LEWIS ROAD PLAZA

GAMBONE DEVELOPMENT COMPANY

312 N. LEWIS ROAD
ROYERSFORD, PENNSYLVANIA 19468

TENANT FIT-OUT

LEGEND

ADJ	ADJUSTABLE	MIN.	MINIMUM	USGS	U.S. GEOLOGICAL SURVEY
AGL	ABOVE GROUND LEVEL	MTL.	METAL	WWF	WELDED WIRE FABRIC
AMSL	ABOVE MEAN SEA LEVEL	NIC	NOT IN CONTRACT	A-1	ANTENNA MARK NUMBER
APPROX.	APPROXIMATE	NTS	NOT TO SCALE	(E)	EXISTING
CAB	CABINET	OC	ON CENTER	(N)	NEW
CONC.	CONCRETE	OHP	OVERHEAD POWER	(P)	PROPOSED
CONT.	CONTINUOUS	OHT	OVERHEAD TELCO	℄	CENTERLINE
CONST	CONSTRUCTION	PWR.	POWER	E	PLATE
COAX	COAXIAL	SF	SQUARE FOOT	B/W	BARBED WIRE
CJ	CONSTRUCTION JOINT	SHT	SHEET	C/L	CHAINLINK
DIA	DIAMETER	SIM	SIMILAR	ø	DIAMETER
DTL	DETAIL	SS	STAINLESS STEEL	H	HEIGHT
DWG	DRAWING	STL	STEEL	W	WIDTH
EA.	EACH	TELCO	TELEPHONE COMPANY	D	DEPTH
ELEC.	ELECTRIC	TO	TOP OF	W/	WITH
ELEV.	ELEVATION	TYP.	TYPICAL		
EQ.	EQUAL	UON	UNLESS OTHERWISE NOTED		
EQUIP	EQUIPMENT	VERT	VERTICAL		
EXT.	EXTERIOR	VIF	VERIFY IN FIELD		
FF	FINISH FLOOR	XFMER	TRANSFORMER		
FTG.	FOOTING				
GA	GAUGE				
GALV	GALVANIZED				
GC	GENERAL CONTRACTOR				
GRND	GROUND				
HORIZ	HORIZONTAL				
INT.	INTERIOR				
LG.	LONG				
MAX	MAXIMUM				
MFG	MANUFACTURER				

2 / S-1 — SECTION NUMBER, SHEET NUMBER — DRAWING SECTION

4 / S-1 — SECTION NUMBER, SHEET NUMBER — DETAIL

5 / E-1 — SECTION NUMBER, SHEET NO. — DETAIL ENLARGEMENT

2 — REVISION NUMBER

DATUM ELEVATION

MATCH LINE

(TB) TEST BORING
(WP) WORK POINT
(DP) DATUM POINT

CAST IN PLACE OR PRE-CAST CONCRETE	CRUSHED STONE, GRAVEL OR POROUS FILL	STEEL
LIGHT WEIGHT CONCRETE	PLASTER CEMENT, SAND, GROUT	METAL, ALUMINUM, ETC.
EARTH: UNDISTURBED	ROCK OR STONE	CONCRETE MASONRY UNIT
EARTH: BACK FILL	RIGID INSULATION	BRICK

DRAWING INDEX

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A-3	RESTAURANT & BAR FLOOR PLAN
A-4	BREWERY FLOOR PLAN
A-5	FRONT ELEVATIONS
A-6	REFLECTED CEILING PLAN
A-7	SECTIONS
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A-11	PARTITION TYPES
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A-13	DOOR SCHEDULE
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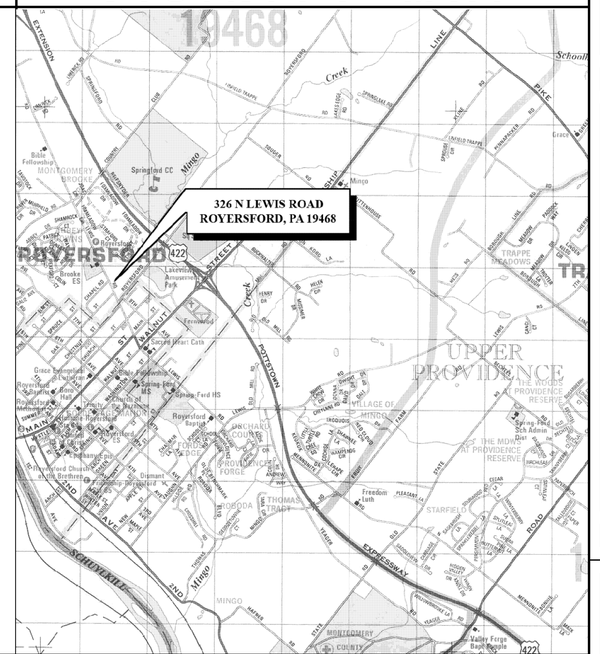
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P-3	FLOOR PLAN - SANITARY DRAINAGE
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P-5	PLUMBING SPECIFICATIONS

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E-5	ELECTRICAL PANELS, SCHEDULES & SCHEMATICS
E-6	ELECTRICAL BREWERY PANELS

VICINITY MAP



PROJECT SUMMARY

SITE ADDRESS: LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PENNSYLVANIA 19468

JURISDICTION: LIMERICK TOWNSHIP

COUNTY: MONTGOMERY COUNTY

ZONED USE: HIGHWAY COMMERCIAL DISTRICT (HC)

BUILDING AREAS:

RESTAURANT / BAR -	GROSS = 7,393 SQ.FT.	NET 6,820 SQ.FT.
BREWERY -	GROSS = 5,175 SQ.FT.	NET 4,925 SQ.FT.
BUILDING TOTAL -	GROSS = 12,568 SQ.FT.	NET 11,745 SQ.FT.

IBC USE: A-2 (ASSEMBLY) & F-1 (FACTORY)

IBC BUILDING TYPE: 3B - PROTECTED

SPRINKLERS: NFPA 13 (COMMERCIAL)

PENNA L&I USE: A-2 (ASSEMBLY: 101-500 CAPACITY) & D-0 (ORDINARY OCCUPANCY)

CONSTR. TYPE: ORDINARY CONSTRUCTION (TABLE 50.11(d))

FIRE DISTRICT: LIMERICK TOWNSHIP

BUILDING USE LIMITATIONS:

USE GROUP	CONSTR. CLASSIFICATION	ALLOWABLE SQ.FT.	ALLOWABLE HEIGHT
A-2 ASSEMBLY	3B - PROTECTED	9,500 SQ.FT.	2 STORIES, 55 FT.
F-1 FACTORY	3B - PROTECTED	12,000 SQ.FT.	2 STORIES, 55 FT.

OWNER CONTACT:

GAMBONE DEVELOPMENT Co.
1030 W. GERMANTOWN PIKE
EAST NORRITON, PENNSYLVANIA 19403
CONTACT: RAY KIERNAN
TELEPHONE: (610) 539 - 4700

LESSEE: CHESTER COUNTY BREWING CO.
LESSEE CONTACT: JOHN GIANNOPOULOS
TELEPHONE: (610) 935 - 5454
MOBILE: (610) 716 - 3020

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA — Regis W. Kubit, PE
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Robin J. Kohn, AIA
Commonwealth of Pennsylvania
License No. RA-11327-X

Contact Person:
Edward M. Happ
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APPROVED BY	CURRENT DATE
Robin J. Kohn, A.I.A.	April 02, 2004

Chester County Brewing Co.

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LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

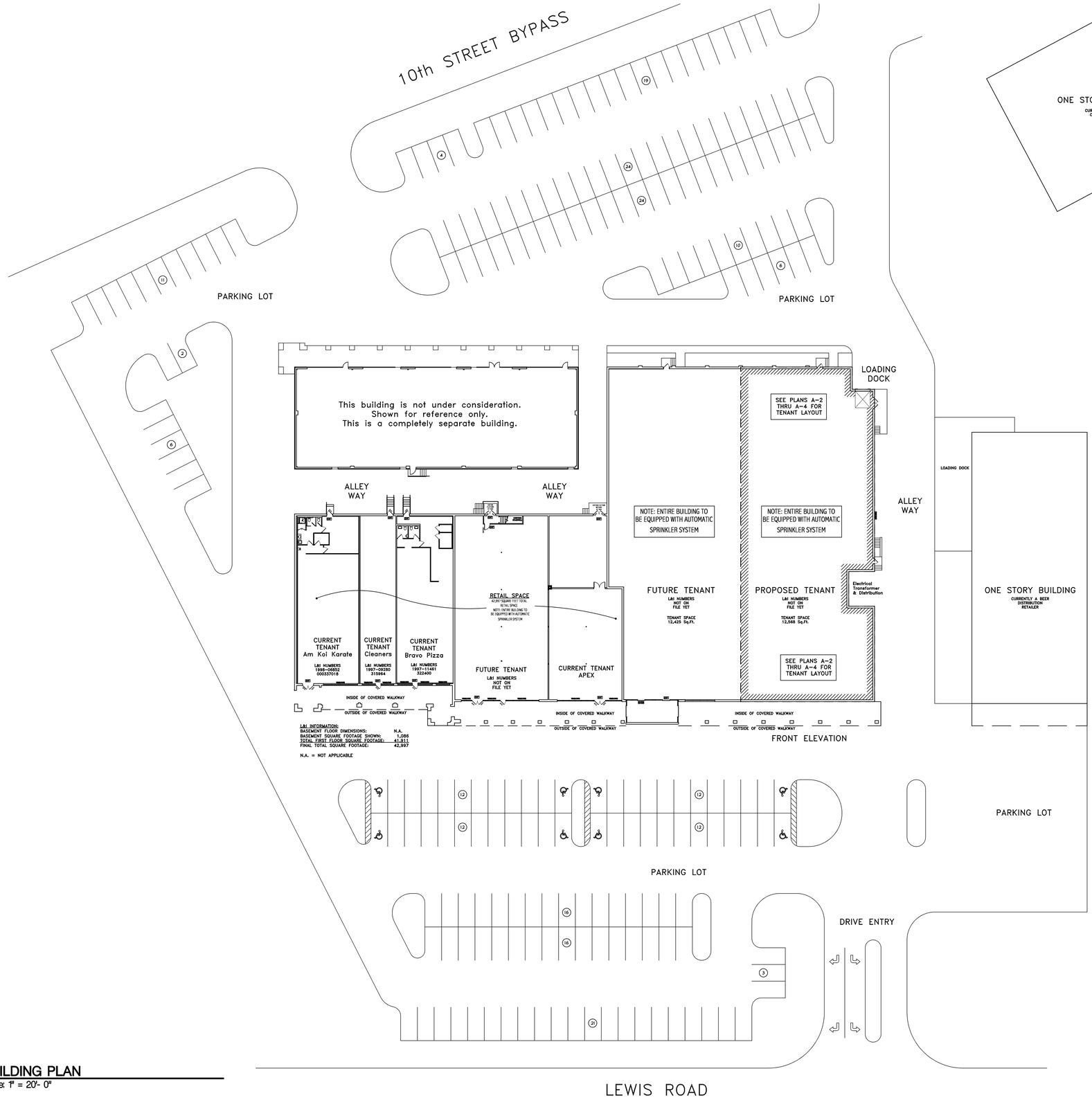
TITLE SHEET

SHEET NUMBER

T-1

REV 6

1998-T1.dwg
04-02-04



1 A-1 **BUILDING PLAN**
Scale: 1" = 20'- 0"

04-02-04 1998c-A1.dwg

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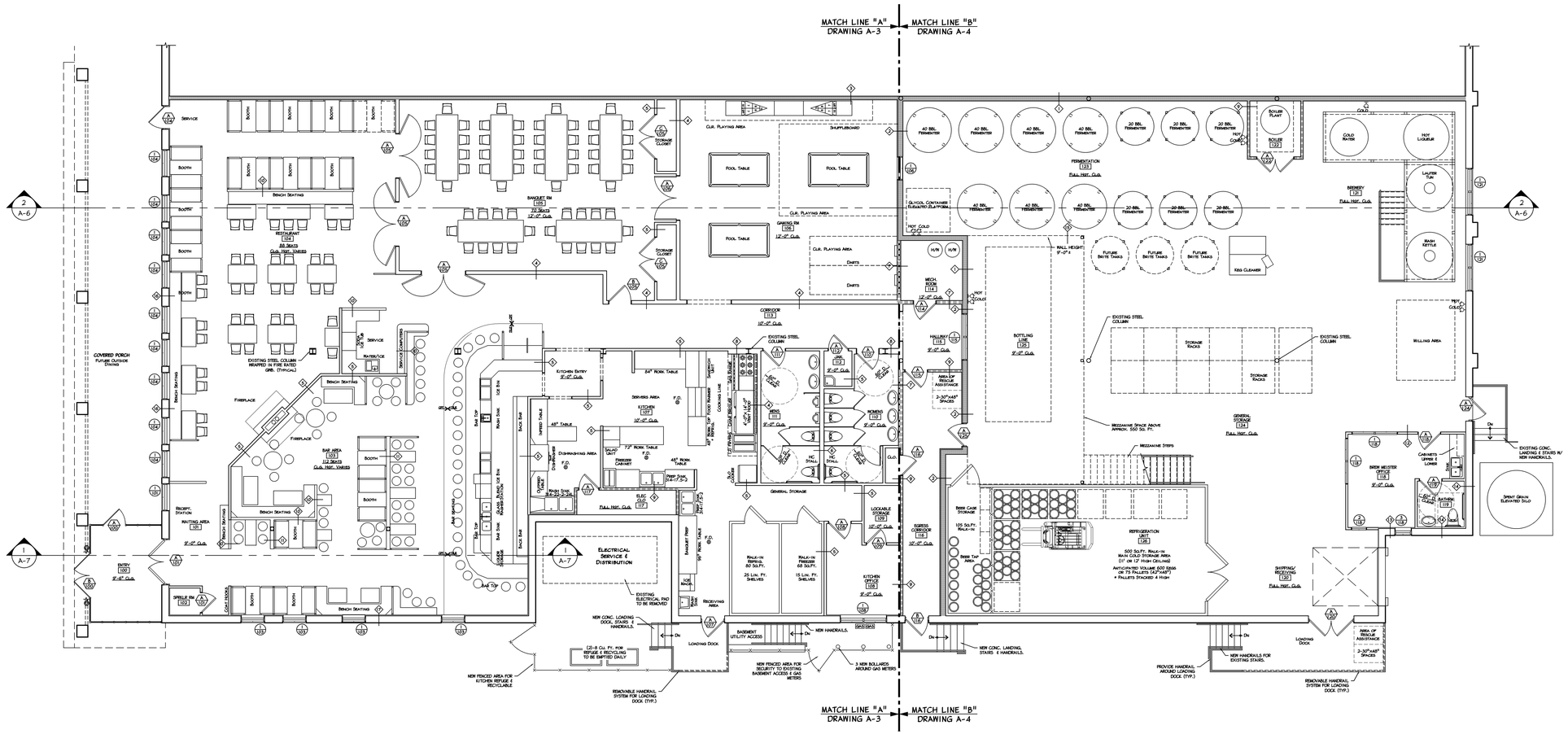
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BUILDING & SITE PLAN

SHEET NUMBER

A-1

REV 6



1 A-2 **FLOOR PLAN**
Scale: 1/8" = 1'- 0"

PENNA L&I USE OCCUPANCY
RESTAURANT & BAR — ASSEMBLY (A-2)
BREWERY — ORDINARY OCCUPANCY (D-O)

IBC 2000 USE GROUPS
RESTAURANT & BAR — ASSEMBLY (A-2)
BREWERY — FACTORY (F-1)

RESTAURANT SQ.FT. = 4947 SQ.FT.
KITCHEN SQ.FT. = 955 SQ.FT.

IBC 2000 LOAD CALC.
RESTAURANT & BAR = 330 (15 GROSS)
KITCHEN = 5 (200 GROSS)
MAX. OCCUPANT LOAD = 335

PA L&I LOAD CALC.
MAX. OCCUPANT LOAD = 330 (15 GROSS)

BREWERY SQ.FT. = 4925 SQ.FT.

IBC 2000 LOAD CALC.
MAX. OCCUPANT LOAD = 25 (200 GROSS)

PA L&I LOAD CALC.
MAX. OCCUPANT LOAD = 62 (80 GROSS)

LEGEND
2-HOUR RATED WALLS
1-HOUR RATED WALLS

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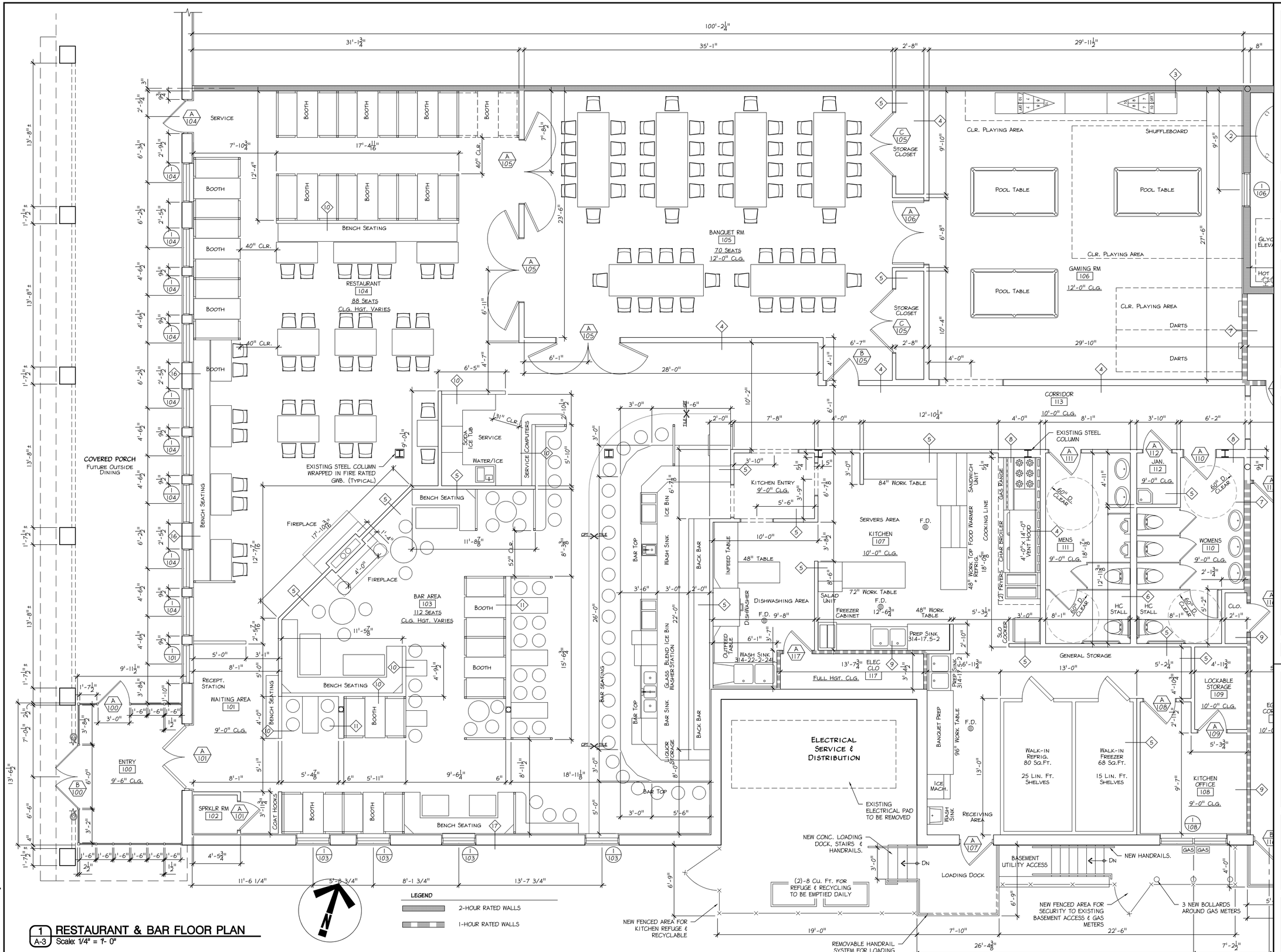
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MONTGOMERY COUNTY

SHEET TITLE
FLOOR PLAN

SHEET NUMBER
A-2
REV 6

04-02-04 1998c-A2.dwg



1 A-3 **RESTAURANT & BAR FLOOR PLAN**
Scale: 1/4" = 1'- 0"

04-02-04 1998-A3.dwg

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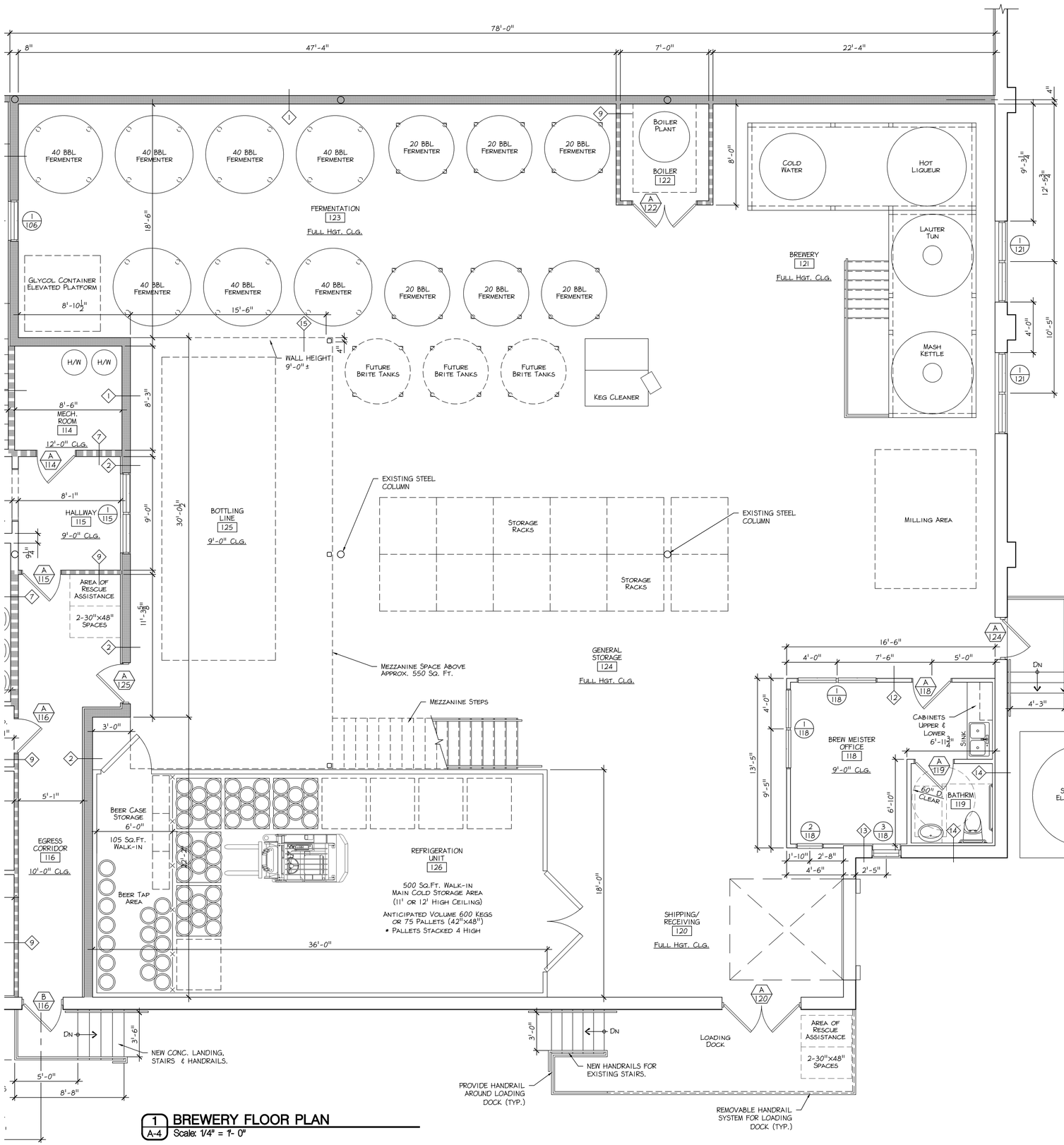
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RESTAURANT & BAR FLOOR PLAN

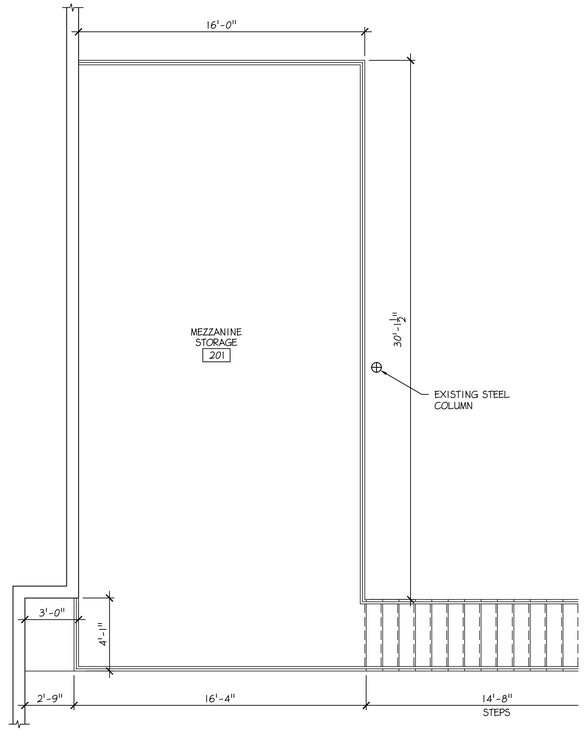
SHEET NUMBER

A-3

REV 6



1 BREWERY FLOOR PLAN
A-4 Scale: 1/4" = 1'- 0"



2 MEZZANINE FLOOR PLAN
A-4 Scale: 1/4" = 1'- 0"

LEGEND

- 2-HOUR RATED WALLS
- 1-HOUR RATED WALLS

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SHEET TITLE

BREWERY
FLOOR PLAN

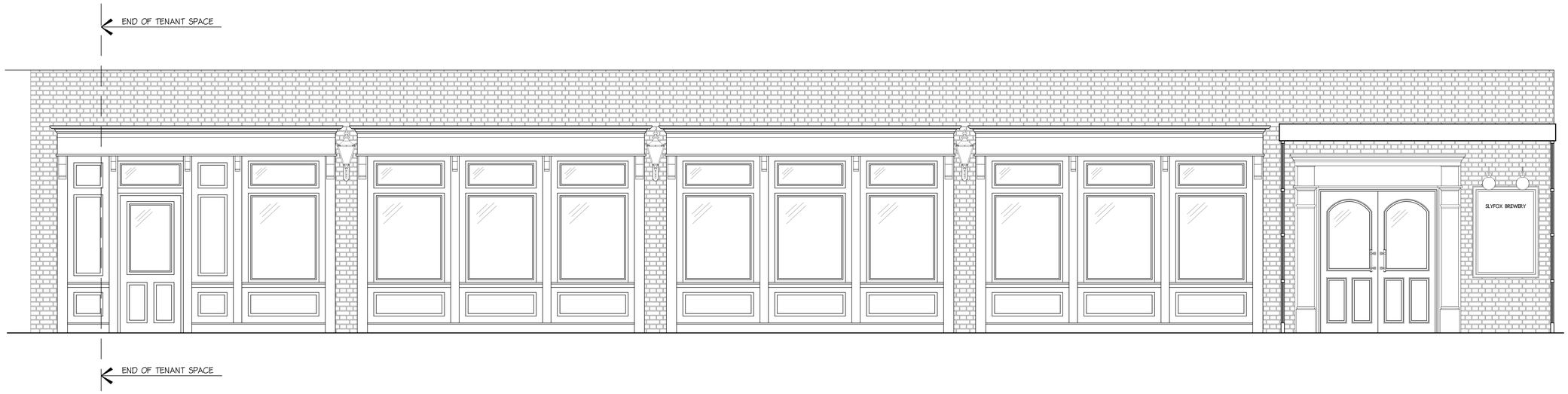
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A-4

