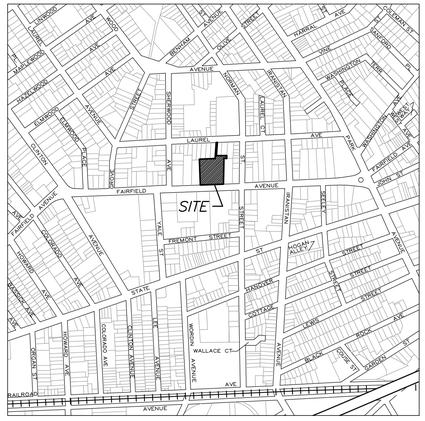
ALTERNATE #1 PARTIAL FIT-OUT
PREPARED FOR:
BEHAVIORAL HEALTH CARE CLINIC
SOUTHWEST COMMUNITY
HEALTH CENTER



VICINITY MAP
SCALE: N.T.S.

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

SHEET TITLE INDEX:

CODES TO WHICH THIS SPACE WAS DESIGNED

2022 CONNECTICUT STATE BUILDING CODE (CSBC)
- INTERNATIONAL BUILDING CODE / 2021 (IBC)
- INTERNATIONAL EXISTING BUILDING CODE / 2021 (IEBC)
- INTERNATIONAL MECHANICAL CODE / 2021 (IMC)
- INTERNATIONAL PLUMBING CODE / 2021 (IPC)
- NATIONAL ELECTRIC CODE, NFPA 70 / 2020 (NEC)
- INTERNATIONAL ENERGY CONSERVATION CODE / 2021 (IECC)
- ACCESSIBLE AND USABLE BUILDINGS & FACILITIES / 2017ICC A117.1

CONNECTICUT AMENDMENTS / 2022 / STATE BUILDING CODE

2022 CONNECTICUT STATE FIRE CODE (CSFSC)
- INTERNATIONAL FIRE CODE / 2021 (IFC)
- NFPA 101, LIFE SAFETY CODE / 2021 (NFPA 101)

CONNECTICUT AMENDMENTS / 2022 / STATE FIRE SAFETY CODE

USE GROUP: B – BUSINESS
TYPE OF CONSTRUCTION = IIIB
BUILDING SPRINKLER: SPRINKLERED

GENERAL NOTES:

1. EXISTING CONDITIONS SHALL BE VERIFIED PRIOR TO BID & CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER AND ARCHITECT IN WRITING. THE PROJECT MANAGER AND ARCHITECT WILL CLARIFY ANY DISCREPANCIES VIA ADDENDUM OR WRITTEN RESPONSE.
2. WHERE EXISTING CONSTRUCTION IS REMOVED PATCH ALL AREAS WITH MATERIALS CONSISTENT WITH EXISTING INCLUDING ADJACENT SURFACES. MATCH AND BLEND PATCHED AREAS INTO EXISTING.
3. THE INFORMATION SHOWN ON THESE DRAWINGS IS BASED UPON THE INFORMATION SHOWN ON THE BUILDING PLANS AND LIMITED FIELD INVESTIGATIONS AND MAY OR MAY NOT REFLECT ACTUAL FILED CONDITIONS. THE CONTRACTOR SHALL VERIFY THE INFORMATION INDICATED ON THESE DRAWINGS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO SUBMITTING HIS BID.
4. THIS CONTRACTOR IS REQUIRED TO PERFORM THIS WORK IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS,ORDINANCES, ETC., AND TO MEET THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND OWNER, WHETHER OR NOT SPECIFICALLY INDICATED OR SPECIFIED ON THIS DRAWING.
5. ALL PENETRATIONS THRU FIRE RATED WALLS SHALL BE FIRE STOPPED WITH "THOMAS AND BETTS" – FLAMESAFE, TYPE FST FIRESTOP COMPOUND OR APPROVED EQUIVALENT. CONFORMING TO ASME E814/UL1479.
6. MAINTAIN ALL RATED SEPARATIONS. ALL PENETRATIONS TO BE SEALED AS PER ASTM E–814/2015 IBC CHAPTER 7.

ARCHITECT:
ROSE •TISO & CO. LLC.
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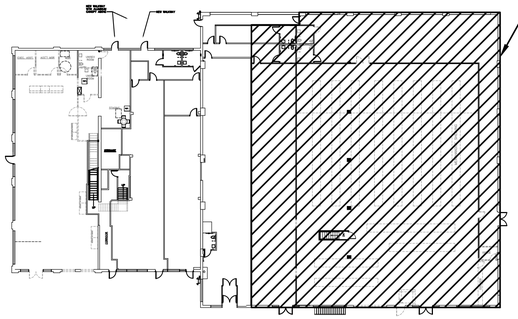
35 BRENTWOOD AVENUE, FAIRFIELD, CT 06825
TEL: (203)610-0262 • FAX: (203)610-6404

JOB NO. 2531

ELECTRICAL ENGINEERS:
MUSCO ENGINEERING ASSOCIATES
375 Morgan Lane, Unit 307
West Haven, CT 06516
(203) 932-1901 FAX (203) 931-1550
www.muscoengineering.com

