWN FOR EXAMPLE ONLY)

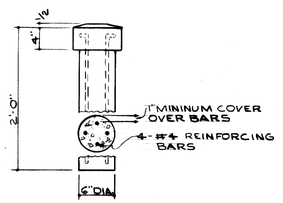
PLAN- DESCRIPTION PLATE
SCALE: 6"= 1'-0"



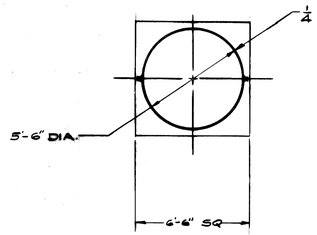
ELEVATION- DESCRIPTION PLATE
SCALE: 6"= 1'-0"

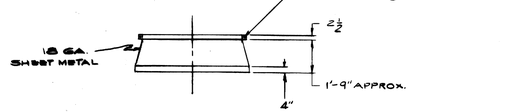


PLAN- CONCRETE POST
SCALE: 1"= 1'-0"



ELEVATION- CONCRETE POST
SCALE: 1"= 1'-0"





DETAIL- BOILER STACK SKIRT
SCALE ¼"= 1'-0"

AS - BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER – SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

NOTE: ALL ROTATING EQUIPMENT SHALL BE GROUTED WITH NON-SHRINK GROUT.

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY	HEATING, VENTILATING, COMPRESSED AIR & DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1/8"=1'-0"
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-17

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

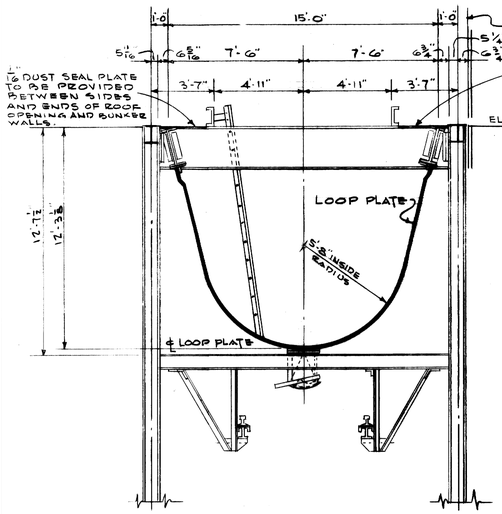
STATE OF KENTUCKY GEORGE F. SPRAGENS 1479 REGISTERED PROFESSIONAL ENGINEER

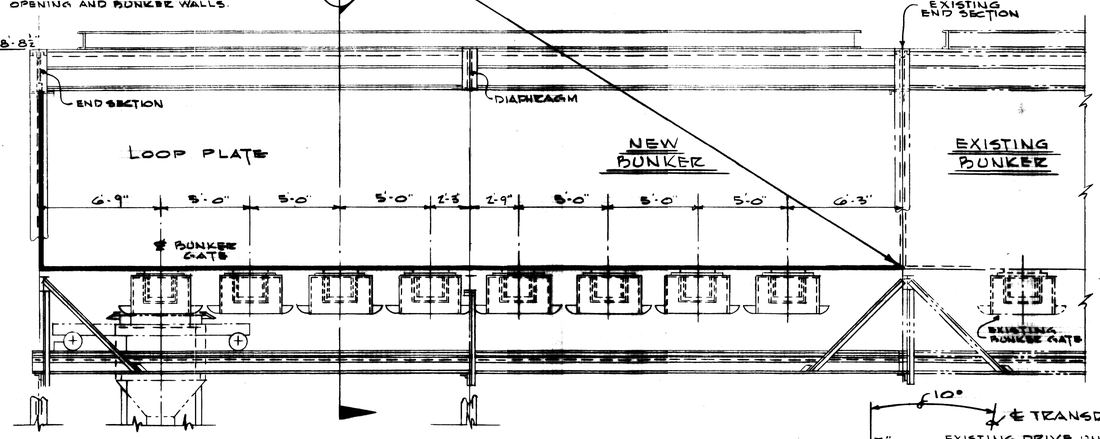
TYPICAL UTILITY MARKER
(SEE DRAWINGS P-1, P-2 & M-2 FOR REQUIRED LOCATIONS)

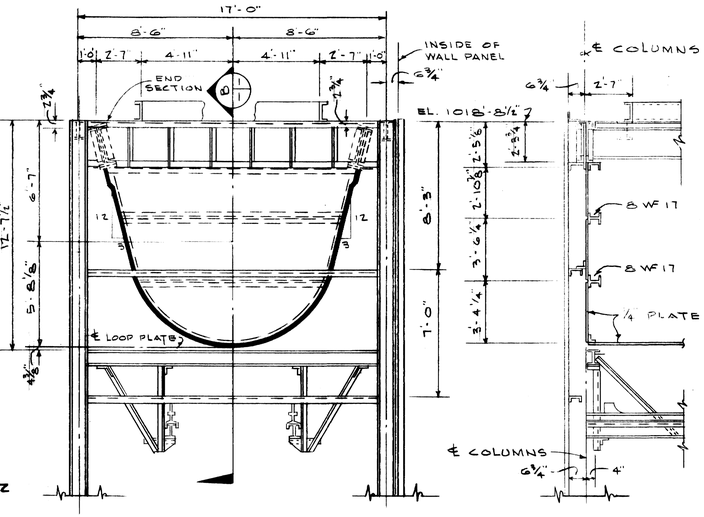
U-5028

Cab # Slot Document # 015337 A-1 171

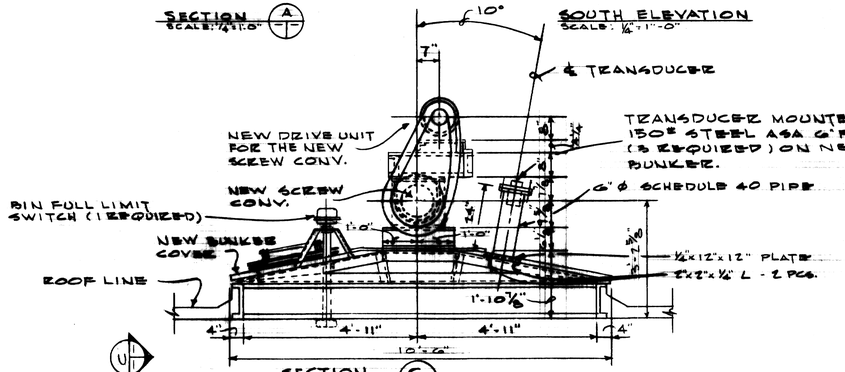
NEW ¼" STEEL LOOP PLATE SHALL BE WELDED CONTINUOUSLY TO EXISTING END PLATE OF EXISTING BUNKER.





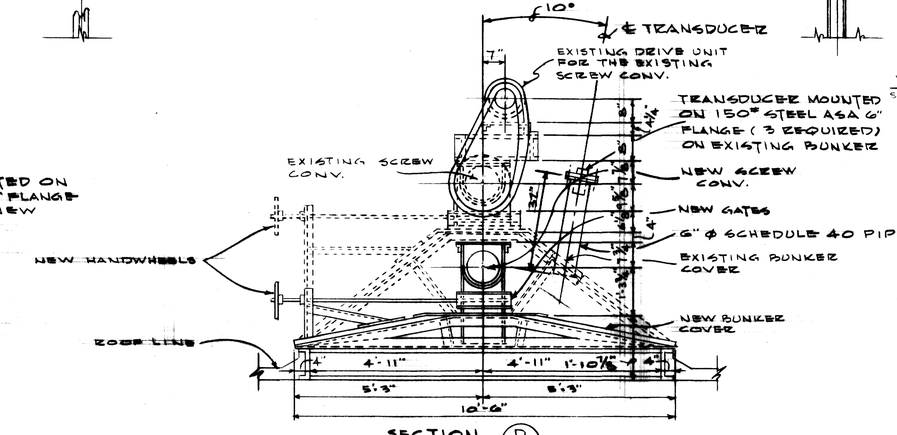


SECTION A
SCALE: 1/4"=1'-0"

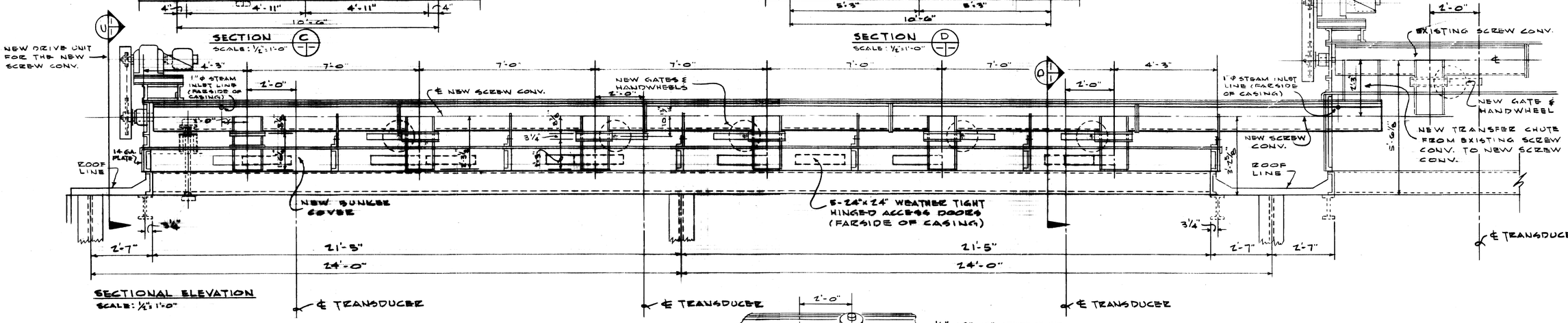


SECTION C
SCALE: 1/2"=1'-0"

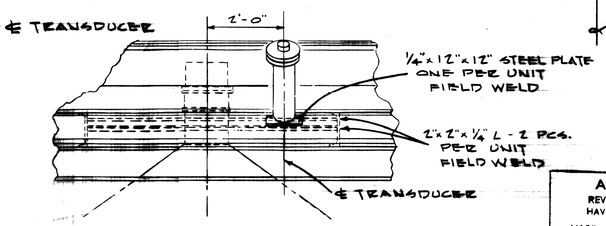
SOUTH ELEVATION
SCALE: ¼"=1'-0"



SECTION D
SCALE: 1/2"=1'-0"



SECTIONAL ELEVATION
SCALE: ½"=1'-0"



AUXILIARY VIEW
TYPICAL TRANSDUCER INSTALLATION
SCALE: ½"=1'-0"

SECTION B
SCALE: ½"=1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

GEORGE F. SPRAGENS 1479 REGISTERED PROFESSIONAL ENGINEER

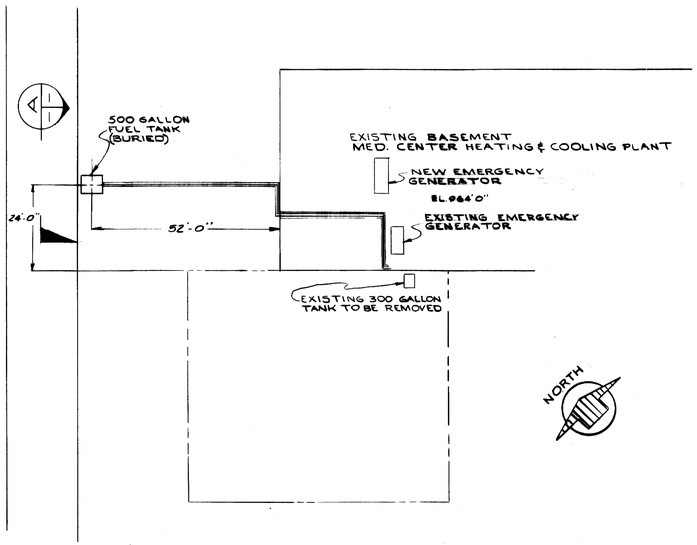
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY P.T.K.	NEW COAL HANDLING EQUIPMENT	DATE 5-28-70
TRACED BY P.T.K.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-18

APPROVED BY C.J. Munsell AGENCY HEAD DATE 5-28-70
APPROVED BY W.F.M. DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

Cab # Slot Document # 015558 A-1 131

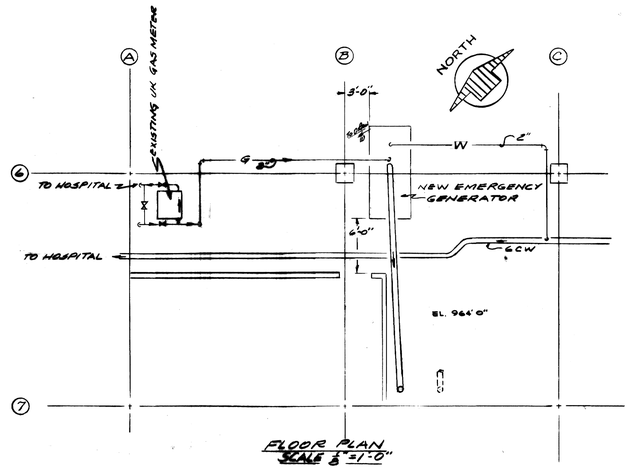
U-5029



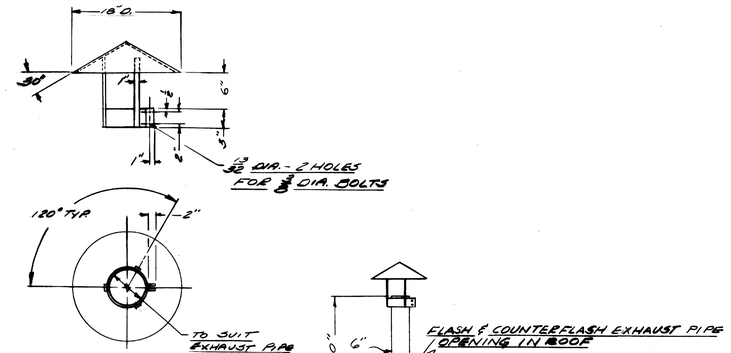
FUEL TANK LOCATION
SCALE: 1"= 20'-0"

INSTALLATION- NEW FUEL OIL TANK FOR EMERGENCY GENERATOR

PIPING DIAGRAM
SCALE: ⅛"=1'-0"

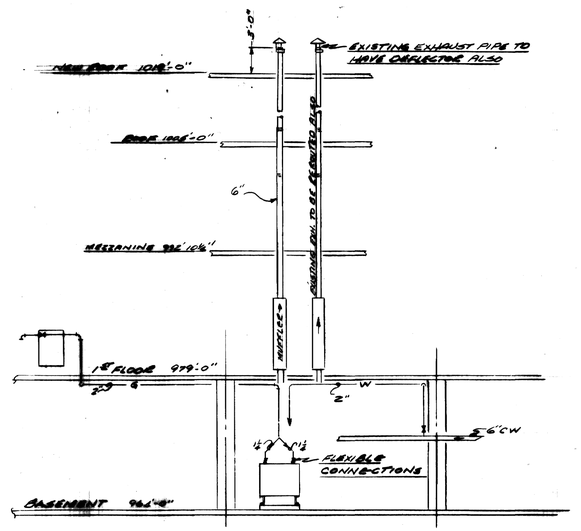


FLOOR PLAN
SCALE ⅛"=1'-0"

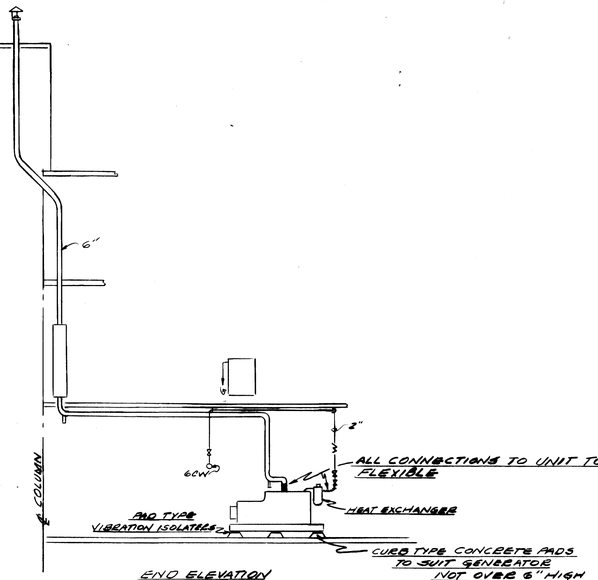


DETAIL EXHAUST DEFLECTOR
SCALE 1"=1'-0"
MATERIAL #304 STAINLESS ST'L. #18 GAGE
2 REQUIRED

DETAIL NEW EXHAUST PIPE THRU ROOF
SCALE ½"=1'-0"



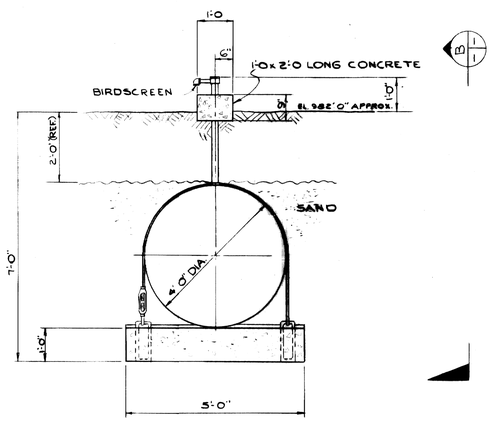
FRONT ELEVATION
SCALE ⅛"=1'-0"

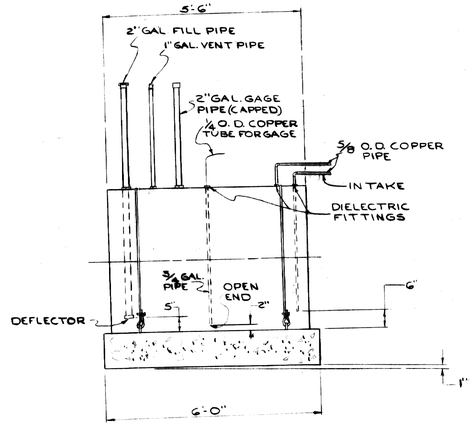


END ELEVATION
SCALE ½"=1'-0"

SIDE ELEVATION
SCALE ½"=1'-0"

INSTALLATION NEW EMERGENCY GENERATOR





AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED IN THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

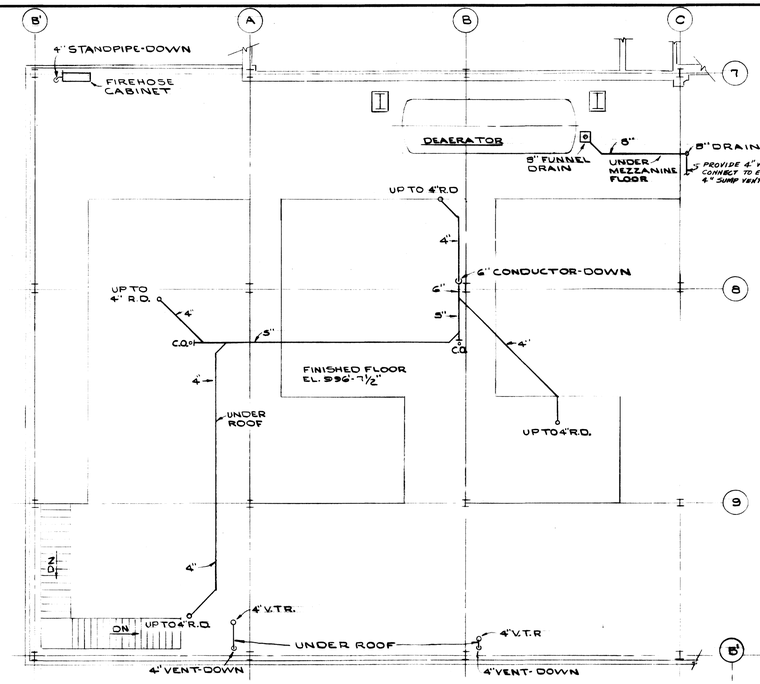
DRAWN BY L.C.	EMERGENCY GENERATOR SYSTEM & DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-19