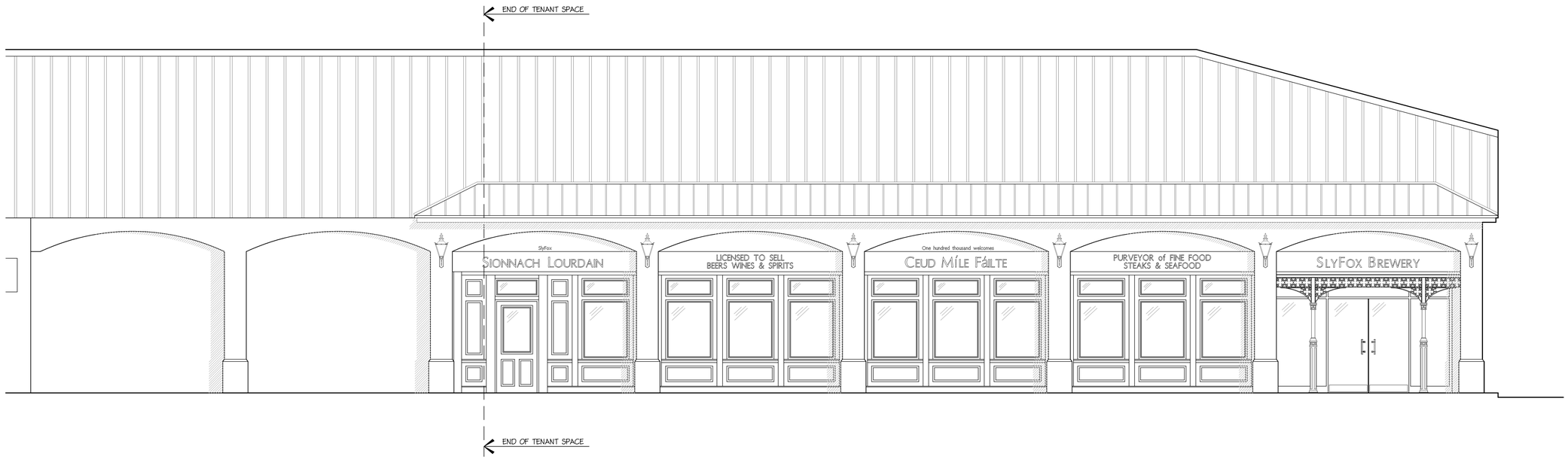
REV 6

1998c-A4.dwg

04-02-04



2 A-5 **RESTAURANT & FRONT ENTRANCE**
Scale: 3/8" = 1'- 0"



1 A-5 **FRONT ELEVATION**
Scale: 1/4" = 1'- 0"

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MONTGOMERY COUNTY

SHEET TITLE

FRONT ELEVATION
& ENLARGED VIEW

SHEET NUMBER

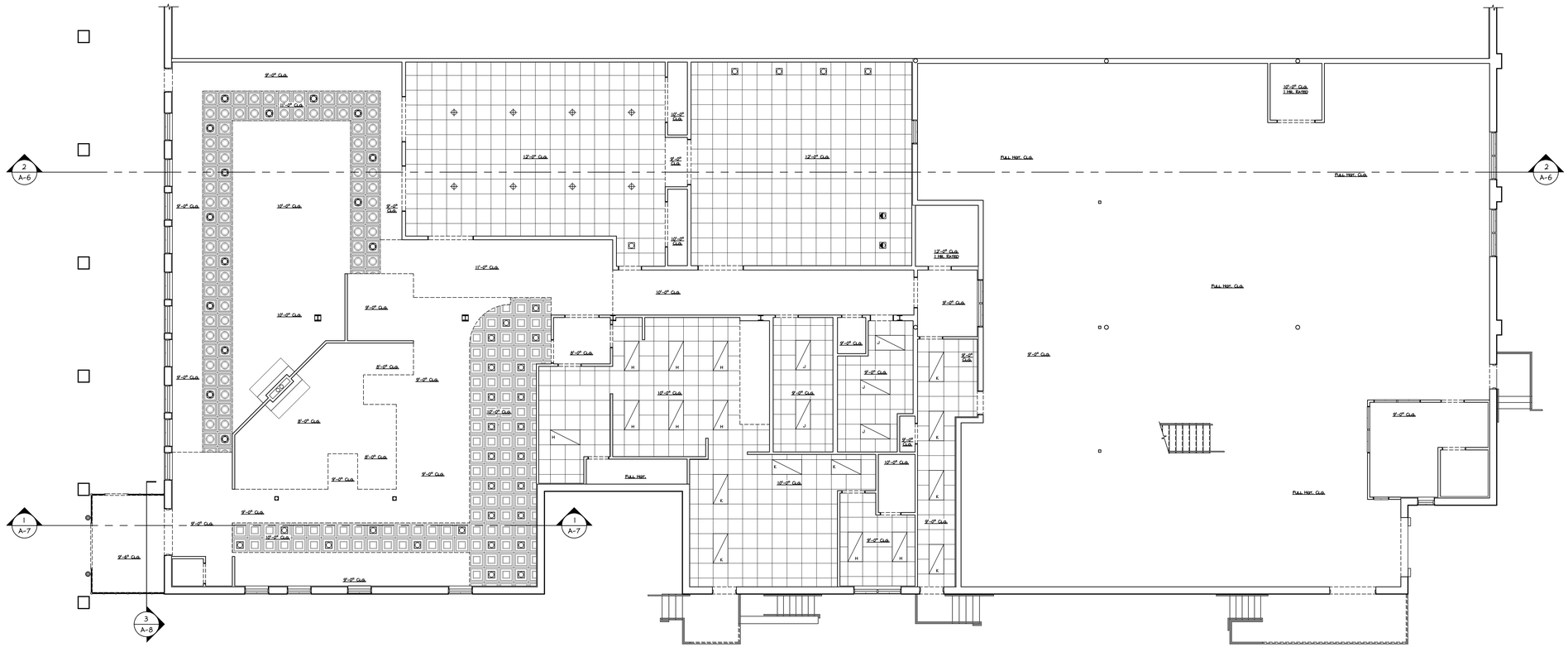
A-5

REV 6

04-02-04 1998c-A5.dwg



2 A-6 **BUILDING SECTION**
Scale: 1/8" = 1'- 0"



1 A-6 **REFLECTED CEILING PLAN**
Scale: 1/8" = 1'- 0"

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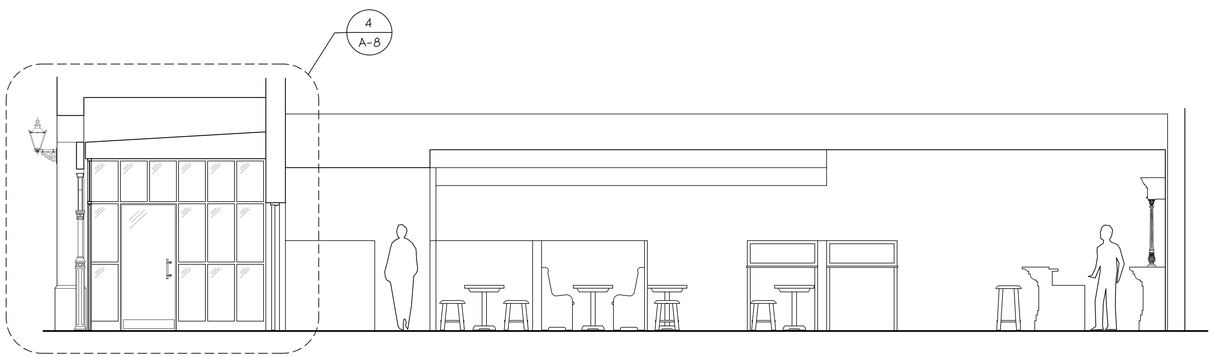
REFLECTED CEILING PLAN
& BUILDING SECTION

SHEET NUMBER

A-6

REV 6

1998c-A6.dwg
04-02-04



1 A-7 **BUILDING SECTION**
Scale: 1/4" = 1'- 0"

04-02-04 1998c-A7.dwg

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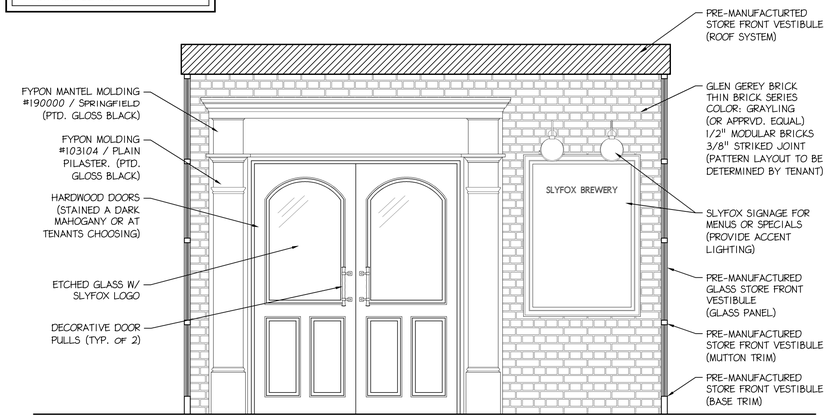
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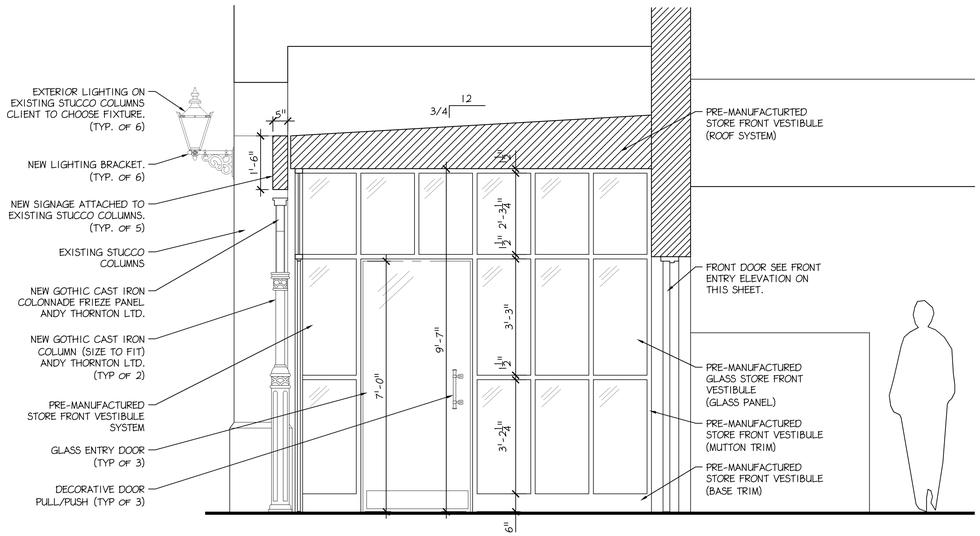
A-7

REV 6

NOTE:
- ALL MOLDING & MILLWORK TO BE HIGH-DENSITY POLYMER
- MOISTURE RESISTANT
- MEETS ASTM E84 CLASS I FIRE RESISTANCE RATINGS.
- FOLLOW MANUF. RECOMMENDATIONS FOR INSTALLATION.

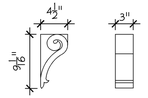


3 A-8 FRONT ENTRY ELEVATION
Scale: 1/2" = 1'- 0"



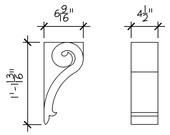
4 A-8 FRONT ENTRY SECTION
Scale: 1/2" = 1'- 0"

ANDY THORNTON LTD.
CARVINGS
ORDER REF. # ATBA PF56
MATERIAL PINE



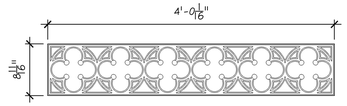
ENLARGED DETAIL
Scale: 1"=1'-0" SMALL CORBEL

ANDY THORNTON LTD.
CARVINGS
ORDER REF. # ATBA PF54
MATERIAL PINE



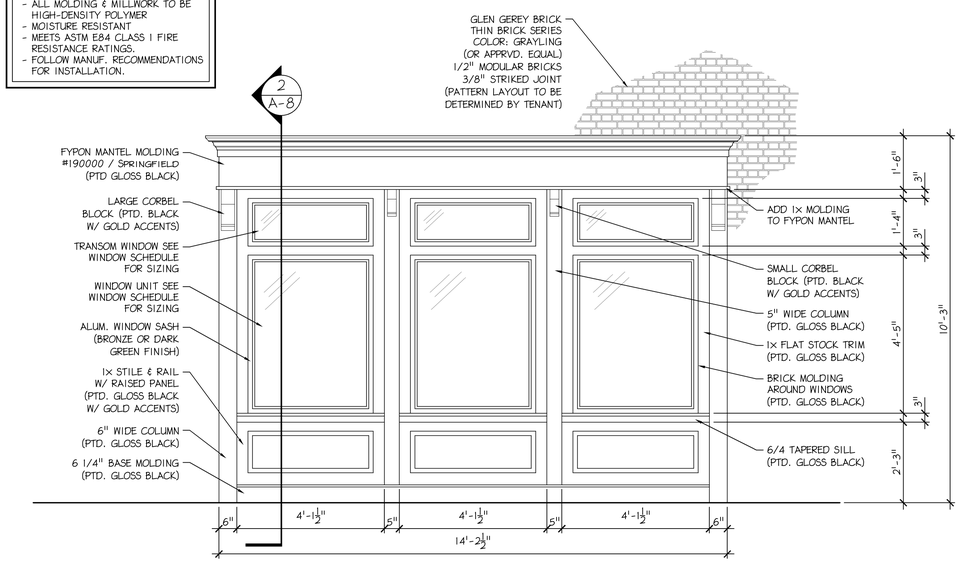
ENLARGED DETAIL
Scale: 1"=1'-0" LARGE CORBEL

ANDY THORNTON ARCHITECTURAL ANTIQUES
DECORATIVE CASTINGS
ORDER REF. # ATDC GC6
MATERIAL ALUMINUM

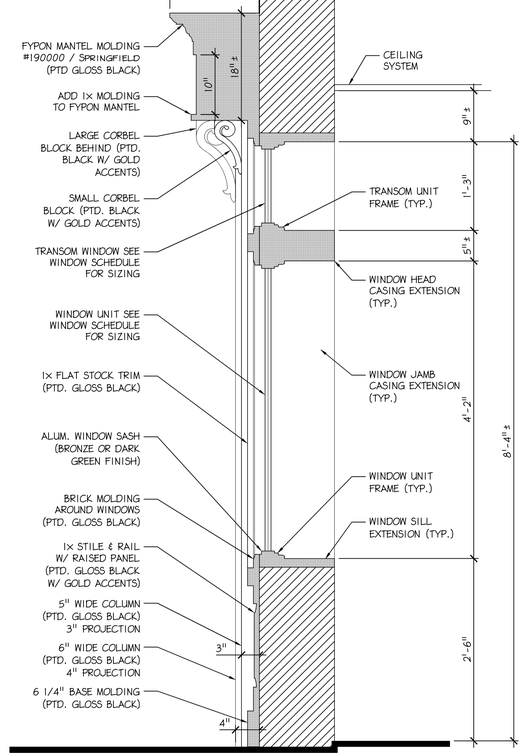


ENLARGED DETAIL
Scale: 1"=1'-0" GOTHIC FRIEZE PANEL

NOTE:
- ALL MOLDING & MILLWORK TO BE HIGH-DENSITY POLYMER
- MOISTURE RESISTANT
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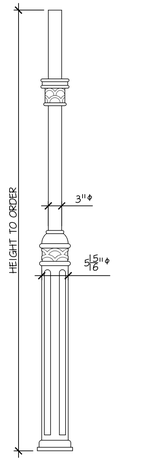


1 A-8 FRONT WINDOW ELEVATION
Scale: 1/2" = 1'- 0"



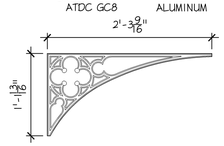
2 A-8 FRONT WINDOW SECTION
Scale: 1" = 1'- 0"

ANDY THORNTON ARCHITECTURAL ANTIQUES
DECORATIVE CASTINGS
ORDER REF. # ATDC AC2
MATERIAL ALUMINUM



ENLARGED DETAIL
Scale: 3/4"=1'-0" GOTHIC COLUMN

ANDY THORNTON ARCHITECTURAL ANTIQUES
DECORATIVE CASTINGS
ORDER REF. # ATDC GC8
MATERIAL ALUMINUM



ENLARGED DETAIL
Scale: 1"=1'-0" GOTHIC SPANDREL

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Regis W. Kubit, PE
REGISTERED ARCHITECT PENNSYLVANIA ROBIN J. KOHN RA-11327
523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Robin J. Kohn, AIA
Commonwealth of Pennsylvania
License No. RA-11327-X

Contact Person:
Edward M. Happ
(610) 917-8831

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APPROVED BY	CURRENT DATE
Robin J. Kohn, A.I.A.	April 02, 2004

Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

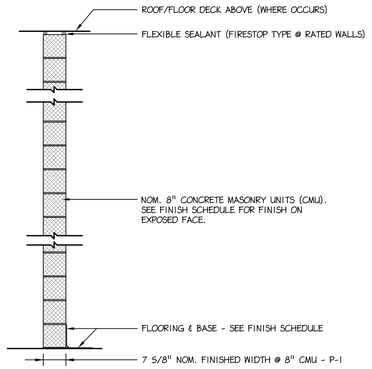
FRONT ELEVATION
DETAILS & NOTES

SHEET NUMBER

A-8

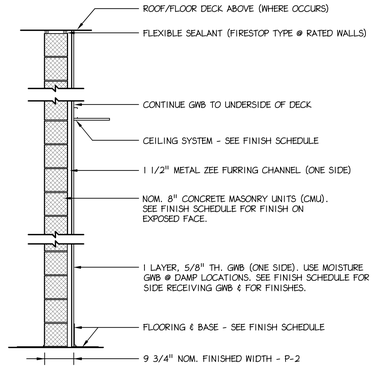
REV 6

1998c-A8.dwg
04-02-04



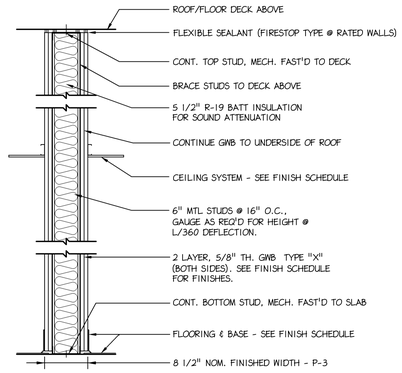
P-1 STANDARD MASONRY WALL UL #U907

Scale: 1/2" = 1'-0" TENANT SEPARATION WALL



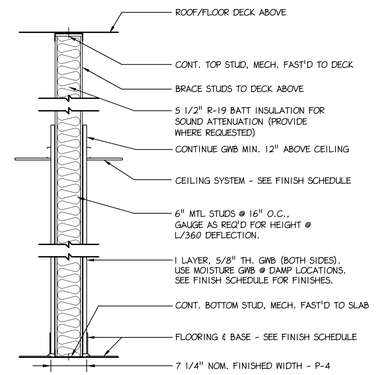
P-2 STD. MASONRY WALL W/ GWB UL #U907

Scale: 1/2" = 1'-0" INTERIOR WALL AT SEPARATION OF USE



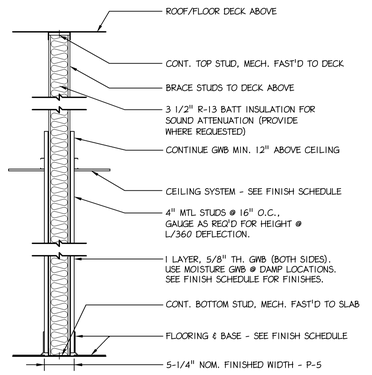
P-3 STD. 2-HOUR MTL STUD WALL UL #U421

Scale: 1/2" = 1'-0" TENANT SEPARATION WALL



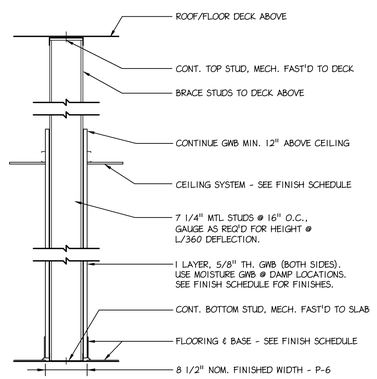
P-4 STANDARD MTL. STUD WALL

Scale: 1/2" = 1'-0" 6" INTERIOR WALL W/ GWB



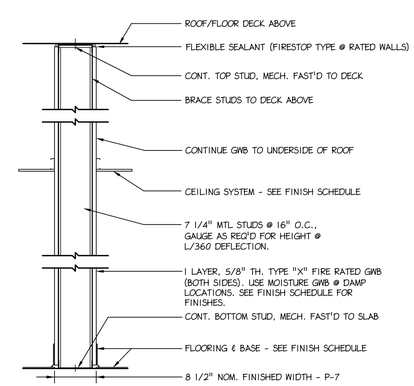
P-5 STANDARD MTL. STUD WALL

Scale: 1/2" = 1'-0" 4" INTERIOR WALL W/ GWB



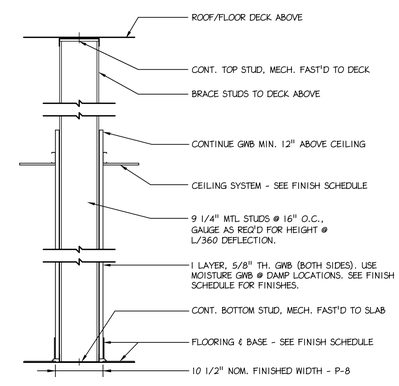
P-6 STANDARD MTL. STUD WALL

Scale: 1/2" = 1'-0" 7 1/4" INTERIOR WALL W/ GWB



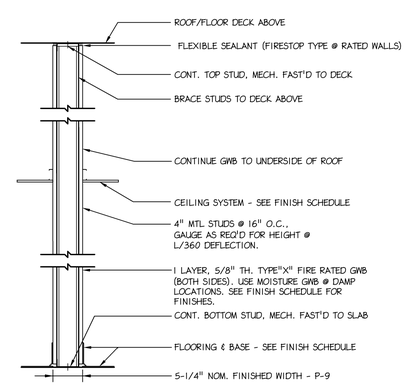
P-7 STD. 1-HOUR MTL STUD WALL UL #U422

Scale: 1/2" = 1'-0" 7 1/4" INTERIOR WALL W/ GWB



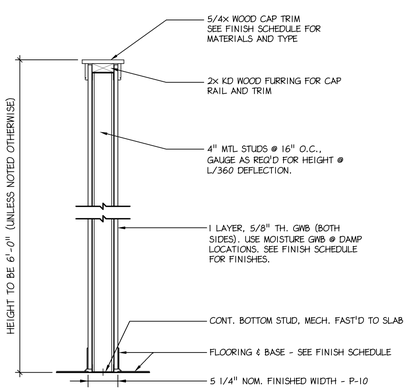
P-8 STANDARD MTL. STUD WALL

Scale: 1/2" = 1'-0" 9 1/4" INTERIOR WALL W/ GWB



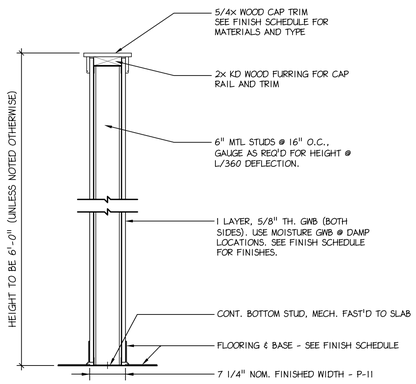
P-9 STD. 1-HOUR MTL STUD WALL UL #U422

Scale: 1/2" = 1'-0" 4" INTERIOR WALL W/ GWB



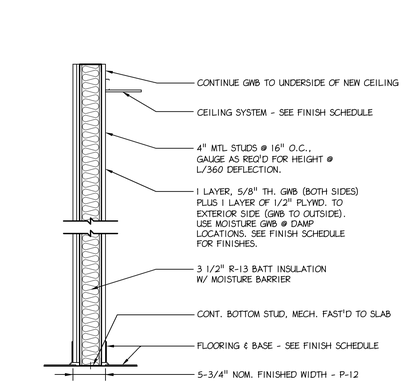
P-10 STD. CAPPED MTL. STUD WALL

Scale: 1/2" = 1'-0" 4" MTL. STUD CAPPED WALL



P-11 STD. CAPPED MTL. STUD WALL

Scale: 1/2" = 1'-0" 6" MTL. STUD CAPPED WALL



P-12 STANDARD MTL. STUD WALL

Scale: 1/2" = 1'-0" 4" INTERIOR WALL W/ GWB

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Robin J. Kohn, AIA — Regis W. Kubit, PE
REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA ROBIN J. KOHN RA-11327
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APPROVED BY: Robin J. Kohn, A.I.A.
CURRENT DATE: April 02, 2004

Chester County Brewing Co.

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312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

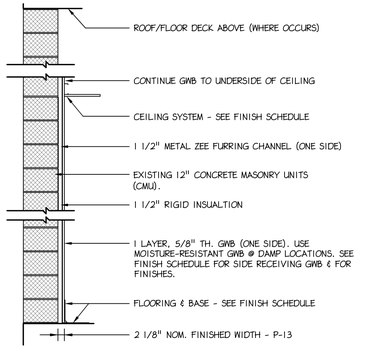
WALL CONSTRUCTION PARTITION TYPES

SHEET NUMBER

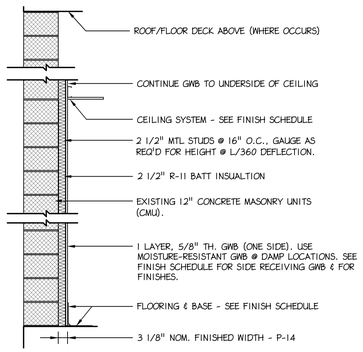
A-10

REV 6

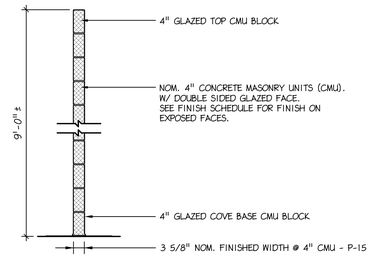
04-02-04 1998c-A10.dwg



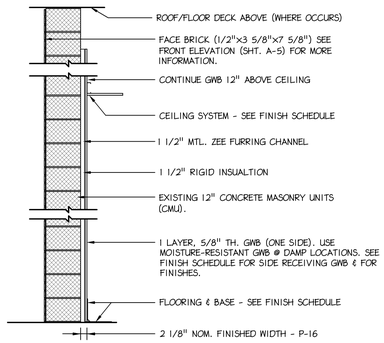
P-13 STD. EXT. MASONRY WALL W/ GWB
Scale: 1/2" = 1'-0" BREW MEISTER OFFICE



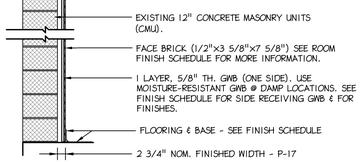
P-14 STD. EXT. MASONRY WALL W/ GWB
Scale: 1/2" = 1'-0" BREW MEISTER OFFICE



P-15 STANDARD MASONRY WALL
Scale: 1/2" = 1'-0" SEPARATION WALL



P-16 STD. EXT. MASONRY WALL W/ GWB
Scale: 1/2" = 1'-0" FRONT DECORATIVE ENTRY WALL



P-17 STD. EXT. MASONRY WALL W/ BRICK
Scale: 1/2" = 1'-0" DECORATIVE BAR WALL

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APPROVED BY: Robin J. Kohn, A.I.A. CURRENT DATE: April 02, 2004

Chester County Brewing Co.