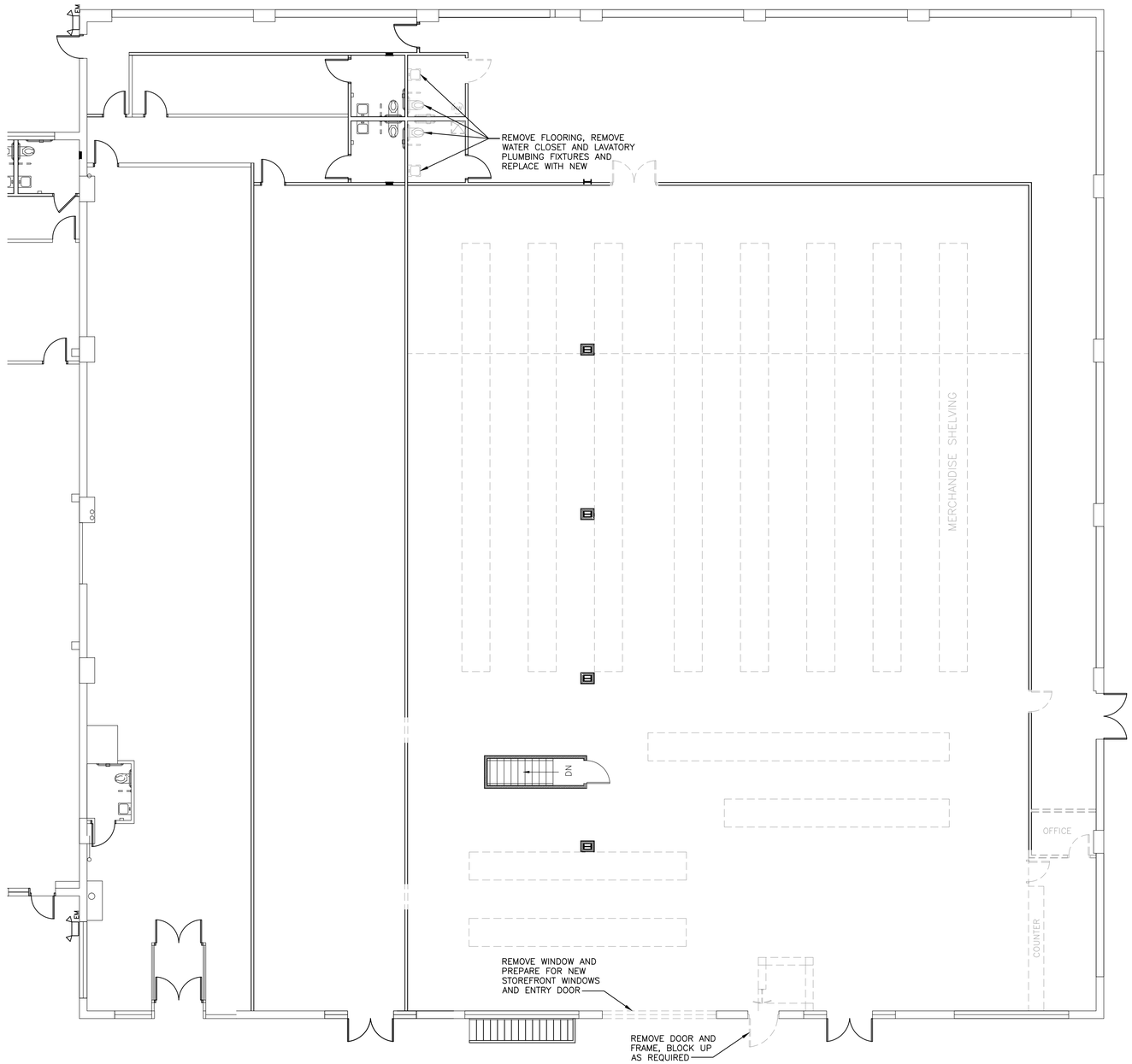
MECHANICAL ENGINEERS:
KUEGLER ASSOCIATES
consulting engineers
www.kueglerassociates.com
Connecticut Office
51 Depot St., Suite 104, Watertown, CT 06795
Phone: (860) 945-6955
Massachusetts Office
203 Kendall Rd., Tewksbury, MA 01876
Phone: (978) 640-1794



FIRST FLOOR KEY PLAN
SCALE: N.T.S.

FLOOR PLAN LEGEND:

- EXISTING DOOR TO BE REMOVED
- EXISTING DOOR TO REMAIN
- NEW DOOR
- EXISTING WALL TO BE REMOVED
- EXISTING WALL TO REMAIN



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

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

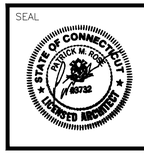
SOUTHWEST COMMUNITY
HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