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.V. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY GEORGE F. SPRAGENS 1479 REGISTERED PROFESSIONAL ENGINEER

Calb.# Slot Document # 015339 A-1 131

U-5030



MEZZANINE FLOOR PLAN

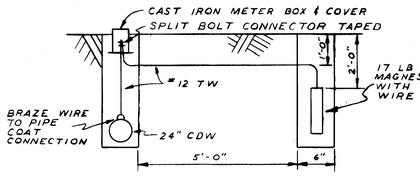
SCALE: ⅛" = 1'-0"

SECTION

SCALE: ⅛" = 1'-0"

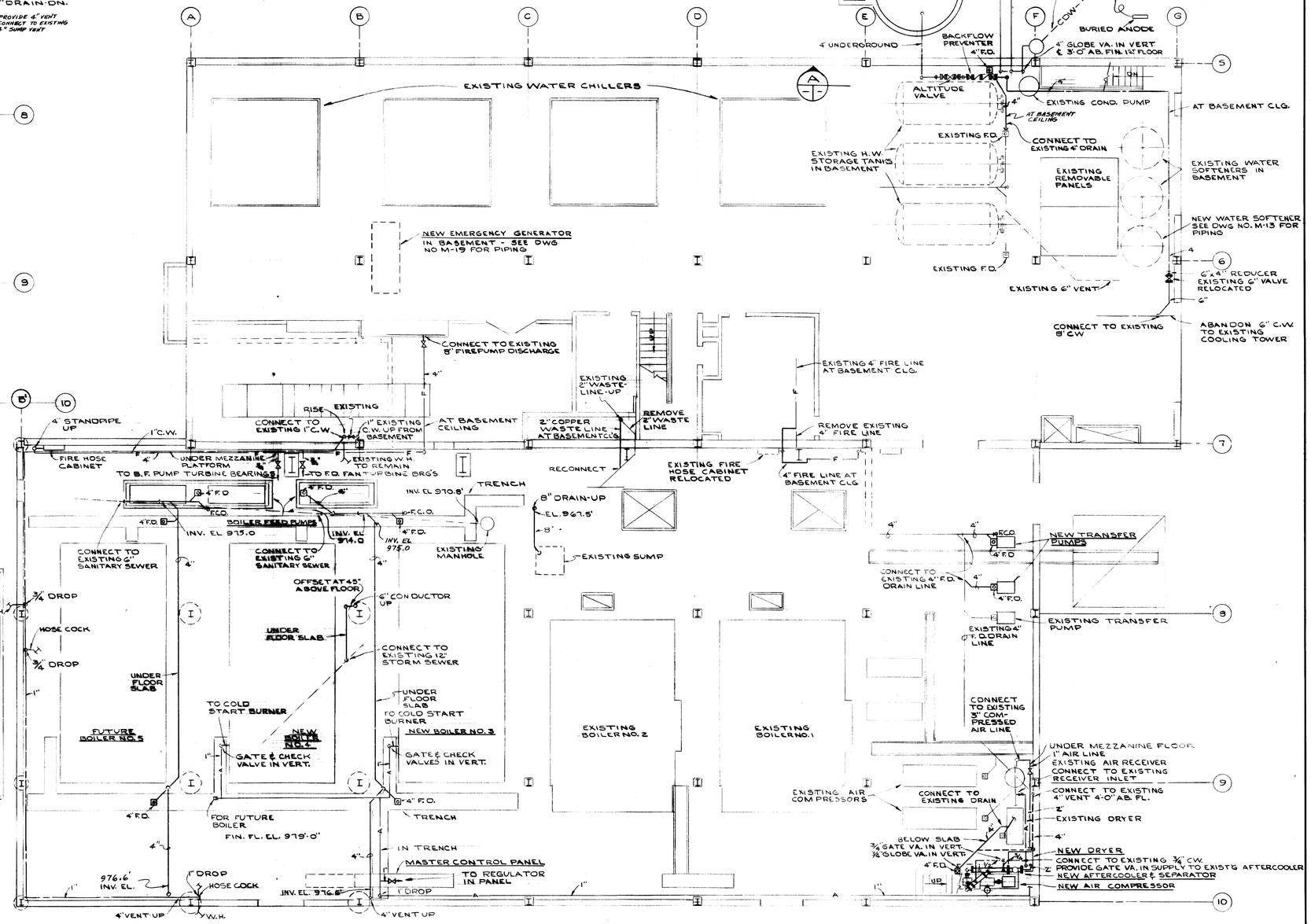
PIPING DIAGRAM AIR COMPRESSOR

NO SCALE



TYPICAL ANODE DETAIL

NO SCALE



FIRST FLOOR PLAN

SCALE: ⅛" = 1'-0"

NOTES

1. WALL HYDRANTS TO BE 24" ABOVE FIN. GR.
2. HOSE COCKS TO BE 3'-0" ABOVE FIN. FL.
3. FIRE HOSE CABINET TO BE LOCATED WITH 1½" HOSE VALVE 5'-0" ABOVE FINISHED FLOOR.
4. FUNNEL DRAIN SHALL BE ZURN NO Z-526 16"x16" TOP, OR APPROVED EQUAL.
5. F.D. FAN TURBINE BEARINGS COOLING WATER DRAINS TO TRENCH. PROVIDE SIGHT FLOW FUNNEL AT EACH BEARING.
6. ALL ROTATING EQUIPMENT SHALL BE GROUTED WITH NON-SHRINK GROUT

AS-BUILT DRAWING

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

REMOVED 3 CLEANOUTS BELOW ROOF DRAINS ON MEZZANINE PLAN

ALTERED VENTS LISTED IN ADDENDUM #2

MISC. ELEVATION & PIPING ALTERATIONS

NORTH

W. A. PITT 7104 REGISTERED PROFESSIONAL ENGINEER — STATE OF KENTUCKY

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY — LEXINGTON, KENTUCKY

DRAWN BY L.C.	PLUMBING SYSTEM & DETAILS	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-20

APPROVED BY C J Marshall AGENCY HEAD DATE 5-28-70

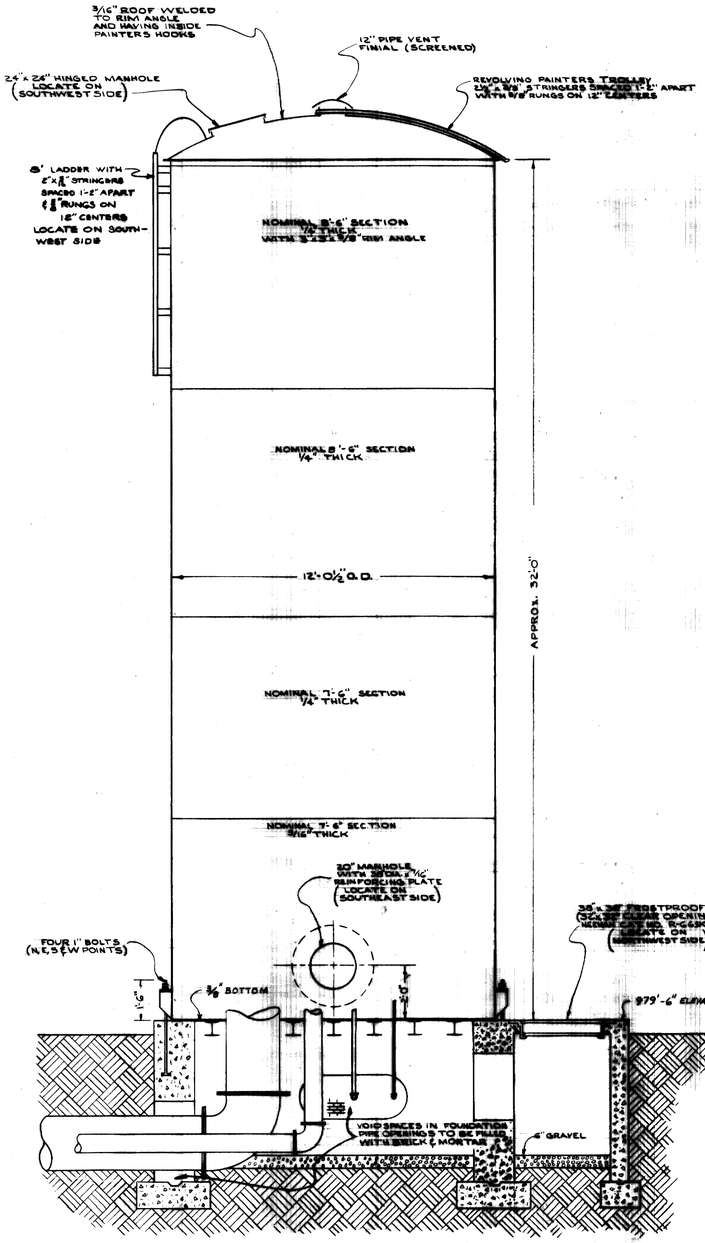
APPROVED BY W. V. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # 131 Shlf A-1 Document # 015340

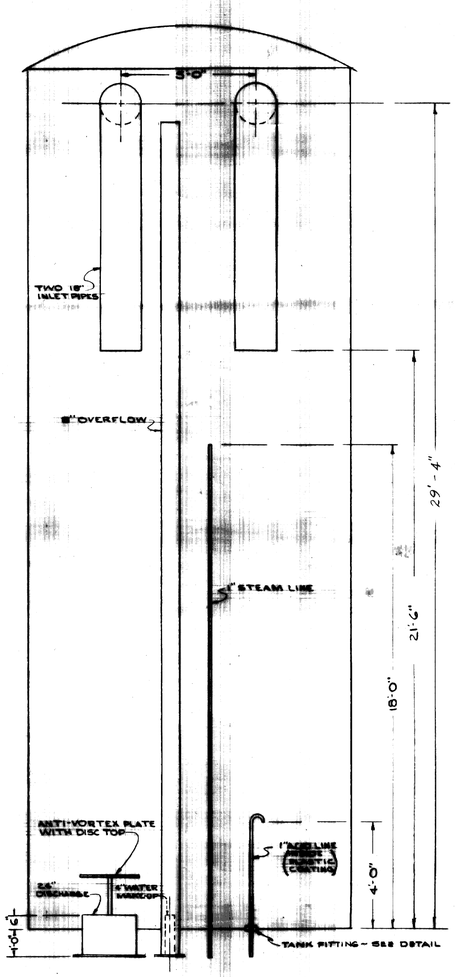
U-5031

NOTE

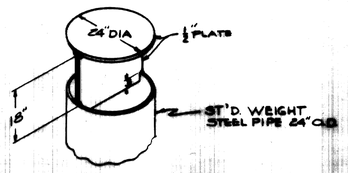
PROVIDE APPROVED INSIDE PIPE SUPPORTS AND SIDE BRACES WITH SUFFICIENT STRENGTH TO WITHSTAND ICE LOADS WHEN STORED WATER IS UNHEATED AT WINTER AMBIENT TEMPERATURES.
INSIDE ½ INCH THICK REINFORCING PLATES (6"x 6" MINIMUM) SHALL BE LOCATED AT ALL ATTACHMENT POINTS OF SUPPORTS TO TANK WALLS



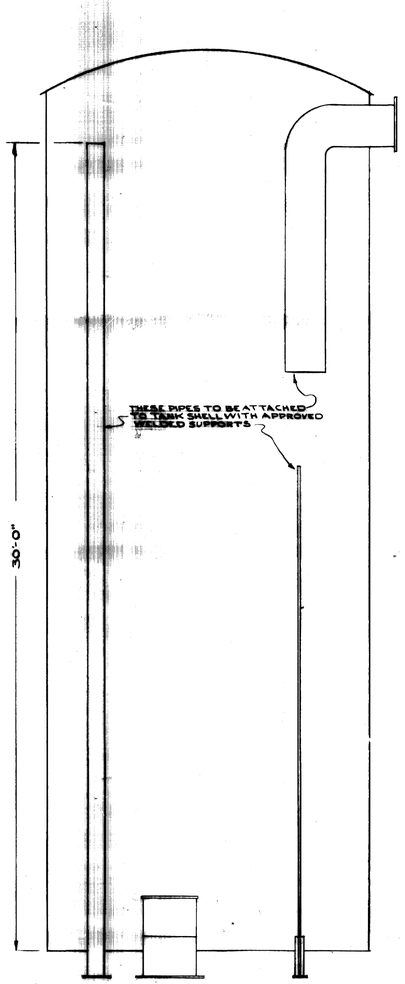
COOLING TOWER WATER STORAGE TANK
SCALE: 3/16" = 1'-0"



VIEWED FROM NORTHEAST SIDE
SCALE: 3/16" = 1'-0"

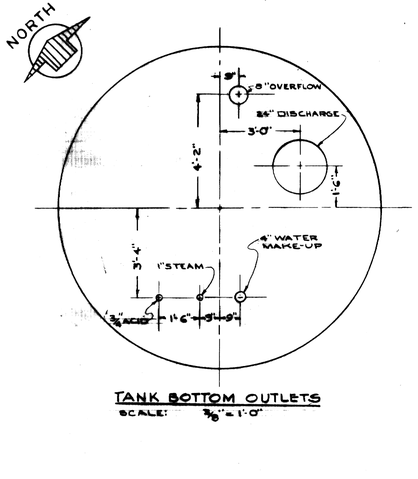


DETAIL OF ANTI-VORTEX PLATE WITH DISC TOP
SCALE: ¾" = 1'-0"

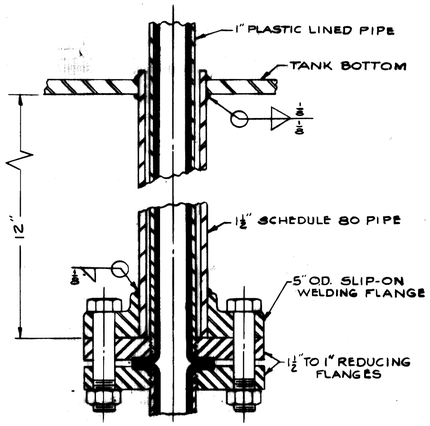


VIEWED FROM NORTHWEST SIDE
SCALE: 3/16" = 1'-0"

INSIDE TANK PIPING



TANK BOTTOM OUTLETS
SCALE: 3/8" = 1'-0"



DETAIL OF TANK FITTING FOR ACID LINE
SCALE - HALF SIZE

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

GEORGE F. SPRAGENS 1470 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

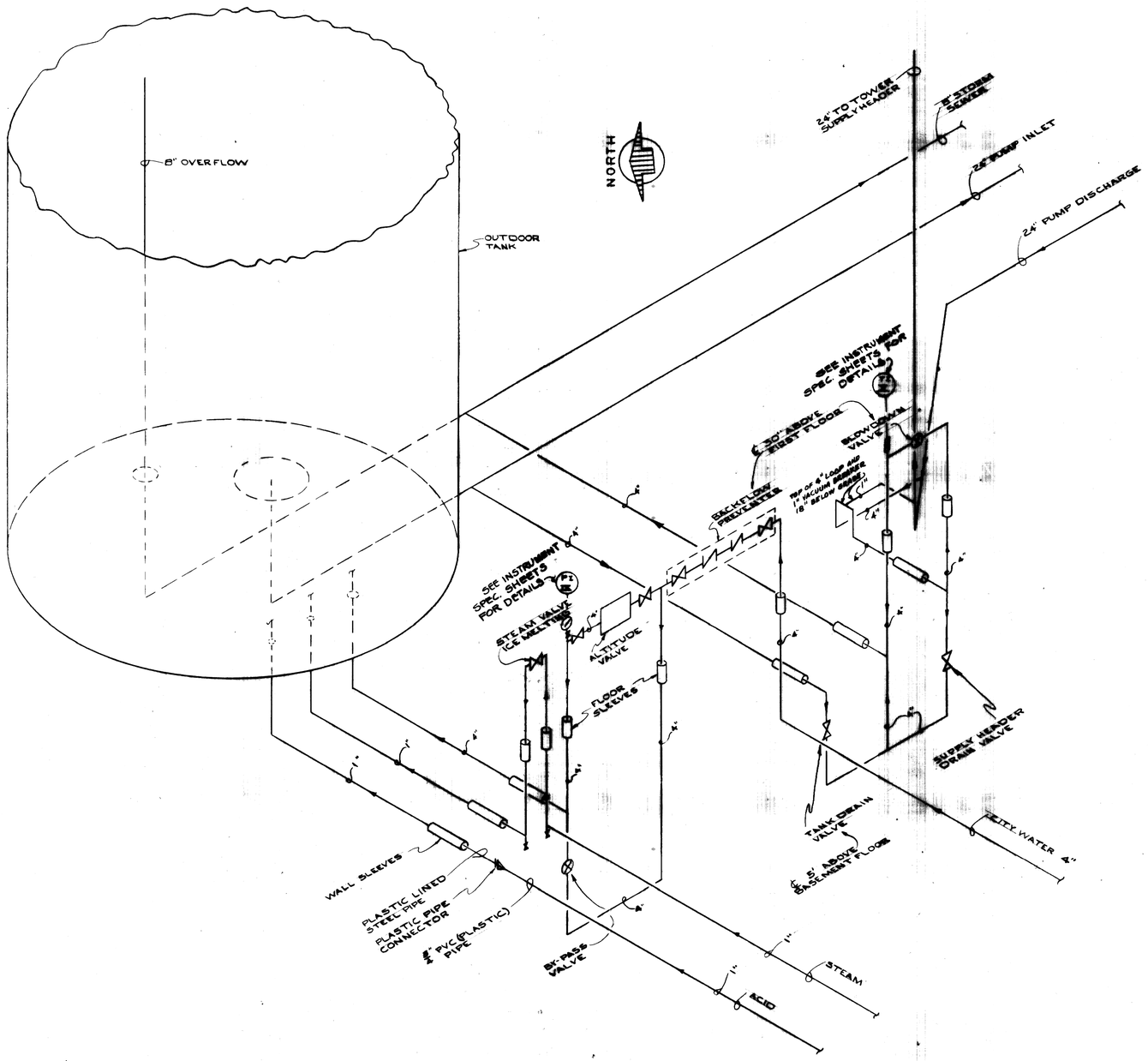
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY	COOLING TOWER WATER STORAGE TANK	DATE 5-28-70
TRACED BY L.C.	MASON & HANGER - SILAS MASON CO., INC. 1860 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-21

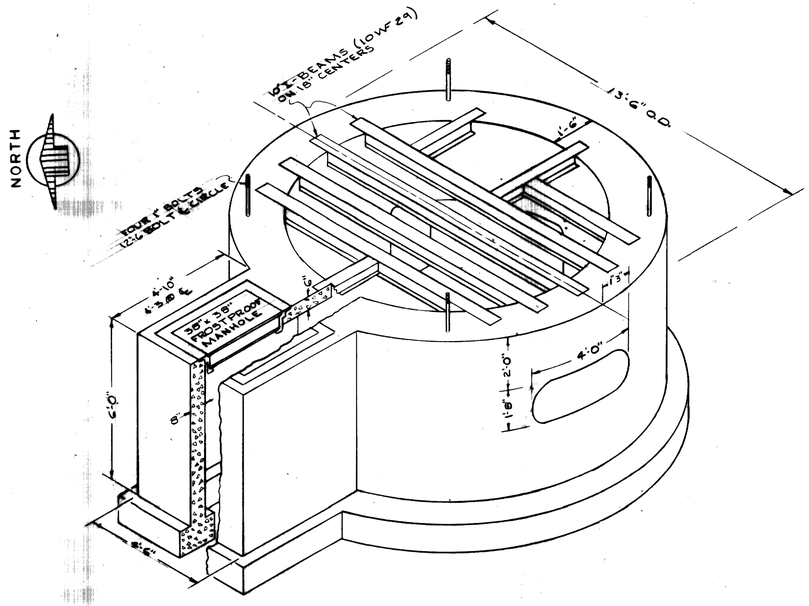
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T. McConnell DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