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312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE
WALL CONSTRUCTION PARTITION TYPES

SHEET NUMBER
A-11
REV 6

04-02-04 1998c-A11.dwg

ROOM FINISH SCHEDULE

ROOM			FLOORS									BASES								WAINSCOTS						HGT.	WALLS									CEILINGS								MTG.			REMARKS
LOCATION (FLOOR)	ROOM NUMBER	ROOM NAME	MATERIALS									MATERIALS								MATERIALS							MATERIALS									MATERIALS											
			SEALED CONC.	SEAMLESS VINYL	CARPETING	CARPETED TILE	HARDWOOD FLOOR	TERRAZZO TILE	ROLLED MMA	VCT	CERAMIC TILE	MASONRY	VINYL COVE	MMA COVE	TERRAZZO TILE	WOOD MOLDING	PAINTED	CERAMIC TILE	PANELING	TILE	PAINTED	CERAMIC TILE	MARLITE		MASONRY	WASH DOWN	GYPSUM BOARD	STAINLESS STEEL	TILE	WALL COVER	PAINTED	PLASTER	GLASS PANEL	ACOUSTICAL	GYPSUM BOARD	WASH DOWN SYSTEM	PAINTED	EXPOSED	GLASS PANEL		FURRED	SUSPENDED	CEILING HEIGHT	
1ST	100	ENTRY VESTIBULE	X									X													36"	X							X								X			9'-6"	
1ST	101	WAITING AREA			X										X					X								X					X		X							18'±	
1ST	102	SPRINKLER ROOM	X									X														X		X								X							FULL	
1ST	103	BAR / LOUNGE			X		X			X						X			X						VARIES	X		X				X		X		X				X	X		VARIES	CEILING HEIGHT VARIES THROUGHOUT OUT SPACE - SEE REFLECTED CEILING FOR MORE INFO.
1ST	104	RESTAURANT SEATING			X		X									X			X						VARIES			X				X		X		X				X	X		VARIES	CEILING HEIGHT VARIES THROUGHOUT OUT SPACE - SEE REFLECTED CEILING FOR MORE INFO.
1ST	105	BANQUET ROOM			X											X												X					X								X		12'-0"	
1ST	106	GAMING ROOM			X											X			X						60"			X				X								X		12'-0"	
1ST	107	KITCHEN								X			X							X					36"			X		X		X		X						X		10'-0"	
1ST	108	KITCHEN OFFICE								X			X															X					X										9'-0"	
1ST	109	LOCKABLE STORAGE								X			X															X						X		X					X		10'-0"	
1ST	110	WOMENS ROOM								X			X							X					36"			X		X		X									X		9'-0"	
1ST	111	MENS ROOM								X			X							X					36"			X		X		X									X		9'-0"	
1ST	112	JANITOR CLOSET								X			X															X					X									X		9'-0"	
1ST	113	CORRIDOR			X										X					X					36"			X				X			X								10'-0"	
1ST	114	MECHANICAL ROOM	X										X							X					36"	X		X				X			X						X			12'-0"	
1ST	115	HALLWAY			X										X					X					36"			X				X			X						X			9'-0"	
1ST	116	EGRESS CORRIDOR								X			X																X					X								X		9'-0"	
1ST	117	ELECTRICAL CLOSET								X			X																X								X							FULL	
1ST	118	BREW MEISTER OFFICE								X			X																X					X		X					X		9'-0"	
1ST	119	BATHROOM								X			X																X					X		X					X		9'-0"	
1ST	120	SHIPPING / RECEIVING	X									X														X										X	X						FULL	
1ST	121	BREWERY	X									X														X											X	X						FULL	
1ST	122	BOILER ROOM	X									X	X													X		X								X	X						10'-0"	
1ST	123	FERMENTATION	X									X														X											X	X						FULL	
1ST	124	GENERAL STORAGE	X									X														X											X	X						FULL	
1ST	125	BOTTLING LINE	X									X														X										X	X						9'-0"	
2ND	201	MEZZANINE STORAGE																																											11'±	

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312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE
ROOM FINISH SCHEDULE

SHEET NUMBER
A-12

REV 6

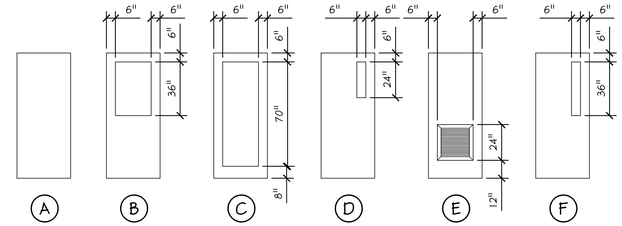
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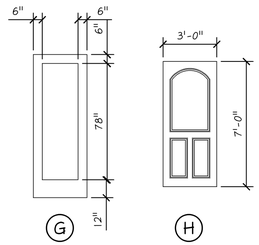
DOOR AND FRAME SCHEDULE

DOOR									FRAME											REMARKS
DOOR		SIZE			TYPE	MATL.	CORE	GLASS	TYPE	MATL.	DETAILS			WIDTH	HDWR. SET NO.	FIRE RATING LABEL	THRESHOLD	REMOTE BUZZER	CARD READER	
FLR.	NO.	W	H	T							HEAD	JAMB	SILL							
FIRST	100A	3'-0"	7'-0"	1"	-	GLASS	-	TEMP	N/A	N/A	-	-	-	-	-	-				VESTIBLE SINGLE ENTRY DOOR - GLASS DOOR W/ SAFETY GLASS
FIRST	100B	6'-0"	7'-0"	1"	-	GLASS	-	TEMP	N/A	N/A	-	-	-	-	-	-				VESTIBLE DOUBLE ENTRY DOOR - GLASS DOOR W/ SAFETY GLASS
FIRST	101A	6'-0"	7'-0"	2 1/4"	HH	WD	SOLID	STN	1	HM	8	11	-	6 3/4"	-	-				ENTRY DOUBLE DOORS W/ LITES - DECORATIVE DOORS
FIRST	102A	2'-8"	7'-0"	1 3/4"	A	WD	SOLID	-	2	HM	1	4	-	6 1/4"	-	-				SPRINKLER ROOM DOOR
FIRST	104A	3'-0"	7'-0"	1 3/4"	B	WD	SOLID	STN	1	HM	8	11	13	6 3/4"	-	-				SERVICE ENTRY DOOR W/ LITE & TRANSOM UNIT - W/ PANIC HDWR.
FIRST	105A	6'-0"	8'-0"	1 3/4"	GG	WD	SOLID	TEMP	2	HM	2	5	-	8 1/4"	-	-				FRENCH DOUBLE DOORS
FIRST	105B	3'-0"	7'-0"	1 3/4"	A	WD	SOLID	-	2	HM	2	5	-	8 1/4"	-	-				SERVICE ENTRY DOOR
FIRST	105C	6'-0"	7'-0"	1 3/4"	AA	WD	SOLID	-	2	HM	2	5	-	8 1/4"	-	-				CLOSET DOUBLE DOORS
FIRST	106A	6'-0"	8'-0"	1 3/4"	AA	WD	SOLID	-	2	HM	2	5	-	8 1/4"	-	-				GAME ROOM DOUBLE DOORS
FIRST	107A	3'-0"	7'-0"	1 3/4"	F	HM	INS	INS	1	HM	9	12	13	6 3/4"	-	-				KITCHEN ENTRY DOOR FROM LOADING DOCK - W/ PANIC HDWR.
FIRST	108A	3'-0"	7'-0"	1 3/4"	B	WD	SOLID	SNGL.	2	HM	1	4	-	6 1/4"	-	-				KITCHEN OFFICE DOOR
FIRST	109A	2'-8"	7'-0"	1 3/4"	A	WD	SOLID	-	2	HM	1	4	-	6 1/4"	-	-				STORAGE ROOM DOOR
FIRST	110A	3'-0"	7'-0"	1 3/4"	A	WD	SOLID	-	2	HM	3	6	13	10 1/2"	-	-				WOMENS ROOM DOOR
FIRST	111A	3'-0"	7'-0"	1 3/4"	A	WD	SOLID	-	2	HM	1	4	13	6 1/4"	-	-				MENS ROOM DOOR
FIRST	112A	2'-8"	7'-0"	1 3/4"	A	WD	SOLID	-	2	HM	1	4	14	6 1/4"	-	-				JANITORS CLOSET DOOR
FIRST	114A	3'-0"	7'-0"	1 3/4"	E	WD	FIRE	-	2	HM	2	5	14	8 1/4"	-	"C"				MECHANICAL ROOM DOOR W/ FUSABLE LINK LOUVER
FIRST	115A	3'-0"	7'-0"	1 3/4"	F	WD	FIRE	WIRE	2	HM	1	4	-	6 1/4"	-	"C"				EGRESS CORRIDOR DOOR
FIRST	116A	2'-8"	7'-0"	1 3/4"	A	HM	FIRE	-	2	HM	1	4	-	6 1/4"	-	"C"				CLOSET DOOR
FIRST	116B	3'-0"	7'-0"	1 3/4"	D	HM	INS	INS	1	HM	8	11	-	6 3/4"	-	-				EGRESS DOOR TO LANDING - W/ PANIC HDWR.
FIRST	117A	2'-8"	7'-0"	1 3/4"	A	HM	FIRE	-	2	HM	1	4	-	6 1/4"	-	"C"				ELECTRICAL CLOSET DOOR
FIRST	118A	3'-0"	7'-0"	1 3/4"	B	HM	INS	INS	2	HM	1	4	-	6 1/4"	-	-				BREW MEISTER OFFICE DOOR
FIRST	119A	3'-0"	7'-0"	1 3/4"	A	HM	HLW	-	2	HM	1	4	-	6 1/4"	-	-				BATHROOM DOOR
FIRST	120A	6'-0"	7'-0"	1 3/4"	AA	HM	INS	-	EXST.	HM	-	-	-	EXST.	-	-				DOUBLE EXISTING LOADING DOCK DOORS - W/ PANIC HDWR.
FIRST	122A	5'-0"	7'-0"	1 3/4"	EE	HM	FIRE	-	2	HM	1	4	-	6 1/4"	-	"C"				BOILER PLANT DOORS W/ FUSABLE LINK LOUVERS
FIRST	124A	3'-0"	7'-0"	1 3/4"	D	HM	INS	INS	EXST.	HM	-	-	-	EXST.	-	-				EXIT DOOR FROM BREWERY - W/ PANIC HDWR.
FIRST	125A	3'-0"	7'-0"	1 3/4"	D	HM	FIRE	WIRE	1	HM	?	?	-	?	-	"B"				EGRESS DOOR FROM BREWERY

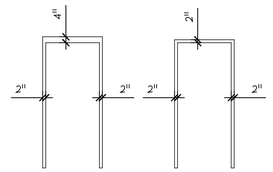
DOOR TYPES

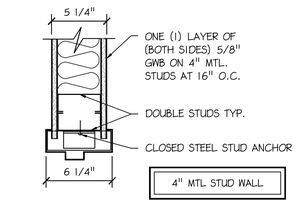
* DOUBLE LETTERS FOR DOOR TYPES DESIGNATES DOUBLE DOORS.



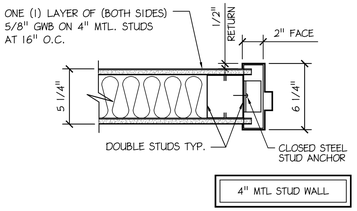


FRAME TYPES

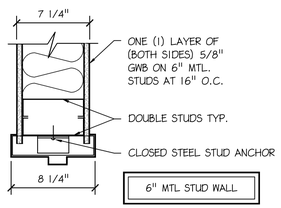




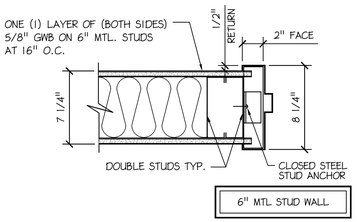
1 HEAD DETAIL A-13 SCALE: 1 1/2" = 1' - 0"



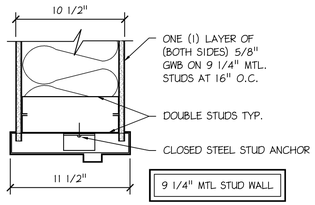
4 JAMB DETAIL A-13 SCALE: 1 1/2" = 1' - 0"



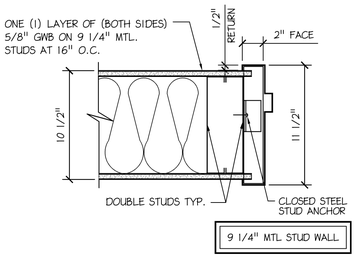
2 HEAD DETAIL A-13 SCALE: 1 1/2" = 1' - 0"



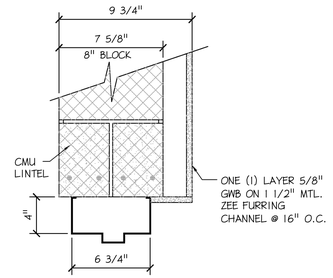
5 JAMB DETAIL A-13 SCALE: 1 1/2" = 1' - 0"



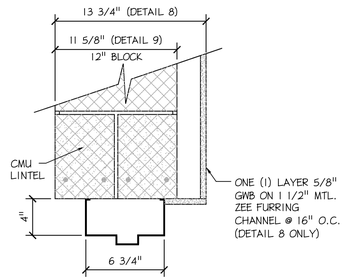
3 HEAD DETAIL A-13 SCALE: 1 1/2" = 1' - 0"



6 JAMB DETAIL A-13 SCALE: 1 1/2" = 1' - 0"

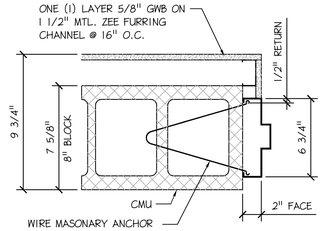


7 HEAD DETAIL A-13 SCALE: 1 1/2" = 1' - 0"

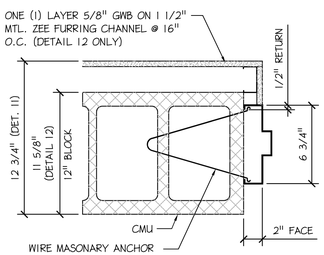


8 HEAD DETAIL (AS SHOWN & NOTED) A-13 SCALE: 1 1/2" = 1' - 0"

9 HEAD DETAIL (AS SHOWN) A-13 SCALE: 1 1/2" = 1' - 0"

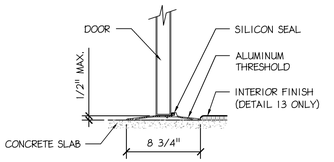


10 HEAD DETAIL A-13 SCALE: 1 1/2" = 1' - 0"



11 JAMB DETAIL (AS SHOWN & NOTED) A-13 SCALE: 1 1/2" = 1' - 0"

12 JAMB DETAIL (AS SHOWN) A-13 SCALE: 1 1/2" = 1' - 0"



13 SILL DETAIL (AS SHOWN & NOTED) A-13 SCALE: 1 1/2" = 1' - 0"

14 SILL DETAIL (AS SHOWN) A-13 SCALE: 1 1/2" = 1' - 0"

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA — Regis W. Kubit, PE
REGISTERED ARCHITECT PENNSYLVANIA ROBIN J. KOHN RA-11327
523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Robin J. Kohn, AIA
Commonwealth of Pennsylvania
License No. RA-11327-X

Contact Person:
Edward M. Happ
(610) 917-8831

PROJECT NO.	DRAWN BY	CHK'D BY
B1998	EMH	EMH

NO.	DATE	BY	ISSUE
1	01-09-04	EMH	ISSUED FOR PRELIMINARY REVIEW
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7			
8			
9			
10			
11			
12			
13			
14			
15			

APPROVED BY	CURRENT DATE
Robin J. Kohn, A.I.A.	April 02, 2004

Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

DOOR & FRAME SCHEDULE

SHEET NUMBER

A-13

REV 6

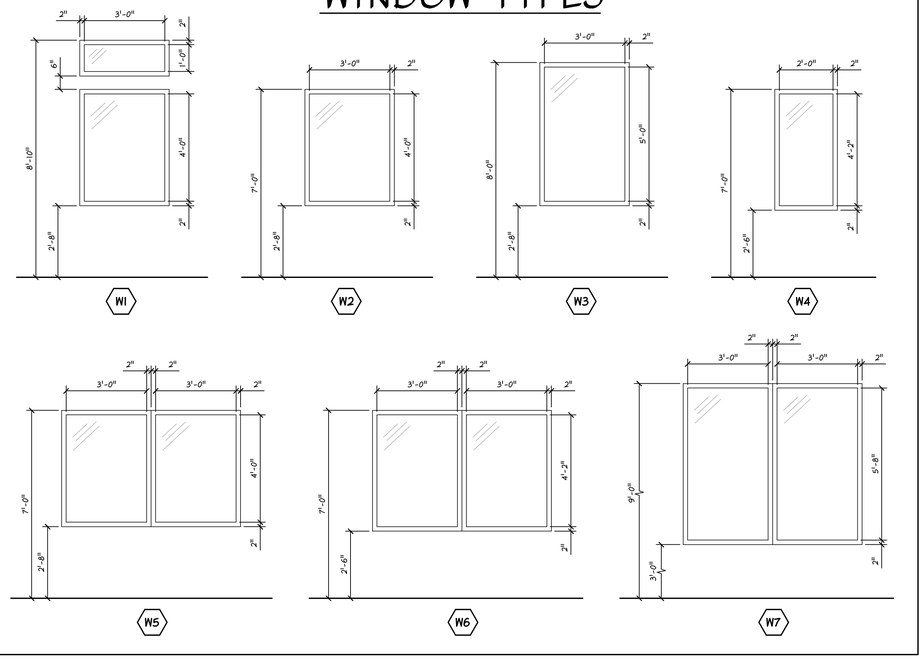
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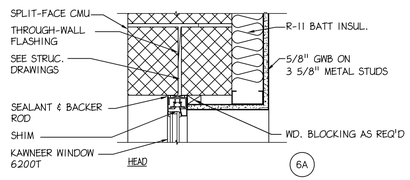
WINDOW SCHEDULE

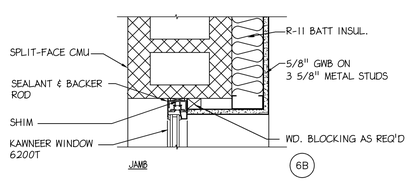
WINDOW									FRAME				FIRE RATING	REMARKS
WINDOW				SIZE		QTY.	GLASS	INT/EXT	MATL.	DETAILS			WIDTH		
FLR.	ROOM	NO.	STYLE	W	H					HEAD	JAMB	SILL		LABEL	
FIRST	101	1	W1	3'-0"	4'-0"	1	INS	EXT	AL	6A	6B	6C	3"	-	FRONT EXTERIOR WINDOW W/ TRANSOM
FIRST	103	1	W2	3'-0"	4'-0"	4	INS	EXT	AL	6A	6B	6C	3"	-	EXTERIOR WIDOW BAR SIDE
FIRST	104	1	W1	3'-0"	4'-0"	9	INS	EXT	AL	6A	6B	6C	3"	-	FRONT EXTERIOR WINDOW W/ TRANSOM
FIRST	106	1	W3	3'-0"	5'-0"	1	INS	INT	AL	6A	6B	6C	3"	"B"	GAME ROOM VIEW WINDOW INTO BREWERY (2-HR RATED)
FIRST	108	1	W5	3'-0"	4'-0"	2	INS	EXT	AL	6A	6B	6C	3"	-	KITCHEN OFFICE EXTERIOR WINDOW
FIRST	115	1	W5	3'-0"	4'-0"	2	INS	INT	AL	6A	6B	6C	3"	"B"	VIEW WINDOW INTO BREWERY (2-HR RATED)
FIRST	118	1	W6	3'-0"	4'-2"	4	INS	INT	AL	7A	7B	7C	3"	-	OFFICE WINDOW IN BREWERY
FIRST	118	2	W4	2'-0"	4'-2"	1	INS	INT	AL	7A	7B	7C	3"	-	OFFICE WINDOW IN BREWERY
FIRST	118	3	W4	2'-0"	4'-2"	1	INS	EXT	AL	6A	6B	6C	3"	-	OFFICE EXTERIOR WINDOW
FIRST	121	1	W7	3'-0"	5'-8"	4	INS	EXT	AL	8A	8B	8C	3"	-	BREWERY EXTERIOR WINDOW

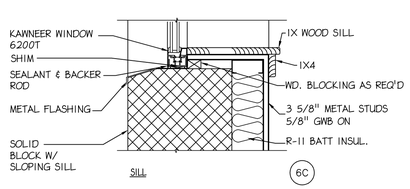
* VERIFY ALL DIMENSIONS IN FIELD

WINDOW TYPES

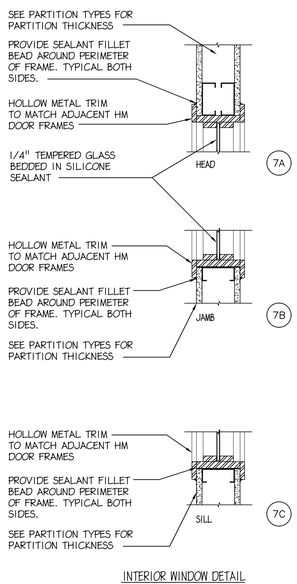






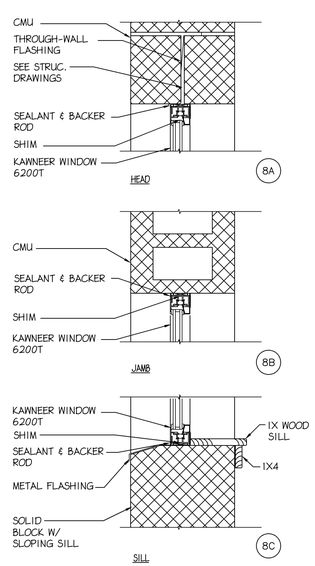


6 A-14 WINDOW DETAIL
SCALE: 1 1/2" = 1' - 0"



INTERIOR WINDOW DETAIL

7 A-14 WINDOW DETAIL
SCALE: 1 1/2" = 1' - 0"



8 A-14 WINDOW DETAIL
SCALE: 1 1/2" = 1' - 0"

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Robin J. Kohn, A.I.A.	April 02, 2004

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MONTGOMERY COUNTY

SHEET TITLE

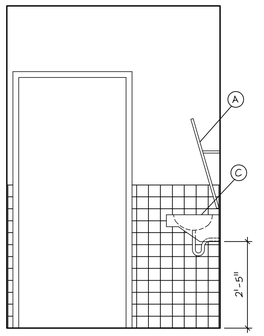
WINDOW SCHEDULE & DETAILS

SHEET NUMBER

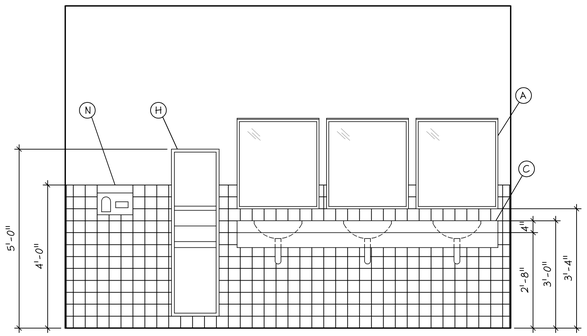
A-14

REV 6

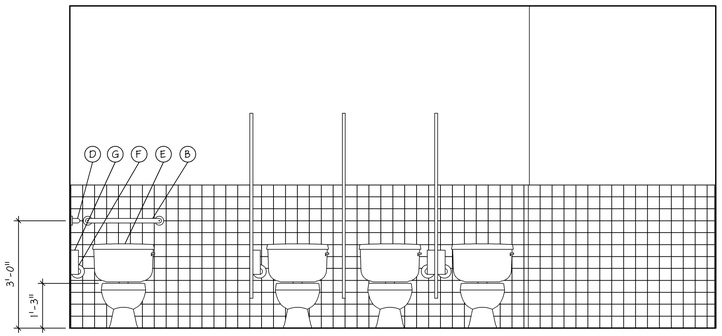
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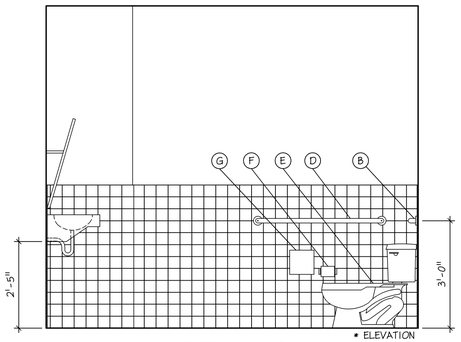
INTERIOR ELEVATION D
SCALE: 1/2"=1'-0"



INTERIOR ELEVATION E
SCALE: 1/2"=1'-0"



INTERIOR ELEVATION F
SCALE: 1/2"=1'-0"



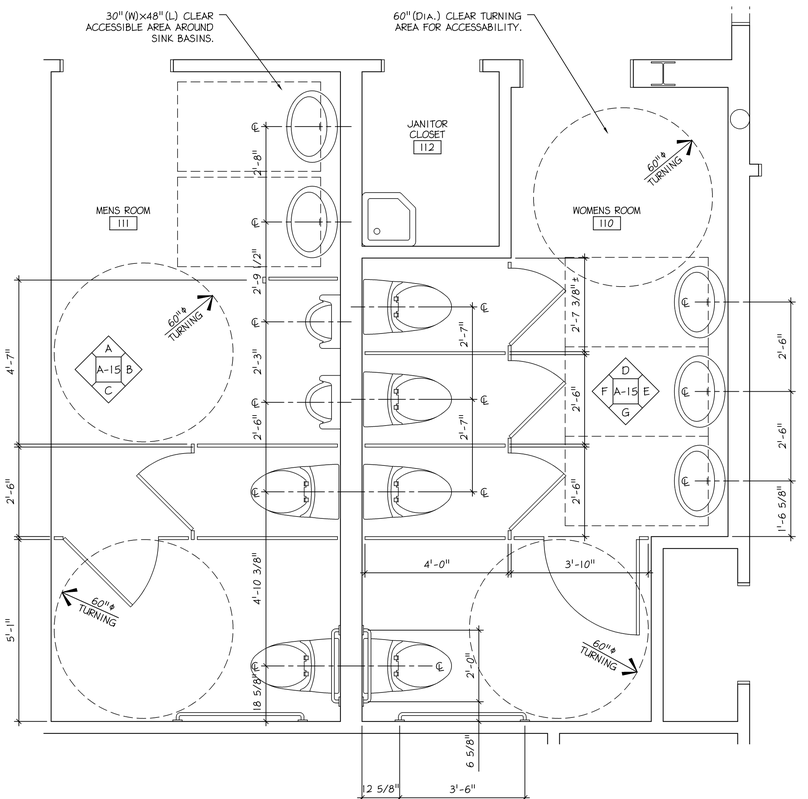
INTERIOR ELEVATION G
SCALE: 1/2"=1'-0"