DEMOLITION FLOOR PLAN

DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-BEHAVIORAL HEALTH_2024	

SEAL

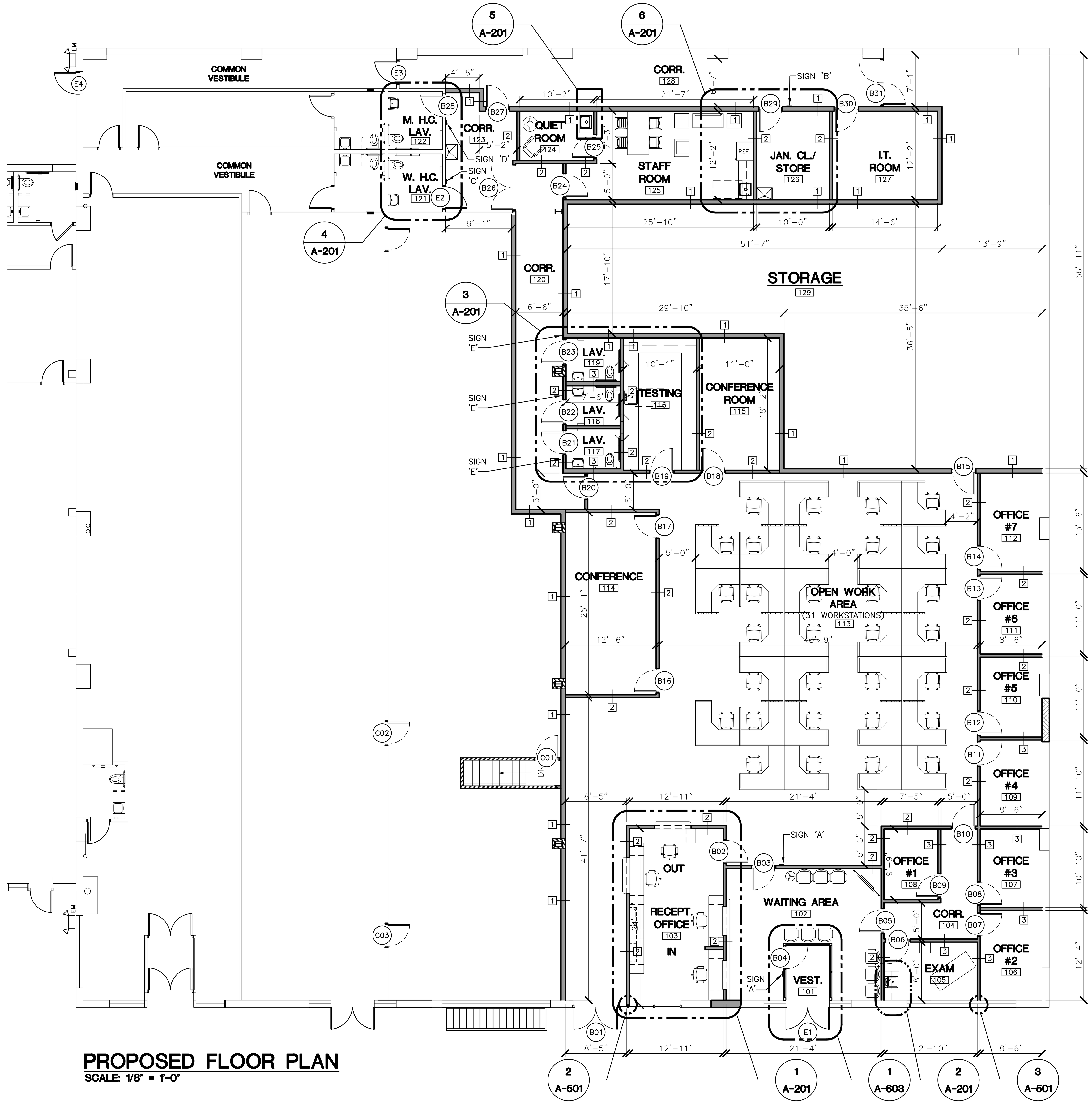


SHEET NUMBER

AD-101

FLOOR PLAN LEGEND:

- EXISTING DOOR TO BE REMOVED
- EXISTING DOOR TO REMAIN
- NEW DOOR
- EXISTING WALL TO BE REMOVED
- EXISTING WALL TO REMAIN
- NEW FULL WALL
- (##) DOOR NUMBER (SEE A-601)
- # WALL TYPE (SEE A-501)



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

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PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