Cab # 131 Slot A-1 Document # 015541

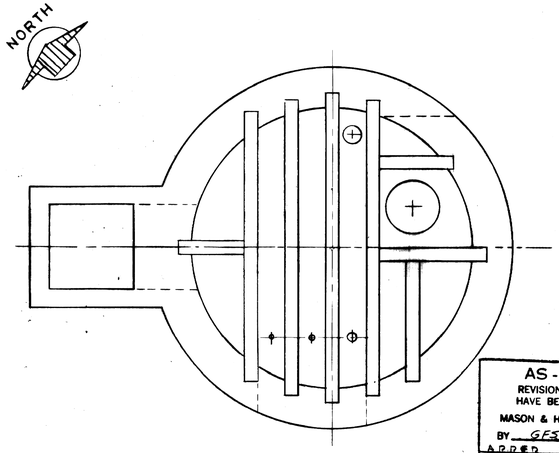
U-5032



PIPING CONNECTIONS TO COOLING TOWER WATER STORAGE TANK



ISOMETRIC VIEW OF TANK FOUNDATION
SEE DWG. NO. S-22 FOR DETAILS



TANK FOUNDATION PLAN
SEE DWG. NO. S-22 FOR DETAILS

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
ADDED 1" VACUUM BREAKER

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

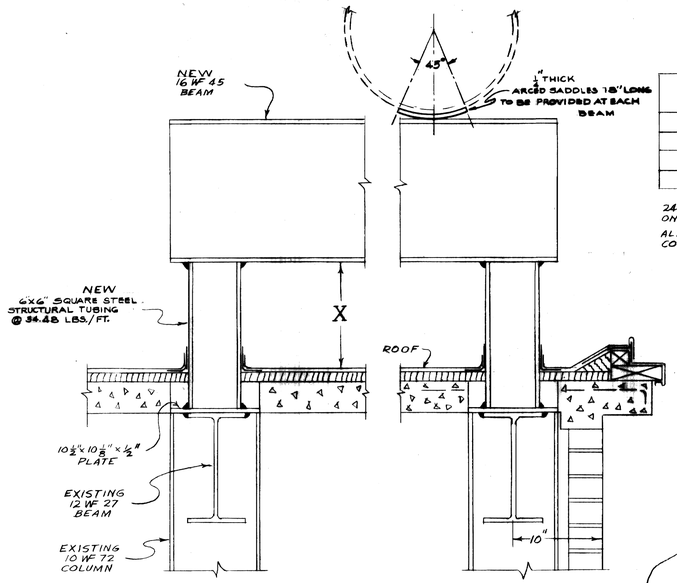
DRAWN BY	COOLING TOWER WATER STORAGE TANK PIPING & FOUNDATION	DATE 5-28-70
TRACED BY L.C.	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE NONE
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-22

GEORGE F. SPRAGENS 1479 REGISTERED PROFESSIONAL ENGINEER — STATE OF KENTUCKY

APPROVED BY _____ AGENCY HEAD DATE 5-28-70
APPROVED BY _____ DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

U-5033

Cab # 131 Slot A-1 Document # 015342

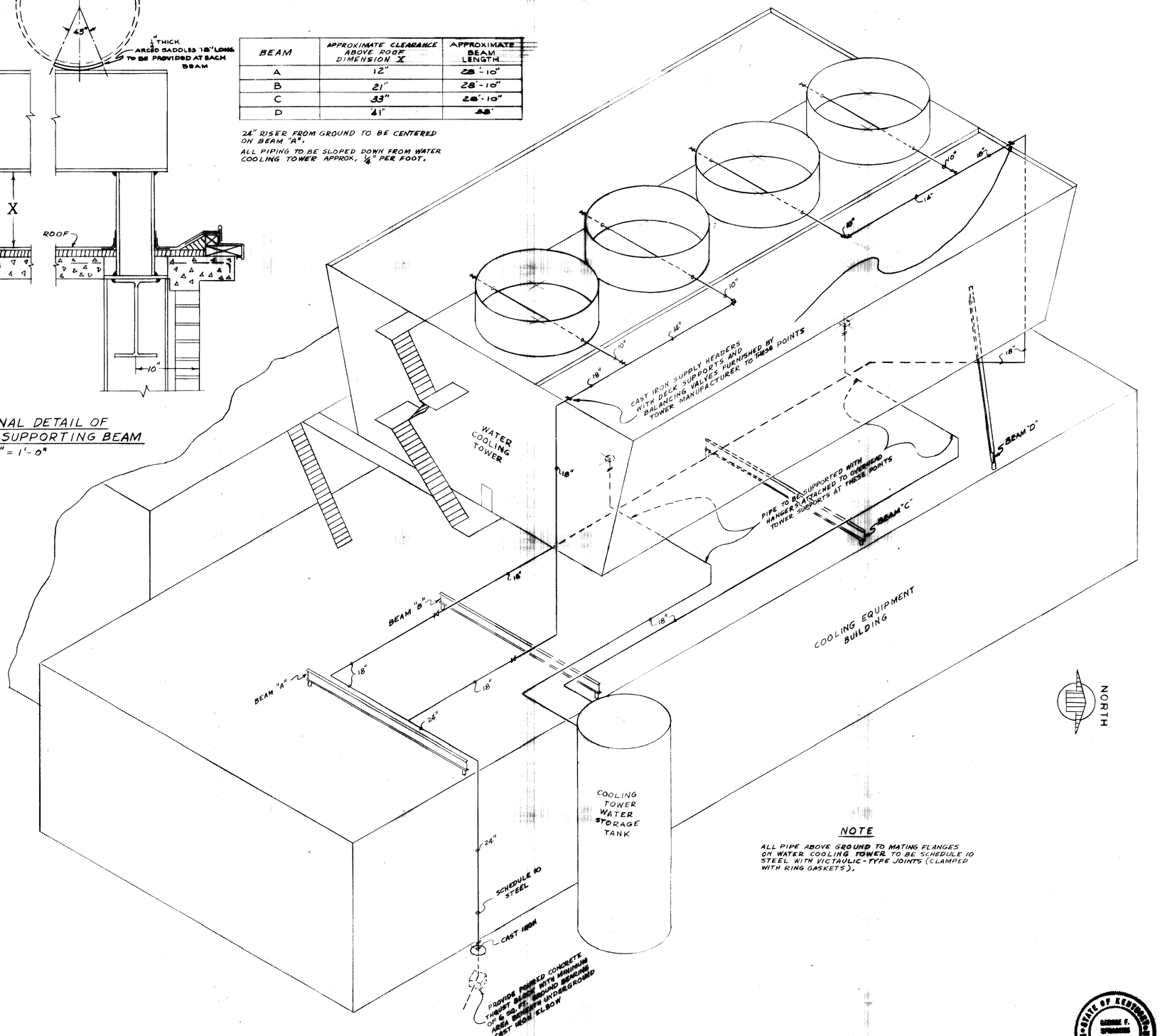


SECTIONAL DETAIL OF
TYPICAL PIPE SUPPORTING BEAM
1½" = 1'-0"

BEAM	APPROXIMATE CLEARANCE ABOVE ROOF DIMENSION X	APPROXIMATE BEAM LENGTH
A	12"	28'-10"
B	21"	28'-10"
C	33"	28'-10"
D	41"	28'

24" RISER FROM GROUND TO BE CENTERED ON BEAM "A".

ALL PIPING TO BE SLOPED DOWN FROM WATER COOLING TOWER APPROX, ¼" PER FOOT.



ISOMETRIC DIAGRAM OF
WATER COOLING TOWER PIPING
⅛" = 1'-0"

NORTH

NOTE

ALL PIPE ABOVE GROUND TO MATING FLANGES ON WATER COOLING TOWER TO BE SCHEDULE 10 STEEL WITH VICTAULIC-TYPE JOINTS (CLAMPED WITH RING GASKETS).

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION
HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
REVISED ROUTING OF SUPPLY LINE
TO N.W. END OF TOWER

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY	WATER COOLING TOWER — PIPING & SUPPORTS	DATE 5-28-70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY GFS		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. M-23

APPROVED BY [signature] AGENCY HEAD DATE 5-28-70
APPROVED BY [signature] DIRECTOR DIVISION OF ENGINEERING DATE 6-1-70

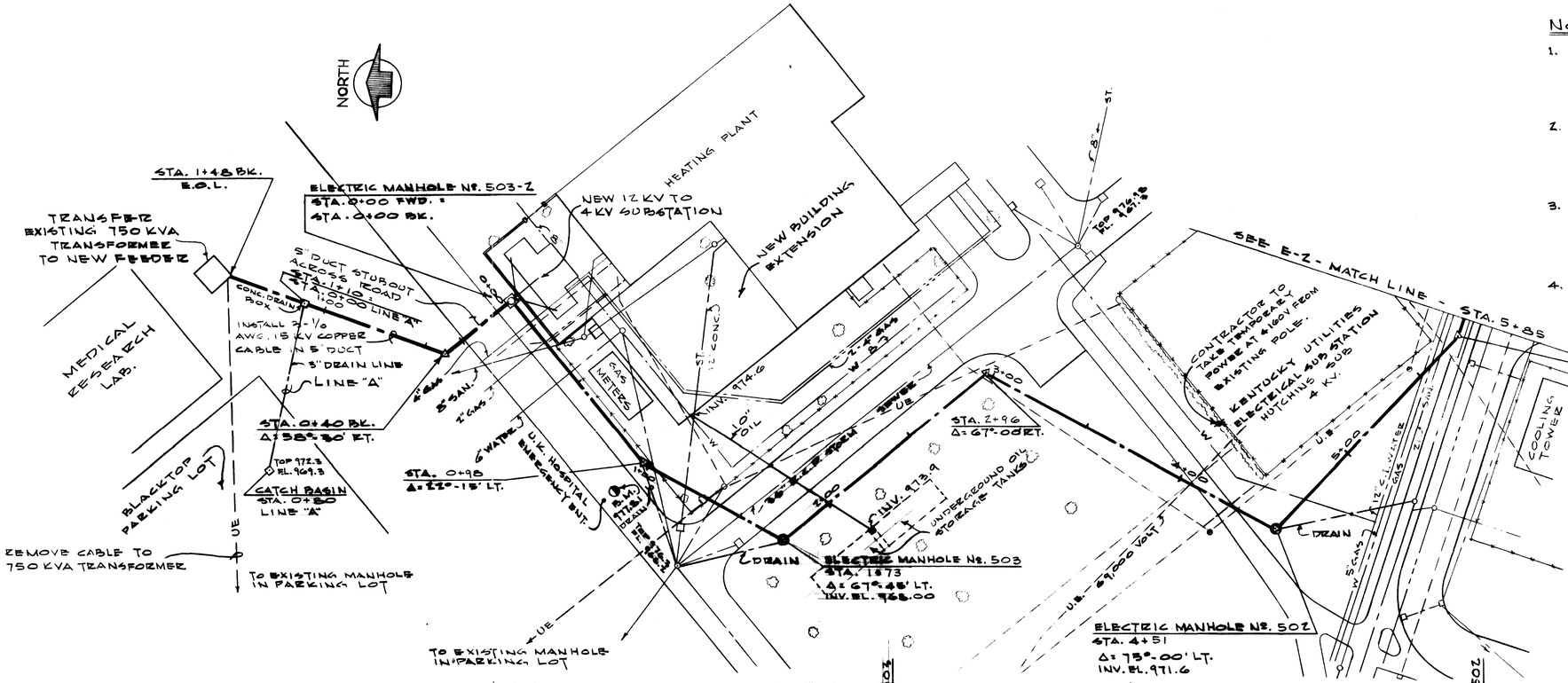
GEORGE F. SPRIGGS 1470 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

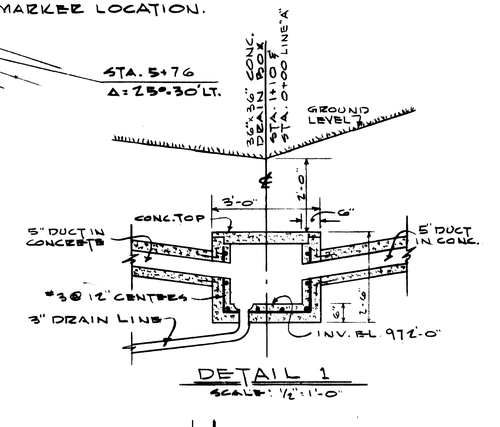
Cab.# 131 Slot A-1 Document# 015343

U-5034

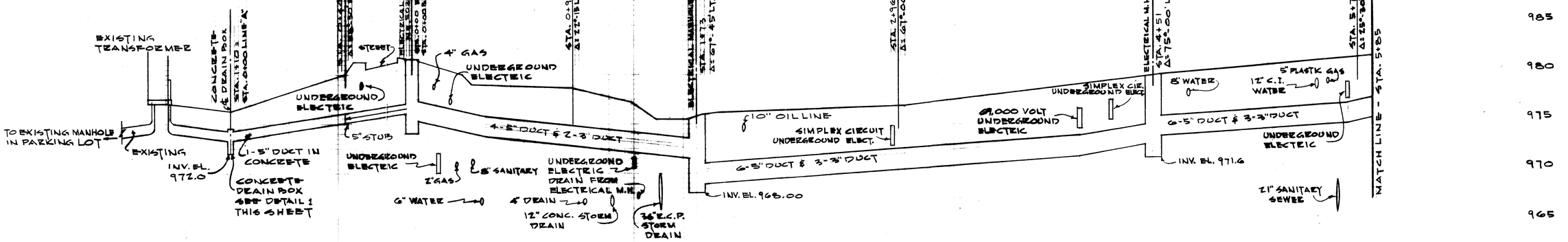
NOTE:

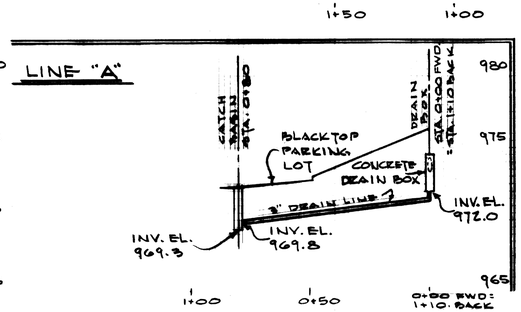
1. ALL UNDERGROUND UTILITIES SHOWN ARE EXISTING & LOCATIONS SHALL BE CONSIDERED APPROXIMATE. IN VACINITY OF HEATING PLANT, CONTRACTOR SHALL COORDINATE UNDERGROUND WORK WITH OTHER TRADES. SEE SHEETS C-2, M-1 & M-2
2. INSTALL NEW DUCT SYSTEM AS SHOWN. INSTALL TWO FEEDERS (3-500 MCM 15 KV COPPER CABLES IN 5" DUCT EACH FEEDER) FROM NEW SUB AT HEATING PLANT TO NEW FEEDER BAY IN KENTUCKY UTILITIES SUB #1
3. RUN 2-#10 THW WIRE FOR LIGHTING IN NEW MANHOLES #503-2, #503 AND 502 IN 3" DUCT. ALSO RUN 2-#8 THW IN SEPARATE 3" DUCT FROM NEW SUB TO NEW OIL CIRCUIT BREAKER IN SUB #1.
4. INSTALL UTILITY MARKER AT EACH ANGLE IN UNDERGROUND LINE (DETAIL 1 E-12. Δ INDICATES MARKER LOCATION.





DETAIL 1
SCALE: 1/2"=1'-0"





AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISION

STATE OF KENTUCKY
J. W. WILSON, III
6964
REGISTERED PROFESSIONAL ENGINEER

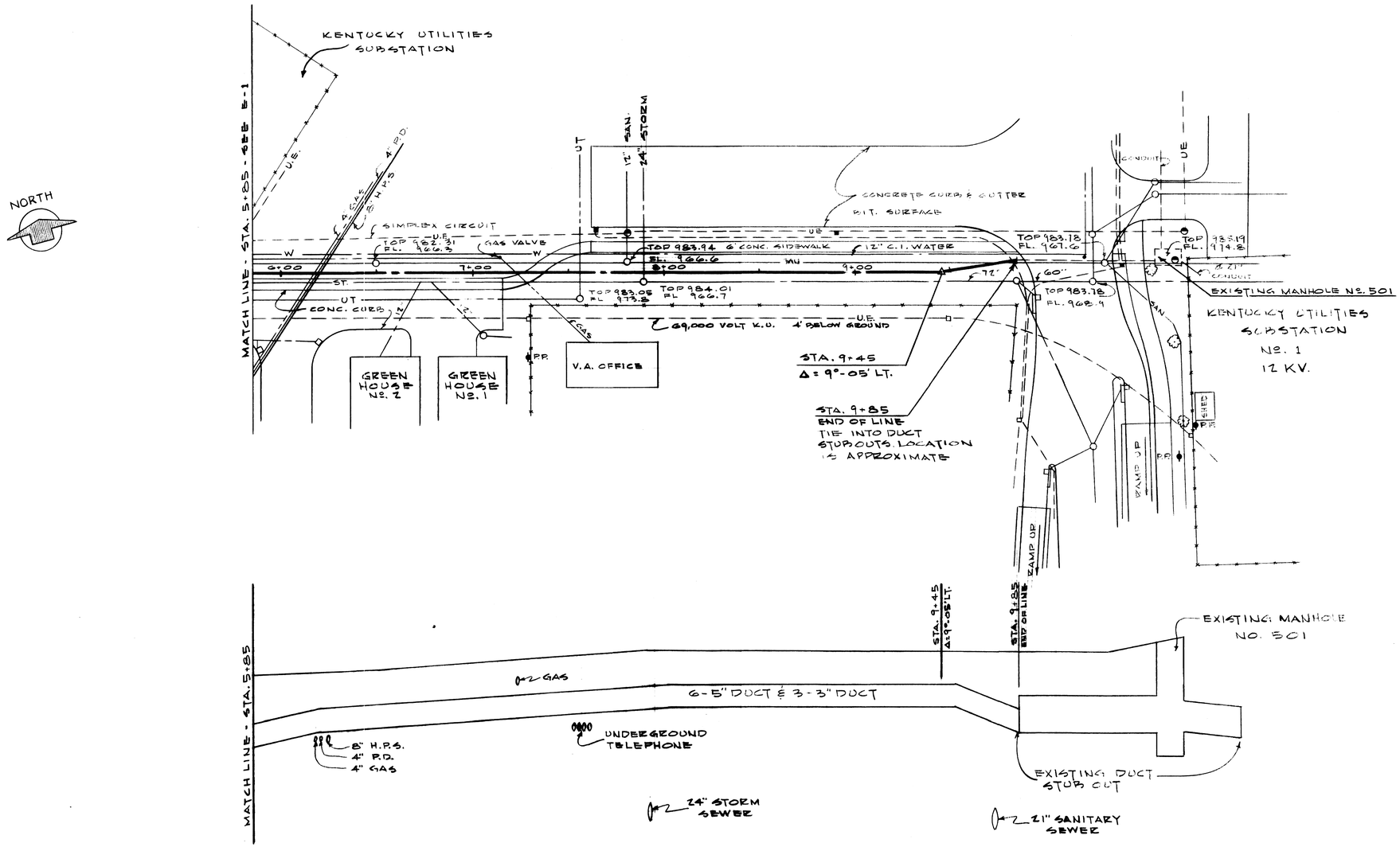
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTE
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCK

DRAWN BY P.T.K.	12 KV CABLE & DUCT PROFILE, H. & C. PLANT END	DATE 5/25/7
TRACED BY P.T.K.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1" = 30'
CHECKED BY J.W.W.		SPEC. NO
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING # E-1

APPROVED BY C. J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W. M. Connell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab. # Slot Document #

U-5035



AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

STATE OF KENTUCKY
J. W. WILSON, II
6964
REGISTERED PROFESSIONAL ENGINEER

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY P.T.K.	12 KV CABLE & DUCT PROFILE, SUB NO. 1 END	DATE 5/28/71
TRACED BY P.T.K.	MASON & HANGER - SILAS MASON CO. INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE 1" = 30'
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT, KENTUCKY	DRAWING NO. E-2

APPROVED BY C.J. Mitchell AGENCY HEAD DATE 5-28-72
APPROVED BY DIRECTOR DIVISION OF ENGINEERING DATE 6-1-70

U-5036

Cab. # Slot Document #

EXISTING SWITCHES

N.C. N.O.