* ELEVATION "C" SIMILAR

3 BATHROOM ELEVATIONS
A-15 SCALE: 1/2" = 1'-0" BATHROOM No. 110

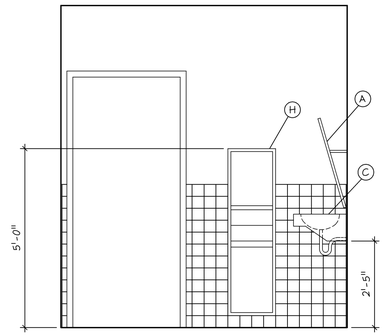
ACCESSORY SCHEDULE

DESIG.	ITEM	MTG. HEIGHT	TOTAL QTY.
A	TILTING MIRROR	70" TO TOP	6
B	REAR GRAB BAR	36" TO CENTER	3
C	COUNTER MOUNTED LAVATORY	36" TO TOP	5
D	SIDE GRAB BAR	36" TO CENTER	3
E	WATER CLOSET	15" TO TOP	7
F	TOIL. PAPER DISPENSER	19" TO CENTER	7
G	FEMININE NAPKIN DISPOSAL	20" TO CENTER	4
H	P/T DISP./WASTE RECEPTACLE	60" TO TOP	2
J	MENS ROOM URINAL	60" TO TOP	2
K	SMALL P/T DISP. WASTE RECEPT.	48" TO TOP	1
L	WALL MOUNTED LAVITORY	36" TO TOP	1
M	36"Sq. CORNER SHOWER (FUTURE)	N/A	1
N	ELECTRIC HAND DRYER	48" TO TOP	2

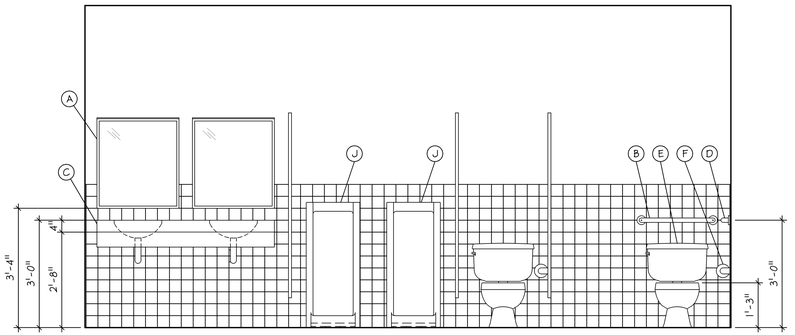


1 BATHROOM PLAN
A-15 SCALE: 1/2" = 1'-0" BATHROOMS No. 110 & 111

NOTE: ALL DIMENSIONS ARE TO ROUGH FRAMING, SUBTRACT GWB THYICKNESS FROM ALL DIMENSIONS FOR FINSIH DIM. (5/8" TYPICAL FOR ALL GWB)

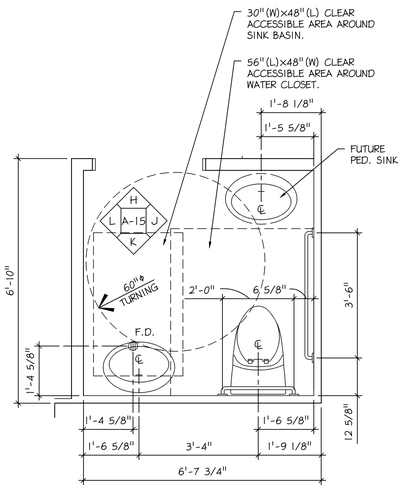


INTERIOR ELEVATION A
SCALE: 1/2"=1'-0"

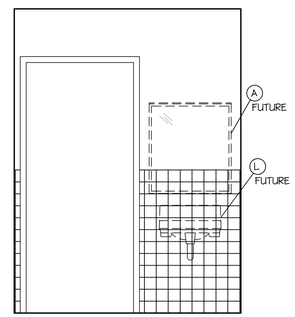


INTERIOR ELEVATION B
SCALE: 1/2"=1'-0"

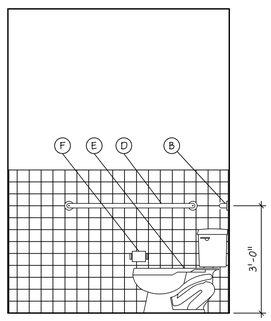
4 BATHROOM ELEVATIONS
A-15 SCALE: 1/2" = 1'-0" BATHROOM No. 111



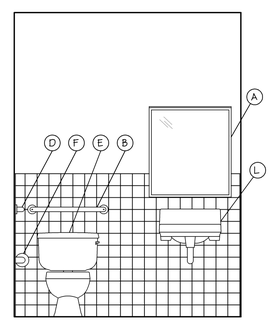
2 BATHROOM PLAN
A-15 SCALE: 1/2" = 1'-0" BATHROOM No. 119



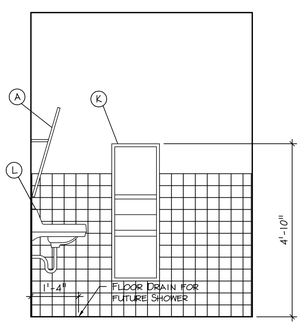
INTERIOR ELEVATION H
SCALE: 1/2"=1'-0"



INTERIOR ELEVATION J
SCALE: 1/2"=1'-0"



INTERIOR ELEVATION K
SCALE: 1/2"=1'-0"



INTERIOR ELEVATION L
SCALE: 1/2"=1'-0"

5 BATHROOM PLAN (ALT. PLAN)
A-15 SCALE: 1/2" = 1'-0" BATHROOM No. 119

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Regis W. Kubit, PE
523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Robin J. Kohn, AIA
Commonwealth of Pennsylvania
License No. RA-11327-X

Contact Person:
Edward M. Happ
(610) 917-8831

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Chester County Brewing Co.

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LIMERICK TOWNSHIP
MONTGOMERY COUNTY

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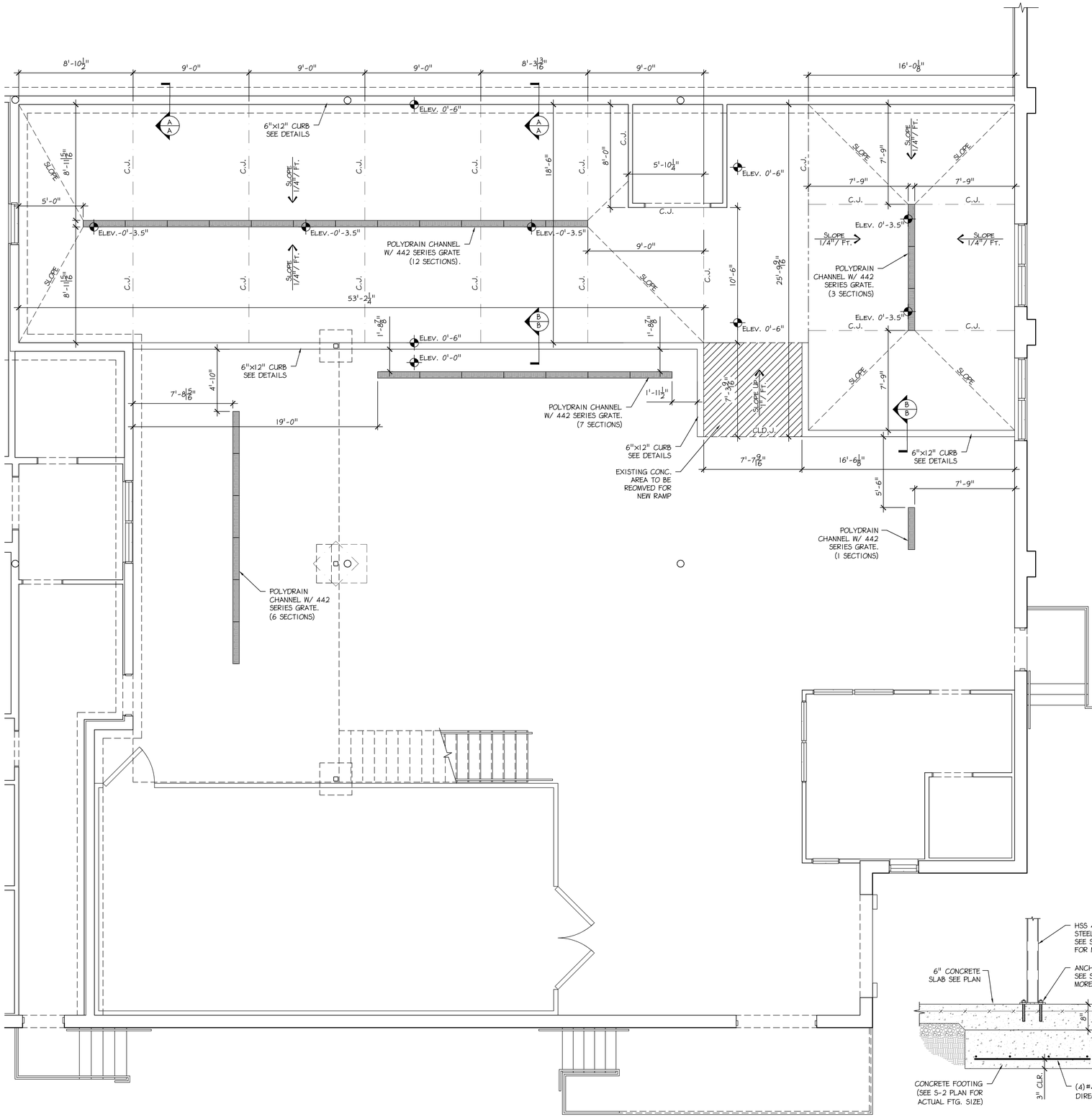
BATHROOM PLANS & ELEVATIONS

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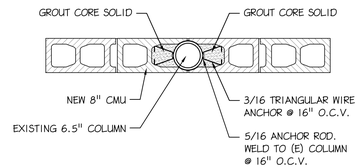
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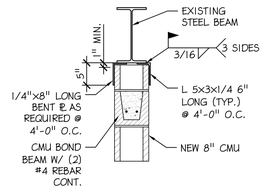
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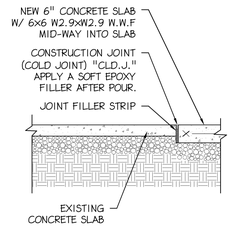
1 S-1 BREWERY FLOOR PLAN
Scale: 1/4" = 1'- 0"



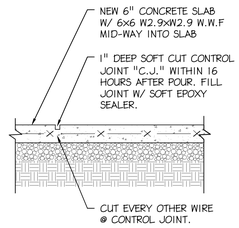
2 S-1 WALL SUPPORT @ COLUMN
Scale: 3/4" = 1'- 0" TYP. @ ALL LOCATIONS



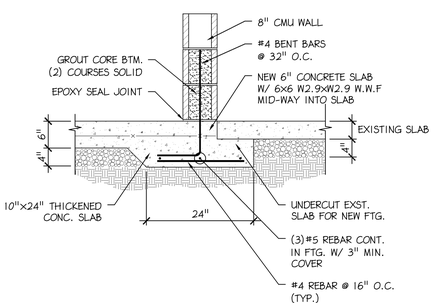
3 S-1 WALL SUPPORT @ STEEL
Scale: 3/4" = 1'- 0"



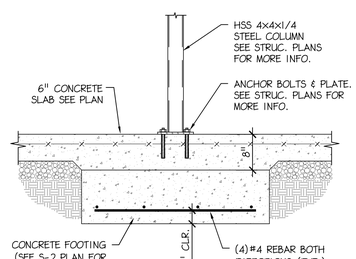
4A S-1 CONSTRUCTION JOINT
Scale: 3/4" = 1'- 0"



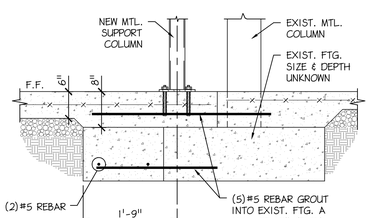
4B S-1 CONTROL JOINT
Scale: 3/4" = 1'- 0"



5 S-1 NEW WALL FOOTING
Scale: 3/4" = 1'- 0"



6A S-1 COLUMN FOOTING
Scale: 3/4" = 1'- 0"



6B S-1 COLUMN FOOTING
Scale: 3/4" = 1'- 0"

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Regis W. Kubit, PE
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL REGIS WILLIAM KUBIT ENGINEER No. 6968-E
523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
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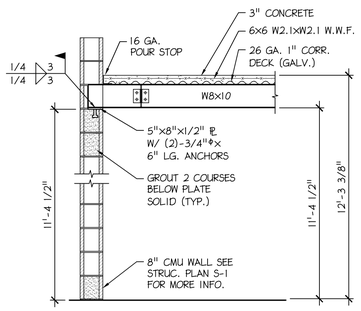
STRUCTURAL
BREWERY
CONCRETE SLAB LAYOUT & DETAILS

SHEET NUMBER

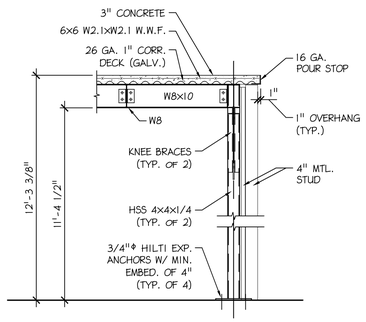
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REV 6

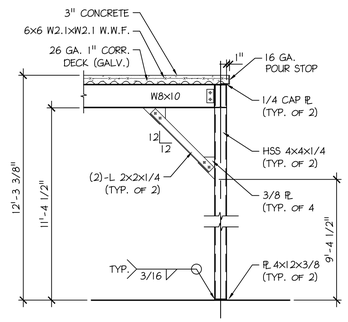
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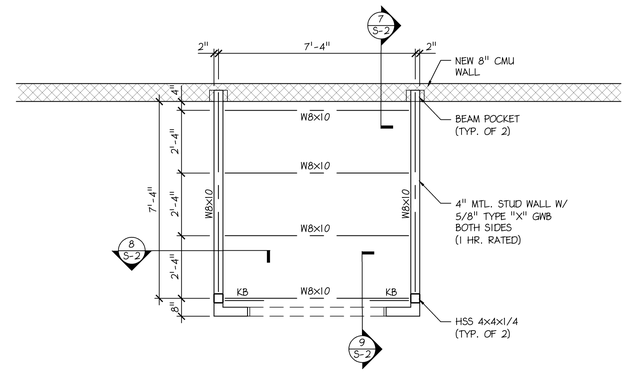
7 S-2 CMU WALL POCKET
Scale: 1/2" = 1'- 0"



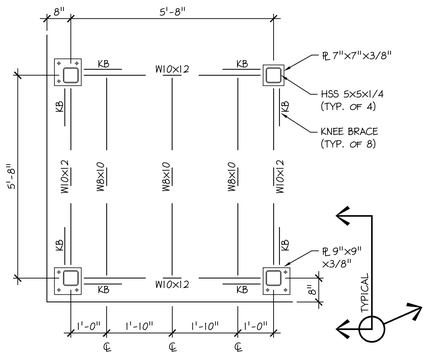
8 S-2 SUPPORT PLATFORM
Scale: 1/2" = 1'- 0"



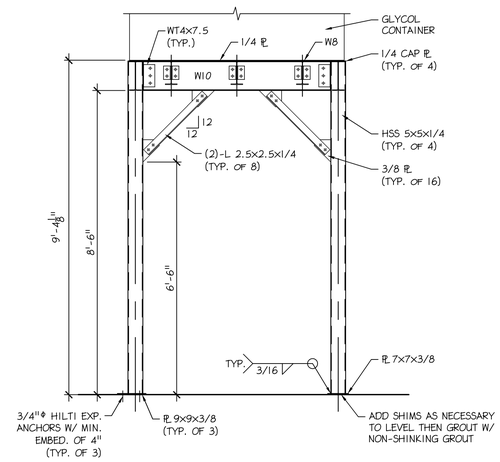
9 S-2 SUPPORT PLATFORM
Scale: 1/2" = 1'- 0"



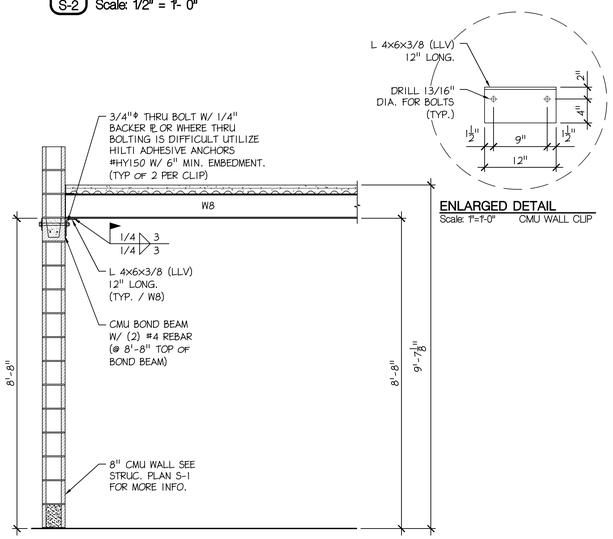
6 S-2 BOILER ROOM ROOF PLATFORM
Scale: 3/8" = 1'- 0" FUTURE 500 GALLON HW TANK



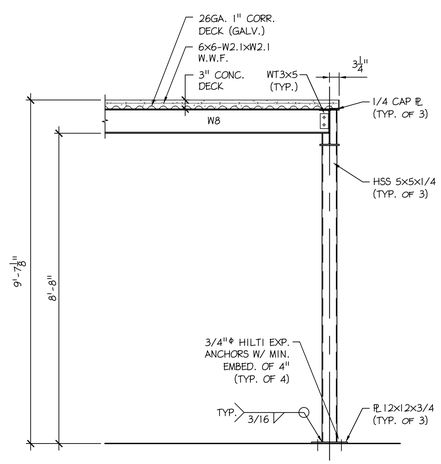
2 S-2 GLYCOL SUPPORT FRAME
Scale: 1/2" = 1'- 0"



3 S-2 GLYCOL SUPPORT FRAME
Scale: 1/2" = 1'- 0"



4 S-2 MEZZANINE SUPPORT
Scale: 1/2" = 1'- 0" AT CMU WALL

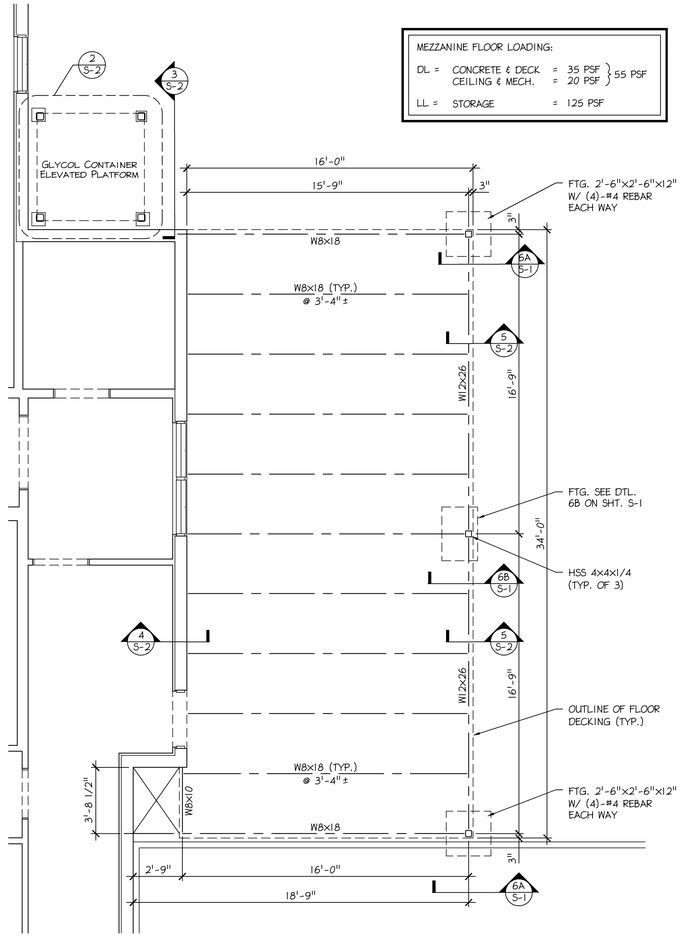


5 S-2 MEZZANINE SUPPORT
Scale: 1/2" = 1'- 0" AT COLUMN

MEZZANINE FLOOR LOADING:

DL = CONCRETE & DECK = 35 PSF
CEILING & MECH. = 20 PSF } 55 PSF

LL = STORAGE = 125 PSF



1 S-2 BREWERY FLOOR PLAN
Scale: 1/4" = 1'- 0"



Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Regis W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
REGIS WILLIAM KUBIT
ENGINEER
No. 6968-E

523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
Edward M. Happ
(610) 917-8831

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LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

STRUCTURAL
BREWERY
MEZZANINE LAYOUT
& DETAILS

SHEET NUMBER

S-2

REV 6

04-02-04 1998-S2.dwg

FOUNDATIONS

1. FOOTINGS ARE DESIGNED TO BEAR ON SOIL HAVING A MINIMUM BEARING CAPACITY OF 3,000 POUNDS PER SQUARE FOOT. BOTTOMS OF EXTERIOR FOOTINGS ARE TO BE A MINIMUM OF 3'-0" BELOW FINISH GRADE. ALL FOOTINGS SHALL BE ONE FOOT INTO VIRGIN SOIL IF FOUNDATION CONDITIONS PROVE UNACCEPTABLE AT ELEVATIONS SHOWN. FOOTINGS SHALL BE CARRIED DEEPER OR OTHER REDESIGN SHALL BE REQUIRED AT THE DIRECTION OF THE ENGINEER. NO FOOTINGS OR SLABS ARE TO BE PLACED IN WATER OR ON FROZEN GROUND.

2. THE ENGINEER SHALL APPROVE ALL BEARING STRATA PRIOR TO PLACEMENT OF THE CONCRETE FOOTINGS.

CONCRETE

1. ALL WORK IN ACCORDANCE WITH ACI "BUILDING CODE" (ACI 318) AND ACI 211.1, ACI 117, ACI 301, ACI 302, ACI 304, ACI 305, ACI SP4, ACI SP66.

2. MINIMUM 28 DAY CYLINDER STRENGTH AND SLUMP AS FOLLOWS:

	F'C	SLUMP
FOOTINGS & PIERS	3000 PSI	3"
SLABS	4000 PSI	3"
WORK EXPOSED TO WEATHER (4%-6% AE)	4000 PSI	4"
OTHER WORK	3000 PSI	3"

3. WATER REDUCING ADMIXTURE (ASTM-C949, TYPE A) WHEN TEMPERATURE BELOW 80. WATER REDUCING RETARDING ADMIXTURE (ASTM-C949 TYPE D) WHEN TEMPERATURE OVER 80.

4. REINFORCEMENT ASTM-A615, GRADE 60, UNLESS OTHERWISE NOTED. LAPS 32 DIAMETERS. ALL BARS SECURELY HELD IN ACCURATE POSITION BY SUITABLE ACCESSORIES. TIE BARS, SUPPORT BARS, ETC. ALL HORIZONTAL REINFORCING BARS IN WALLS AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS. WELDED WIRE FABRIC ASTM-A185. ALL FABRIC SHALL BE FLAT SHEETS. NO ROLLED FABRIC IS ACCEPTABLE.

5. FORMS SHALL BE SUITABLE MATERIAL FOR THE PARTICULAR WORK AND FINISH REQUIRED. EARTH BANKS MAY BE USED BELOW GRADE WHEN EARTH BANKS ARE FIRM AND WHEN THEY WILL RETAIN CONCRETE IN A CROSS SECTION NO LESS THAN REQUIRED.

6. FORMS SHALL NOT BE REMOVED SOONER THAN 7 DAYS AFTER CASTING CONCRETE UNLESS APPROVED MEANS ARE TAKEN TO PREVENT PREMATURE DRYING OF THE CONCRETE.

7. THE CLEAR DISTANCE FROM SURFACE OF CONCRETE TO REINFORCING SHALL BE AS FOLLOWS:

   CONCRETE CAST AGAINST EARTH - 3" CLEAR
   FORMED SURFACES EXPOSED TO WEATHER OR AGAINST GROUND - 1 1/2" CLEAR
   SLABS - 3/4" CLEAR. TOP AND BOTTOM.

8. UNFORMED SURFACES TO BE CURED WITH WET BURLAP COVERED WITH POLYETHYLENE SHEETS WITH LAPPED, SEALED JOINTS. DURING COLD WEATHER, PROVIDE ADEQUATE PROTECTION AND HEAT.

9. MINIMUM EMBEDMENT LENGTH SHALL BE 24 BAR DIAMETERS UNLESS OTHERWISE NOTED.

10. SHOP DRAWINGS FOR ALL REINFORCING STEEL MUST BE SUBMITTED FOR APPROVAL AND APPROVED PRIOR TO PLACING CONCRETE.

MASONRY NOTES

1. MATERIALS:
   - CONCRETE MASONRY UNITS — ASTM C90 GRADE N (MIN. COMP. STRENGTH = 1900 PSI)
   - MORTAR — ASTM C270 TYPE M OR S (MIN. COMP. STRENGTH = 2500 PSI)
   - GROUT — ASTM C476 (MIN. COMP. STRENGTH = 3000 PSI)

2. MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF ACI 530/ASCE 5 AS PUBLISHED BY AMERICAN CONCRETE INSTITUTE, AND AMERICAN SOCIETY OF CIVIL ENGINEERS.

3. ALL MASONRY BEARING BENEATH STEEL BEAM AND LINTEL SUPPORTS SHALL HAVE TWO COURSES OF CMU FILLED WITH CONCRETE GROUT OR SHALL BE 100% CMU, UNLESS NOTED OTHERWISE.

4. LINTELS FOR NON-LOAD BEARING MASONRY ARE AS FOLLOWS FOR EACH 4" OF WALL THICKNESS OR FRACTION THEREOF:

SPAN	SIZE	REINFORCING
UP TO 5'-0"	8" DEEP	(1) #4 TOP & BOTTOM
5'-1" TO 8'-0	8" DEEP	(1) #5 TOP & BOTTOM

5. CONCRETE LINTELS SHALL BE PRECAST, MINIMUM COMPRESSIVE STRENGTH EQUAL TO 3000 PSI AND SHALL BE THE SAME WIDTH AS WALLS SUPPORTED WITH MINIMUM BEARING OF 8" EACH END.

6. ALL HORIZONTAL WALL REINFORCING SHALL BE TRUSS TYPE 9 GAUGE, GALVANIZED REINFORCING SPACED AT 16" O.C. VERTICALLY. AT ALL CORNERS AND INTERSECTIONS HORIZONTAL WALL REINFORCING SHALL BE FULLY LAPPED WITH TRUSS TYPE, GALVANIZED CORNERS AND TEES.

STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE ACCORDING TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING" NINTH EDITION. ALL STEEL UNLESS NOTED SHALL BE ASTM A36. WIDE FLANGE SHAPES SHALL BE A992. TUBE STEEL SHALL BE ASTM A500 GRADE B. SHOP CONNECTIONS SHALL BE WELDED AND GROUND SMOOTH. FIELD CONNECTIONS SHALL BE WELDED OR BOLTED WITH A325-N LOAD INDICATOR BOLTS. WELDING SHALL CONFIRM TO THE AWS "STRUCTURAL WELDING CODE" (AWS D1.1). ALL STEEL TO RECEIVE ONE SHOP COAT OF RUST INHIBITOR PAINT.

2. CONNECTIONS, UNLESS NOTED, SHALL BE FOR "TYPE 2" FRAMING USING AISC TABLE II DETAILS.

3. ALL STEEL SHALL BE FABRICATED AND ERECTED TO MEET THE LATEST OSHA STEEL ERECTION STANDARD.

STEEL FLOOR DECK

1. STEEL FLOOR DECK UNITS SHALL BE MANUFACTURED FROM STEEL CONFORMING TO ASTM DESIGNATION AGII GRADE E. DECK SHALL BE 26 GAUGE UNCOATED WITH 1" CORRUGATIONS. DECK SHALL SPAN A MINIMUM OF 3 SPANS. DECK SHEETS SHALL BE WELDED TO SUPPORTING STEEL WITH WELDING WASHERS, AS RECOMMENDED BY THE MANUFACTURER.

2. STEEL DECK IS NOT TO CONSIDERED A WORKING PLATFORM. CONCRETE IS TO BE PLACED AS SOON AS PRACTICAL AFTER DECK HAS BEEN PLACED. IF DELAY IS ANTICIPATED THE CONTRACTOR MUST PROVIDE ADEQUATE TIMBER DECKING TO PROTECT METAL DECKING FROM DEFORMATION CAUSED BY WHEELED VEHICLES, FOOT TRAFFIC OR OTHER CAUSES.