PROPOSED FLOOR PLAN

DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-Behavioral Health_2024	

SEAL: STATE OF CONNECTICUT — PATRICK M. ROSE — LICENSED ARCHITECT

SHEET NUMBER

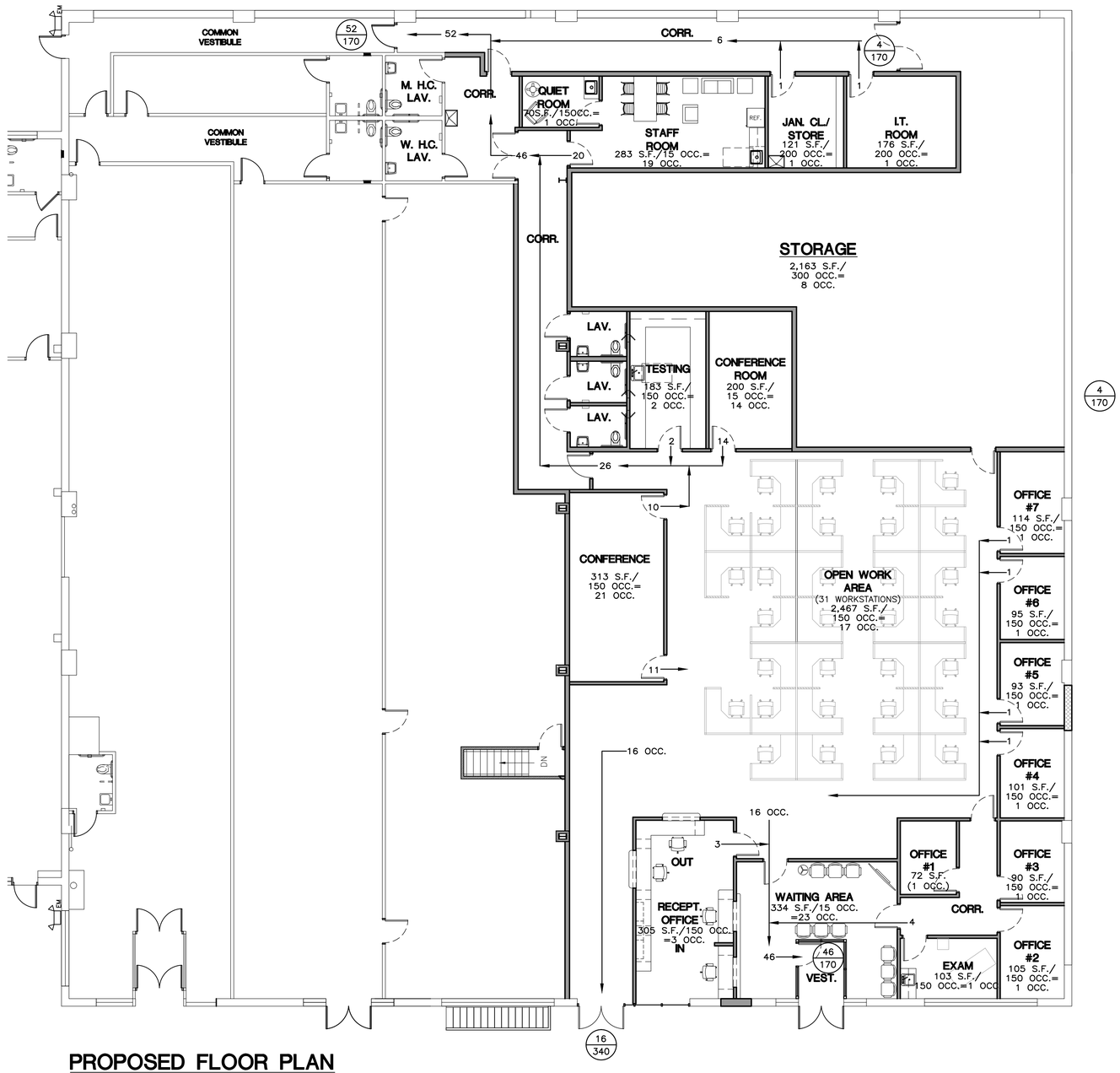
A-101

OCCUPANCY LOAD SYMBOL

(###/###) = # OF OCCUPANCY
= ALLOWED OCCUPANTS LOAD THRU OPENING

TOTAL OCCUPANCY = 47 OCCUPANCY @ URGENT CARE

TOTAL OCCUPANCY = 204 OCCUPANCY @ BEHAVIOR HEALTH



PROPOSED FLOOR PLAN

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

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PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