INSTALL 15KV 600A CIRCUIT BREAKER

INSTALL 15KV DISCONNECT SWITCHES

N.C. N.O.

CABLE TERMINATIONS

KENTUCKY UTILITIES CO
12 KV SUBSTATION
NO. 1

PULL IN 2-#10 THW FROM H&C PLANT TO SUPPLY LIGHTS & RECEPTS IN MANHOLES 503-2, 503 & 502. RUN IN 3" DUCT

NEW MANHOLE NO. 502

INSTALL 3-500MCM 15KV COPPER CABLE IN 5" DUCT

NEW MANHOLE NO. 503

INSTALL 2-#8 THW IN 3" DUCT

EXIST'G M.H. IN PARKING LOT

TO LATERAL POLE ON ROSE STREET

RE-SPLICE CABLE

REMOVE EXIST'G CABLE

EXISTING MANHOLE NO. 501

NEW MANHOLE NO. 503-2

INSTALL 3-1/0 AWG 15KV COPPER CABLE IN 5" DUCT

EXIST'G MEDICAL RESEARCH LAB TRANSFORMER

PRESENT FEEDER TO U. OF K. CAMPUS

NEW 12 KV TO 4KV SUBSTATION AT HEATING & COOLING PLANT

5000 KVA

N.C. N.C.

5000 KVA

N.O. N.O.

PR PR

#1 #2

52 52 52

RELAY CONTROL

KENTUCKY UTILITIES CO.
4KV SUBSTATION
"HUTCHINS SUB"

INSTALL 6-500 MCM 15KV COPPER CABLES

EXIST'G MANHOLE

SPLICE

C.T. TERMINAL BOX

DISCONNECT CAPACITOR SECTION BUS FROM BREAKER SECTION BUS

MAKE CONNECTION TO THE 4KV SUBSTATION

PRESENT FEED TO H&C PLANT CONSISTING OF 6-500 MCM 5KV COPPER CABLES. REMOVE ONE 3-CONDUCTOR FEEDER

DISCONNECT BOTH 5KV FEEDERS FROM MAIN BUS & CONNECT ONE FEEDER TO CAPACITOR BUS

4KV BUS

ENTRANCE SECT. AUX. SECT. CAPACITOR SECTION

52 52 52 52 52

EXISTING SWITCHGEAR LINEUP AND FEEDERS TO HOSPITAL COMPLEX LOCATED IN BASEMENT OF HEATING PLANT

FEEDER SECTIONS #1 #2 #3 #4 #5

INSTALL 800/5 AMP CURRENT TRANSFORMERS IN EACH PHASE OF FEEDERS 1, 2, 3, 4 & 5

EXISTING 4KV TO 277/480V UNIT SUBSTATION ON FIRST FLOOR OF H&C PLANT

52 52 52

INSTALL 600 AMP POWER CIRCUIT BREAKER

52 52 52 52 52

SPARES

52 52 52 52 52

INSTALL 3-250 MCM 2½"C TO SECT. 1 OF NEW MOTOR CONTROL CENTER (MCC 4)

C1

C2

C3

INSTALL 3-500 MCM, 3"C TO NEW AUTO-TRANSFER SWITCH FOR NEW EMER. GENERATOR

INSTALL 3-500 MCM, 3"C TO SECT. 2 OF NEW MOTOR CONTROL CENTER (MCC4)

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER - SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY J.W.W.	MAIN POWER SCHEMATIC	DATE 5/28/70
TRACED BY N.Q.	MASON & HANGER-SILAS MASON CO., INC. 1300 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-3

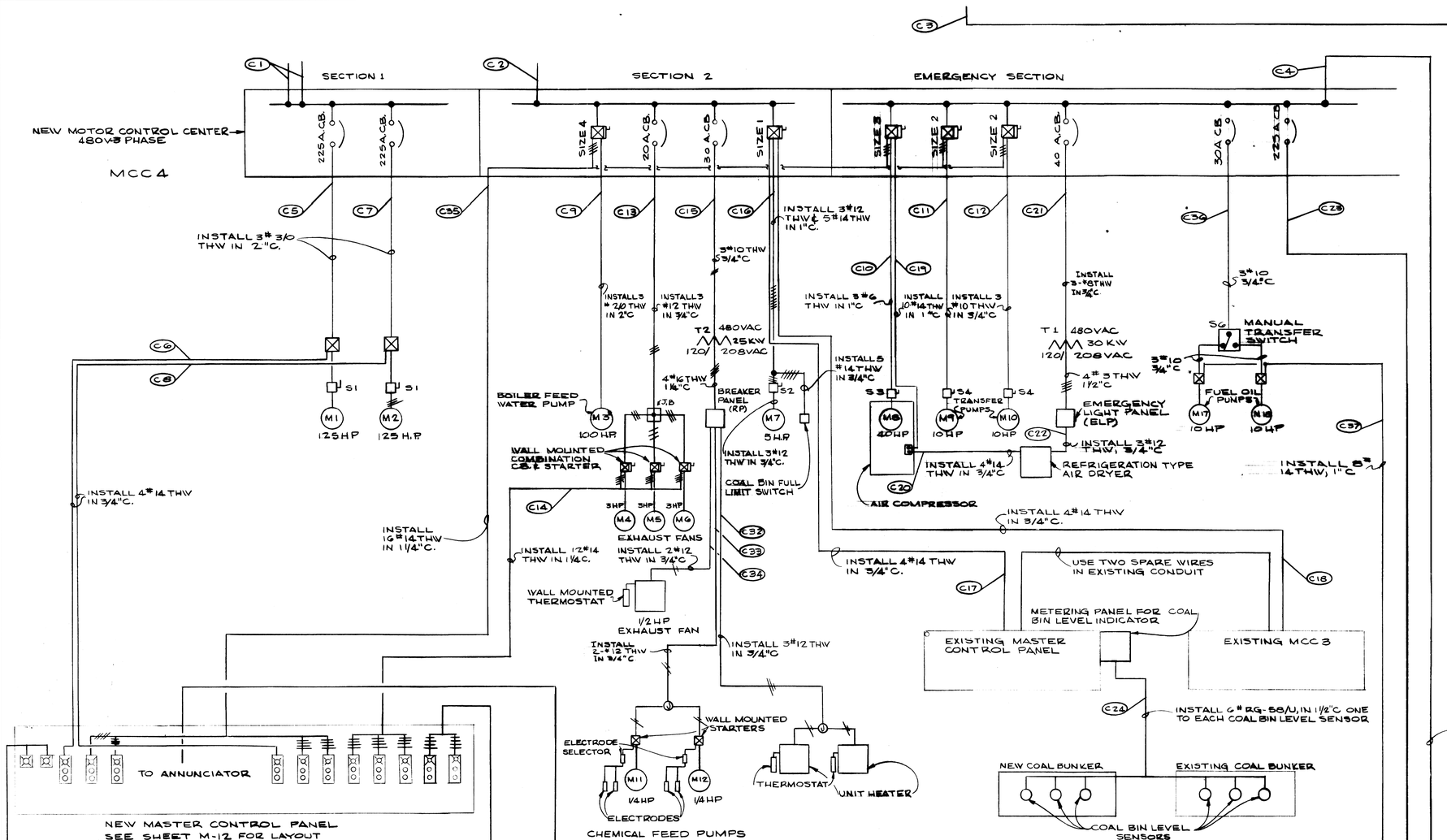
STATE OF KENTUCKY J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER

APPROVED BY C. J. Marshall AGENCY HEAD DATE 5-28-70

APPROVED BY C. T. McCormick DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # Slot Document # 014536

U-5037



MOTOR SCHEDULE

M1	NEW BOILER #3 DRAFT FAN MOTOR
M2	" " #4 " " "
M3	BOILER FEED PUMP
M4	ROOF EXHAUST FANS
M5	ROOF EXHAUST FANS
M6	ROOF EXHAUST FANS
M7	SCREW COAL CONVEYOR MOTOR
M8	AIR COMPRESSOR MOTOR
M9	TRANSFER PUMP
M10	TRANSFER PUMP
M11	CHEMICAL FEED PUMP
M12	CHEMICAL FEED PUMP
M13	COOLING TOWER FANS
M14	COOLING TOWER FANS
M15	COOLING TOWER FANS
M16	COOLING TOWER FANS
M17	FUEL OIL PUMPS
M18	FUEL OIL PUMPS

LEGEND

- COMBINATION CIRCUIT BREAKER & MOTOR STARTER
- MOTOR STARTER
- SAFETY DISCONNECT SWITCH
- START-STOP PUSHBUTTON STATION WITH RED RUNNING LIGHT
- MOTOR STARTER WITH PUSH BUTTON STATION

EQUIPMENT SCHEDULE

NOTE
ALL SWITCHES ARE 3 POLE, 480VAC NON FUSABLE TYPE

- S1 200 AMP SAFETY SWITCH IN NEMA 1 ENCLOSURE
- S2 30 AMP SAFETY SWITCH IN NEMA 3R ENCLOSURE
- S3 100 AMP SAFETY SWITCH IN NEMA 1 ENCLOSURE
- S4 30 AMP SAFETY SWITCH IN NEMA 1 ENCLOSURE
- S5 100 AMP SAFETY SWITCH IN NEMA 3R ENCLOSURE
- S6 30 AMP DOUBLE THROW SWITCH IN NEMA 1 ENCLOSURE

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CHANGED STARTER & WIRE SIZES TO M-9 & M-10

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

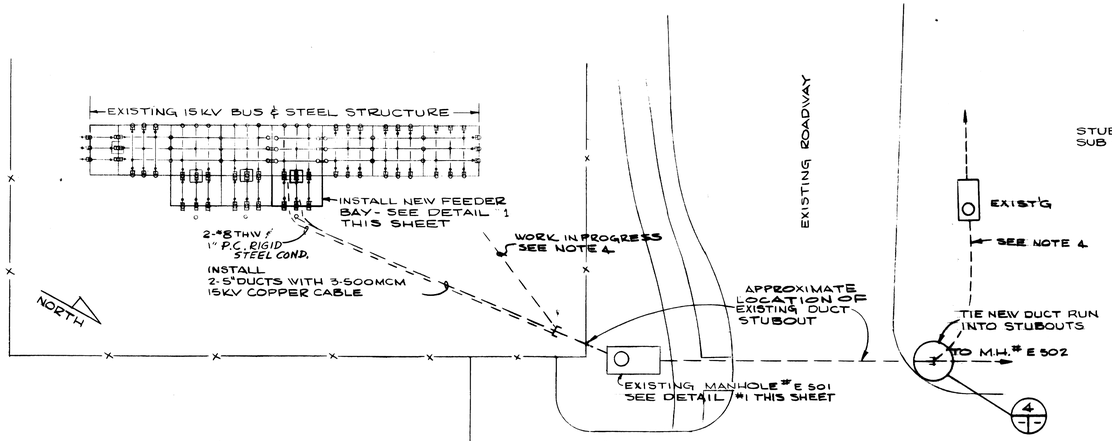
DRAWN BY M.P.	DISTRIBUTION SCHEMATIC	DATE 5/28/70
TRACED BY N.Q.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-4

STATE OF KENTUCKY J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER

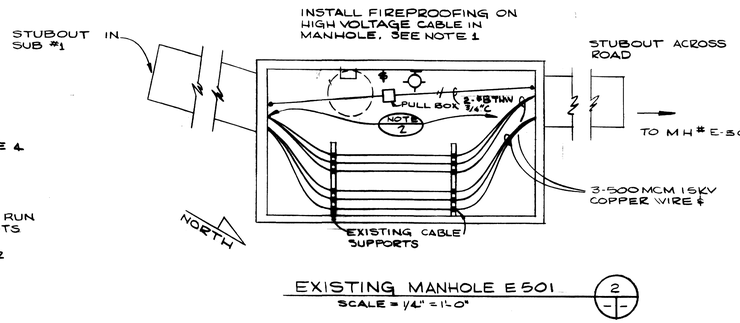
APPROVED BY C. J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY J. W. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # Slot Document # 131 A-1 015347

U-5038



KENTUCKY UTILITY SUBSTATION #1
15 KV BUS DETAIL
NO SCALE

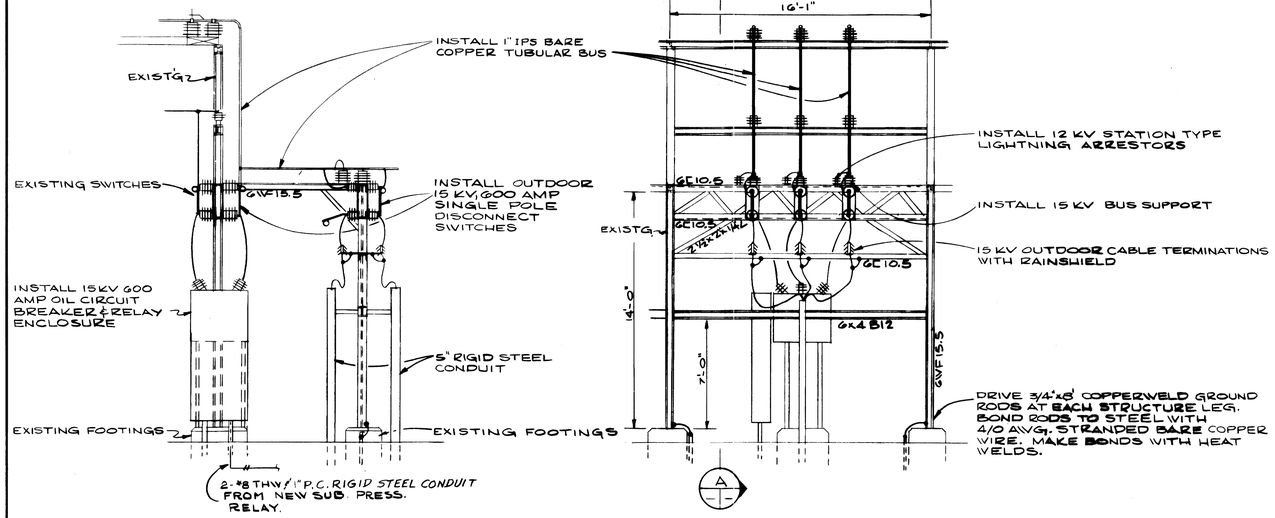


EXISTING MANHOLE E 501
SCALE = 1/2" = 1'-0"

2

NOTES

1. FIREPROOF CABLE WITH DOUBLE WRAP OF ELECTRIC ARC & FIREPROOF TAPE. FIRST WRAP SHALL BE HALF LAP AND THE SECOND WRAP SHALL BE A BUTT WRAP.
2. UTILIZE 2-5" DUCTS AT LOWEST ELEVATION AVAILABLE IN DUCT BANK.
3. SUBSTATION FRAMEWORK STEEL SHALL MATCH EXISTING. NOTED DIMENSIONS ARE APPROXIMATE.
4. WORK IN PROGRESS CONNECTED WITH AG. SCIENCE # 2 BLDG. CONTRACTOR SHALL AVOID CONFLICT.

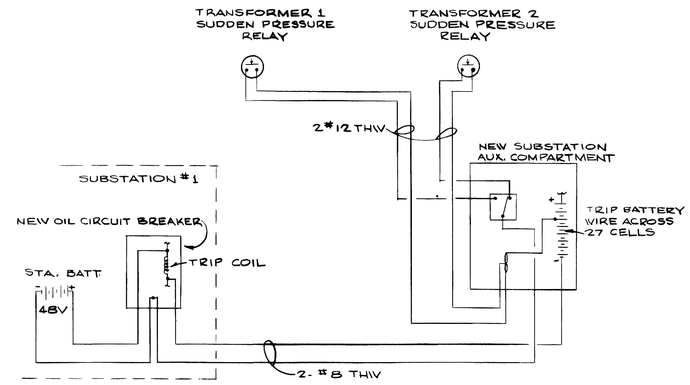


NEW FEEDER BAY DETAIL
SCALE 1/4" = 1'-0"

A

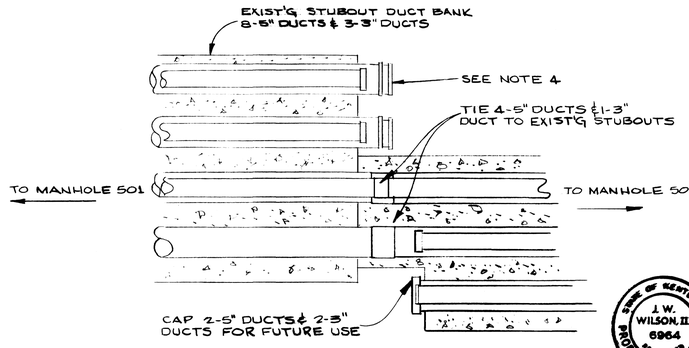
DETAIL
SCALE 1/4" = 1'-0"

1



NEW SUB. SUDDEN PRESSURE RELAY DETAIL

3



DUCT JUNCTION DETAIL
SCALE 1"=1'-0"

4

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CHANGED CAST IRON UNIZHEG ROUND CONDUIT TO PLASTIC COATED RIGID STEEL.

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

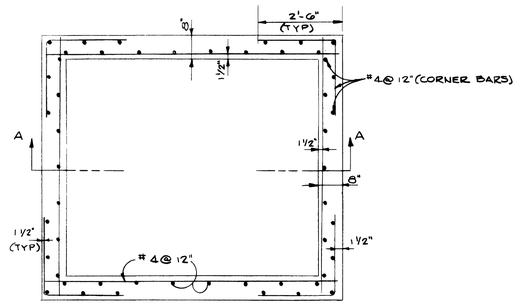
DRAWN BY J.W.W.	12 KV SUBSTATION NO. 1 & MANHOLE DETAILS	DATE 5/28/70
TRACED BY N.G.	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE As Noted
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-5

APPROVED BY [signature] AGENCY HEAD DATE 5-28-70
APPROVED BY [signature] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

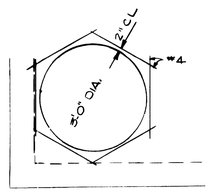
STATE OF KENTUCKY J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER

Cab # Slot Document # 015148 A-1 131

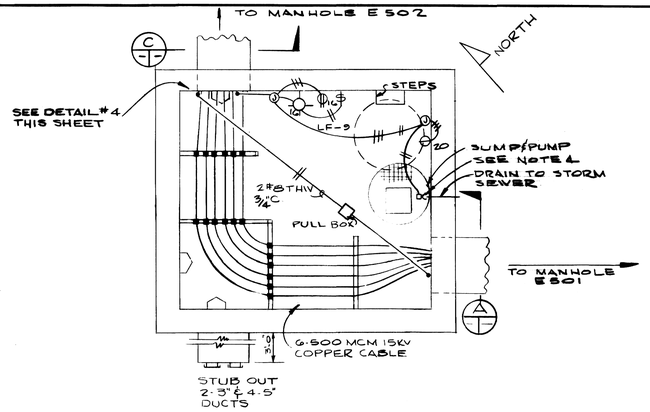
U-5039



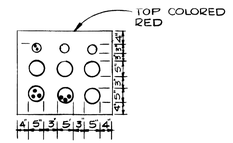
PLAN



OPENING FOR MANHOLE 3
SCALE 1/2"=1'-0"



MANHOLE # E-502 5
SCALE 1/2"=1'-0"



DUCT DETAIL A

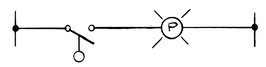
NOTES

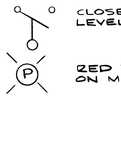
1 ALL LOW VOLTAGE POWER & CONTROL WIRE SHALL BE RUN IN RIGID CONDUIT INSIDE OF MANHOLES