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STRUCTURAL
NOTES & SPECIFICATIONS

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REV 6

04-02-04 19998-S3.dwg

FOOD SERVICE EQUIPMENT PIPING SCHEDULE

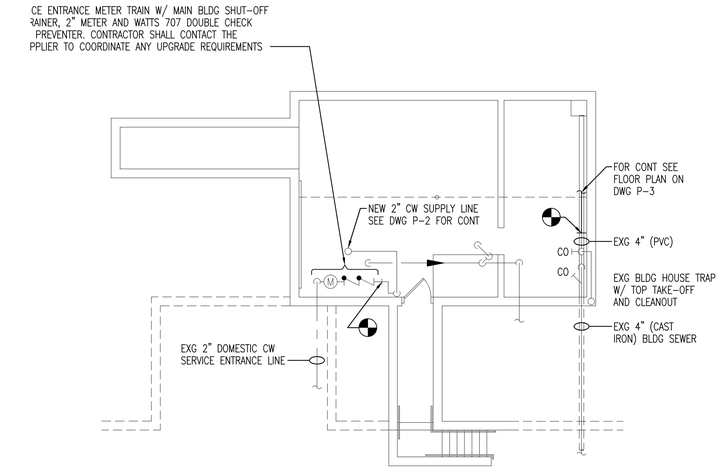
ITEM	DESCRIPTION	WATER		WASTE				GAS	REMARKS
		CW	HW	DIRECT	INDIRECT	GREASE INTERCEP	VENT		
R1	BEVERAGE & ICE DISPENSOR	--	---	---	1" TO FD	---	---	---	SEE NOTES 3 & 5
R2	WATER STATION with ICE BIN	1/2"	--	1-1/2"	1" TO FD	---	2"	---	SEE NOTES 1 & 3
R3	BAR SINK (THREE-COMPARTMENT)	1/2"	1/2"	(3)1-1/2"	---	---	2"	---	SEE NOTE 1
R4	GLASSWASHER	--	1/2"	--	1-1/2" TO FD	---	---	---	SEE NOTE 8
R5	BLEND/WATER STATION	1/2"	--	2"	---	---	2"	---	
R6	COMBINATION ICE BIN	--	--	--	1" TO FD	---	---	---	
R7	HAND WASH SINK	1/2"	1/2"	2"	---	---	2"	---	chrome 'p' trap furnished w/ sink P.C. to install P.C. to provide thermostatic mixing valve. SEE NOTE4
R8	EXTRA DEEP ICE CHEST	--	--	--	1" TO FD	---	---	---	
K1	DISHWASHER WITH RINSE WATER BOOSTER HEATER	--	3/4"	2"	2" FLR SINK	YES	1-1/2"	---	SEE NOTES 6 & 7
~~K2~~	~~PRE-RINSE SINK (SGL BOWL)~~	~~1/2"~~	~~1/2"~~	~~2"~~	~~2" FLR SINK~~	~~YES~~	~~1-1/2"~~	~~---~~	~~SEE NOTES 1 & 3~~ NOT USED
K3	WASH SINK (DBL BOWL)	1/2"	1/2"	2"	---	YES	1-1/2"	---	two (2) drain connections tailpieces w/ lever handles by Food Service Contractor
K4	PREP SINK (DBL BOWL)	1/2"	1/2"	---	2" FLR SINK	YES	1-1/2"	---	SEE NOTES 1 & 3
K5	HAND WASH SINK	1/2"	1/2"	2"	---	YES	2"	---	chrome 'p' trap furnished w/ sink P.C. to install P.C. to provide thermostatic mixing valve. SEE NOTE4
K6	ICE MACHINE	1/2"	---	---	1/2"&3/4" TO FD	---	1-1/2"	---	AIR COOLED SEE NOTE -
K7	FREEZER CABINET	--	--	--	3/4' TO FD	---	---	---	
K8	SLOW COOKER	--	--	--	---	---	---	---	TOTAL ELECTRIC UNIT NO PLUMBING SERVICES REQ'D
K9	FOOD WARMER	---	---	---	---	---	---	1@1/2" 10,500 B.T.U.	one connection w/gas cock & quick disconnect SEE NOTE 2
K10	SANDWICH UNIT	--	--	--	---	---	---	---	SELF CONTAINED ELEC UNIT NO PLUMBING SERVICES REQ'D
K11	10 BURNER RANGE WITH OVENS	---	---	---	---	---	---	1@1" 330,000 B.T.U.	one connection w/gas cock & quick disconnect SEE NOTE 2
K12	CHAR BROILER	---	---	---	---	---	---	1@3/4" 100,000 B.T.U.	one connection w/gas cock & quick disconnect SEE NOTE 2
K13	FRYER	---	---	---	---	---	---	1@1/2" 110,000 B.T.U.	one connection w/gas cock & quick disconnect SEE NOTE 2
K14	WALK-IN REFRIG	---	---			---	---		
K15	WALK-IN FREEZER	---	---			---	---		
B1	HOSE STATION WITH MIXING VALVE	3/4"	3/4"	---	---	---	---		
B2	HOSE STATION	3/4"	---	---	---	---	---		

NOTES:
1. P.C TO FURNISH AND INSTALL CHROME 'P' TRAP AND SUPPLY STOPS AS REQUIRED
2. AVTEC QUICK DISCONNECT - FOOD SERVICE CONTRACTOR TO FURNISH GAS CONNECTOR.
3. PIPE INDIRECT WASTE TO NEAREST FLOOR SINK OR FLOOR DRAIN.
4. PROVIDE MIXING VALVE
5. PLUMBING CONTRACTOR TO PROVIDE A 1/2" CW EQUIPMENT LINE WITH BALL VALVE(s) AND CONNECTION(s) TO OWNER SUPPLIED BEVERAGE DISPENSER UNIT.
6. THE 3/4" HW PIPING FROM RINSE WATER BOOSTER HEATER TO FINAL CONNECTION ON DISHWASHER IS BY THE FOOD SERVICE CONTRACTOR.
7. PLUMBING CONTRACTOR TO INSTALL HIGH TEMPERATURE BRASS PRESSURE REDUCING VALVE WITH BYPASS, INDICATING TEMPERATURE/PRESSURE GAUGES AND SHOCK ABSORBER IN HW LINE TO HEATER.
8. PLUMBING CONTRACTOR TO PROVIDE HIGH TEMPERATURE BRASS PRESSURE REDUCING VALVE (IF WTR PRESSURE ABV 25PSI), BALL VALVE, INLINE STRAINER & 3/4' MALE GARDEN HOSE FITTING ON WATER SUPPLY LINE AND 1-1/2" INDIRECT DRAIN WITH REDUCER TO 3/4" FPT CONNECTION.

PLUMBING FIXTURE SCHEDULE

REF NO	FIXTURE	CW (IN)	HW (IN)	SAN (IN)	TRAP (IN)	VENT (IN)	REMARKS
P-1	WATER CLOSET	1		4		2	FLOOR MOUNT FLUSH TANK
P-1A	WATER CLOSET	1		4		2	FLOOR MOUNT FLUSH TANK; SEE NOTE 1
P-2	URINAL	3/4		2	2	1 1/4	WALL HUNG; SEE NOTE 2
P-3	LAVATORY	1/2	1/2	1 1/2	1 1/4	1 1/4	COUNTERTOP; SEE NOTE 2
P-4	MOP BASIN	1/2	1/2	2	2	1 1/4	FLOOR MOUNT
P-5	SS DBL BOWL SINK	1/2	1/2	1 1/2	1 1/2	1 1/4	COUNTERTOP (BREWERY)
P-6	SS SGL BOWL SINK	1/2	1/2	1 1/2	1 1/2	1 1/4	COUNTERTOP (BAR)
P-7	FLOOR DRAIN			2	2	1 12	TOILET RMS
P-8	FLOOR DRAIN			3	3	2	AREA & INDIRECT (RESTAURANT & KITCHEN)
P-9	FLOOR SINK			2	2	2	INDIRECT (KITCHEN)
P-10	FLOOR DRAIN			4	4	2	MECH RMS
P-11	TRENCH DRAIN			4	4	2	AREA (BREWERY)
P-12	TRENCH DRAIN			4	4	2	AREA (BREWERY)

NOTES:
1. FIXTURE, TRIM AND MOUNTING TO MEET AMERICAN DISABILITIES ACT GUIDELINES, ANSI REQUIREMENTS AND ANSI REQUIREMENTS FOR PEOPLE WITH DISABILITIES.
2. FIXTURE TRIM AND MOUNTING TO MEET AMERICAN DISABILITIES ACT GUIDELINES, ANSI REQUIREMENTS AND ANSI REQUIREMENTS FOR PEOPLE WITH DISABILITIES WHERE INDICATED.



PLUMBING BASEMENT PLAN
SCALE: 1/8" = 1'-0"

LEGEND AND ABBREVIATIONS

- WORK BY THIS CONTRACTOR
- EXISTING OR BY OTHERS
- COLD WATER PIPING (CW)
- HOT WATER PIPING (HW)
- HOT WATER RECIRC PIPING (HWR)
- SANITARY PIPING (SAN)
- SANITARY VENT PIPING
- G — GAS PIPING
- BALL VALVE
- CIRCUIT SETTER
- CHECK VALVE
- UNION
- WATER HAMMER ARRESTOR
- CLEANOUT
- FLOOR CLEANOUT
- PIPE TURNING DOWN
- PIPE TURNING UP
- PIPE TEE UP
- PIPE TEE DOWN
- (G) GAS METER
- (M) WATER METER
- FLOOR DRAIN
- CONNECT TO EXISTING
- P-# PLUMBING FIXTURE DESIGNATION

ABV	ABOVE
ADA	AMERICANS W/ DISABILITY ACT
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
ALT	ALTERNATE
APPROX	APPROXIMATELY
BLDG	BUILDING
BLW	BELOW
BSMT	BASEMENT
CO	CLEAN OUT
CONT	CONTINUATION
CW	COLD WATER
DFU	DRAINAGE FIXTURE UNIT
DN	DOWN
DWG	DRAWING
E.C.	ELECTRICAL CONTRACTOR
EXG	EXISTING
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FLR	FLOOR
FS	FLOOR SINK
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HD	HEAD
HP	HORSEPOWER
INV. EL.	INVERT ELEVATION
LAV	LAVATORY
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
PRESS	PRESSURE
RD	ROOF DRAIN
RTU	ROOF TOP UNIT
SF	SQUARE FEET
T&P	TEMPERATURE AND PRESSURE
TYP	TYPICAL
URI	URINAL
VTR	VENT THRU ROOF
WC	WATER CLOSET
W.C.	WATER COLUMN
WCO	WALL CLEAN OUT
W/	WITH

GENERAL NOTES:

1. ALL PLUMBING WORK SHALL CONFORM TO THE LATEST PLUMBING CODE OF LIMERICK TOWNSHIP AND SUBSEQUENT AMENDMENTS THERETO.
2. DRAWINGS ARE DIAGRAMMATIC. PLUMBING CONTRACTOR SHALL VISIT SITE TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BID. COORDINATE ALL EQUIPMENT LOCATIONS AND PIPE ROUTING WITH OTHER TRADES AND ARCHITECTURAL DETAILS PRIOR TO INSTALLATION.
3. THE REMOVAL OF EXISTING PLUMBING SYSTEMS FIXTURES, PIPING, ETC. BACK TO POINTS WHERE NEW WORK IS CONNECTING THERE TO WILL BE BY OTHERS. THIS CONTRACTOR IS RESPONSIBLE FOR THE RECONNECTION AND EXTENSIONS OF EXISTING SYSTEMS WITH NEW AS INDICATED OR NOTED.
4. VERIFY LOCATIONS, MOUNTING HEIGHTS, TRIM LOCATIONS, ETC. FOR ALL PLUMBING FIXTURES WITH THE ARCHITECT PRIOR TO INSTALLATION. P-___* DESIGNATES FIXTURE AND FIXTURE TRIM MOUNTING TO MEET THE AMERICAN DISABILITIES ACT GUIDELINES AND ANSI REQUIREMENTS FOR PEOPLE WITH DISABILITIES.
5. CONCEAL ALL PIPING IN WALLS/CHASE SPACE, BELOW FLOORS, AND ABOVE CEILINGS UNLESS OTHERWISE NOTED. INSTALL ALL WATER SUPPLY PIPING IN EXTERIOR WALLS ON THE INSIDE (WARM SIDE) OF THE BUILDING INSULATION. SEAL ALL PIPING PENETRATIONS THROUGH RATED ASSEMBLIES ACCORDINGLY. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND SOUND RATED PARTITIONS, CEILINGS AND FLOORS.
6. SEE RISER DIAGRAMS ON DRAWING P-4 FOR WATER, GAS AND DRAINAGE SYSTEMS PIPE SIZING. SEE FIXTURE PIPING SCHEDULE ON THIS DRAWING FOR FIXTURE BRANCH COLD WATER, HOT WATER, SOIL, WASTE AND VENT PIPE SIZES.

KITCHEN NOTES:

1. FOOD SERVICE EQUIPMENT IS BY FOOD SERVICE CONTRACTOR. P.C. SHALL FURNISH REQUIRED APPURTENANCES AND MAKE ALL FINAL CONNECTIONS.
2. PC SHALL REFER TO FOOD SERVICE EQUIPMENT CONTRACTOR'S DRAWINGS FOR ROUGH-IN INFORMATION AND LOCATIONS OF ALL EQUIPMENT PRIOR TO THE INSTALLATION OF ANY PIPING. SEE FOOD SERVICE EQUIPMENT PIPING SCHEDULE THIS DWG FOR EQUIPMENT CONNECTIONS, SIZES, ETC.. VERIFY ALL FINAL UTILITY CONNECTIONS WITH FOOD SERVICE EQUIPMENT CONTRACTOR AND OWNERS VENDORS.
3. THE PC SHALL PROVIDE ALL SERVICES AND MAKE ALL NECESSARY FINAL CONNECTIONS TO ALL KITCHEN EQUIPMENT. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, FURNISHING AND INSTALLING ALL VALVES (ie. MIXING, SOLENOID, ETC.), TRAPS, VACUUM BREAKERS, WATER HAMMER ARRESTERS AND PIPING. PROVIDE UNIONS,SHUT-OFF VALVES, 'P'-TRAPS, AND OTHER COMPONENTS AT EACH PIECE OF EQUIPMENT AS NOTED.
4. ALL HOT WATER CONNECTIONS SHALL BE 140 DEGREES UNLESS OTHERWISE NOTED.
5. ROUTE CW, HW AND GAS PIPING CONCEALED ABOVE CEILINGS AND IN CHASE/WALL SPACES UNLESS OTHERWISE NOTED. ALL EXPOSED FIXTURE SUPPLIES, STOP VALVES, ETC. SHALL BE CHROME PLATED.
6. COORDINATE FINAL LOCATIONS OF ALL FLOOR DRAINS WITH THE FOOD SERVICE CONTRACTOR. RECESS AREA FLOOR DRAINS APPROX 1/2" BELOW SURRONDING FINISH FLOOR AREA TO FACILITATE SLOPING OF FLOOR TILE TO DRAIN.

04-02-04 1998c-P1.dwg

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA — Regis W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
REGIS WILLIAM KUBIT
ENGINEER
No. 6968-E

523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
Edward M. Happ
(610) 917-8831

N.E. FISHER & ASSOCIATES
MECHANICAL & ELECTRICAL ENGINEERS
329 EAST SECOND STREET
BOYERTOWN, PENNSYLVANIA 19512
(610) 369 - 3190

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Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

PLUMBING SYSTEM
BASEMENT PLAN
SCHEDULES &
GENERAL NOTES

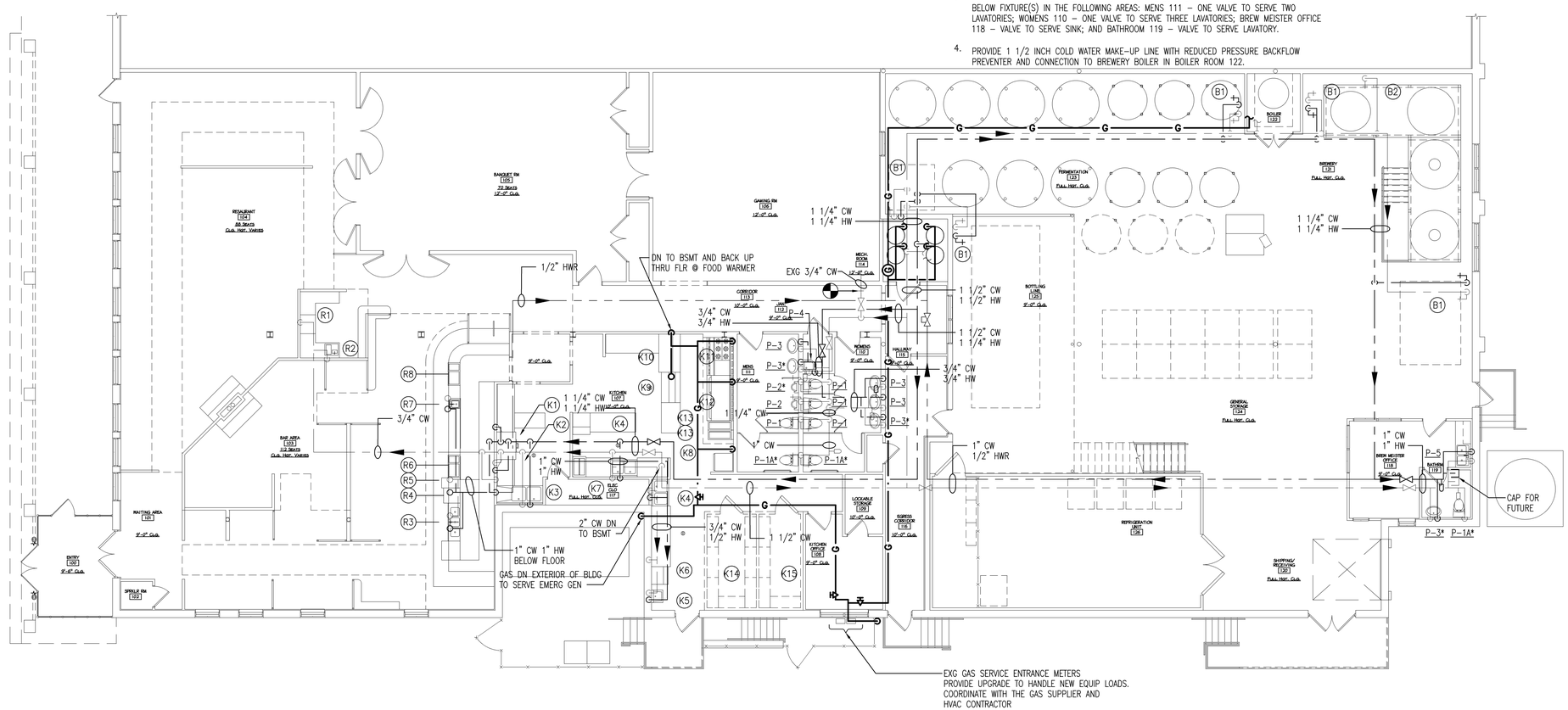
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P-1

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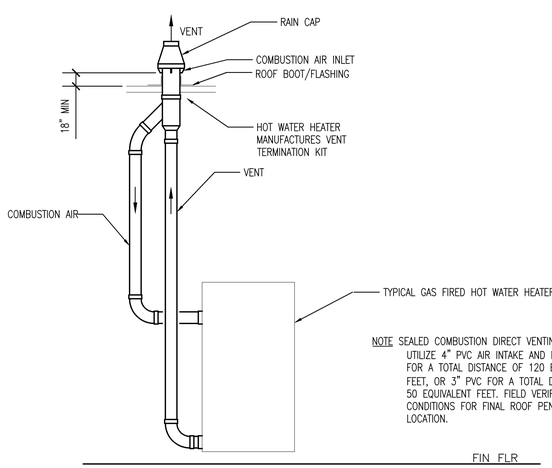
DRAWING NOTES:

1. SEE DRAWING P–1 FOR LEGEND AND ABBREVIATIONS.
2. SEE WATER HEATERS PIPING DIAGRAM (THIS DRAWING) FOR CONTINUATION OF WATER SYSTEMS PIPING, VALVING, PUMP AND APPURTENANCES AT DOMESTIC WATER HEATERS IN MECHANICAL ROOM 112.
3. PROVIDE POINT OF USE THERMOSTATIC MIXING VALVES AND MOUNT ABOVE CEILINGS OR BELOW FIXTURE(S) IN THE FOLLOWING AREAS: MENS 111 – ONE VALVE TO SERVE TWO LAVATORIES; WOMENS 110 – ONE VALVE TO SERVE THREE LAVATORIES; BREW MEISTER OFFICE 118 – VALVE TO SERVE SINK; AND BATHROOM 119 – VALVE TO SERVE LAVATORY.
4. PROVIDE 1 1/2 INCH COLD WATER MAKE–UP LINE WITH REDUCED PRESSURE BACKFLOW PREVENTER AND CONNECTION TO BREWERY BOILER IN BOILER ROOM 122.



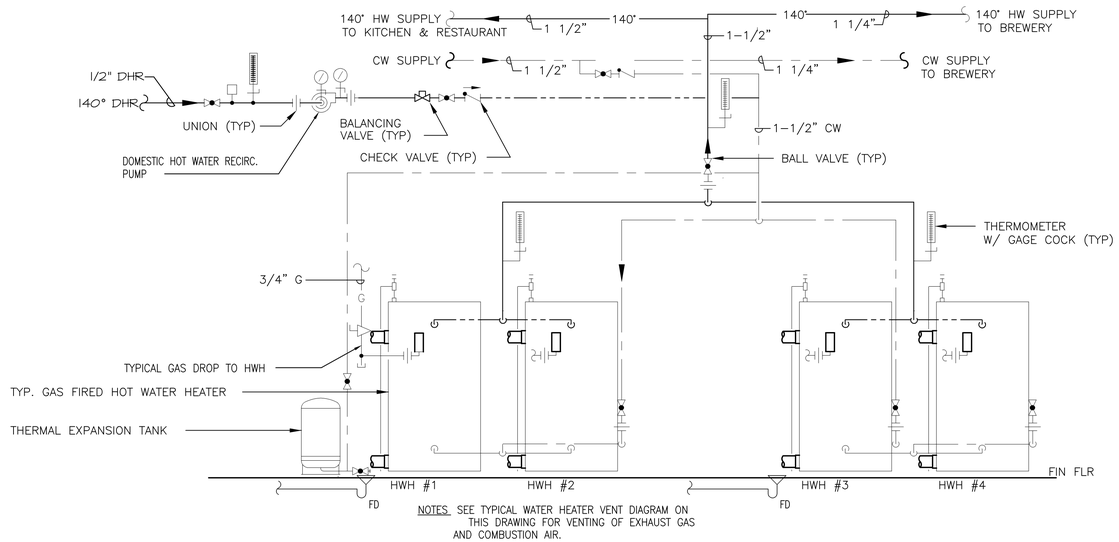
PLUMBING FLOOR PLAN – DOMESTIC WATER AND GAS PIPING

SCALE: 1/8" = 1'–0"



TYPICAL WATER HEATER VENT DIAGRAM

NO SCALE



WATER HEATERS PIPING DIAGRAM

NO SCALE

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Regis W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
REGIS WILLIAM KUBIT
ENGINEER
No. 6968–E

523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
Edward M. Happ
(610) 917-8831

N.E. FISHER & ASSOCIATES
MECHANICAL & ELECTRICAL ENGINEERS
329 EAST SECOND STREET
BOYERTOWN, PENNSYLVANIA 19512
(610) 369 - 3190

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Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

PLUMBING SYSTEM DOMESTIC WATER & GAS PIPING PLAN W/ WATER HEATER DIAGRAMS

SHEET NUMBER

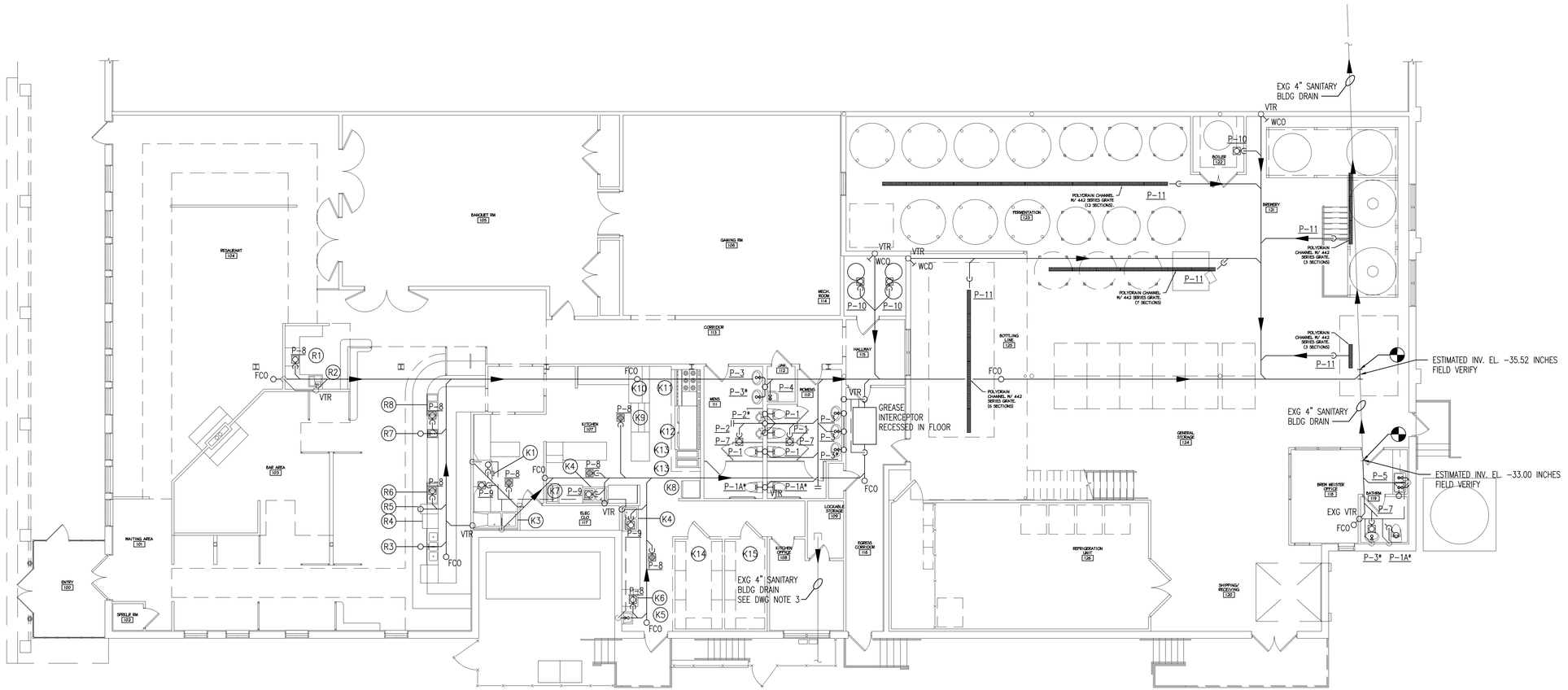
P-2

REV 6

04-02-04 1998c-P2.dwg

DRAWING NOTES:

1. SEE DRAWING P-1 FOR LEGEND AND ABBREVIATIONS.
2. COORDINATE VENT THROUGH ROOF TERMINALS WITH MECHANICAL EQUIPMENT PRIOR TO MAKING ANY NEW ROOF PENETRATIONS.