EGRESS FLOOR PLAN

DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-BEHAVIORAL HEALTH_2024	

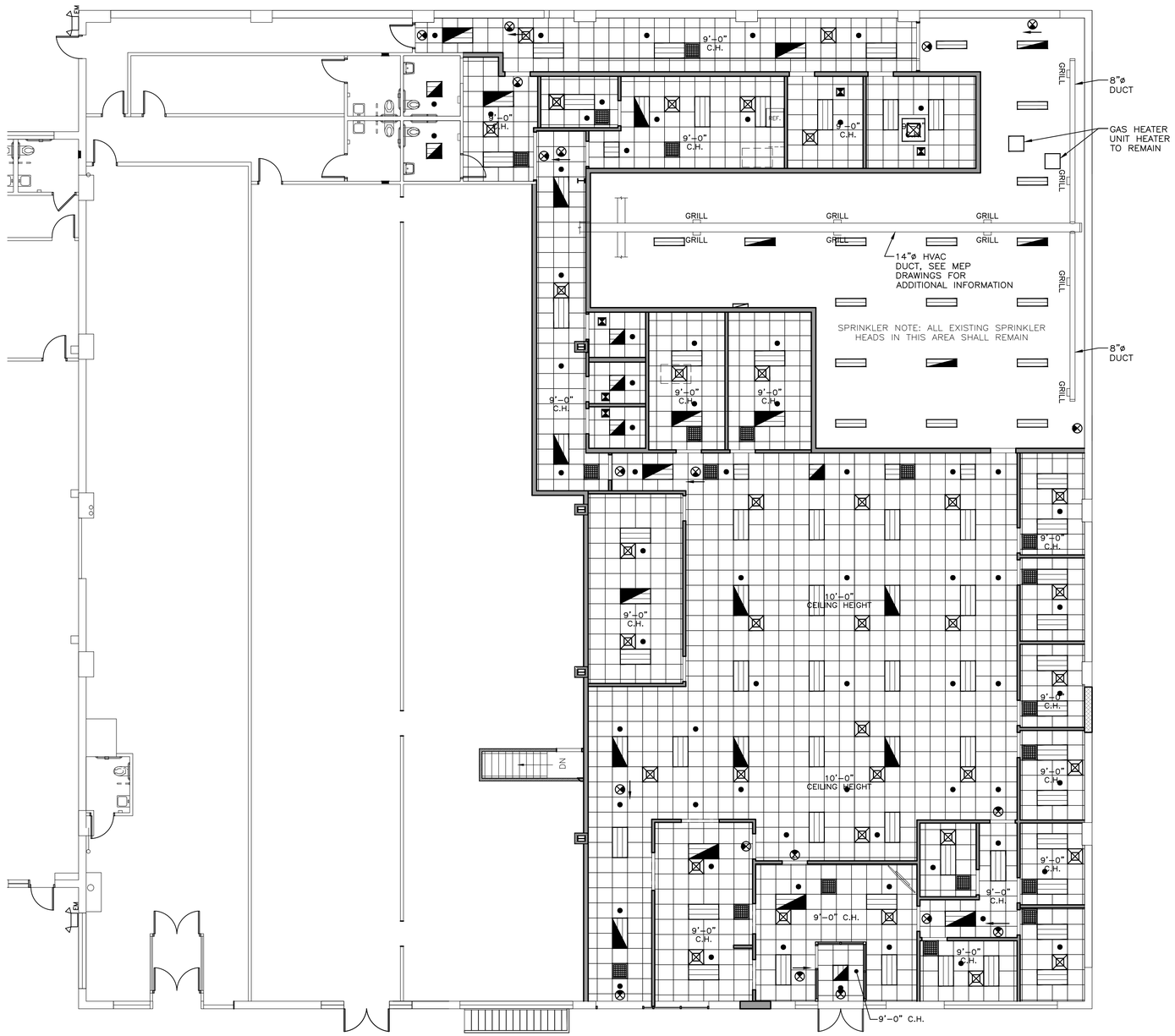
SEAL

SHEET NUMBER

EG-101

REFLECTED CEILING LEGEND:

- RETURN DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST FAN
- 2x2 FLUORESCENT LIGHT
- 2x2 FLUORESCENT LIGHT, EMERGENCY LIGHT
- 2x4 FLUORESCENT LIGHT
- 2x4 FLUORESCENT LIGHT, EMERGENCY LIGHT
- 1x4 FLUORESCENT LIGHT
- 1x4 FLUORESCENT LIGHT, EMERGENCY LIGHT
- DOWN LIGHT
- DOWN LIGHT, EMERGENCY LIGHT
- 2x2 CEILING GRID
- GYPSUM BOARD CEILING
- EXIT SIGN
- SPRINKLER HEADS



PROPOSED CEILING PLAN
SCALE: 1/8" = 1'-0"

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PROPOSED CEILING PLAN

DESIGNED BY: PMR	SCALE: AS NOTED
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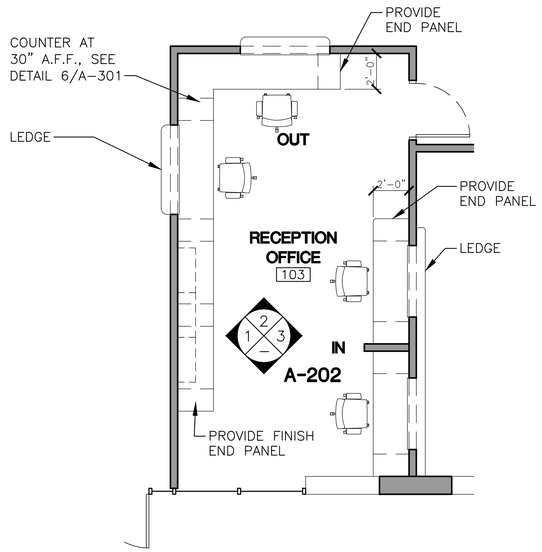
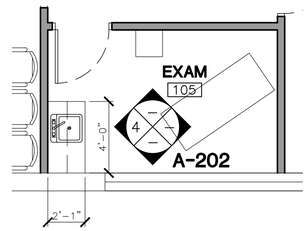
SEAL
STATE OF CONNECTICUT · PATRICK M. ROSE · #18732 · REGISTERED ARCHITECT