2 LOCATE ALL LIGHTS, RECEPTS, & CONDUIT ABOVE 5'-0" ELEVATION

3 RUN EQUIPMENT GROUND FROM PANEL RP TO RECEPTS IN MANHOLES

4 CIRCUIT RP 20 110VAC LIQUID LEVEL





DUCT DETAIL B

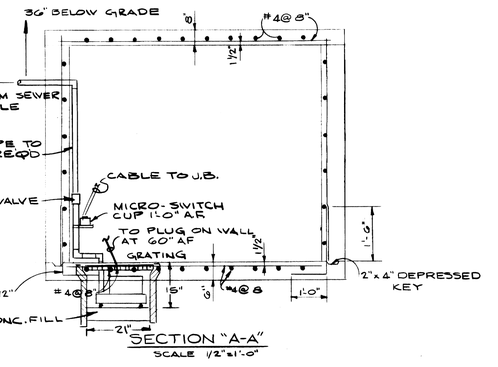
DUCT DETAIL C

DUCT DETAIL F

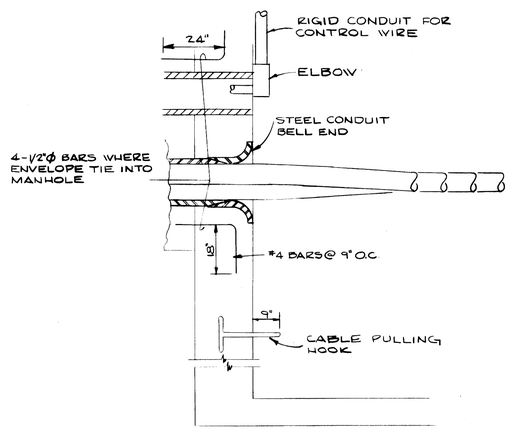
DUCT DETAIL E

CLOSES ON HIGH WATER LEVEL IN MANHOLE

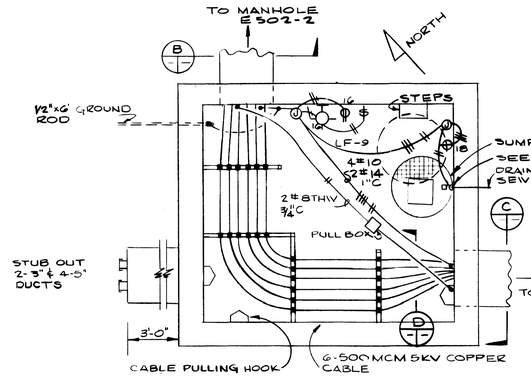
RED PILOT LIGHT LOCATED ON MASTER PANEL



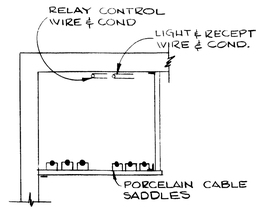
TYPICAL MANHOLE STRUCTURAL DETAIL 1
SCALE 1/2"=1'-0"



CONDUIT ENTRANCE 4
NO SCALE

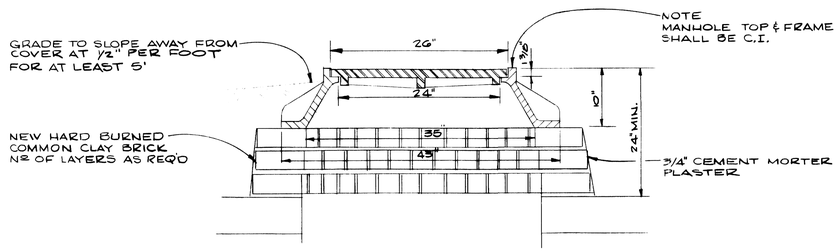


MANHOLE # E-503 6
SCALE 1/2"=1'-0"

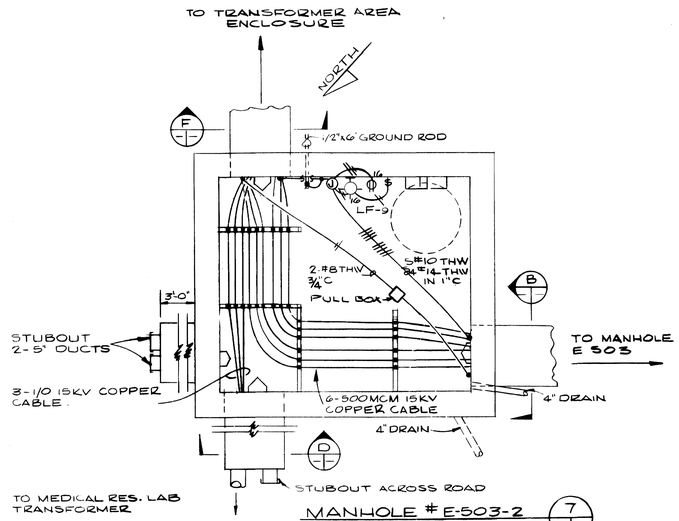


CABLE SUPPORT D

MH TOP & FRAME TO CONFORM TO EXIST'G GRADE & SLOPES MH TOP SHALL BE 1" ABOVE EXIST'G GRADE TO ENABLE EARTH TO SLOPE AWAY FROM OPENING



MANHOLE COVER AND FRAME (TYP) 2



MANHOLE # E-503-2 7
SCALE 1/2"=1'-0"

GFS 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY J.W.W	12 KV MANHOLE DETAILS	DATE 5/28/70
TRACED BY N.Q	MASON & HANGER-SILAS MASON CO., INC. 1300 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-6

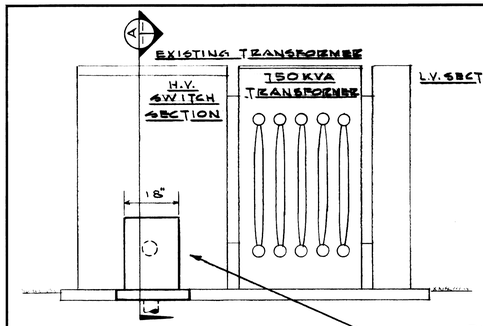
APPROVED BY _____ AGENCY HEAD DATE 5-28-70

APPROVED BY _____ DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

STATE OF KENTUCKY J. W. WILSON, III 5964 REGISTERED PROFESSIONAL ENGINEER

Cab # Slot Document # 131 A-1 015349

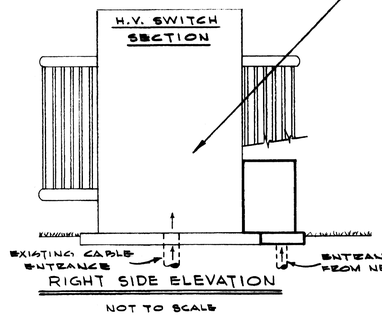
U-5040



REAR ELEVATION

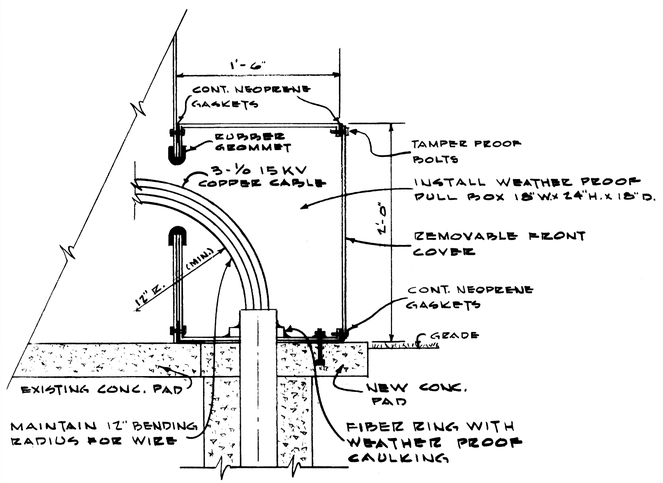
NOT TO SCALE

DISCONNECT TRANSFORMER FROM PRESENT FEED. CUT 6" HOLE IN REAR OF H.V. SWITCH SECTION & INSTALL PULL BOX AND CABLE AS SHOWN. CONNECT NEW CABLE TO H.V. SWITCH & GROUND CABLE SHIELD.



RIGHT SIDE ELEVATION

NOT TO SCALE

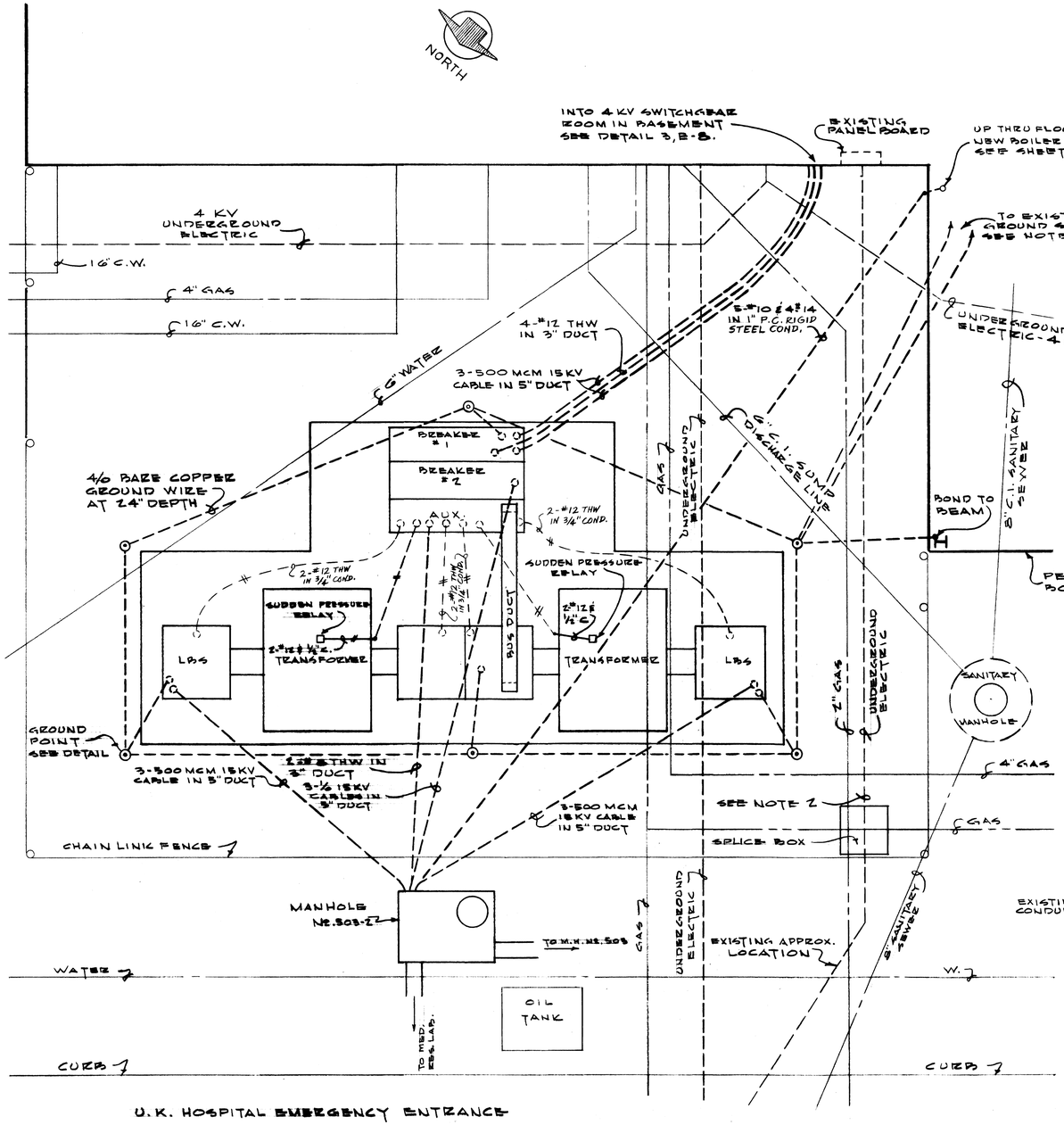


SECTION A

NOT TO SCALE

MEDICAL RESEARCH CENTER 1/1

TRANSFORMER DETAILS



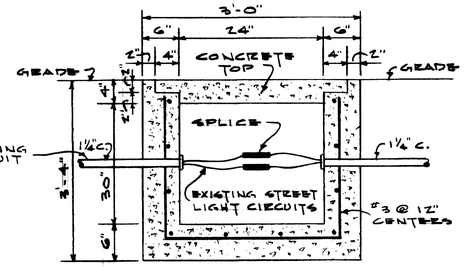
U.K. HOSPITAL EMERGENCY ENTRANCE

NEW SUBSTATION INSTALLATION DETAIL

SCALE: 1/4" = 1'-0"

NOTES:

1. EXISTING GROUNDING GRID LOCATED IN FOUNDATION AREA OF NEW BOILER ROOM, CONTRACTOR TO REMOVE GRID. TIE TO EXISTING GROUND OF 4 KV SWITCHGEAR AND TO EXISTING GROUND OF 480 SWITCHGEAR SEE DETAIL #3, SHEET E-8.
2. REMOVE EXISTING (3) LIGHTING CIRCUITS FROM PANEL BOARD TO A POINT APPROX. 42' FROM BUILDING, INSTALL ONE CKT. OF 3-#2 THW IN 1¼" C., TWO CKTS. OF 3-#4 THW, EACH IN 1¼" C., ONE SPARE 1¼" C. CONDUCTORS SHALL BE ALUMINUM & CONDUIT SHALL BE P.C. RIGID STEEL. INSTALL A 24"x 24"x 30" INSIDE, CONCRETE SPLICE BOX AT LOCATION SHOWN & SPLICE NEW CABLE TO EXISTING CKTS.



CONCRETE SPLICE BOX DETAIL

SCALE: 1" = 1'-0"

AS-BUILT DRAWING

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

CHANGED CAST IRON CONDUIT TO P.C. RIGID STEEL.

ON SUBSTATION DETAIL - ADDED WIRING FROM AUXILIARY COMPARTMENT TO EACH OF 4 SWITCHES (FOR ELECTRIC HEATERS)

STATE OF KENTUCKY J. W. WILSON, III 6984 REGISTERED PROFESSIONAL ENGINEER

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

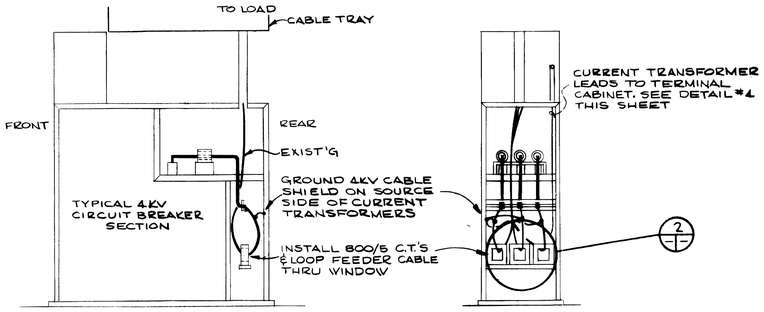
DRAWN BY P.T.K.	NEW 12 KV TO 4 KV SUBSTATION & DETAILS	DATE 5/28/70
TRACED BY P.T.K.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS SHOWN
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-7

APPROVED BY J. J. Marshall AGENCY HEAD DATE 5-28-70

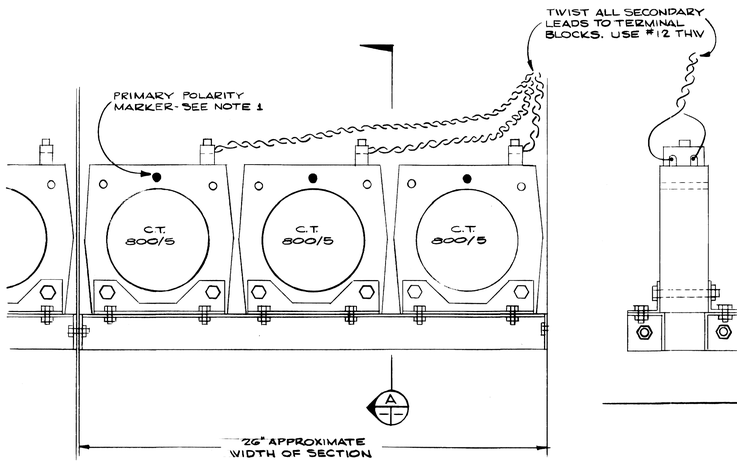
APPROVED BY W. J. McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab. # Slot Document # 015550

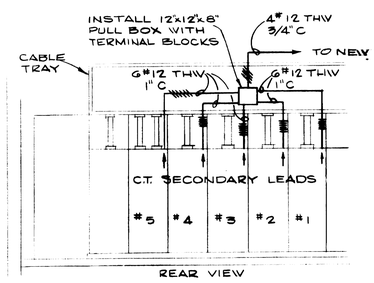
U-5041



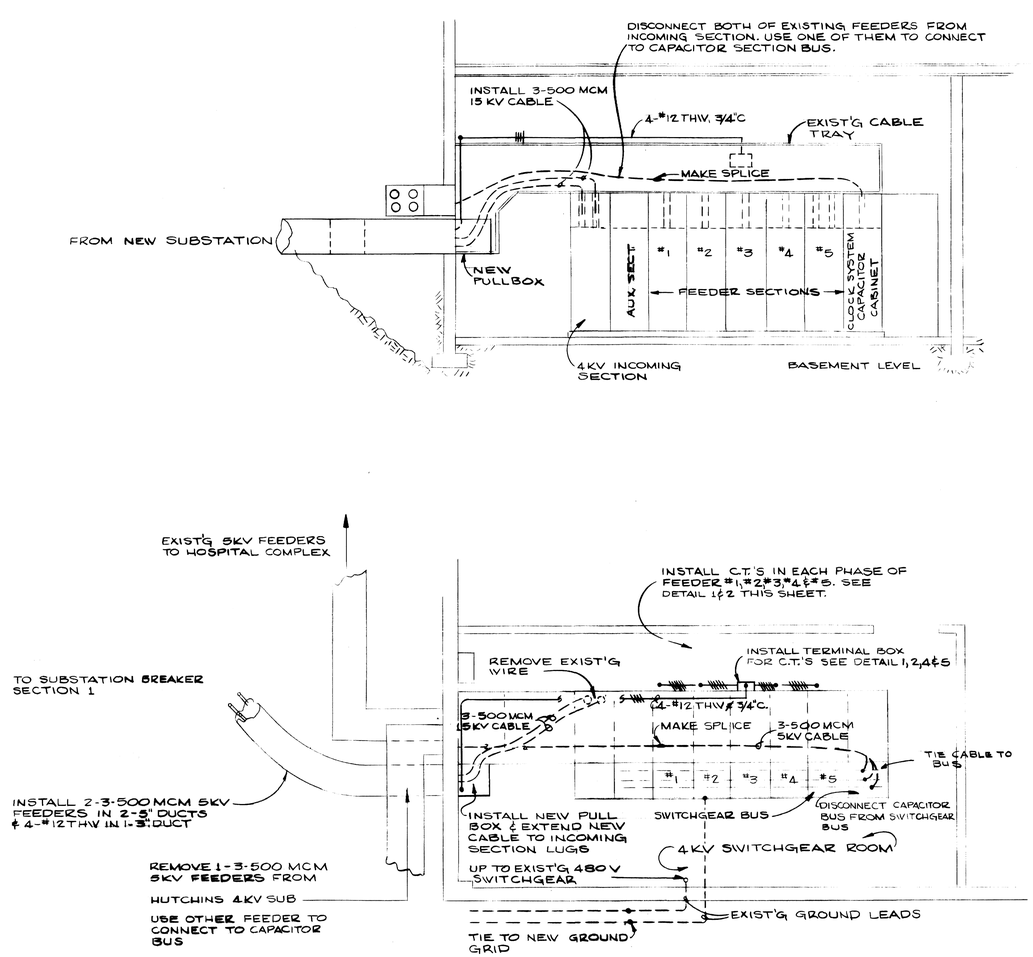
TYPICAL CURRENT TRANSFORMER INSTALLATION (1)
1/2" = 1'-0"



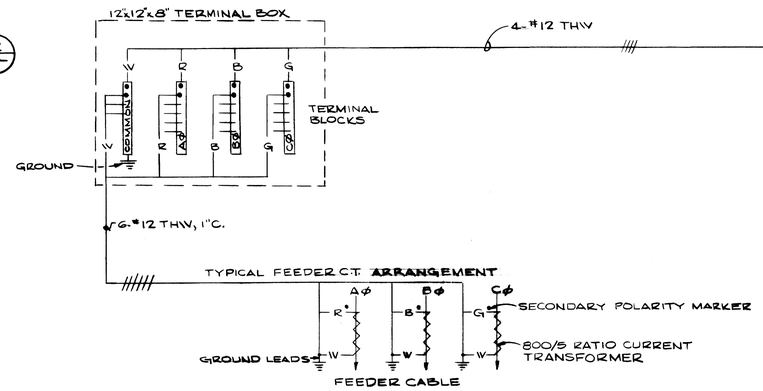
CURRENT TRANSFORMER MOUNTING (2)
3" = 1'-0"



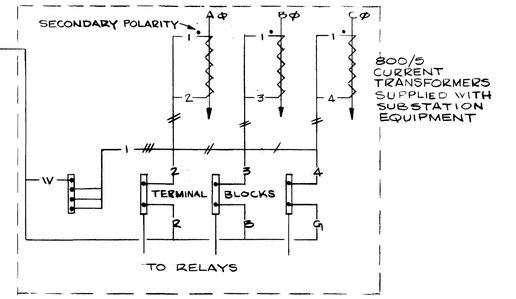
CURRENT TRANSFORMER TERMINAL BOX (4)



NEW 4KV FEEDER ENTRANCE DETAIL (3)
SCALE 1/4" = 1'-0"



DIFFERENTIAL RELAY C.T. WIRING DIAGRAM (5)



NEW SUBSTATION BREAKER SECTION #1.