PLUMBING FLOOR PLAN – SANITARY DRAINAGE

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

Betzwood Associates PC
Architects & Engineers

Robin J. Kohn, AIA — Regis W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
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tel. (610) 917-8831 fax (610) 917-8836
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License No. PE-6968-E

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Edward M. Happ
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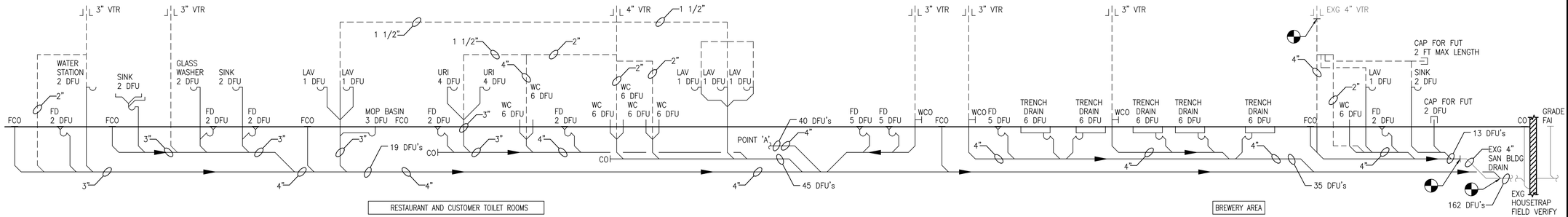
PLUMBING SYSTEM
SANITARY DRAINAGE
PLAN

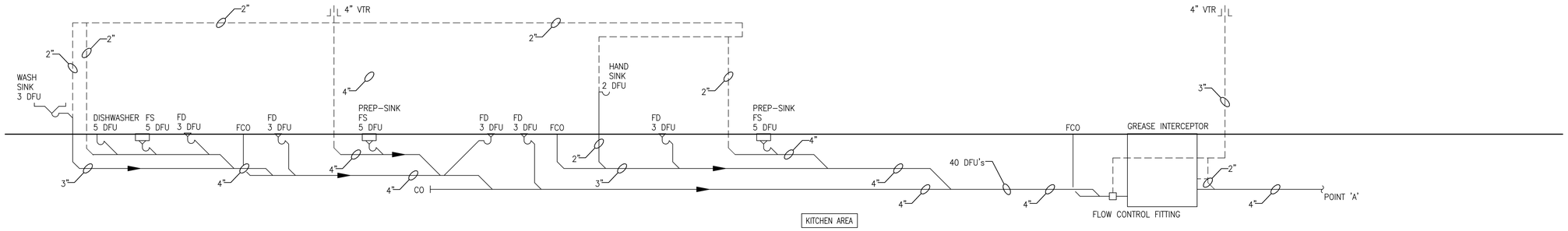
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P-3

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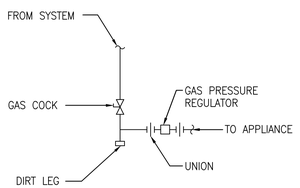
SANITARY RISER DIAGRAMS
NO SCALE

NOTES:

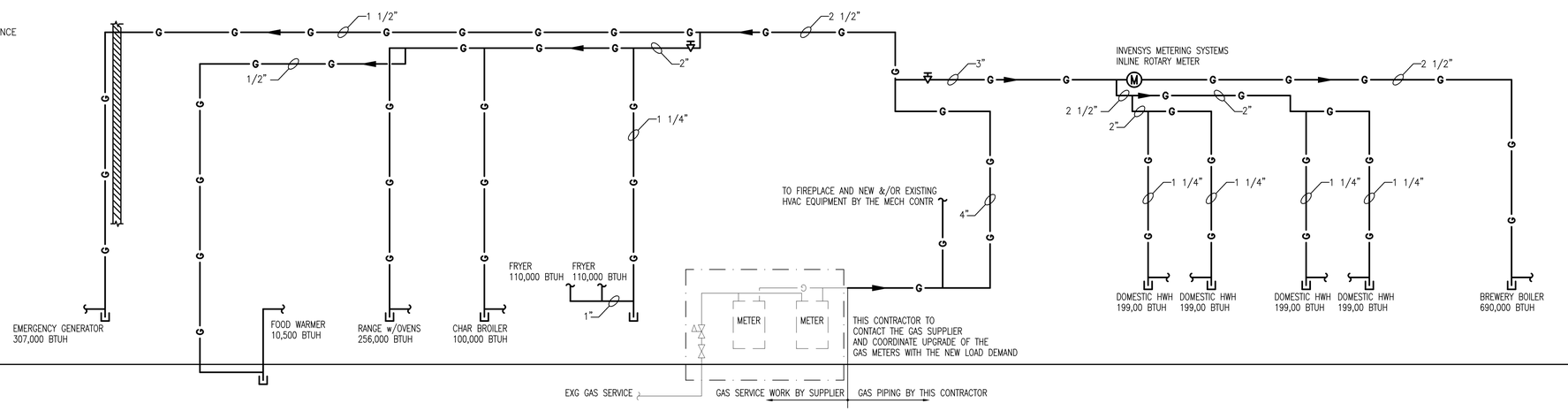
1. ALL SANITARY PIPING LESS THAN 3"ø SHALL BR SLOPED AT 1/4"/1'-0". ALL SANITARY PIPING 3"ø OR LARGER SHALL BE SLOPED AT 1/8"/1'-0" (IN ACCORDANCE WITH THE PLUMBING CODE AND ALL LOCAL REQUIREMENTS).
2. ALL SANITARY PIPING LOCATED BELOW THE FLOOR SLAB SHALL BE NO LESS THAN 2"ø.

DRAWING NOTES:

1. SEE DRAWING P-1 FOR LEGEND AND ABBREVIATIONS.
2. SEE PLUMBING FIXTURE SCHEDULE AND FOOD SERVICE EQUIPMENT PIPING SCHEDULE ON DRAWING P-1 FOR FIXTURE BRANCH AND CONNECTION SIZES.



GAS PIPING DETAIL
NO SCALE



GAS SYSTEM RISER DIAGRAM
NO SCALE

NOTES:

1. SEE GAS PIPING DETAIL ON THIS DRAWING FOR VALVES, PIPING. CONNECTIONS, ETC. TO EQUIPMENT.

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MONTGOMERY COUNTY

SHEET TITLE

PLUMBING SYSTEM SANITARY AND GAS RISER DIAGRAMS

SHEET NUMBER

P-4

REV 6

04-02-04 1998c-P4.dwg

PLUMBING SPECIFICATION

1. THE GENERAL CONDITIONS SHALL APPLY TO AND FORM A PART OF THIS SECTION OF THESE SPECIFICATION.

2. PROVIDE ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND SUPERVISION AND PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER AND COMPLETE EXECUTION OF ALL PLUMBING WORK IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.

3. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRIC CODE, OSHA, 1995 BOCA INTERNATIONAL PLUMBING CODE AND ALL OTHER STATE AND LOCAL AUTHORITIES HAVING JURISDICTION AND APPLICABLE MANUFACTURER'S RECOMMENDATIONS.

4. THE CONTRACTOR SHALL VISIT THE SITE, EXAMINE ALL CONDITIONS AND MAKE ALLOWANCES FOR DIFFICULTIES AND CONTINGENCIES AFFECTING THE PROPER EXECUTION OF THIS CONTRACT.

5. THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES NECESSARY FOR PERMITS AND INSPECTIONS REQUIRED WITH HIS WORK.

6. THE CONTRACTOR SHALL VERIFY ALL UTILITY SERVICE INFORMATION SHOWN ON THE DRAWINGS WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING A BID. ANY CHANGES OR SERVICE CHARGES IMPOSED BY THE UTILITY COMPANY SHALL BE QUALIFIED AND INCLUDED IN THE BID.

7. ALL EQUIPMENT SHALL BE TESTED, LISTED AND LABELED BY AN APPROVED AUTHORITY (UL, AGA, ETL) AND SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING.

8. ALL EQUIPMENT, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.

9. WHERE PRODUCTS ARE SPECIFIED BY BRAND NAME, CATALOG NUMBERS OR BY NAMES OF MANUFACTURERS, THE REFERENCE IS INTENDED TO BE DESCRIPTIVE AND NOT RESTRICTIVE, AND IS SOLELY FOR THE PURPOSE OF INDICATING THE TYPE OF QUALITY OF ITEM THAT WILL BE ACCEPTABLE. AN APPROVED EQUAL WILL BE ACCEPTED UNLESS INDICATED OTHERWISE.

10. THE CONTRACTOR RESPONSIBLE FOR WORK COVERED BY THESE SPECIFICATIONS SHALL COORDINATE AND COOPERATE WITH ALL OTHER TRADES. TRADES THAT HAVE WORK CONNECTED WITH THE PLUMBING WORK SHALL BE NOTIFIED FOR INSTALLATION REQUIREMENTS AND SCHEDULING. THE CONTRACTOR SHALL SCHEDULE HIS WORK TO AVOID ANY INTERRUPTION OF ANY UTILITY SERVICES TO THE OPERATION AREAS OF THE BUILDING DURING NORMAL WORKING HOURS. INTERRUPTION OF SERVICES SHALL BE DONE DURING OFF HOURS AT NO ADDITIONAL COST TO THE OWNER.

11. THE CONTRACTOR SHALL PERFORM ANY DEMOLITION REQUIRED FOR CONNECTION OF NEW WORK. ALL CUTTING AND PATCHING OF EVERY NATURE REQUIRED IN CONNECTION WITH THIS CONTRACT SHALL BE DONE BY THIS CONTRACTOR WITH MECHANICS EXPERIENCED IN THEIR RESPECTIVE TRADES. ALL PATCHING SHALL MATCH ADJACENT FINISHES. ALL WORK SHALL BE COORDINATED TO AVOID CUTTING OF WORK IN PLACE AND INTERFERING WITH OTHER OPERATIONS.

12. ALL EXCAVATIONS REQUIRED FOR INSTALLATION OF PIPE SHALL HAVE SOLID, UNDISTURBED BOTTOMS, AND SHALL BE SUBJECT TO APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO PIPING PLACEMENT. SHOULD BOTTOMS BECOME SOFT OR WET BEFORE PIPING IS PLACED, ALL SUCH UNSUITABLE BOTTOMS SHALL BE REMOVED AT NO COST TO THE OWNER AND FILLED WITH CONCRETE.

13. BACKFILL ALL EXCAVATIONS PERFORMED UNDER THIS CONTRACT AS REQUIRED TO SATISFY FINISHED GRADE REQUIREMENTS.

14. FURNISH AND INSTALL ALL NECESSARY HANGERS, INSERTS, SUPPORTS SUPPLEMENTARY STEEL, ETC., TO PROPERLY SUPPORT ALL EQUIPMENT AND PIPING IN AN APPROVED MANNER AND IN FULL ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

15. ALL HOT AND COLD WATER PIPING WITHIN THE BUILDING SHALL BE HARD DRAWN TYPE "L" COPPER TUBING IN ACCORDANCE WITH ASTM-B88. FITTINGS SHALL BE WROUGHT COPPER OR CAST BRASS. VALVES SHALL BE CAST BRASS UNLESS NOTED OTHERWISE. HANGERS FOR SUPPORTING COPPER TUBING SHALL BE COPPERIZED. ALL WATER SERVICE PIPING OUTSIDE OF THE BUILDING SHALL BE TYPE "K" COPPER ASTM B-88. FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH SOLDER AND FLUX HAVING A LEAD CONTENT OF NOT MORE THAN 0.2 PERCENT.

16. ALL SANITARY AND VENT PIPING UNLESS NOTED OTHERWISE SHALL BE NO-HUB SERVICE WEIGHT CAST IRON IN ACCORDANCE WITH ASTM A74; JOINTS SHALL BE A NEOPRENE GASKET WITH STAINLESS STEEL CLAMP AND SHIELD ASSEMBLY, INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IF PERMITTED BY THE LOCAL AUTHORITY ALL SANITARY AND VENT PIPING SHALL BE SCHEDULE 40 PVC, ASTM D2665, D2949, WITH PVC FITTINGS (DWV TYPE) AND SOLVENT WELD JOINTS. PVC PIPING SHALL NOT BE USED IN RETURN AIR PLENUM TYPE CEILINGS OR IN FIRE-RATED CEILING ASSEMBLIES (CONTRACTOR TO VERIFY THESE AREAS WITH ARCHITECT). PVC PIPING SHALL NOT BE USED WITHOUT WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITY HAVING JURISDICTION AND THE LOCAL FIRE MARSHAL.

17. ALL FUEL GAS PIPING MATERIALS, JOINTS AND INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE NATIONAL FUEL GAS CODE AND ALL LOCAL REQUIREMENTS. ALL GAS PIPING SIZES LISTED ON THE DRAWINGS ARE PIPING I.D. ALL HANGERS AND SUPPORTS FOR GAS PIPING SHALL BE IN ACCORDANCE WITH NATIONAL FUEL GAS CODE (NFPA 54).

17.1 ALL FUEL GAS PIPING ABOVE FINISHED GRADE, OUTSIDE THE BUILDING SHALL BE GALVANIZED STEEL, SCHEDULE 40 IN ACCORDANCE WITH ASTM A53. FITTINGS SHALL BE GALVANIZED MALLEABLE IRON IN ACCORDANCE WITH ASME B16.3. JOINTS SHALL BE SCREWED FOR PIPE SIZES UP TO THREE INCHES I.D. FLANGED AND BOLTED FOR PIPE SIZES GREATER THAN THREE INCHES I.D. AND WELDED. ALL JOINTS ON EXTERIOR FUEL GAS PIPING SHALL BE PAINTED TO PREVENT CORROSION.

17.2 ALL FUEL GAS PIPING INSIDE THE BUILDING (ABOVE FINISHED FLOOR/GRADE) SHALL BE SCHEDULE 40 BLACK STEEL IN ACCORDANCE WITH ASTM A53. FITTINGS SHALL BE MALLEABLE IRON IN ACCORDANCE WITH ASME B16.3. JOINTS SHALL BE SCREWED UP TO THREE INCHES I.D., FLANGED FOR PIPING LARGER THAN THREE INCHES I.D. AND WELDED; BRAZED IN CONCEALED AREAS.

18. WHERE PIPING PASSES THROUGH FIRE RESISTING PORTIONS OF THE STRUCTURE AN APPROVED FIRE-STOPPING DEVICE SHALL BE INSTALLED TO MAINTAIN THE FIRE RATING OF THAT PORTION OF THE STRUCTURE. "FIRESTOP PENETRATOR" OR "PROSEAL PLUG DEVICES" AS MANUFACTURED BY PROSET SYSTEMS (OR APPROVED EQUAL) SHALL BE USED AT THESE LOCATIONS.

19. ALL SHUTOFF VALVES SHALL BE FULL PORT BALL VALVES. ALL BALL, GATE, GLOBE AND CHECK VALVES SHALL BE ALL BRONZE, SWEATED PATTERN SUITABLE FOR 125 PSI WORKING PRESSURE. ALL BACKFLOW PREVENTERS SHALL BE AS REQUIRED BY THE LOCAL AUTHORITY. ALL VALVES AND PIPING EXPOSED TO VIEW SHALL BE CHROME PLATED.

19.1 HW RECIRC BALANCING VALVE SHALL BE AN IN-LINE BALANCING VALVE WITH A VISUAL FLOW INDICATOR AND ADJUSTMENT SCREW FOR SYSTEM FLOW CALIBRATION; MODEL TB-3/4 MANUFACTURED BY BELL & GOSSETT. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CALIBRATE TO FLOW 1 TO 2 GPM.

19.2 GAS SHUTOFF VALVES SHALL HAVE A QUARTER-TURN OPERATION AND SHALL BE AGA APPROVED FOR SYSTEM PRESSURE. INSTALL IN ACCORDANCE WITH THE NATIONAL FUEL GAS CODE REQUIREMENTS.

19.3 GAS PRESSURE REGULATING VALVES SHALL BE THE SIZE AND TYPE REQUIRED BY THE APPLIANCE AND THE LOCAL GAS SUPPLIER. VALVES SHALL BE AGA APPROVED.

19.4 WATER HAMMER ARRESTORS SHALL BE ZURN, SHOCKTROLL OR EQUAL AND SHALL BE INSTALLED WHERE INDICATED ON THE DRAWINGS AND SIZED PER MANUFACTURER'S RECOMMENDATIONS.

20. INSULATION

20.1 ALL COLD WATER, HOT WATER, FITTINGS AND VALVES SHALL BE INSULATED WITH MATERIALS HAVING A "K" FACTOR OF 0.27 AT 75 DEGREES F MEAN TEMPERATURE, A FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS.

THICKNESS:
- COLD WATER AND HOT WATER RUNOUTS UP TO 1" = 1/2" THICK
- COLD WATER MAINS = 1" THICK
- HOT WATER MAINS = 1" THICK

MATERIALS:
- VAPOR BARRIER ALL SERVICE JACKETED FIBERGLASS WITH FITTINGS COVERED WITH PRE-SHAPED PLASTIC COVERS.

MANUFACTURERS:
- CERTAINEED, MANVILLE, OWENS, KNAUF OR APPROVED EQUAL.

ALL PIPING IN UNHEATED PORTIONS OF THE BUILDING (CRAWL SPACES, BASEMENT, ATTICS) SHALL BE HEAT TRACED (7W/LF) AND INSULATED WITH ONE INCH ARMSTRONG AP ARMAFLEX. HEAT TRACING SHALL BE THERMOSTATICALLY CONTROLLED TO MAINTAIN 45 DEGREES F MINIMUM PIPE TEMPERATURE.

21. FIXTURES AND FIXTURE TRIMMINGS SHALL BE FURNISHED AND INSTALLED AS SPECIFIED HEREIN. FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY WALL HANGERS AND SUPPORTS, SUPPLY VALVES, DRAINAGE FITTINGS AND ESCUTCHEONS. THE FOLLOWING ITEM NUMBERS CORRESPOND WITH THE "P" NUMBERS NOTED ON THE PLUMBING FIXTURE SCHEDULE AND ON THE DRAWINGS.

P-1 WATER CLOSET - SHALL BE AMERICAN STANDARD "CADET EL 1.6 PA" MODEL 2292.100, ELONGATED BOWL, PRESSURE ASSISTED TANK TYPE WITH COVER LOCKING DEVICE, WHITE VITREOUS CHINA, TWO BOLT CAPS, CHROME PLATED ANGLE STOP, WITH 3/8 INCH FLEXIBLE WALL SUPPLY AND ESCUTCHEON, WITH OPEN FRONT PLASTIC SEAT.

P-1A HANDICAP WATER CLOSET - SHALL BE AMERICAN STANDARD "CADET 17 INCH 1.6 PA" MODEL 2168.100, ELONGATED BOWL, PRESSURE ASSISTED TANK TYPE WITH COVER LOCKING DEVICE, WHITE VITREOUS CHINA, TWO BOLT CAPS, CHROME PLATED ANGLE STOP, WITH 3/8 INCH FLEXIBLE WALL SUPPLY AND ESCUTCHEON, WITH OPEN FRONT PLASTIC SEAT.

P-2 URINAL - SHALL BE AMERICAN STANDARD "ALLBROOK," MODEL 6541.132, WHITE VITREOUS CHINA (WALL HUNG) WITH SLOAN ROYAL, MODEL 186.1 FLUSH VALVE.

P-3 LAVATORY - SHALL BE AMERICAN STANDARD "AQUALYN COUNTERTOP LAVATORY," MODEL 0476.028, WHITE VITREOUS CHINA WITH FAUCET HOLES ON FOUR INCH CENTERS. FAUCET SHALL BE "HERITAGE" MODEL 5402.172 WITH WRIST BLADE HANDLES. PROVIDE CHROME PLATED P-TRAP AND ARM, ANGLE STOPS VALVES AND 3/8 INCH FLEXIBLE WALL SUPPLIES AND ESCUTCHEONS. DRAIN SHALL BE AN OFFSET GRID TYPE, MODEL 7723.018. INSULATE EXPOSED WATER AND DRAIN PIPING WITH TRUBRO "HANDI-LAV-GUARD" PIPE INSULATION.

P-4 JANITOR'S SINK - SHALL BE FIAT "MOP SERVICE BASIN," MODEL MSB-2424 WITH MODEL 830-AA FAUCET AND MODEL 832-AA HOSE AND BRACKET ASSEMBLY AND MODEL 889-CC MOP HANGER.

P-5 STAINLESS STEEL SINK - SHALL BE ELKAY "PACEMAKER STARLITE," MODEL PSR-250 WITH THREE FAUCET HOLES, ELKAY, MODEL LK-4100 KITCHEN FAUCET, LK 99 DRAIN, WITH STRAINER AND LK-290 DRAIN FITTING, 1/2 INCH SUPPLIES, STOP VALVES AND 1-1/2 INCH TRAP.

P-6 NOT USED.

P-7 FLOOR DRAIN - SHALL BE J.R. SMITH, MODEL 2010 WITH A SIX INCH DIAMETER ADJUSTABLE STRAINER AND A TWO INCH OUTLET.

P-8 FLOOR DRAIN - SHALL BE J.R. SMITH, MODEL 3021 SANI-CEPTOR, CAST IRON FLANGED RECEPTOR WITH ACID RESISTANT COATED INTERIOR, NICKEL BRONZE RIM WITH 8 1/2 INCH TOP, ALUMINUM SEDIMENT BUCKET AND TWO INCH OUTLET. PROVIDE FULL GRATE IN OPEN IN OPEN FLOOR AREAS AND 3/4 GRATE AT EQUIPMENT.

P-9 FLOOR DRAIN - SHALL BE J.R. SMITH, MODEL 3100 SANI-CEPTOR, CAST IRON FLANGED RECEPTOR WITH ACID COATED INTERIOR, NICKEL BRONZE RIM WITH 8 1/2 INCH SQUARE TOP WITH 1/2 GRATE AND ALUMINUM DOME BOTTOM STRAINER AND THREE INCH OUTLET.

P-10 FLOOR DRAIN - SHALL BE J.R. SMITH, MODEL 2415C WITH DUCO CAST IRON BODY WITH HINGED BAR GRATE, LOCKING DEVICE, SEDIMENT BUCKET AND THREE INCH BOTTOM OUTLET.

P-11 TRENCH DRAIN - FURNISHED AS PART OF BREWERY EQUIPMENT.

P-12 TRENCH DRAIN - FURNISHED AS PART OF BREWERY EQUIPMENT.

NOTE: (1) ALL DRAINS SHALL HAVE VANDAL PROOF SCREWS.
(2) ALL DRAINS SHALL BE EQUIPPED WITH OUTLETS TO SUIT THE JOINTS IN THE PIPE TO WHICH THEY ARE CONNECTED. SIDE OUTLET DRAINS SHALL BE PROVIDED WHERE REQUIRED. EACH DRAIN SHALL BE CONNECTED TO THE DRAINAGE SYSTEM THROUGH A DEEP SEAL P-TRAP.
(3) DRAINS INSTALLED IN AREAS HAVING WATERPROOF MEMBRANE SHALL BE PROVIDED WITH FLASHING AS HEREINBEFORE SPECIFIED AND FLASHING CLAMP DEVICE.

22. GAS FIRED WATER HEATERS - FOUR A.O. SMITH GAS FIRED UNIT FACTORY ASSEMBLED WATER HEATERS TO STORE AND SUPPLY DOMESTIC HOT WATER WITHIN 5 DEGREES F OF THE SELECTED TEMPERATURE, WHEN SUPPLIED WITH NATURAL GAS AND VENTED PROPERLY. (NOTE: PROVIDE ACCOMMODATIONS FOR ONE FUTURE GAS FIRED WATER HEATER OF EQUAL CAPACITY.) THE HEATERS SHALL BE SUITABLE FOR SEALED COMBUSTION DIRECT VENTING UNSING A FOUR INCH DIAMETER PVC AIR INTAKE PIPE AND FOUR INCH DIAMETER PVC EXHAUST PIPER FOR A TOTAL DISTANCE OF 20 EQUIVALENT FEET OF VENT AND 120 EQUIVALENT FEET OF INTAKE. THE HEATER SHALL BE FACTORY ASSEMBLED AND TESTED. THE POWER BURNER SHALL BE OF A DESIGN THAT REQUIRES NO SPECIAL CALIBRATIONS ON START-UP. THE HEATERS SHALL BE APPROVED FOR ZERO INCH CLEARANCES TO COMBUSTIBLES. THE CONTROL SHALL BE AN INTEGRATED SOLID STATE TEMPERATURE AND IGNITION CONTROL DEVICE WITH INTEGRAL DIAGNOSTICS, LED FAULT DISPLAY CAPABILITY AND A DIGITAL DISPLAY OF TEMPERATURE SETTINGS. THE TANKS SHALL BE FOAM INSULATED AND EQUIPPED WITH AN ASME RATED TEMPERATURE PRESSURE RELIEF VALVE. THE WATER HEATER SHALL BE UL LISTED AND EXCEED THE MINIMUM EFFICIENCY REQUIREMENTS OF ASHRAE/IES 90.1B-1992. THIS HEATER SHALL BE LISTED BY SCAQMD RULE 1146.2 LOW NOX. WATER HEATERS SHALL BE MODEL BTH-199 AS MANUFACTURED BY A.O. SMITH. WATER HEATERS SHALL BE OF THE SEAMLESS GLASS LINED STEEL TANK CONSTRUCTION IN WHICH THE GLASS COATING IS APPLIED TO THE WATER SIDE SURFACES OF THE TANK AFTER THE TANK HAS BEEN ASSEMBLED AND WELDED. THE CONDENSING FLUE COIL SHALL BE COATED ON THE FLUE GAS SIDE WITH ACID RESISTANT GLASS LINING DESIGNED FOR USE IN CONDENSING HEATERS. EACH WATER HEATER SHALL HAVE AN INPUT RATING OF 199,000 BTUH AND A STORAGE CAPACITY OF 100 GALLLONS. EACH UNIT SHALL BE CAPABLE OF SUPPLYING 227 GALLONS OF HOT WATER PER HOUR AT A TEMPERATURE RISE OF 100 DEGREES F.
ACCESSORIES: PROVIDE FACTORY FABRICATED TWO UNIT MANIFOLD KITS (O.A. SMITH PART #78692) FOR WATER INTAKE AND SUPPLY. CONCENTRIC VENT TERMINATION KIT FOR SIDEWALL INTAKE AND EXHAUST VENTING (A.O. SMITH PART #194451); ONE VENT KIT REQUIRED FOR EACH WATER HEATER. THE DISCHARGE OF EACH RELIEF VALVE SHALL BE PIPED TO THE NEAREST FLOOR DRAIN OR AS NOTED ON THE DRAWINGS. PROVIDE BALL TYPE DRAIN VALVE ON EACH HEATER FOR DRAINING PURPOSES.

23. EXPANSION TANK

23.1 WELDED STEEL, TESTED AND STAMPED IN ACCORDANCE WITH ASME SPECIFICATIONS, RATE FOR WORKING PRESSURE 125 PSIG, WITH FLEXIBLE DIAPHRAGM SEALED INTO TANK, INLINE MODEL (PROVIDE SUPPORT PER MANUFACTURER'S RECOMMENDATIONS). FOR USE WITH POTABLE WATER SYSTEMS. MODEL ST-60-C MANUFACTURED BY AMTROL.

24. HOT WATER RECIRCULATION PUMP

24.1 INLINE CIRCULATING PUMP WITH BRONZE BODY, GLASS FILLED POLYPROPYLENE IMPELLER, STAINLESS STEEL SHAFT AND CARBON SLEEVE BEARINGS 1/30 HP, 115 VOLTS, SINGLE PHASE; MODEL SLC-30B, MANUFACTURED BY BELL & GOSSETT. PUMP SHALL HAVE A MINIMUM CAPACITY OF 3 GPM AT 12 FEET OF TOTAL DYNAMIC HEAD.

24.2 HWR PUMP SHALL BE CONTROLLED BY AN AQUASTAT. AQUASTAT SHALL BE MODEL AQ, MANUFACTURED BY BELL & GOSSETT. COORDINATE WIRING WITH THE ELECTRICAL CONTRACTOR.