SHEET NUMBER
AC-101



1 A-201 **ENLARGED FLOOR PLAN**
SCALE: 1/4" = 1'-0"



2 A-201 **ENLARGED FLOOR PLAN**
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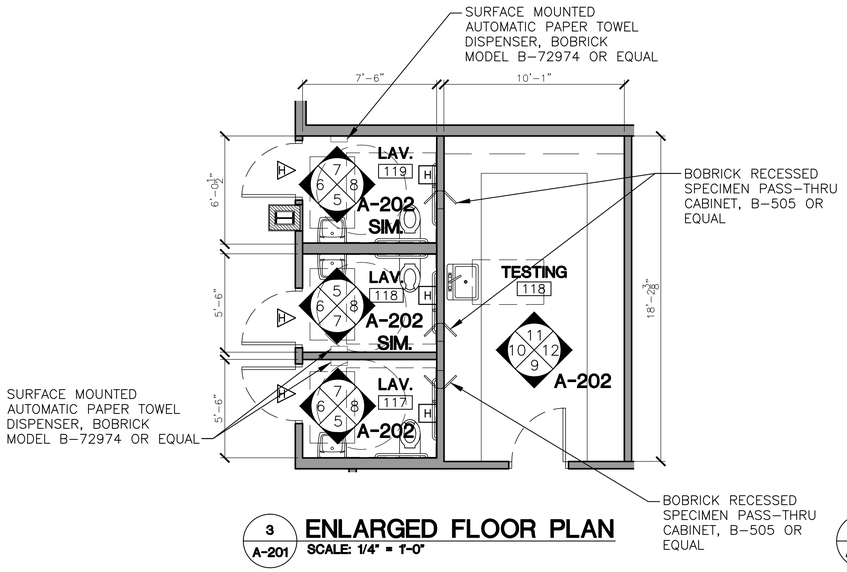
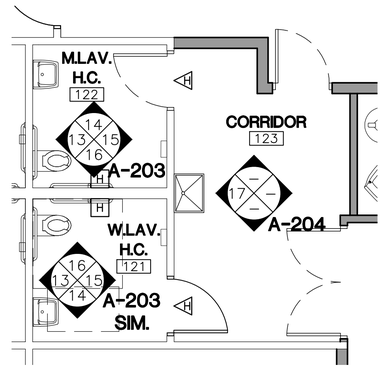
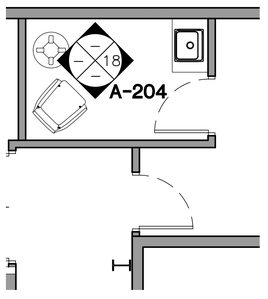


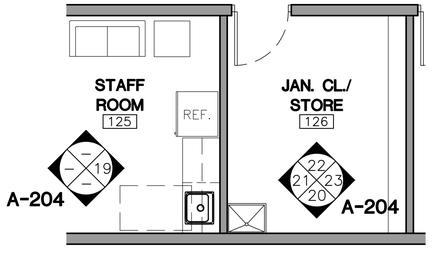
3 A-201 **ENLARGED FLOOR PLAN**
SCALE: 1/4" = 1'-0"



4 A-201 **ENLARGED FLOOR PLAN**
SCALE: 1/4" = 1'-0"



5 A-201 **ENLARGED FLOOR PLAN**
SCALE: 1/4" = 1'-0"



6 A-201 **ENLARGED FLOOR PLAN**
SCALE: 1/4" = 1'-0"

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REVISIONS

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BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY
HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

ENLARGED FLOOR PLANS

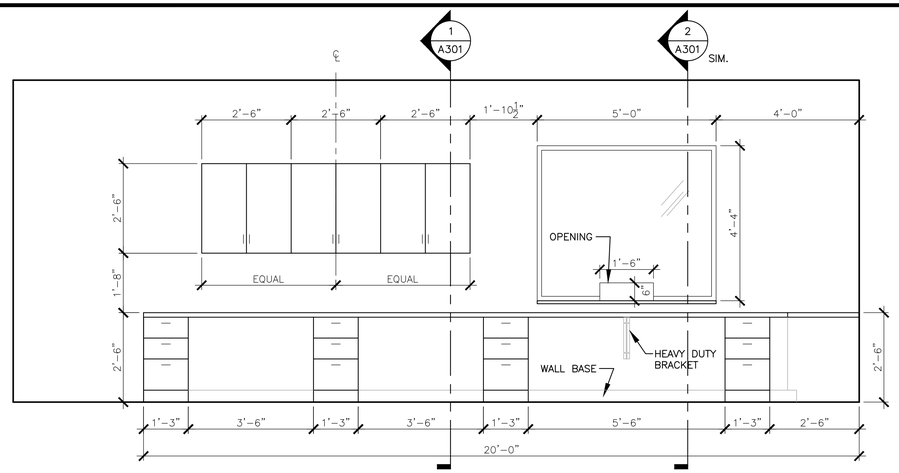
DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-Behavioral Health_2024	

SEAL

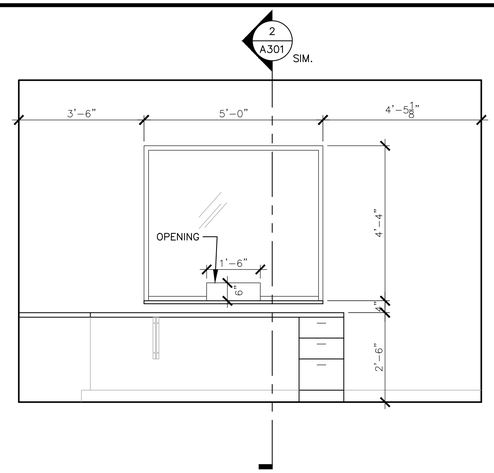
STATE OF CONNECTICUT · PATRICK M. ROSE · 19732 · LICENSED ARCHITECT