NOTES

1. PRIMARY POLARITY SHALL MATCH C.T.'S IN NEW MAIN BREAKER #1. CONSULT SHOP DRAWINGS FROM SUBSTATION MANUFACTURER.

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

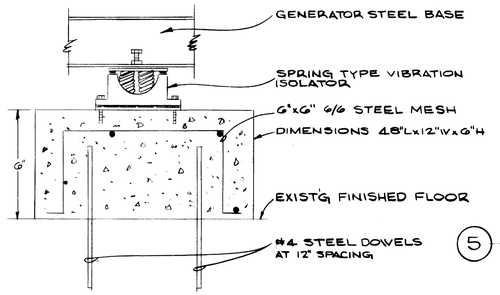
DRAWN BY J.W.W.	MEDICAL CENTER SWITCHGEAR DETAILS	DATE 5/28/70
TRACED BY N.Q	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-8

STATE OF KENTUCKY J. W. WILSON, II. 6964 REGISTERED PROFESSIONAL ENGINEER

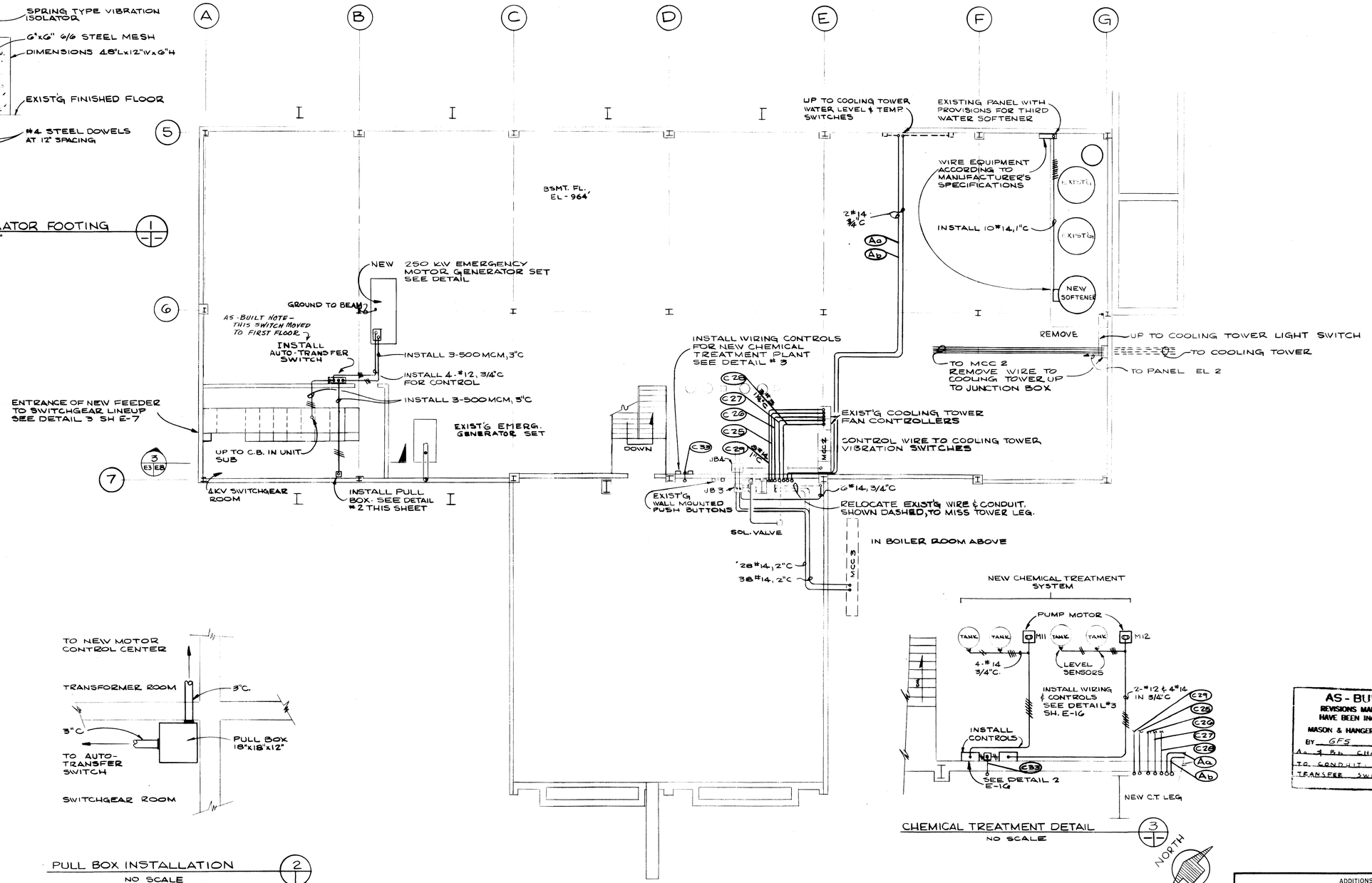
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.V. McCann DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # Slot Document # 115551 A-1 131

U-5042



TYPICAL EMER. GENERATOR FOOTING (1)
SCALE 3"=1'-0"



PULL BOX INSTALLATION (2)
NO SCALE

CHEMICAL TREATMENT DETAIL (3)
NO SCALE

NORTH

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
Aa & Bb CHANGED FROM M.I. CABLE TO CONDUIT
TRANSFER SWITCH RELOCATION INSTRD

B A S E M E N T P L A N
SCALE: 1/8" = 1'-0"

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY J.W.W.	BASEMENT PLAN	DATE 5/28/70
TRACED BY N.Q.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-9

STATE OF KENTUCKY J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER

APPROVED BY _____ AGENCY HEAD DATE _____
APPROVED BY _____ DIRECTOR, DIVISION OF ENGINEERING DATE 6-1-70

Cab # Slot Document # 015552 A-1 131

SUBSTATION AREA

EXHAUST FAN

THERMOSTAT

RP-6

TO AREA LIGHT 3 SEE DETAIL #2 THIS SHEET

TO MANHOLE 503-2

5#10 & 4#14, 1" P.C. RIGID CONDUIT

EXIST'G PANEL BOARD

ALONG CEILING OF SWITCHGEAR ROOM 3-500 MCM, 3"C

EXIST'G UNIT SUBSTATION

FRONT

REAR

3"-250 MCM, 2½"C

3"-500 MCM, 3"C

EXIST'G TRANSFORMER ROOM

EXIST'G AUTO TRANSFER SWITCH

EXIST'G EMERGENCY DIST. PANEL

3#4/0 THW

LF-3

THERMOSTAT

ER1

RP-2,4

UNIT HEATER

3#12 THW 3/4"C.

TO GAS METER HOUSE SEE DETAIL 2 THIS SHEET

LF-5

TO PILOT LIGHTS ON WATER CONTROL PANEL

RP16, 18, 20

UP TO MOTOR CONTROLS

RP-13

T2

T1

PANEL BOARDS

DRY TYPE TRANSFORMERS SEE NOTE 1

UP TO ROOF FAN CONTROLS

MCC4 SEE DETAIL #1

3#4/0 THW 3"C

INSTALL MAN. TRANSFER SWITCH

ELP.15

8-#14 THW 1"C

ELP-5,6,8

ELP-10,12

ELP. 2,4

M3

UP TO DEAERATOR ANN. SWITCHES

FLOW SWITCH IN STEAM LINE

3#14 MI CABLE

FLOW SWITCH IN STEAM LINE

3#12 THW 3/4"C.

3-3/0 THW 2"C

2-3#14 MI CABLES

3-2#14 MI CABLES

2-2#14 MI CABLES

3#14 MI CABLES

FLOW SWITCH IN RECIRC. LINE

FLOW SWITCH IN RECIRC. LINE

RP-3

RP-5

RP-12

RP-7

3 PHASE RECEPT.

FUTURE BOILER

BOILER #4

BOILER #3

EXISTING WALL TO BE REMOVED

SEE DETAIL #2 E-12 FOR WORK IN EXIST'G BOILER ROOM

RUN CABLE DOWN TO GUTTER & TO MASTER PANEL

3#14 MI CABLE

LIGHT AT WATER COLUMN

LF-10

SEE NOTE 2

ELP-7,9

ELP-13

BOILER FACE PANEL #4

BOILER FACE PANEL #3

INSTALL NEMA 5 STARTER SUPPLIED BY BOILER MFG.

3-#3/0 THW 2"C.

ELP-11

WELDING RECEPT 100A

IN FLOOR SLAB

THERMOSTAT

UNIT HEATER

TO MCC4

3#2 THW, 1½"C

SEE NOTE 7

TO MASTER PNL

FLOOR EL. 979'-0"

REMOVE CONDUIT, WIRE & EQUIPMENT.

4-3#14 MI & 5-2#14 MI CABLES TO ANNUNCIATOR PANEL

NEW MASTER BOILER CONTROL PANEL

TO NEW WELDING RECEPT.

3#2 THW 1½"C.

EXISTING TO LIGHT

MAKE SPLICE TO FEED EXISTING LIGHT FIXTURE

PULL BOX

TO EXIST'G WELDING RECEPT. SEE DETAIL 2 E-12

UP TO ROOF & COAL BUNKER LIGHTS ELP-15

FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

NOTES

1. WALL MOUNTED DRY TYPE 480Δ-120/208Y TRANSFORMERS T1 - 30 KW; T2 - 25 KW
2. MOMENTARY CONTACT SWITCH (SUPPLIED BY BOILER MAN.) TO BE WIRED TO LOW WATER LEVEL ALARM SWITCH ON BOILER WATER COLUMN. USE 2#14 MI CABLE.
3. MOUNT LIGHT FIXTURES AT ELEVATION TO MATCH EXISTING.
4. MOUNT ALL RECEPTS AT 36" ABOVE FLOOR MOUNT SWITCHES AT 54" ABOVE FLOOR.
5. MOUNT DOOR LIGHTS / LIGHTS AT NEW TRANSFORMER AT SAME ELEVATION AS EXIST'G.
6. MINIMUM CONDUIT SIZE SHALL BE ¾" RIGID
7. STARTER FOR M17 & M18 TO BE SUPPLIED BY FUEL OIL PUMP VENDOR

MOTOR CONTROL CENTER #4 CIRCUITS (1/-)

NEW SUBSTATION

LF-3

RP-1

LF-8

GAS HOUSE

GAS METER HOUSE & SUB LIGHTS (2/-)

SCALE 1/16" = 1'-0"

NORTH

AS-BUILT DRAWING

REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING

MASON & HANGER — SILAS MASON CO., INC.

BY GFS DATE 1-10-72

CHANGED CONDUIT TO M14 503-3 FROM C.I. TO P.C. RIGID STEEL

ADDITIONS & RENOVATIONS

HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER

UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY M.P.	NEW ADDITION FIRST FLOOR PLAN	DATE 5/28/70
TRACED BY N.Q.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-10

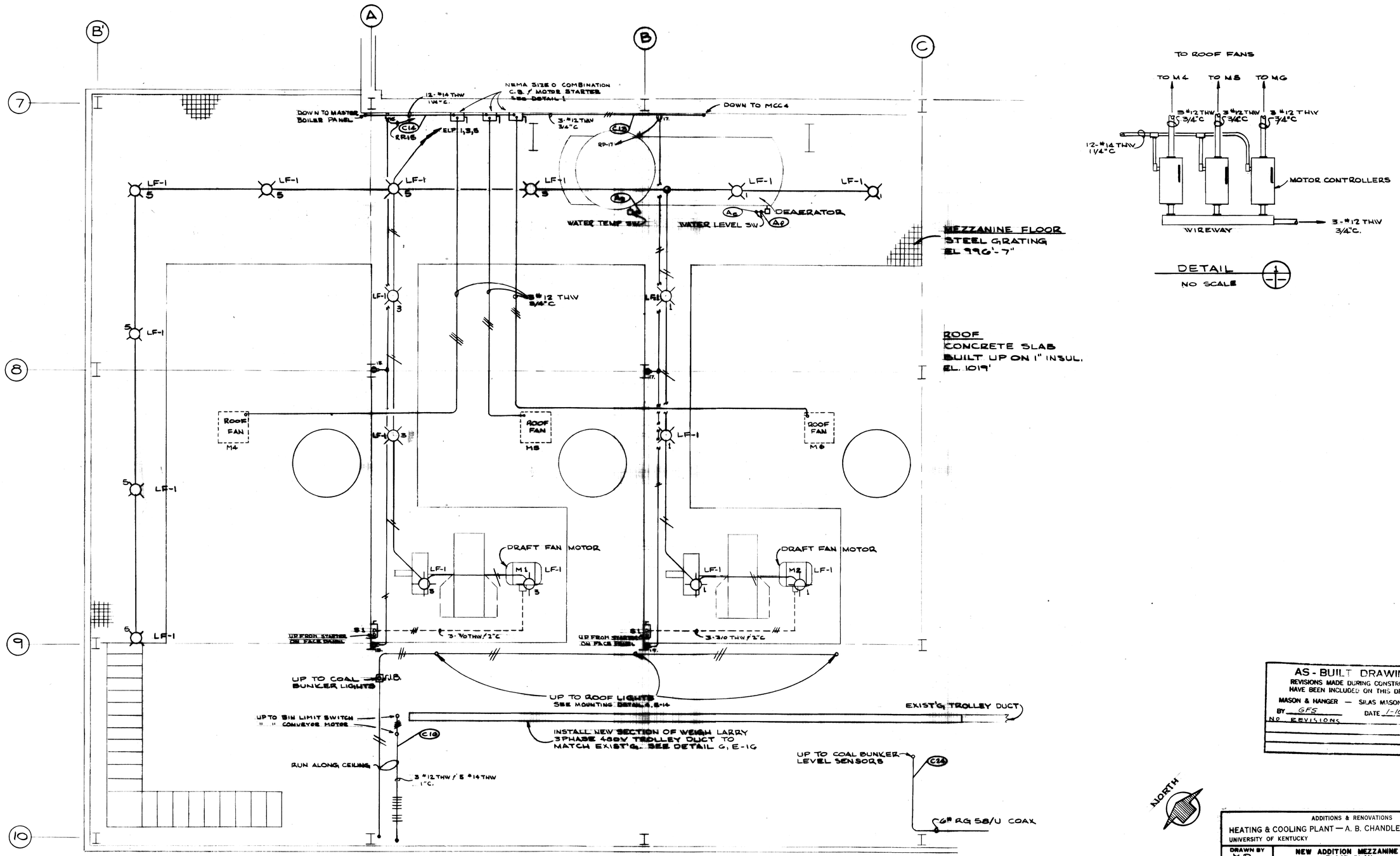
STATE OF KENTUCKY J. W. WILSON, III 6954 REGISTERED PROFESSIONAL ENGINEER

APPROVED BY _____ AGENCY HEAD DATE 5-28-70

APPROVED BY _____ DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # 131 Shot A-1 Document # 015583

U-5044



DETAIL 1
NO SCALE

MEZZANINE FLOOR PLAN

SCALE 1/4" = 1'-0"

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

NORTH

STATE OF KENTUCKY
J.W. WILSON, III
6964
REGISTERED
PROFESSIONAL ENGINEER

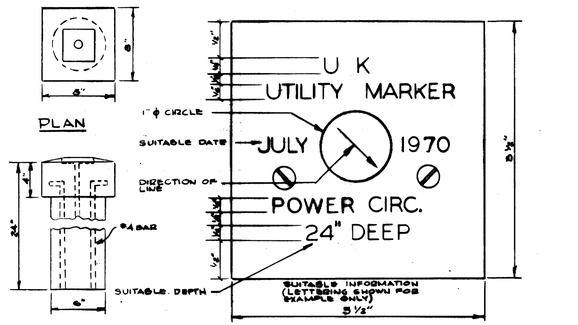
ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

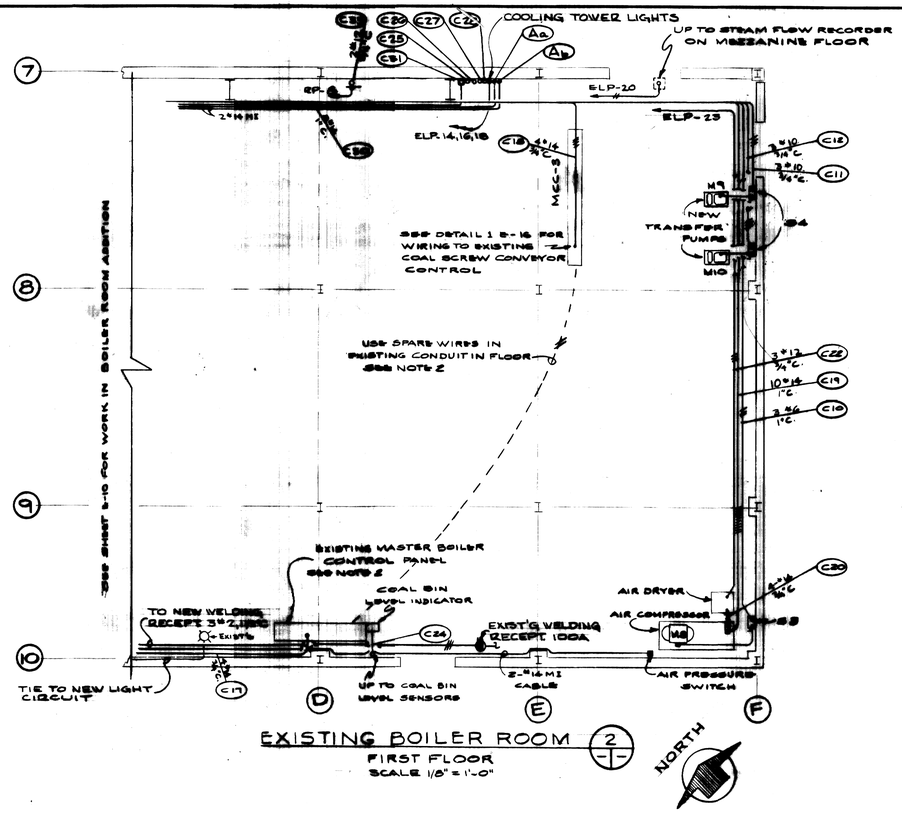
DRAWN BY M.P.	NEW ADDITION MEZZANINE FLOOR PLAN	DATE 8/28/70
TRACED BY J.E.G.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-11

APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.F. McCormick DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # 131 Slot A-1 Document # 115354

U-5045





NOTE:
1. INSTALL NEW TWO POSITION SELECTOR SWITCH & RED PILOT LIGHT ON EXISTING MASTER BOILER CONTROL PANEL FOR NEW & EXISTING COAL SCREW CONVEYOR CONTROL SEE DETAIL 1 E-16 FOR WIRING
2. SPARE WIRES TO BE USED TO WIRE ONE CONTACT SET OF NEW SELECTOR SWITCH INTO EXISTING SCREW CONVEYOR CONTROLS IN MCC3 SEE DETAIL 1 E-16