25. THERMOSTATIC MIXING VALVE

25.1 MIXING VALVE SHALL BE THERMOSTATIC TYPE WITH UNION INLET STRAINERS, CHECK STOPS, THERMOMETER, SHUTOFF VALVES AND CHROME FINISH; SERIES E80, MANUFACTURED BY POWERS. INSTALL AND SET UP SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SET MIXING VALVE TO SUPPLY DOMESTIC HOT WATER A 115 DEGREES F.

26. GREASE INTERCEPTOR

26.1 GREASE INTERCEPTOR SHALL BE J.R. SMITH FIGURE NO. 8465-AR10-F-B, LARGE CAPACITY STEEL INTERCEPTOR OR APPROVED EQUAL, RATED AT MINIMUM 150 GPM FLOW RATE AND 300 POUND GREASE CAPACITY.

26.2 INTERCEPTOR SHALL BE OF STEEL CONSTRUCTION WITH ACID RESISTANT COATING INSIDE AND OUTSIDE, ANCHOR FLANGE FOR RECESSING AND MOUNTING TOP FLUSH WITH FINISHED FLOOR, FOUR INCH SIZE HIGH INLET AND OUTLET, INTERNAL AIR RELIEF BYPASS, BRONZE CLEANOUT PLUG AND VISIBLE DOUBLE WALL TRAP SEAL WITH REMOVABLE PRESSURE EQUALIZING/FLOW DIFFUSING BAFFLE AND SEDIMENT BUCKET. GAS AND WATERTIGHT GASKETED NON-SKID COVER SECURED WITH RECESSED AND COVERED CENTER SECURING HANDLE.

27. STERILIZATION OF DOMESTIC WATER SYSTEM

27.1 BEFORE BEING PLACED IN SERVICE, ALL DOMESTIC WATER LINES SHALL BE CHLORINATED USING A METHOD THAT IS SATISFACTORY TO THE WATER AUTHORITY OR THE AUTHORITY HAVING JURISDICTION. IN THE ABSENCE OF A PRESCRIBED METHOD, THE PROCEDURE LISTED IN AWWA C651 OR AWWA C652 OR AS DESCRIBED BELOW SHALL BE USED.

27.2 PRIOR TO CHLORINATION, ALL DIRT AND FOREIGN MATTER SHALL BE REMOVED BY A THOROUGH FLUSHING. THIS SHALL BE DONE AFTER THE PRESSURE TEST AND LEAKAGE TEST.

27.3 A CHLORINE HYPOCHLORITE SOLUTION SHALL BE APPLIED BY MEANS OF A SOLUTION FEED DEVICE OR THE GAS SHALL BE FED DIRECTLY FROM A CHLORINE CYLINDER EQUIPPED WITH PROPER DEVICES FOR REGULATING THE RATE OF FLOW AND THE EFFECTIVE DIFFUSE OF GAS WITHIN THE PIPE.

27.4 WATER SHALL BE CONTROLLED TO FLOW SLOWLY INTO THE SYSTEM DURING THE APPLICATION OF CHLORINE IN SUCH PROPORTIONS THAT THE CHLORINE DOSE APPLIED TO THE WATER ENTERING THE PIPE SHALL BE AT LEAST 40 TO 50 PARTS PER MILLION.

27.5 TREATED WATER SHALL BE RETAINED IN THE SYSTEM LONG ENOUGH TO DESTROY ALL NON-SPORE FORMING BACTERIA. THIS PERIOD SHALL BE AT LEAST THREE HOURS. A LONGER CHLORINE CONTACT TIME MAY BE REQUESTED BY THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.

27.6 AFTER THE CHLORINE TREATED WATER HAS BEEN RETAINED FOR THE REQUIRED TIME, THE CHLORINE RESIDUAL AT THE PIPE EXTREMITIES AND AT OTHER REPRESENTATIVE POINTS SHALL BE AT LEAST FIVE PARTS PER MILLIONS.

27.7 FOLLOWING CHLORINATION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE SYSTEM AT ITS EXTREMITIES UNTIL THE REPLACEMENT WATER THROUGHOUT ITS LENGTH SHALL, UPON TEST, BE EQUAL TO THE WATER QUALITY SERVED FROM THE WATER SUPPLY SYSTEM.

27.8 SHOULD THE INITIAL TREATMENT IN THE OPINION OF THE OWNER'S REPRESENTATIVE PROVE INEFFECTIVE, THE CHLORINATION PROCEDURE SHALL BE REPEATED UNTIL CONFIRMED TESTS SHOW THAT WATER SAMPLED FROM THE SYSTEM CONFORMS TO THE REQUIREMENTS.

27.9 THE "START-UP" OF THE WATER HEATER SYSTEM SHALL BE CARRIED OUT BY THE CONTRACTOR AND MANUFACTURE'S REPRESENTATIVE.

27.10 IN ADDITION TO THE ABOVE WORK, THE CONTRACTOR SHALL CHECK THE OPERATION OF ALL WATER HEATER THERMOSTAT SETPOINTS AND OPERATIONS.

28. TEST OF DRAINAGE SYSTEM

28.1 ALL PLUMBING AND DRAINAGE PIPING SHALL BE TESTED BY PLUGGING ALL OPENINGS AND FILL SYSTEM WITH WATER TO THE TOP OF ALL VENT PIPES. THE WATER SHALL STAND FOR 30 MINUTES FOR INSPECTION. ALL TESTS MUST COMPLY WITH LOCAL AUTHORITY REQUIREMENTS.

29. TEST OF DOMESTIC WATER PIPING

29.1 ALL WATER LINES SHALL BE TESTED TO A HYDROSTATIC PRESSURE EQUAL TO 1-1/2 TIMES THE MAXIMUM OPERATING PRESSURE. THE SYSTEM SHALL BE LEAK-FREE FOR 24 HOURS AT THIS PRESSURE.

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Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA — Regis W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
REGIS WILLIAM KUBIT
ENGINEER
No. 6968-E

523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
Edward M. Happ
(610) 917-8831

N.E. FISHER & ASSOCIATES
MECHANICAL & ELECTRICAL ENGINEERS
329 EAST SECOND STREET
BOYERTOWN, PENNSYLVANIA 19512
(610) 369 - 3190

PROJECT NO. 2466

PROJECT NO.	DRAWN BY	CHK'D BY
B1998	EMH	EMH

NO.	DATE	BY	ISSUE
1	01-09-04	EMH	ISSUED FOR PRELIMINARY REVIEW
2	01-26-04	EMH	ISSUED FOR PA L&I
3	02-10-04	EMH	REISSUED FOR PA L&I
4	02-18-04	EMH	ISSUED FOR PRELIM. CONSTRUCTION
5	03-03-04	EMH	ISSUED FOR CONSTRUCTION BID
6	04-02-04	EMH	ISSUED FOR CONSTRUCTION
7			
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12			
13			
14			
15			

APPROVED BY: Robin J. Kohn, A.I.A.
CURRENT DATE: April 02, 2004

Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

PLUMBING SYSTEM
PLUMBING
SPECIFICATIONS

SHEET NUMBER

P-5

REV 6

04-02-04 1998-P5.dwg

(4) "BP-1" PANEL SCHEDULE

PANEL: BP-1 — MAINS: 400 AMP MLO
MFR CAT NO: SQUARE D — VOLTAGE: 208/120 VAC 3ϕ 4 WIRE
NQOD442L400TFL, MHC53V5 (COVER), PK23GTA, (9)-QOB120,
(5)-QOB320, (2)-QOB340 (1)-QOB360 & (1)-QOB380 (BRANCH C.B.'s)

CKT	AMPS		LOAD	LOAD		AMPS	CKT
1	15.0	20/1	BREWERY LIGHTS	BREWERY LIGHTS	20/1	15.0	2
3	8.8	20/1	BOTTLING LINE LIGHTS	BREW MEISTER OFFICE LTS.	20/1	3.8	4
5	3.8	20/1	MEZZANINE LIGHTS	COLD STORAGE LIGHTS	20/1	7.5	6
7	7.5	20/1	BREWERY RECEPT.	OFFICE RECEPT.	20/1	7.5	8
9	3.0	20/1	BOILER RECEPT.	BREWERY EQUIP. PANEL	80/3	58.9	10
11	45.0	60/3	WALKIN COOLER	BREWERY EQUIP. PANEL			12
13			WALKIN COOLER	BREWERY EQUIP. PANEL			14
15			WALKIN COOLER	KEGGER	20/3	10.0	16
17	10.0	20/3	BOILER PLANT	KEGGER			18
19			BOILER PLANT	KEGGER			20
21			BOILER PLANT	AGITATOR	20/3	10.0	22
23	55.0	70/3	GLYCOL CHILLER	AGITATOR			24
25			GLYCOL CHILLER	AGITATOR			26
27			GLYCOL CHILLER	#2 TWIST LOK.	20/3	8.0	28
29	32.0	40/3	BOTTLING LINE	#2 TWIST LOK.			30
31			BOTTLING LINE	#2 TWIST LOK.			32
33			BOTTLING LINE	OH DOOR OPENER	20/3	5.0	34
35	8.0	20/3	#1 TWIST LOK.	OH DOOR OPENER			36
37			#1 TWIST LOK.	OH DOOR OPENER			38
39			#1 TWIST LOK.	COMPRESSOR	40/2	32.0	40
41	-	-	-	COMPRESSOR			42

CURRENT DRAW MAINS: — FEEDERS:

A	B	C	N
292.9	295.5	291.2	

(4) #500 MCM & (1) #2 GND THHN IN 3" EMT
FED FROM MDP-1

(5) "BP-2" PANEL SCHEDULE

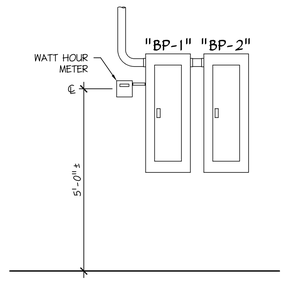
PANEL: BP-2 — MAINS: 400 AMP MLO
MFR CAT NO: SQUARE D — VOLTAGE: 208/120 VAC 3ϕ 4 WIRE
NQOD442L400, MHC53V5 (COVER), PK23GTA,
(BRANCH C.B.'s AS REQUIRED)

CKT	AMPS		LOAD	LOAD		AMPS	CKT
1	-	-	-	-	-	-	2
3	-	-	-	-	-	-	4
5	-	-	-	-	-	-	6
7	-	-	-	-	-	-	8
9	-	-	-	-	-	-	10
11	-	-	-	-	-	-	12
13	-	-	-	-	-	-	14
15	-	-	-	-	-	-	16
17	-	-	-	-	-	-	18
19	-	-	-	-	-	-	20
21	-	-	-	-	-	-	22
23	-	-	-	-	-	-	24
25	-	-	-	-	-	-	26
27	-	-	-	-	-	-	28
29	-	-	-	-	-	-	30
31	-	-	-	-	-	-	32
33	-	-	-	-	-	-	34
35	-	-	-	-	-	-	36
37	-	-	-	-	-	-	38
39	-	-	-	-	-	-	40
41	-	-	-	-	-	-	42

CURRENT DRAW MAINS: — FEEDERS:

A	B	C	N
0.0	0.0	0.0	

(4) #500 MCM & (1) #2 GND THHN IN 3" EMT
FED FROM MDP-1 THRU BP-1



(1) PANEL ELEVATION
(E-6) Scale: 3/8" = 1'- 0"

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA — Regis W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
REGIS WILLIAM KUBIT
ENGINEER
No. 6968-E

523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
Edward M. Happ
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PROJECT NO.	DRAWN BY	CHK'D BY
B1998	EMH	EMH

NO.	DATE	BY	ISSUE
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6	04-02-04	EMH	ISSUED FOR CONSTRUCTION
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APPROVED BY: Robin J. Kohn, A.I.A. — CURRENT DATE: April 02, 2004

Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE
ELECTRICAL
BREWERY PANELS

SHEET NUMBER
E-6
REV 6

04-02-04 1998c-E6.dwg

LEGEND

S	SINGLE POLE SWITCH HUBBELL #1201
S_3	THREE WAY SWITCH HUBBELL #1203
S_4	FOUR WAY SWITCH HUBBELL #1204
S_D	DIMMER SWITCH LUTRON #NFI0-277
P_B	ON/OFF PUSH BUTTON SQUARE D CLASS 9001-#BF210
	DUPLEX RECEPTACLE HUBBEL #CBR20
$_{CH}$	DUPLEX RECEPTACLE HUBBEL #CBR20 INSTALLED AT COUNTER HEIGHT
$_{GFI}$	DUPLEX GFCI RECEPTACLE HUBBEL #CBR20
$_{UPS}$	DUPLEX GFCI RECEPTACLE HUBBEL #CBR20 ON A DEDICATED UPS CIRCUIT
	DOUBLE DUPLEX RECEPTACLE HUBBEL #420
	EMERGENCY LIGHTING W/ BATTERY BACKUP
	EMERGENCY LIGHTING REMOTE LIGHT HEAD
EXIT	EMERGENCY EXIT SIGNAGE W/ BATTERY BACKUP
FE	FIRE EXTINGUISHER RATED FOR 10A/2BC
	LUTRON DIMMER CONTROL PANEL LUTRON GRAFIK EYE RESTAURANT DIMMER SYSTEM CAT# 4108. (SEE SPECIFICATIONS)
UPS	UNINTERRUPTABLE POWER SUPPLY POWERWARE 9 PRESTIGE UPS 240 VOLTS 1Ø 3 WIRE INPUT 208/120 VOLTS 1Ø 3 WIRE OUTPUT W/ BATTERY AND MAINTENANCE BY PASS CABINETS. (SEE SPECIFICATIONS)

② "LP" PANEL SCHEDULE

PANEL: LP — MAINS: 225 AMP MLO
MFR CAT NO: SQUARE D — VOLTAGE: 208/120 VAC 3Ø 4 WIRE
HNQOD442L225TFL, MHC47 (COVER), PK23GTA (GRD BAR KIT)
(28)-QOB120 (BRANCH C.B.'s)

CKT	AMPS	LOAD		LOAD		AMPS	CKT
1	15	20/1	DINING ROOM LIGHTS	BAR AREA LIGHTS	20/1	15	2
3	6.3	20/1	ENTRY LIGHT	DINING RM LIGHTS	20/1	10.5	4
5	8.3	20/1	BAR LIGHT	REAR CORR. LIGHTS	20/1	6.2	6
7	10.0	20/1	BANQUET LIGHTS	BANQUET LIGHTS	20/1	10.0	8
9	11.3	20/1	POOL TABLE LIGHTS	SHUFFLE / DARTS LIGHTS	20/1	5.0	10
11	10.0	20/1	KITCHEN LIGHTS	BACK HALL / MECH. LTS.	20/1	7.4	12
13	11.0	20/1	RESTROOM LIGHTS	DINING RM RECEPT.	20/1	9.0	14
15	3.0	20/1	SERVICE RECEPT.	BANQUET RECEPT.	20/1	9.0	16
17	9.0	20/1	HALL & RESTRM. RECEPT.	GAME RM. RECEPT.	20/1	9.0	18
19	7.5	20/1	KITCHEN OFFICE RECEPT.	HALL/ BEER COOLER LTS.	20/1	6.9	20
21	3	20/1	ELEC. CLOSET RECEPT.	ELEC. CLOSET RECEPT.	20/1	3.0	22
23	12.5	20/1	HAND DRYER MEN'S	HAND DRYER WOMEN'S	20/1	12.5	24
25	9.0	20/1	EXTERIOR LIGHTS	-	-	-	26
27	-	-	-	-	-	-	28
29	-	-	-	-	-	-	30
31	-	-	-	-	-	-	32
33	-	-	-	-	-	-	34
35	-	-	-	-	-	-	36
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41	-	-	-	-	-	-	42

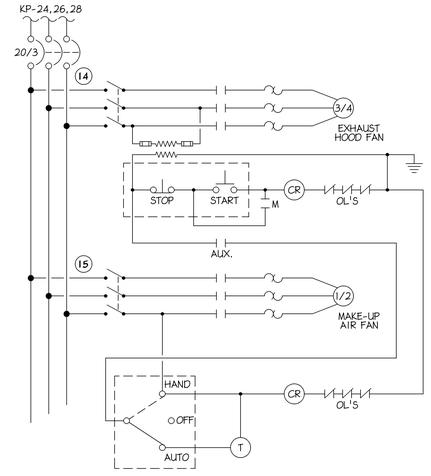
CURRENT DRAW MAINS: A 93.4 — B 51.1 — C 74.9 — N
FEEDERS: (4) #4/0 & (1) #6 GND THHN IN 2 1/2" EMT
FED FROM MDP-1

③ "KP" PANEL SCHEDULE

PANEL: KP — MAINS: 225 AMP MLO
MFR CAT NO: SQUARE D — VOLTAGE: 208/120 VAC 3Ø 4 WIRE
NQOD442L225, MHC35 (COVER), PK23GTA (GRD BAR KIT)
(17)QOB120, (2)-QOB220 (1)-QOB320 & (1)-QOB370 (BRANCH C.B.'s)

CKT	AMPS	LOAD		LOAD		AMPS	CKT
1	4.5	20/1	KITCHEN RECEPT.	KITCHEN RECEPT.	20/1	7.4	2
3	4.6	20/1	SALAD UNIT	KITCHEN REFRIG	20/1	9.5	4
5	7.8	20/1	SANDWICH UNIT	MEAT SLICER	20/1	2.5	6
7	7.6	20/1	ICE MACHINE	ICE CREAM CAB.	20/1	2.0	8
9	16.0	20/2	SLO COOKER	DISHWASHER	70/3	56.0	10
11			SLO COOKER	DISHWASHER			12
13	7.4	20/1	BACK KITCHEN RECEPT.	DISHWASHER			14
15	3.0	20/1	KITCHEN RANGE	KITCHEN FRYER #1	20/1	7.0	16
17	7.0	20/1	KITCHEN FRYER #2	GLASSWARE WASHER	20/2	13.6	18
19	7.5	20/1	BLENDER	GLASSWARE WASHER			20
21	8.5	20/1	BAR COOLER	BAR RECEPT. #1	20/1	7.5	22
23	7.5	20/1	BAR RECEPT. #2	KITCHEN HOOD FANS	20/3	8.3	24
25	3.3	20/1	KITCHEN HOOD LIGHTS	KITCHEN HOOD FANS			26
27	-	-	-	KITCHEN HOOD FANS			28
29	-	-	-	-	-	-	30
31	-	-	-	-	-	-	32
33	-	-	-	-	-	-	34
35	-	-	-	-	-	-	36
37	-	-	-	-	-	-	38
39	-	-	-	-	-	-	40
41	-	-	-	-	-	-	42

CURRENT DRAW MAINS: A 122.1 — B 120.4 — C 118.7 — N
FEEDERS: (4) #4/0 & (1) #6 GND THHN IN 2 1/2" EMT
FED FROM MDP-1 THRU "LP" PANEL



4 KITCHEN EXHAUST FAN
E-5 Scale: N.T.S.

⑥ "EM-1" PANEL SCHEDULE

PANEL: EM-1 (EMERGENCY ONLY) — MAINS: 50 AMP MLO
MFR CAT NO: SQUARE D — VOLTAGE: 208/120 VAC 3Ø 4 WIRE
NQOD412L100, MHC205 (COVER), PK12GTA (GRD BAR KIT)
(4)-QOB120 (BRANCH C.B.'s)

CKT	AMPS	LOAD		LOAD		AMPS	CKT
1	14.4	20/1	REST. EMER. LTS.	KITCHEN EMER LTS.	20/1	13.8	2
3	3.2	20/1	BREWERY EMER. LTS.	SPARE	20/1	-	4
5	-	-	-	-	-	-	6
7	-	-	-	-	-	-	8
9	-	-	-	-	-	-	10
11	-	-	-	-	-	-	12

CURRENT DRAW MAINS: A 28.2 — B 3.2 — C - — N
FEEDERS: (4)-#6 & (1)-#8 GND THHN IN (1)-1" EMT
FED FROM TANSFER SWITCH

⑦ "EM-2" PANEL SCHEDULE

PANEL: EM-2 — MAINS: 150 AMP MLO
MFR CAT NO: SQUARE D — VOLTAGE: 208/120 VAC 3Ø 4 WIRE
NQOD24L100, MHC235 (COVER), PK15GTA (GRD BAR KIT)
(3)-QOB120 (1)-QOB230 (1)-QOB360 (BRANCH C.B.'s)

CKT	AMPS	LOAD		LOAD		AMPS	CKT
1	8.0	20/1	EXIT LIGHTS	EXIT LIGHTS	20/1	8.0	2
3	28.0	60/3	REFRIGERATION	UPS	30/2	25.0	4
5			REFRIGERATION	UPS			6
7			REFRIGERATION	EXTERIOR LIGHTS	20/1	7.5	8
9	-	-	-	-	-	-	10
11	-	-	-	-	-	-	12
13	-	-	-	-	-	-	14
15	-	-	-	-	-	-	16
17	-	-	-	-	-	-	18
19	-	-	-	-	-	-	20
21	-	-	-	-	-	-	22
23	-	-	-	-	-	-	24

CURRENT DRAW MAINS: A 51.5 — B 53.0 — C 53.0 — N
FEEDERS: (4)-#4 & (1)-#8 GND THHN IN (1)-1" EMT
FED FROM TRANSFER SWITCH

⑪ "UPS" PANEL SCHEDULE

PANEL: UPS — MAINS: 100 AMP MLO
MFR CAT NO: SQUARE D — VOLTAGE: 208/120 VAC 1Ø 3 WIRE
NQOD20L100, MHC235 (COVER), PK12GTA (GRD BAR KIT)
(12)-QOB120 (BRANCH C.B.'s)

CKT	AMPS	LOAD		LOAD		AMPS	CKT
1	4.0	20/1	BAR COMPUTER #1	BAR COMPUTER #2	20/1	4.0	2
3	4.0	20/1	SERVICE AREA COMP. #1	SERVICE AREA COMP. #2	20/1	4.0	4
5	4.0	20/1	SERVICE AREA COMP. #3	SPARE	20/1	-	6
7	-	20/1	SPARE	SPARE	20/1	-	8
9	-	20/1	SPARE	SPARE	20/1	-	10
11	-	20/1	SPARE	SPARE	20/1	-	12
13	-	-	-	-	-	-	14
15	-	-	-	-	-	-	16
17	-	-	-	-	-	-	18
19	-	-	-	-	-	-	20

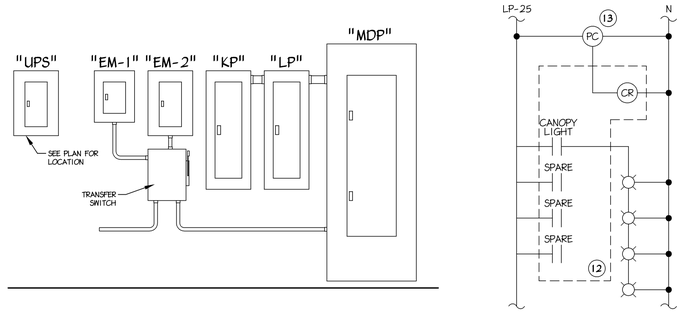
CURRENT DRAW MAINS: L-1 12.0 — L-2 8.0 — N
FEEDERS: (3) #8 & (1) #8 GND THHN IN 3/4" EMT
FED FROM UPS

LIGHTING FIXTURE SCHEDULE

SYMBOL	LETTER	DESCRIPTION	SYMBOL	LETTER	DESCRIPTION
A	A	LOCATION: DINING ROOM OVER BOOTHS MANUFACTURER: REMARKS: TO BE SELECTED BY OWNER	N	N	LOCATION: OVER MIRROR MEN'S BATHROOM MANUFACTURER: SEAGULL CAT# 4339 W/ (6) 40G25W LAMPS REMARKS:
B	B	LOCATION: DINING ROOM GENERAL LIGHTING MANUFACTURER: HALO CAT.# H71CT-IC HOUSING W/ 404 SPECULAR REFLECTOR & 60 WATT A-19 IF LAMP REMARKS: RECESSED FIXTURES	P	P	LOCATION: CLOSET LIGHTS MANUFACTURER: LEVITON CAT# 9875 W/ 100 WATT WA19IF LAMP REMARKS: PORCELAIN LAMP HOLDER
C	C	LOCATION: BAR LIGHTING MANUFACTURER: HALO CAT.#H99T HOUSING W/ 9425B TRIM & 50 WATT R20 LAMP REMARKS: RECESSED FIXTURES	R	R	LOCATION: OUTDOOR LIGHTING MANUFACTURER: LITHONIA CAT# TWH100M-120 W/ 100 WATT METAL HALIDE LAMP FURNISH W/ BUILT-IN PHOTOCELL REMARKS:
D	D	LOCATION: FRONT ENTRY LIGHTING MANUFACTURER: HALO CAT.# H71CT IC HOUSING W/ 310 TRIM & 75 WATT R30 LAMP REMARKS: RECESSED FIXTURES	S	S	LOCATION: BOTTLING LINE LIGHTING MANUFACTURER: LITHONIA CAT# TDMSW232120ESAL W/ (4) F32T8 LAMPS REMARKS: (4) LAMP FLUORESCENT FIXTURE
E	E	LOCATION: BANQUET ROOM LIGHTING MANUFACTURER: REMARKS: TO BE SELECTED BY OWNER	S1	S1	LOCATION: BOTTLING LINE LIGHTING #2 MANUFACTURER: LITHONIA CAT# DMSW232120ESAL W/ (2) F32T8 LAMPS REMARKS: (2) LAMP FLUORESCENT FIXTURE
F	F	LOCATION: POOL TABLE LIGHTING MANUFACTURER: SEAGULL CAT# 6107-93 W/ 3-150 WATT LAMPS REMARKS:	T	T	LOCATION: BREWERY LIGHTING MANUFACTURER: LUMARK CAT# MHBE-5A-250H MT-LL REMARKS: 250 WATT METAL HALIDE FIXTURE
G	G	LOCATION: DART BOARD LIGHTING MANUFACTURER: HALO CAT# H71CT-IC HOUSING W/ #77 EYEBALL TRIM & 50 WATT R20 LAMP REMARKS:	T1	T1	LOCATION: BREWERY LIGHTING MANUFACTURER: LUMARK CAT# MHBE-5A-250H MT-LL EM/SC REMARKS: 250 WATT METAL HALIDE FIXTURE W/ EMER. LIGHT
H	H	LOCATION: KITCHEN LIGHTING FIXTURE MANUFACTURER: METALUX CAT# 2GP432A120LE3 W/ (4) F32T8 LAMPS REMARKS: 2'x4' LAY-IN / 4 LAMP FLUORESCENT	U	U	LOCATION: COLD STORAGE LIGHTING MANUFACTURER: DAYBRITE CAT# VISI50112CG W/ 150WA21/RS/IP LAMP (150 WATTS) REMARKS:
J	J	LOCATION: BATHROOM LIGHTING FIXTURE MANUFACTURER: METALUX CAT# 2GP332A120LE3 W/ (3) F32T8 LAMPS REMARKS: 2'x4' LAY-IN / 3 LAMP FLUORESCENT	V	V	LOCATION: BOILER ROOM LIGHTING MANUFACTURER: DAYBRITE CAT# VISI50112CGD16 W/ 150WA21/RS/IP LAMP (150 WATTS) REMARKS:
K	K	LOCATION: PREP AREA LIGHTING FIXTURE MANUFACTURER: METALUX CAT# 2GP232A120ES W/ (2) F32T8 LAMPS REMARKS: 2'x4' LAY-IN / 2 LAMP FLUORESCENT	W	W	LOCATION: MEZZANINE STORAGE LIGHTING MANUFACTURER: LITHONIA CAT# EJS232120ES W/ (2) F32T8 LAMPS REMARKS:
L	L	LOCATION: STORAGE CLOSET LIGHTING FIXTURE MANUFACTURER: METALUX CAT# W232A120LE3 W/ (2) F32T8 LAMPS REMARKS: 1'x4' SURFACE MOUNT / 2 LAMP FLUORESCENT	EXIT	X	LOCATION: LIGHTED EXIT SIGNAGE MANUFACTURER: LITHONIA QUANTUM SERIES CAT# QMSWR120EL REMARKS:
L1	L1	LOCATION: ELECTRIC CLOSET LIGHTING FIXTURE MANUFACTURER: METALUX CAT# 8TW232A120LE3 W/ (4) F32T8 LAMPS REMARKS: 1'x4' TANDEM SURFACE / 2 LAMP FLUORESCENT	Z	Z	LOCATION: OUTDOOR DECORATIVE LIGHTING MANUFACTURER: SEAGULL CAT# 8052-71 W/ (3) B10 CAND CLEAR 40 WATT LAMPS REMARKS: FRONT ENTRY AREA
M	M	LOCATION: OVER MIRROR WOMEN'S BATHROOM MANUFACTURER: SEAGULL CAT# 4355 W/ (9) 40G25W LAMPS REMARKS:			