SHEET NUMBER

A-201



1 A-202 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"



2 A-202 **MILLWORK ELEVATION**
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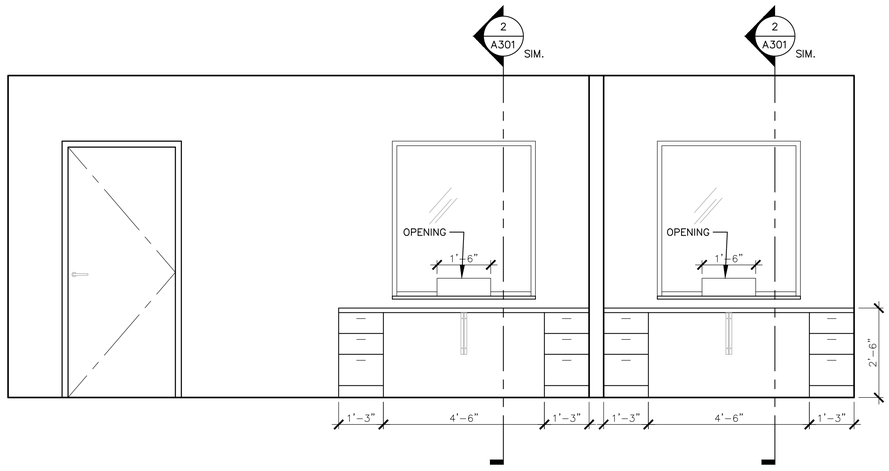

3 A-202 **MILLWORK ELEVATION**
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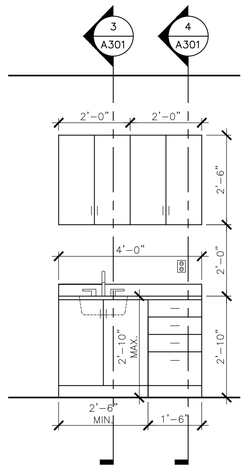
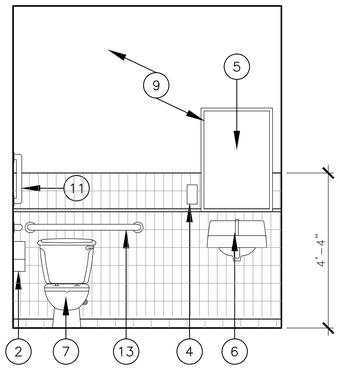
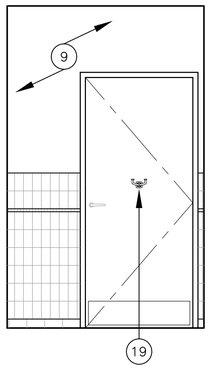


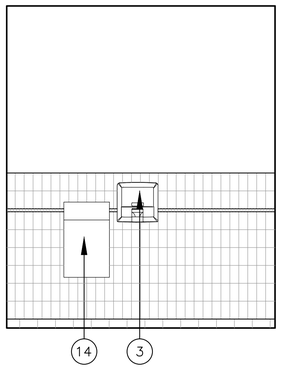
4 A-202 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"



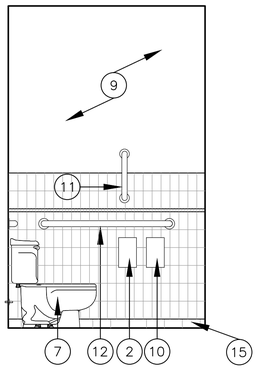
5 A-202 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"



6 A-202 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"



7 A-202 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"



8 A-202 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY
HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

INTERIOR ELEVATIONS

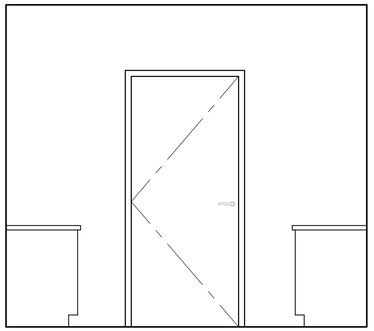
DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-Behavioral Health_2024	

SEAL

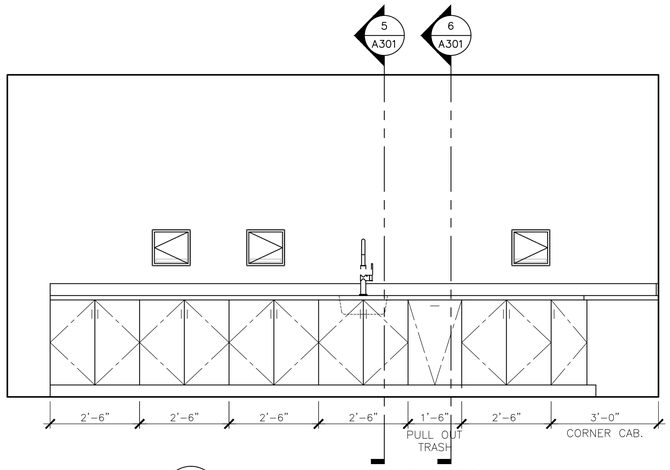
STATE OF CONNECTICUT · PATRICK M. ROSE · #16732 · LICENSED ARCHITECT