PANEL BP

120/208V, 3Φ, 4 WIRE, S/N SURFACE MOUNTED 100 AMP MAIN BREAKER

POLE NO.	CKT NO.	AMP TRIP	NO. POLES	WIRE & COND.	LOAD SERVED	LOAD-WATTS A	LOAD-WATTS B	LOAD-WATTS C	POLE NO.	CKT NO.	AMP TRIP	NO. POLES	WIRE & COND.	LOAD SERVED
1	1	20	1	2#12 TWH 3/4"C.	GAS METER HOUSE LIGHTS	300 / 1200			2	2	20	1		UNIT HEATER 1
3	3	20	1		RECEPTS		1800 / 1200		4	4	20	1		UNIT HEATER 2
5	5	20	1					1200 / 1200	6	6	20	1		EXHAUST FAN TRANSFORMER RM
7	7	20	1			1800 / 1400			8	8	20	1		CHEMICAL TREAT PUMPS
9	9	20	1				1800 / 1800		10			1		
11	11	20	1					1800 / 1800	12	12	20	3	4#12 3/4"C	3 PHASE RECEPT
13	13	20	1			1800 / 1800			14					
15	15	20	1				1800 / 300		16	16	20	1		MAN HOLE POWER
17	17	20	1					1200 / 475	18	18	20	1	4#10 1"C	SUMP PUMP MH E502
19	19	20	1		SPARE	1800 / 475			20	20	20	1		SUMP PUMP MH E502
21	21	20	1		SPARE		1800 / 1800		22	22	20	1		SPARE
					TOTAL	10,375	12,300	8,875						

CONNECTED 31.55 KW LOAD FACTOR 55% FUTURE DEMAND 17 KW

PANEL ELP

120/208V, 3Φ, 4 WIRE, S/N SURFACE MOUNTED 100 AMP MAIN BREAKER

POLE NO.	CKT NO.	AMP TRIP	NO. POLES	WIRE & COND.	LOAD SERVED	LOAD-WATTS A	LOAD-WATTS B	LOAD-WATTS C	POLE NO.	CKT NO.	AMP TRIP	NO. POLES	WIRE & COND.	LOAD SERVED
1	1	20	1		COOLING TOWER LIGHTS	1800 / 1560			2	2	20	1	5#12 TWH 3/4"C	BOILER ROOM LIGHTS FIRST FLOOR
3	3	20	1	4#12 TWH 3/4"C			1800 / 1800		4	4	20	1		
5	5	20	1					1800 / 1200	6	6	20	1	3#12 TWH 3/4"C	
7	7	20	1	3#12 TWH	TO MASTER BOILER	1000 / 1520			8	8	20	1		
9	9	20	1	3#12 3/4"C	CONTROL PANEL		800 / 1800		10	10	20	1	3#12 3/4"C	OUTSIDE LIGHTS
11	11	20	1	2#12 3/4"C				1000 / 1000	12	12	20	1		
13	13	20	1	2#12 3/4"C		1000 / 700			14	14	20	1	4#12 TWH 3/4"C	COOLING TOWER LIGHTS
15	15	20	1	2#12 3/4"C			1800 / 1800		16	16	20	1		COOLING TOWER LIGHTS
17	17	20	1		SPARE			1800 / 1200	18	18	20	1		
19	19	20	1			1800 / 1800			20	20		1	2#12 TWH 3/4"C	
21							420 / 1800		22	22		1		SPARE
23	23	20	3	3#12 3/4"C	AIR DRYER			420 / 1800	24	24		1		
25						420 / 1800			26	26		1		
					TOTAL	13,250	11,530	10,380						

CONNECTED 34.75 KW LOAD FACTOR 80% FUTURE DEMAND 30 KW

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
CHANGED WIRE SIZE TO C11 & C12 ON DETAIL 2

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

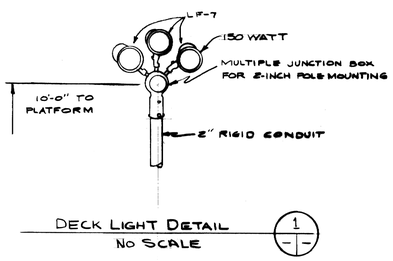
DRAWN BY	EXISTING BOILER ROOM & DETAILS	DATE 5/26/70
TRACED BY	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-12

APPROVED BY [signature] AGENCY HEAD DATE 5-28-70
APPROVED BY [signature] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

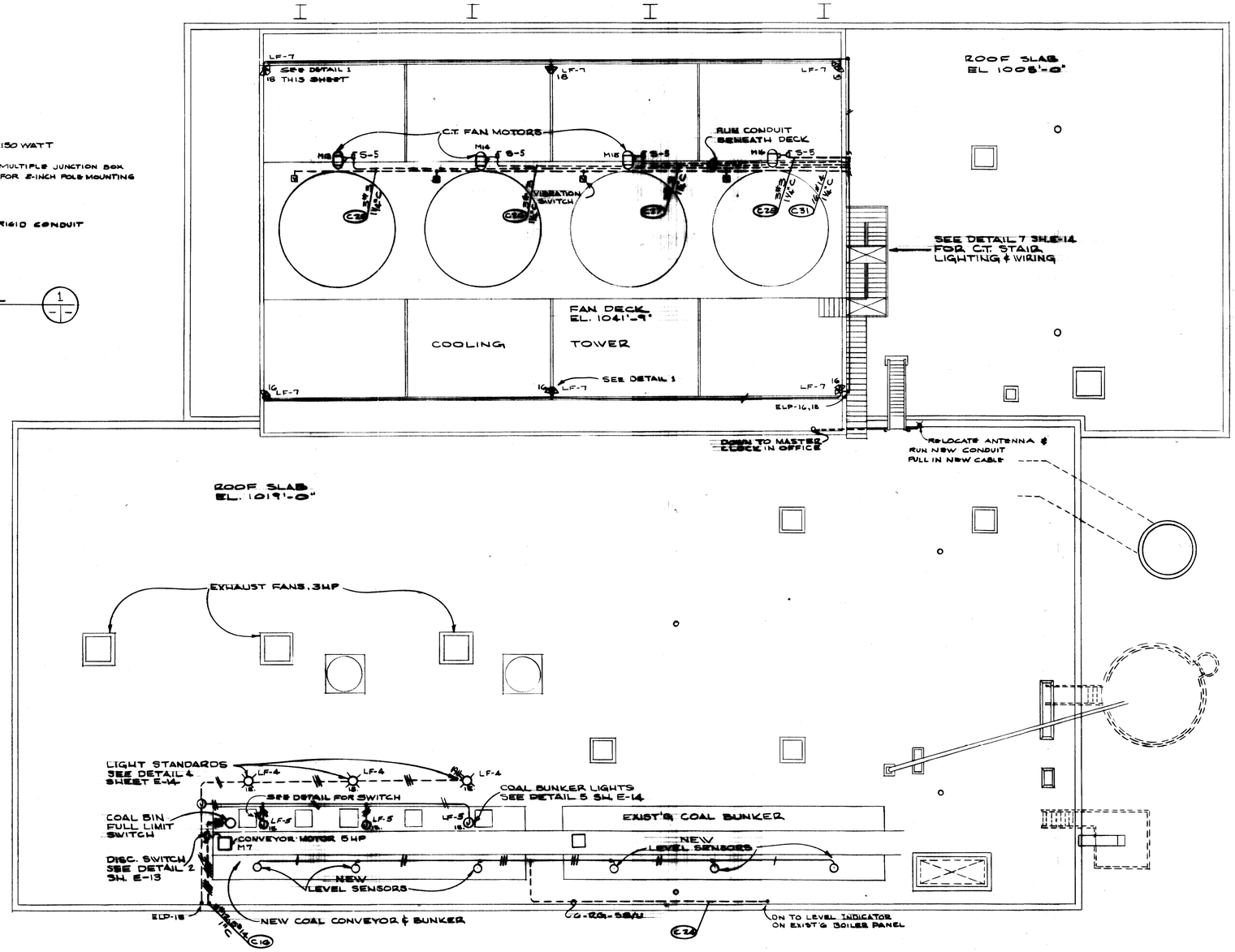
STATE OF KENTUCKY J. W. WILSON, JR. 6964 REGISTERED PROFESSIONAL ENGINEER

Cab # 131 Slot A-1 Document # 015555

U-5046



DECK LIGHT DETAIL — NO SCALE — 1/E-1



ROOF PLAN

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

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

NORTH

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

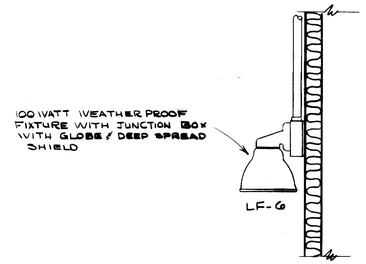
DRAWN BY M.P.	ROOF PLAN	DATE 5/28/70
TRACED BY N.Q.	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE As NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-13

STATE OF KENTUCKY J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER

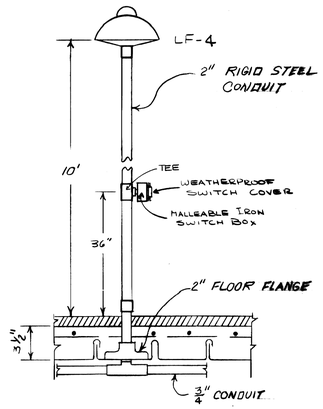
APPROVED BY C.J. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY W.T.M. Caudill DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab.# Slot Document# 115536 A-1 131

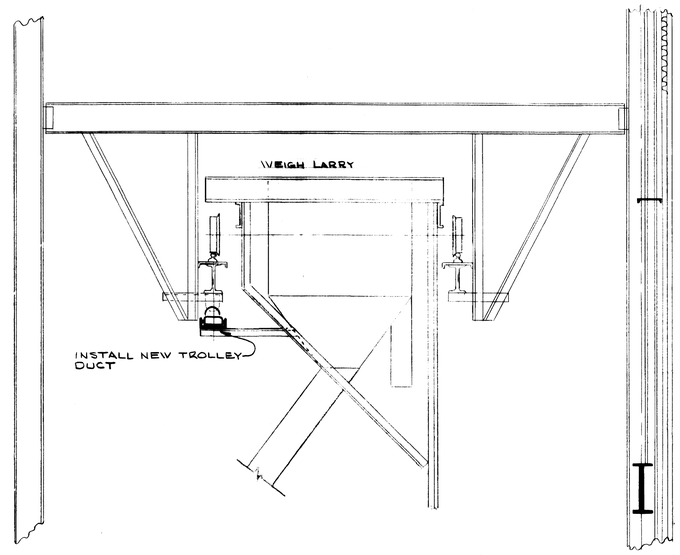
U-5047



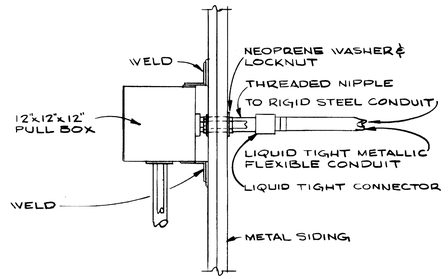
COOLING TOWER LIGHT DETAIL (1)
SCALE 1"=1'-0"



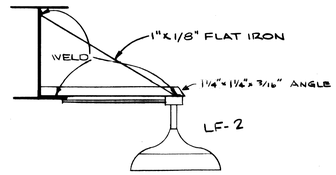
ROOF LIGHT DETAIL (4)
NO SCALE



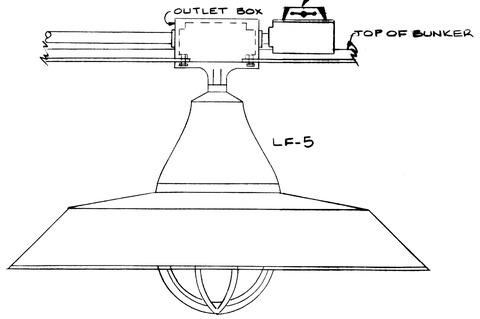
WEIGH LARRY
TROLLEY BUS DUCT SUPPORT DETAIL (6)
NO SCALE



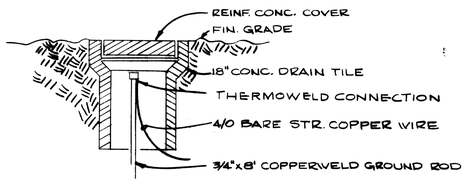
PULLBOX DETAIL (8)
SCALE 1"=1'-0"



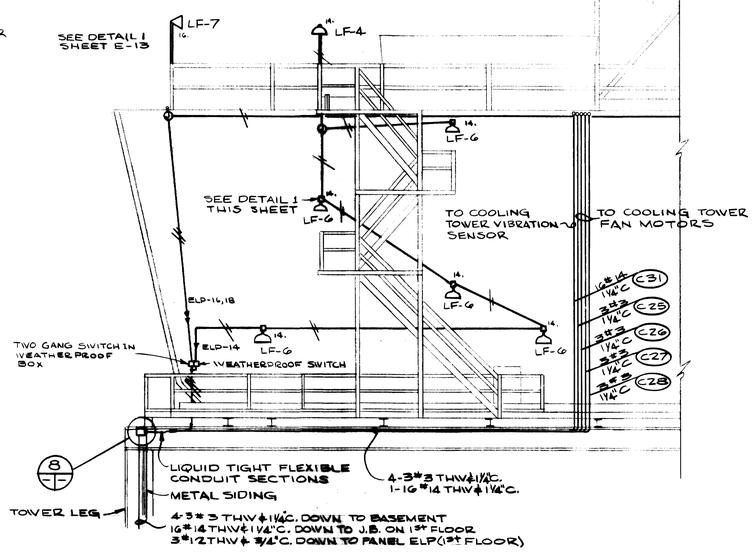
BOILER OPERATOR AREA LIGHT DETAIL (2)
NO SCALE



COAL BUNKER LIGHT DETAIL (5)
NO SCALE



TYPICAL INSTALLATION GROUND POINT (3)
NO SCALE



COOLING TOWER STAIR LIGHTING DETAIL (7)

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO REVISIONS

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

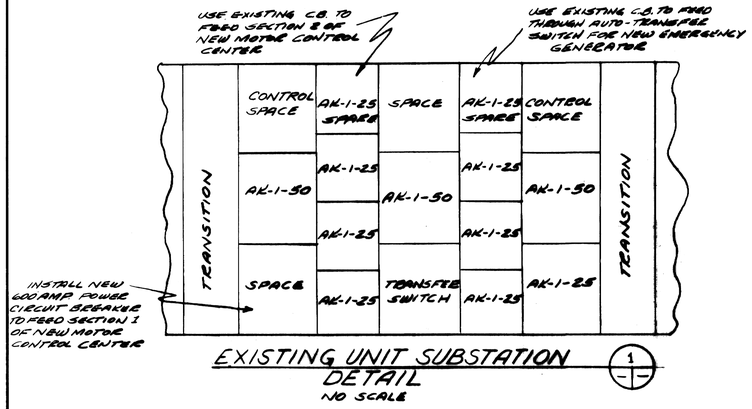
DRAWN BY J.W.W.	WEIGH LARRY, LIGHTING & GROUNDING DETAILS	DATE 5/26/70
TRACED BY N.C.	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-14

APPROVED BY J.W. Marshall AGENCY HEAD DATE 5-28-70
APPROVED BY [illegible] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

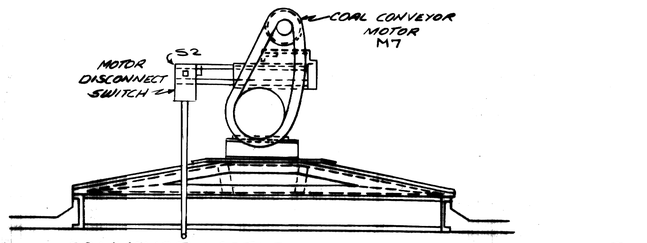
STATE OF KENTUCKY J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER

Cab.# Slot Document# 015537 A-1 131

U-5048



EXISTING UNIT SUBSTATION DETAIL (1)
NO SCALE



CONVEYOR MOTOR DISCONNECT SWITCH (4)
NO SCALE

NOTE

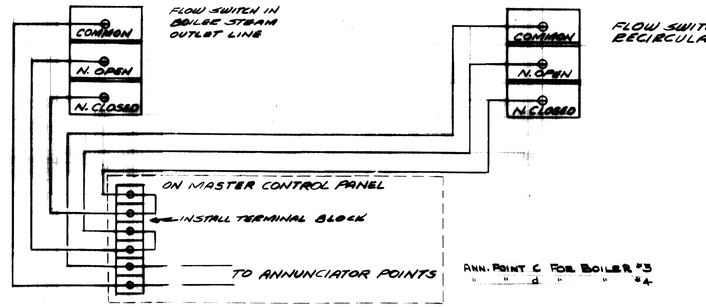
ANNUNCIATOR POINTS SHALL BE WIRED TO SWITCH POINTS AS NOTED BELOW

- Aa - WIRE TO COOLING TOWER LOW WATER LEVEL SWITCH
- Ab - WIRE TO COOLING TOWER WATER TEMP. SWITCH.
- Ac - SEE DETAIL 5 THIS SHEET
- Ad - " " " " "
- Ae - WIRE TO DEARATOR HIGH WATER LEVEL SWITCH
- Af - " " " LOW " " "
- Ag - " " " LOW " TEMP. "
- Ah - WIRE TO CONTACT POINTS ON FEEDWATER PRESSURE RECORDER
- Ai - WIRE TO CONTACT POINTS ON MAIN STEAM HEADER TEMP. RECORDER.
- Aj - WIRE TO NEW AIR COMPRESSOR LOW PRESSURE SWITCH.
- Ak - WIRE TO COOLING TOWER VIBRATION SWITCH 1
- Al - " " " " " " 2
- Am - " " " " " " 3
- An - " " " " " " 4
- Ao - WIRE TO FUEL OIL TANK #1 LEVEL GUAGE
- Ap - WIRE TO FUEL OIL TANK #2 LEVEL GUAGE

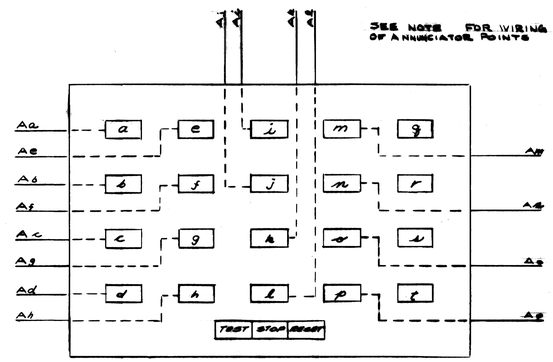
SECTION #1	SECTION #2	EMERGENCY SECTION	
SECTION #1	SECTION #2		
1) SPARE FOR FUTURE BOILER	4) SPARE	SPACE	SPACE
	5) 5 HP NEMA SIZE 1 SCREW CONV.		
2) 225 C.B. BOILER #3 FAN MOTOR	6) 30 A. C.B. PANEL RP 20 A. C.B. FUSE 5 I.L.M.	8) 15 HP NEMA 2 CONDENSATE TRANS. PUMP	11) 30 AMP C.B. FUEL OIL PUMPS
3) 225 C.B. BOILER #4 FAN MOTOR	7) 100 HP NEMA 4 BOILER FEED WATER	9) 15 HP NEMA 2 CONDENSATE TRANS. PUMP	12) 40 AMP C.B. EMERGENCY LIGHT PANEL
		10) 40 HP NEMA 3 AIR COMPRESSOR	13) 1256 AMP C.B. EXISTING EMERGENCY FEEDER