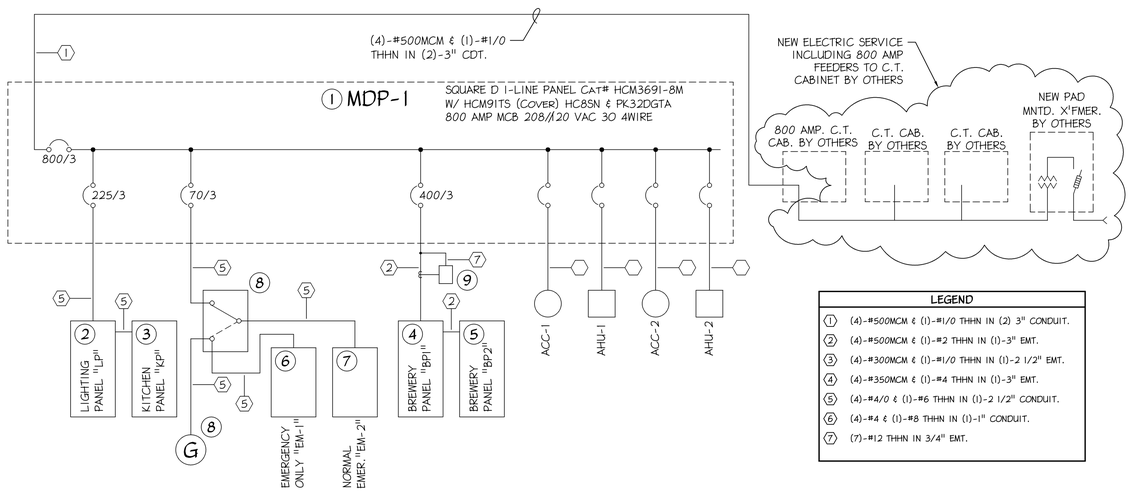
BILL OF MATERIAL

ITEM	QTY	SUPPLIER	DESCRIPTION	ITEM	QTY	SUPPLIER	DESCRIPTION
1	1	ELEC. CONTR.	MAIN DISTRIBUTION PANEL: SQUARE D #HCM3691-8M W/ HCM91TS (Cover), HC8SN, PK32DGTA, 800 AMP MCB (1)-QA3400 (1)-QJ3225 (1)-FA36070 & C.B.'s AS Required.	9	1	ELEC. CONTR.	BREWERY WATT HOUR METER: E-MON D-MON CAT# 208400
2	1	ELEC. CONTR.	LIGHTING PANEL: SQUARE D #NQOD442L225TFL W/ MHC47 (Cover), PK23GTA & (28)-QOB120 Circuit Breakers.	10	1	ELEC. CONTR.	UPS: POWERWARE PRESTIEGE 6000VA / 4000W & (2)-Battery Packs (Rack Mountable)
3	1	ELEC. CONTR.	KITCHEN PANEL: SQUARE D #NQOD442L225 W/ MHC35 (Cover), PK23GTA & (17)-QOB120, (1)-QOB220 (1)-QOB320 & (1)-QOB370 Circuit Breakers.	11	1	ELEC. CONTR.	UPS DISTRIBUTION PANEL: SQUARE D NQOD20L100 W/ MHC235 (Cover), PK12GTA &(12) QOB120 Circuit Breakers.
4	1	ELEC. CONTR.	BREWERY PANEL #1: SQUARE D #NQOD442L400TFL W/ MHC53VS, PK23GTA & (9)-QOB120, (5)-QOB320 & (2)-QOB340 (1)-QOB370, (1) QOB360 & (1)-QOB380 C.B.'S.	12	1	ELEC. CONTR.	LIGHTING CONTACTOR: SQUARE D #CLASS 8903LG40V02 NEMA 1
5	1	ELEC. CONTR.	BREWERY PANEL #2: SQUARE D #NQOD442L400 W/ MHC53VS, PK23GTA & Branch Circuit Breakers As Required.	13	1	ELEC. CONTR.	PHOTOCELL: INTERNMATIC #K4121C
6	1	ELEC. CONTR.	EMERGENCY ONLY PANEL: SQUARE D #NQOD412L100 W/ MHC20S (Cover), PK9GTA & (4)-QOB120 Circuit Breakers.	14	1	ELEC. CONTR.	KITCHEN HOOD FANS: COMBINATION STARTER, SQUARE D #8538SBG11 V02, PROVIDE THERMAL TRIP UNITS AS REQUIRED & START/STOP PUSH BUTTONS IN COVER.
7	1	ELEC. CONTR.	NORMAL EMERGENCY PANEL: SQUARE D #NQOD424L100 W/ MHC23S (Cover), PK15GTA & (2)-QOB120, (1)-QOB230 & (1)-QOB360 Circuit Breakers.	15	1	ELEC. CONTR.	KITCHEN HOOD FANS: COMBINATION STARTER, SQUARE D #8538SBG11, PROVIDE THERMAL TRIP UNITS AS REQUIRED & HAND/OFF/AUTO SWITCH IN COVER.
8	1	ELEC. CONTR.	EMERGENCY GENERATOR & TRANSFER SWITCH: 25KW 208/120 VAC, 3Ø 4 WIRE, NATURAL GAS FUEL (PA APPROVED)				



2 MDP & PANEL ELEVATION
E-5 Scale: 3/8" = 1'- 0"

3 PHOTOCELL
E-5 Scale: N.T.S.



LEGEND	
1	(4)-#500MCM & (1)-#1/0 THHN IN (2) 3" CONDUIT.
2	(4)-#500MCM & (1)-#2 THHN IN (1)-3" EMT.
3	(4)-#300MCM & (1)-#1/0 THHN IN (1)-2 1/2" EMT.
4	(4)-#350MCM & (1)-#4 THHN IN (1)-3" EMT.
5	(4)-#4/0 & (1)-#6 THHN IN (1)-2 1/2" CONDUIT.
6	(4)-#4 & (1)-#8 THHN IN (1)-1" CONDUIT.
7	(7)-#12 THHN IN 3/4" EMT.

1 SINGLE LINE DIAGRAM
E-5 Scale: N.T.S.

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA — Regis W. Kubit, PE
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL REGIS WILLIAM KUBIT ENGINEER No. 6968-E
523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
Edward M. Happ
(610) 917-8831

PROJECT NO.	DRAWN BY	CHK'D BY
B1998	EMH	EMH

NO.	DATE	BY	ISSUE
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APPROVED BY: Robin J. Kohn, A.I.A. — CURRENT DATE: April 02, 2004

Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

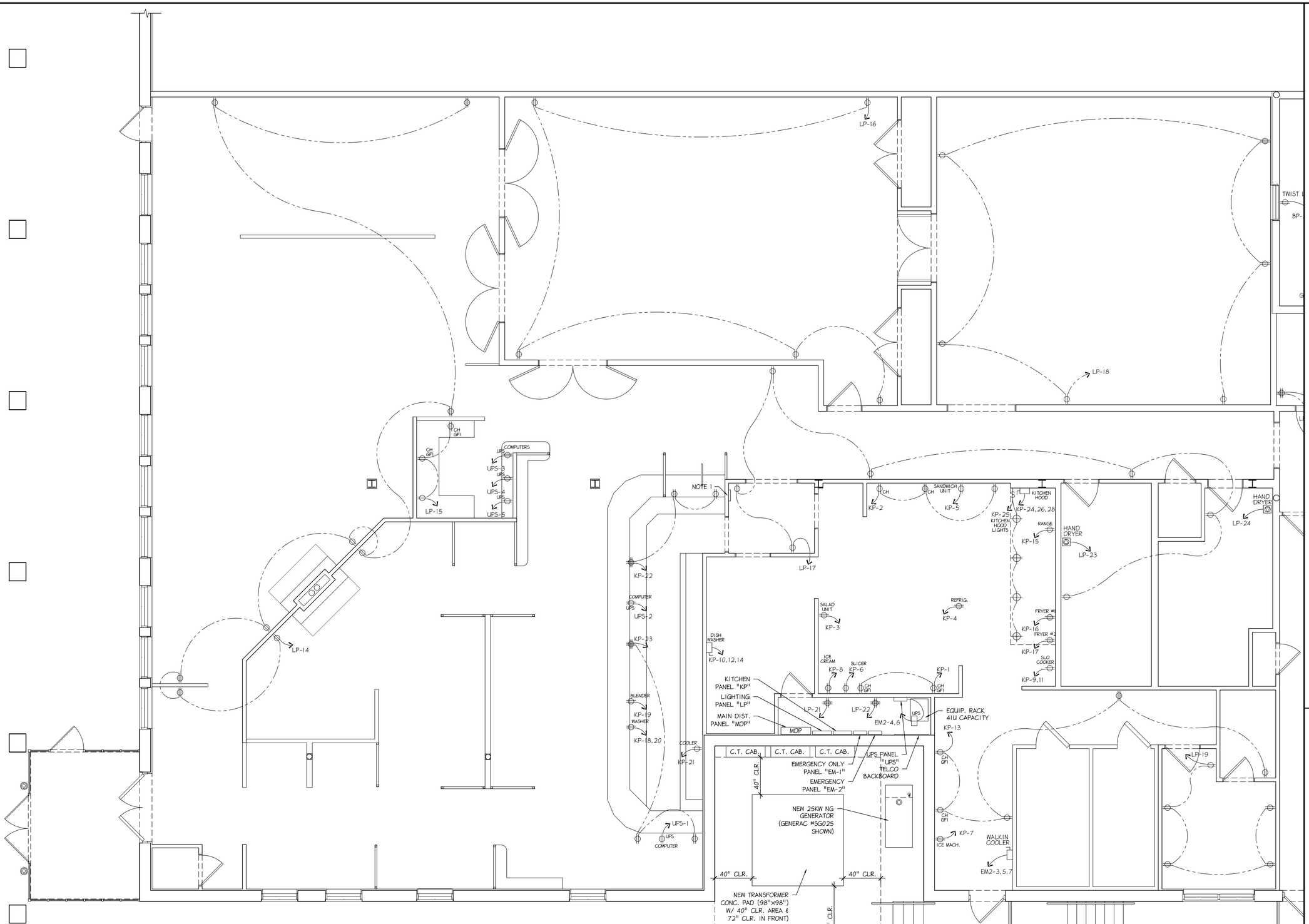
LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE
ELECTRICAL PANELS, FIXTURE SCHEDULE & SINGLE LINE DIAGRAM

SHEET NUMBER
E-5

REV 6

04-02-04 1998-E5.dwg



NOTES:
1. PROVIDE LUTRON DIMMER PANEL. WIRE LIGHTING CIRCUITS #1,2,3,465 THROUGH LUTRON GRAFIK EYE RESTAURANT DIMMER SYSTEM (#GRK-4108)

2. ALL FEEDER CONDUIT & WIRE SIZES ARE LISTED FOR ESTIMATING PURPOSES ONLY AND MUST BE FIELD VERIFIED PRIOR TO WIRING ANY OF THE BREWERY EQUIPMENT.

1 E-3 RESTAURANT & BAR POWER PLAN
Scale: 1/4" = 1'- 0"

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tel. (610) 917-8831 fax (610) 917-8836
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Regis W. Kubit, P.E.
Commonwealth of Pennsylvania
License No. PE-6968-E

Contact Person:
Edward M. Happ
(610) 917-8831

PROJECT NO.	DRAWN BY	CHK'D BY
B1998	EMH	EMH

NO.	DATE	BY	ISSUE
1	01-09-04	EMH	ISSUED FOR PRELIMINARY REVIEW
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APPROVED BY	CURRENT DATE
Robin J. Kohn, A.I.A.	April 02, 2004

Chester County Brewing Co.

LEWIS ROAD PLAZA
312 N. LEWIS ROAD
ROYERSFORD, PA 19468

LIMERICK TOWNSHIP
MONTGOMERY COUNTY

SHEET TITLE

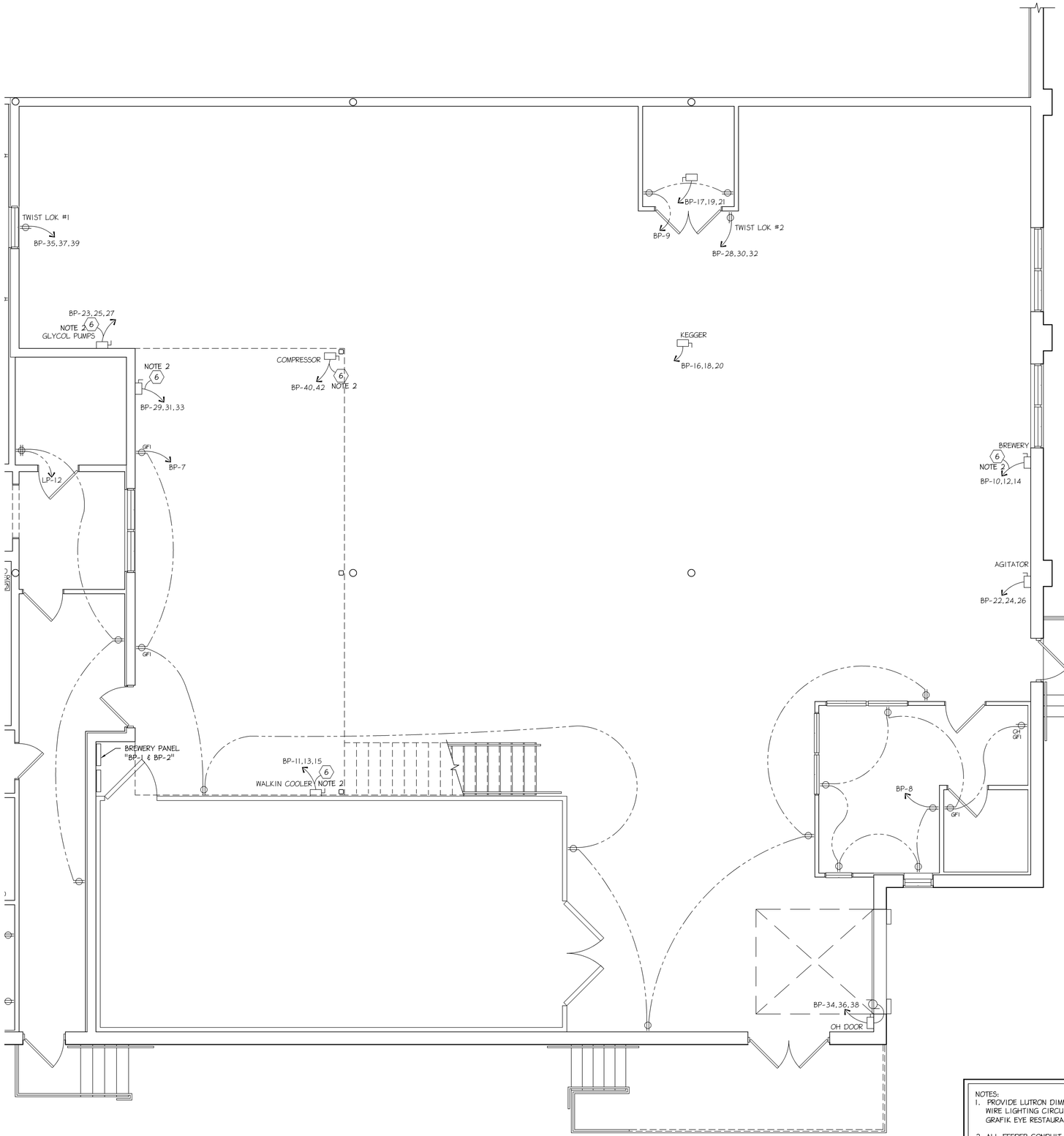
ELECTRICAL
RESTAURANT & BAR
POWER & EQUIPMENT
PLAN

SHEET NUMBER

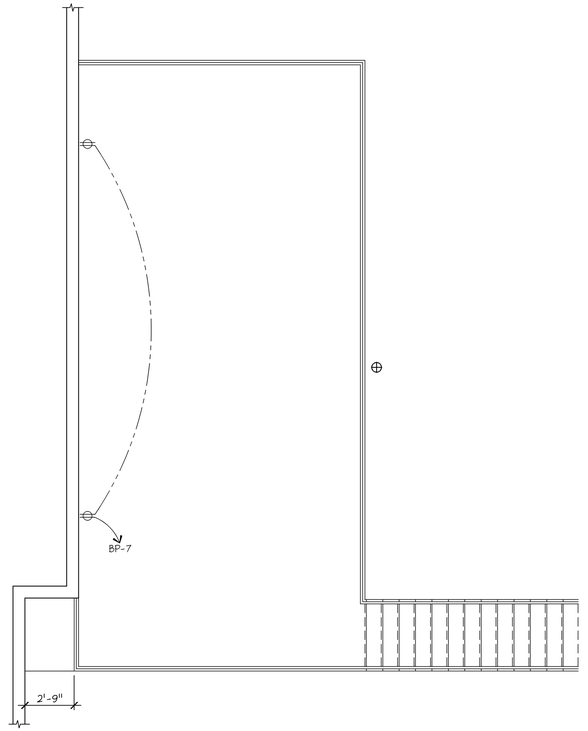
E-3

REV 6

04-02-04 1998c-E3.dwg



1 E-4 BREWERY FLOOR PLAN
Scale: 1/4" = 1'- 0"



2 E-4 MEZZANINE FLOOR PLAN
Scale: 1/4" = 1'- 0"

NOTES:
1. PROVIDE LUTRON DIMMER PANEL. WIRE LIGHTING CIRCUITS #1,2,3,4&5 THROUGH LUTRON GRAFIK EYE RESTAURANT DIMMER SYSTEM (#GRK-4108)

2. ALL FEEDER CONDUIT & WIRE SIZES ARE LISTED FOR ESTIMATING PURPOSES ONLY AND MUST BE FIELD VERIFIED PRIOR TO WIRING ANY OF THE BREWERY EQUIPMENT.

Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Regis W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
REGIS WILLIAM KUBIT
ENGINEER
No. 6968-E

523 Kimberton Road, Suite 11B Phoenixville, PA 19460
tel. (610) 917-8831 fax (610) 917-8836
email mail@betzwood.com http://www.betzwood.com

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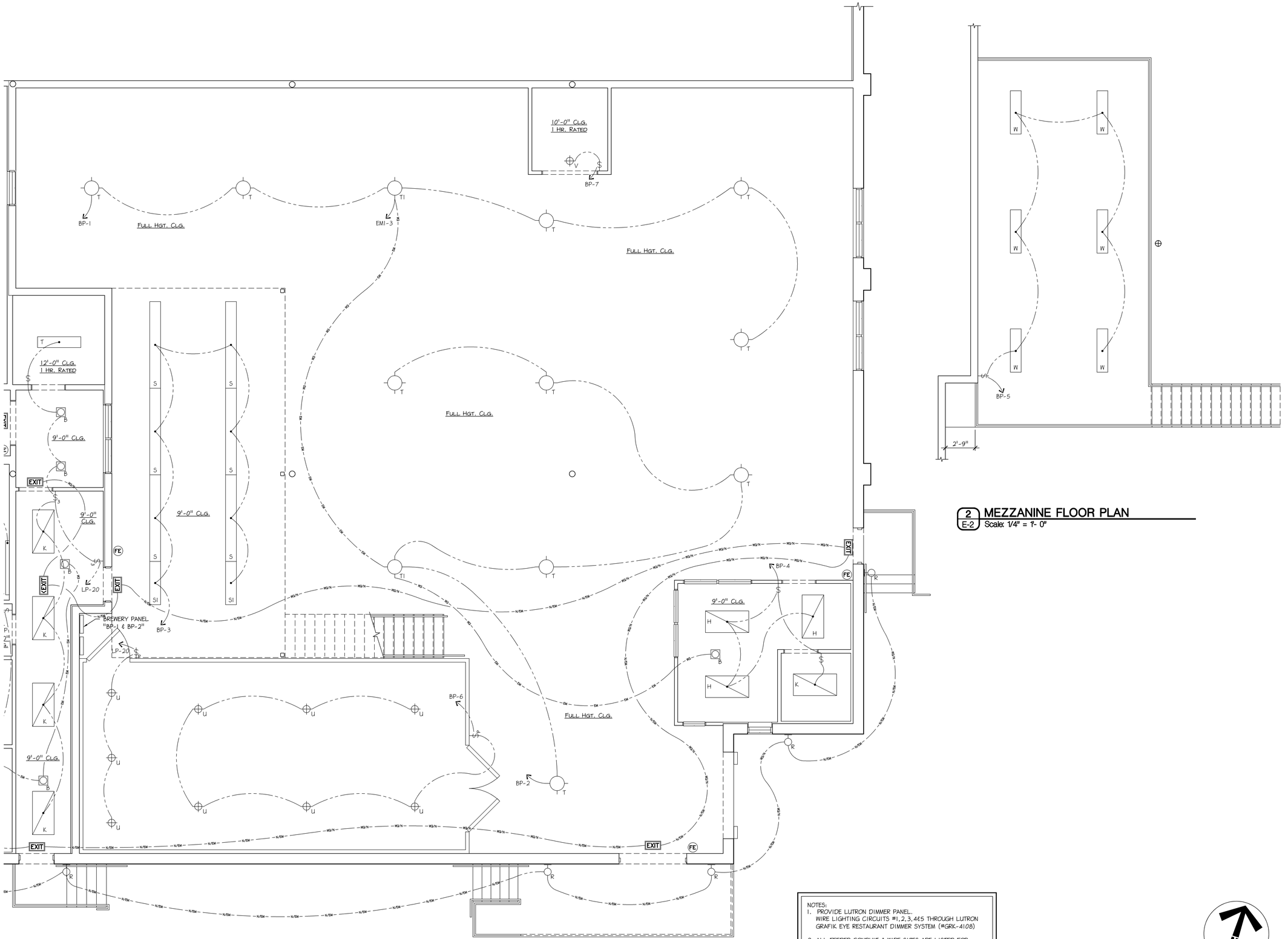
ELECTRICAL
BREWERY AREA
POWER & EQUIPMENT
PLAN

SHEET NUMBER

E-4

REV 6

04-02-04 1998-E4.dwg



1 E-2 **BREWERY LIGHTING PLAN**
Scale: 1/4" = 1'- 0"

2 E-2 **MEZZANINE FLOOR PLAN**
Scale: 1/4" = 1'- 0"

NOTES:
1. PROVIDE LUTRON DIMMER PANEL. WIRE LIGHTING CIRCUITS #1,2,3,4&5 THROUGH LUTRON GRAFIK EYE RESTAURANT DIMMER SYSTEM (#GRK-4108)
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No. 6968-E

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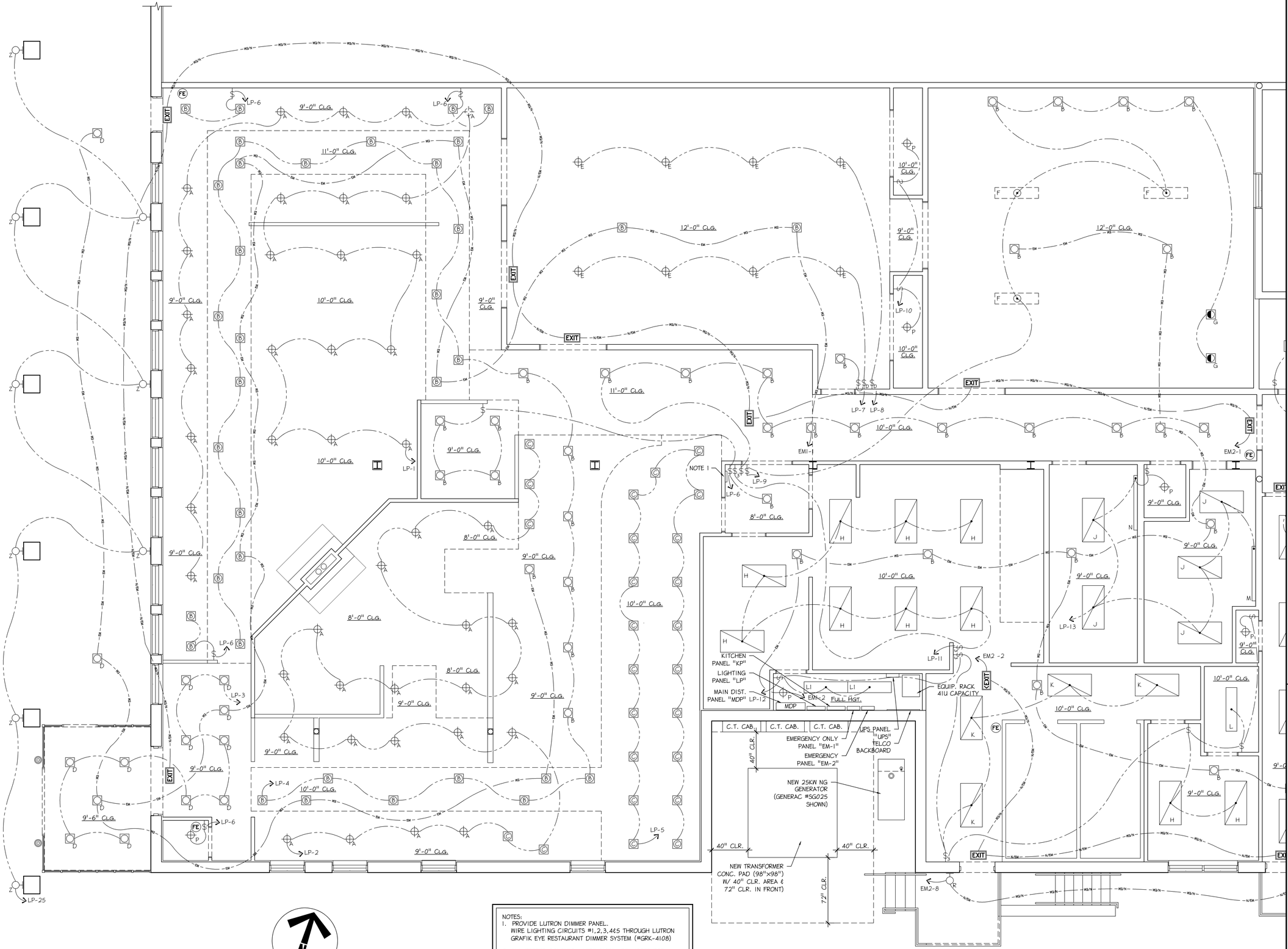
ELECTRICAL
BREWERY AREA
LIGHTING PLAN

SHEET NUMBER

E-2

REV 6

04-02-04 1998-E2.dwg



1 E-1 **RESTAURANT & BAR LIGHTING PLAN**
Scale: 1/4" = 1'- 0"

NOTES:
1. PROVIDE LUTRON DIMMER PANEL. WIRE LIGHTING CIRCUITS #1,2,3,4&5 THROUGH LUTRON GRAFIK EYE RESTAURANT DIMMER SYSTEM (#GRK-4108)
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04-02-04 1998E-E1.dwg

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E-1

REV 6