NOTE: ALL CIRCUIT BREAKERS SHALL HAVE AN INTERRUPTING RATING OF 14,000 AMP. RMS SYMMETRICAL

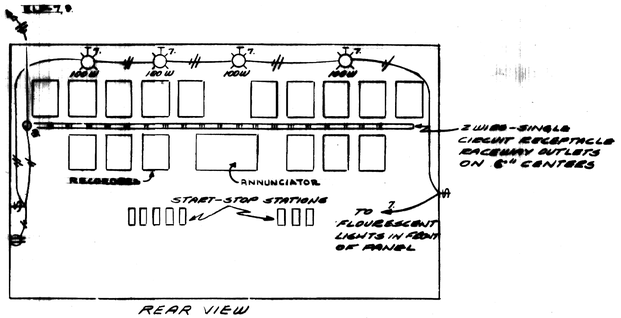
ELEVATION VIEW OF MOTOR CONTROL CENTER #4 (2)
3/4" = 1'-0"



TYPICAL FLOW SWITCH WIRING DIAGRAM (5)
NO SCALE



ANNUNCIATOR PANEL WIRING DETAIL (3)



REAR VIEW

MASTER CONTROL PANEL (6)
NO SCALE

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GES DATE 1-10-72
ON DETAIL 2 CHANGED CONTROLS B & S TO 15 HP NEMA 2 FROM 10 HP NEMA 1

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY J.W.W	DETAILS	DATE 5/28/70
TRACED BY N.Q.	MASON & HANGER - SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-15

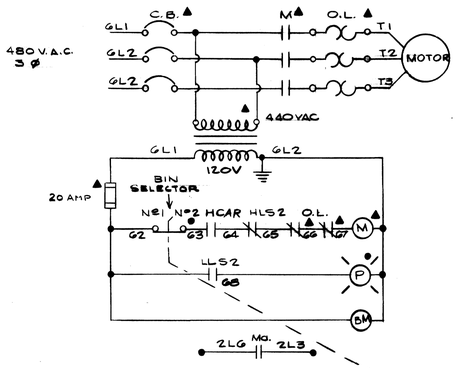
J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER STATE OF KENTUCKY

APPROVED BY _____ AGENCY HEAD DATE _____
APPROVED BY W J McConnell DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # Slot Document # 055538 131 A-1

U-5049

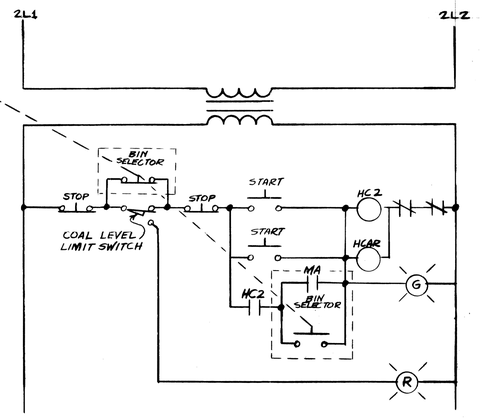
ELEMENTARY WIRING DIAGRAM FOR NEW SCREW CONVEYOR (1)



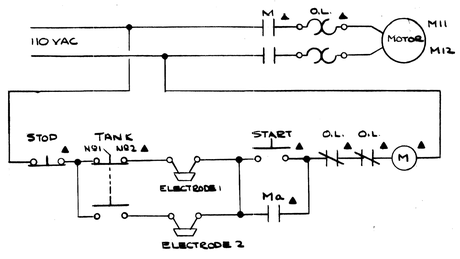
NOTE

1. AUXILLARY CONTACTS(Ma) FROM STARTER NO G IN MCC-4 AND CONTACTS FROM BIN SELECTOR SWITCH TO BE ADDED TO EXISTING MASTER CONTROL PANEL ARE TO BE ADDED TO THE CONTROL CIRCUIT OF THE EXIST'G SCREW CONVEYOR MOTOR LOCATED IN MCC-3.
2. INSTALL NEW COAL BIN LOW LEVEL LIGHT & COAL BIN SELECTOR SWITCH ON EXIST'G MASTER CONTROL PANEL BELOW EXIST'G LOW LEVEL LIGHT FOR EXIST'G COAL BIN.

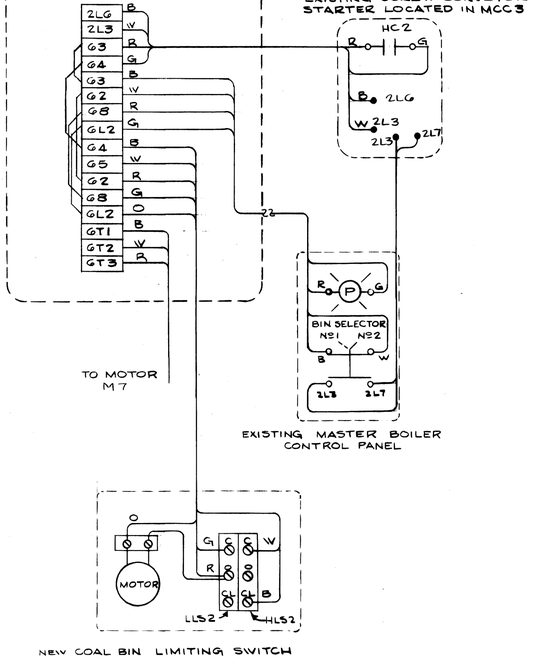
CONTROL SCHMETIC FOR EXIST'G SCREW CONVEYOR (2)



CONTROL FOR CHEMICAL FEED PUMPS (3)

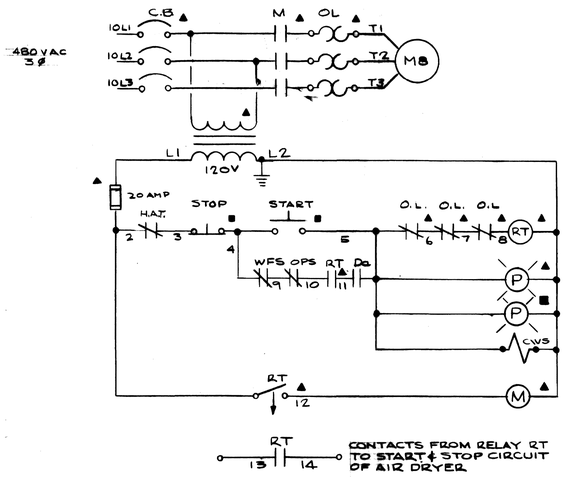


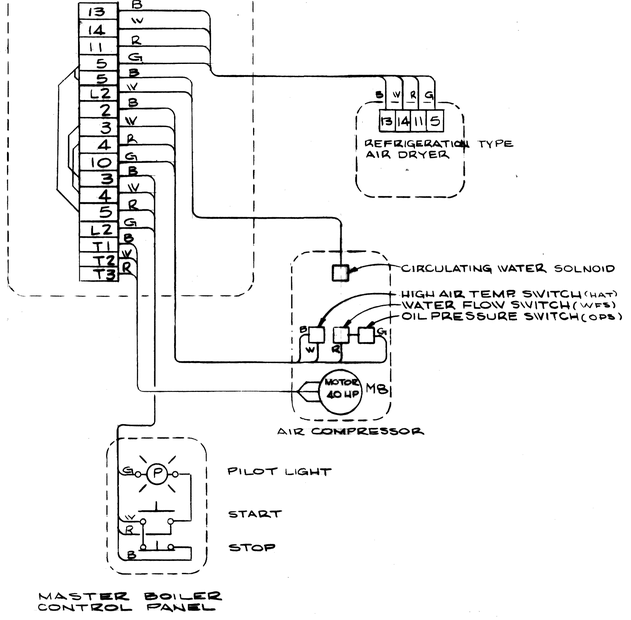
MOTOR #	NAME	LOCATION
M11	CHEMICAL FEED PUMP	BASEMENT EXIST'G BUILDING
M12	CHEMICAL FEED PUMP	BASEMENT



MOTOR NO	NAME	WIRE NO.	LOCATION OF MOTOR
M7	NEW SCREW CONVEYOR	AS SHOWN	WEST END ON SCREW CONVEYOR EXTENSION ON ROOF

ELEMENTARY & WIRING DIAGRAM FOR AIR COMPRESSOR (4)





MOTOR #	NAME	WIRE NUMBER	LOCATION OF MOTOR
M8	AIR COMPRESSOR	ADD PREFIX 10 TO WIRE NO. SHOWN	SOUTH EAST CORNER OF EXIST'G BOILER ROOM

SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
▲	LOCATED IN STARTER
■	LOCATED ON NEW MASTER CONTROL PANEL
●	LOCATED ON EXISTING MASTER CONTROL PANEL
✱	LOCATED ON BOILER FACE PANEL
(M)	ENERGIZING COIL OF STARTER CONTACTOR
M	MAIN CONTACTS OF STARTER
Ma	AUXILLARY CONTACTS ON STARTER
(P)	PILOT LIGHT WITH RED LENS
HCAR	AUXILIARY RELAY TO BE INSTALLED IN EXISTING SCREW CONVEYOR STARTER
HLS-2	CONTACTS IN NEW COAL BIN LIMIT SWITCH OPENS WHEN COAL BIN IS FULL
LLS-2	CONTACTS IN NEW COAL BIN LIMIT SWITCH CLOSES WHEN COAL LEVEL IS LOW
(BM)	ROTOR MOTOR OF COAL BIN LIMIT SWITCH LOCATED IN TOP OF NEW COAL BUNKER
H.A.T.	CONTACTS OPEN ON HIGH DISCHARGE AIR TEMPERATURE OF AIR COMPRESSOR
W.F.S.	CONTACTS OPEN WHEN THERE IS NO WATER FLOW IN COOLING WATER SYSTEM OF AIR COMPRESSOR
O.P	CONTACTS OPEN ON LOSS OF OIL PRESSURE IN LUBRICATION SYSTEM OF AIR COMPRESSOR
CWS	CIRCULATING WATER SOLENOID IN COOLING WATER SYSTEM OF AIR COMPRESSOR
	ELECTRODE LOCATED IN BOILER FEED CHEMICAL TANK. CONTACTS OPEN ON LOW LIQUID LEVEL IN TANK.
(RT)	PNEUMATIC TIMING RELAY WITH FOUR NORMALLY OPEN CONTACTS, TWO INSTANTANEOUS CLOSE AND TWO TIMED CLOSE
RT	TIMED CLOSE CONTACT OF RELAY RT (1 MIN DELAY)
Da	NORMALLY OPEN CONTACTS ON AIR DRYER STARTER
HCZ	HOLDING COIL FOR EXISTING SCREW CONVEYOR STARTER

AS-BUILT DRAWING
REVISIONS MADE DURING CONSTRUCTION HAVE BEEN INCLUDED ON THIS DRAWING
MASON & HANGER — SILAS MASON CO., INC.
BY GFS DATE 1-10-72
REVISED CONTROL SCHEMATIC FOR EXISTING SCREW CONVEYER

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY MJS	MOTOR CONTROL DETAILS	DATE 5/28/70
TRACED BY NG	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE AS NOTED
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-16

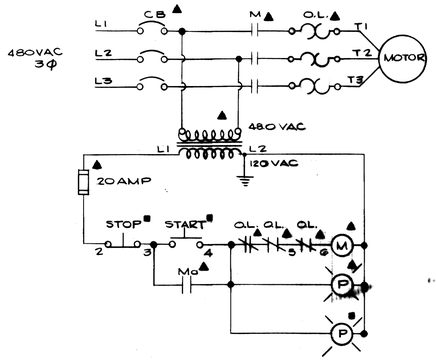
STATE OF KENTUCKY J. W. WILSON, III 6964 REGISTERED PROFESSIONAL ENGINEER

APPROVED BY _____ AGENCY HEAD DATE 5-28-70
APPROVED BY _____ DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

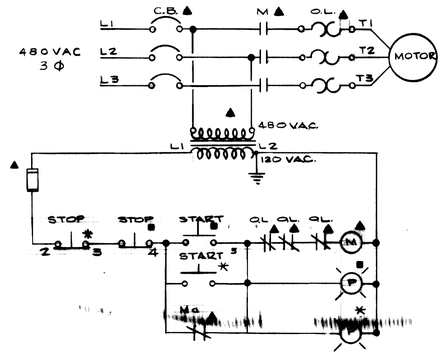
Cab # 131 Shot A-1 Document # 015359

U-5050

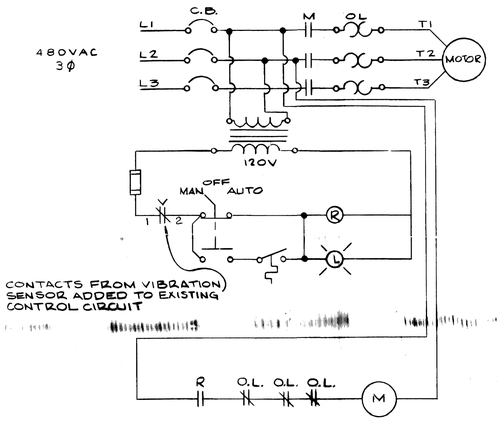
ELEMENTARY & WIRING DIAGRAM FOR STARTER 7, 8, & 9 — 1/-



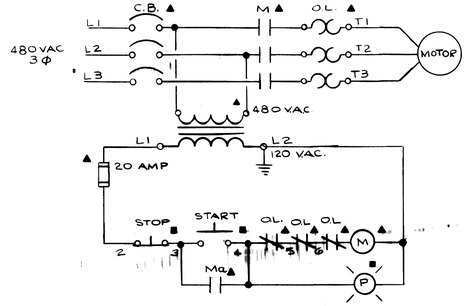
ELEMENTARY & WIRING DIAGRAM — 2/-

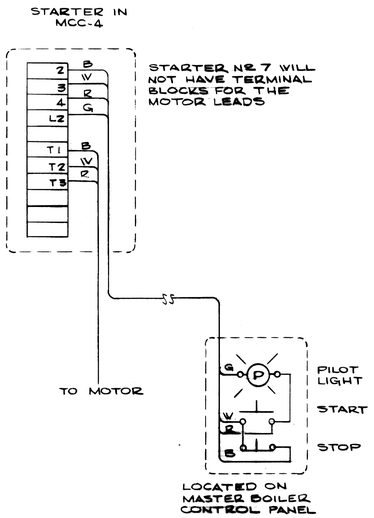


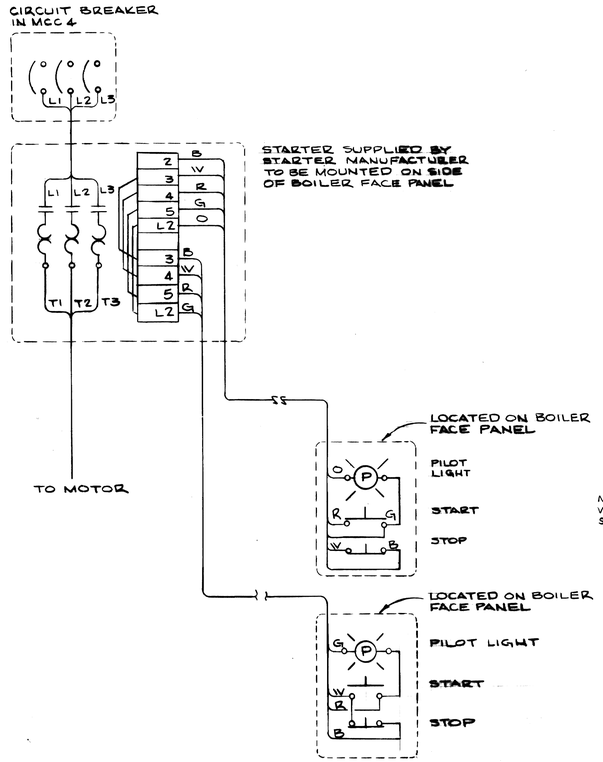
ELEMENTARY & WIRING DIAGRAM FOR COOLING TOWER FANS MOTOR NO. 13, 14, 15 & 16 — 3/-

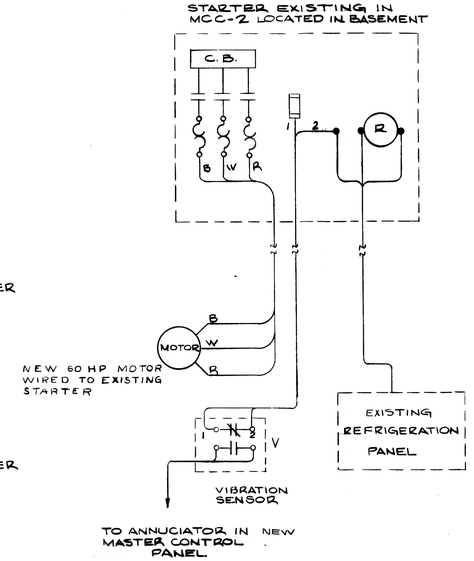


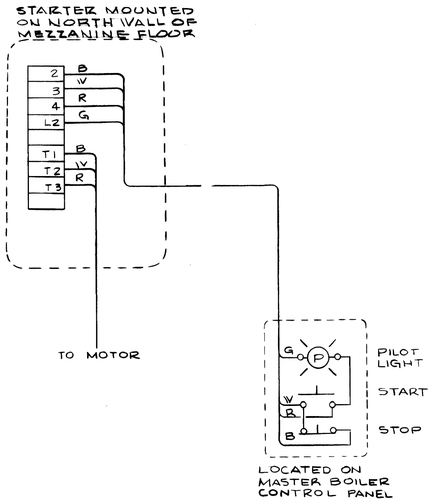
ELEMENTARY & WIRING DIAGRAM — 4/-











MOTOR Nº	NAME	WIRE NO.	LOCATION OF MOTOR
M3	BOILER FEED WATER PUMP	ADD PREFIX 7 TO WIRE Nºs SHOWN	NORTH SIDE NEW ADDITION 1st FLOOR
M9	CONDENSATE TRANSFER PUMP	ADD PREFIX 8 TO WIRE Nºs SHOWN	EAST END OF FIRST FLOOR
M10	CONDENSATE TRANSFER PUMP	ADD PREFIX 9 TO WIRE Nºs SHOWN	EAST END OF FIRST FLOOR

MOTOR Nº	NAME	WIRE NO.	LOCATION OF MOTOR
M1	#3 BOILER DRAFT FAN MOTOR	ADD PREFIX 2 TO WIRE Nºs SHOWN	ON MEZZANINE FLOOR OVER FRONT OF BOILER
M2	#4 BOILER DRAFT FAN MOTOR	ADD PREFIX 3 TO WIRE Nºs SHOWN	ON MEZZANINE FLOOR OVER FRONT OF BOILER

MOTOR Nº	NAME	LOCATION OF MOTOR
M4	ROOF EXHAUST FAN MOTOR	IN ROOF OVER FUTURE BOILER Nº. 5
M5	ROOF EXHAUST FAN MOTOR	IN ROOF OVER BOILER Nº. 4
M6	ROOF EXHAUST FAN MOTOR	IN ROOF OVER BOILER Nº. 3

AS BUILT DRAWING
REVISIONS HAVE BEEN MADE IN THIS DRAWING DURING CONSTRUCTION
MASON & HANGER-SILAS MASON CO., INC.
BY GFS DATE 1-10-72
NO. REVISIONS

STATE OF KENTUCKY J. W. WILSON, III 6864 REGISTERED PROFESSIONAL ENGINEER

ADDITIONS & RENOVATIONS
HEATING & COOLING PLANT — A. B. CHANDLER MEDICAL CENTER
UNIVERSITY OF KENTUCKY LEXINGTON, KENTUCKY

DRAWN BY M.D	MOTOR CONTROL DETAILS	DATE 5/28/70
TRACED BY N.G	MASON & HANGER-SILAS MASON CO., INC. 1500 W. MAIN ST. LEXINGTON, KENTUCKY	SCALE As Noted
CHECKED BY J.W.W.		SPEC. NO.
	COMMONWEALTH OF KENTUCKY DEPARTMENT OF FINANCE DIVISION OF ENGINEERING FRANKFORT KENTUCKY	DRAWING NO. E-17

APPROVED BY [signature] AGENCY HEAD DATE 5-?
APPROVED BY [signature] DIRECTOR: DIVISION OF ENGINEERING DATE 6-1-70

Cab # Slot Document # 015360 131 A-1

U-5051