SHEET NUMBER

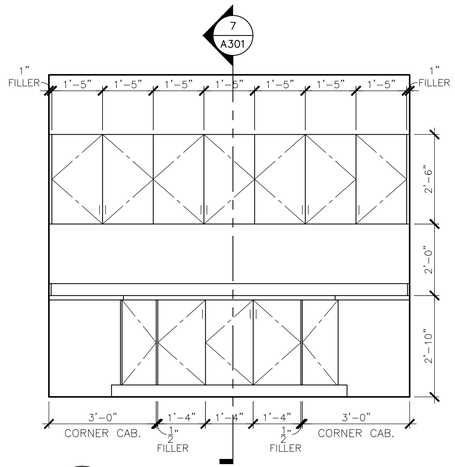
A-202



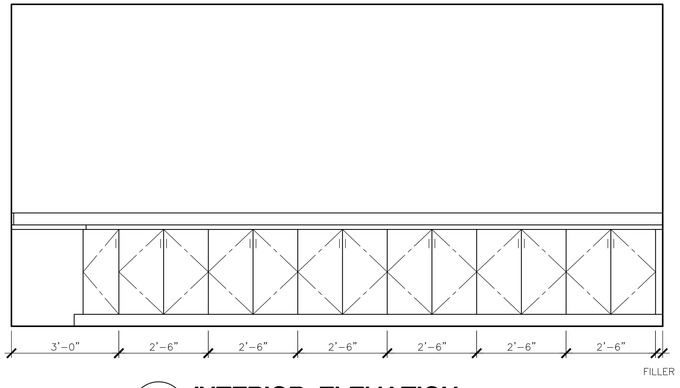
9 A-203 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



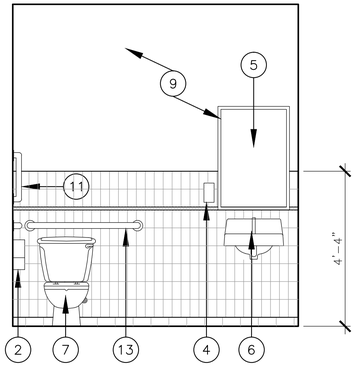
10 A-203 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"



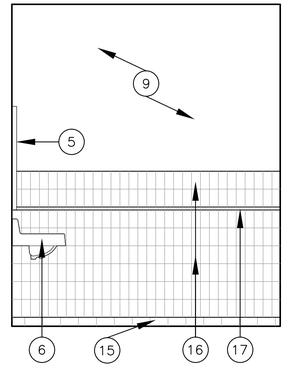
11 A-203 **MILLWORK ELEVATION**
SCALE: 1/2" = 1'-0"



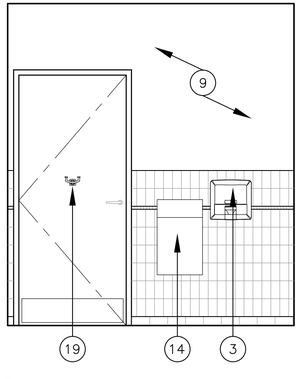
12 A-203 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



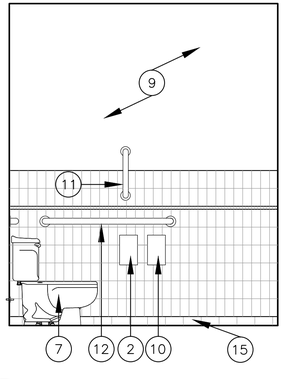
13 A-203 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



14 A-203 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



15 A-203 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



16 A-203 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"

ELEVATION LEGEND

1. STANDARD SINK BASE CABINET
2. TOILET TISSUE HOLDER
3. PAPER TOWEL DISPENSER
4. SOAP DISPENSER
5. MIRROR
6. LAVATORY – WALL MOUNTED
7. FLOOR MOUNTED TOILET
8. WALL MOUNTED URINAL
9. PAINT
10. FEMININE NAPKIN DISPOSAL @ WOMEN'S LAV. ONLY
11. 18" VERTICAL GRAB BAR–BOBRICK, B–6160.99 X 18
12. 42" GRAB BAR–BOBRICK, B–6160.99 X 42
13. 36" GRAB BAR–BOBRICK, B–6160.99 X 36
14. SURFACE MOUNTED TRASH RECEPTACLE
15. 3"x6" TILE BASE
16. 3"x6" TILE
17. GLASS ACCENT TILE 1"X1"
18. PARTITION
19. COAT HOOK
20. SPECIMEN PASS–THRU DOOR

TOILET FINISH SCHEDULE

PRODUCT	MANUFACTURER	NAME	COLOR	FINISH/TYPE	COMMENTS
TILE @ BATHROOM WALLS	AMERICAN OLEAN	SELECTED BY TENANT	SELECTED BY TENANT	3"X6" & 1"X1"	BULLNOSE AT ALL EXP EDGES
GROUT @ BATHROOM WALLS	LATICRETE	–	–	–	
TILE @ BATHROOM FLOOR	AMERICAN OLEAN	SELECTED BY TENANT	SELECTED BY TENANT	12"X12"	
GROUT @ BATHROOM FLOOR	LATICRETE	–	–	–	
BASE @ BATHROOM WALLS	AMERICAN OLEAN	SELECTED BY TENANT	SELECTED BY TENANT	6"X12"	BULLNOSE AT ALL EXP EDGES
PAINT @ BATHROOM WALLS (ABOVE TILES)	SHERWIN WILLIAMS	SELECTED BY TENANT	SELECTED BY TENANT	SEMI–GLOSS	
COUNTERS	CORIAN OR EQUAL	SOLID SURFACE	SELECTED BY TENANT		

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY
HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

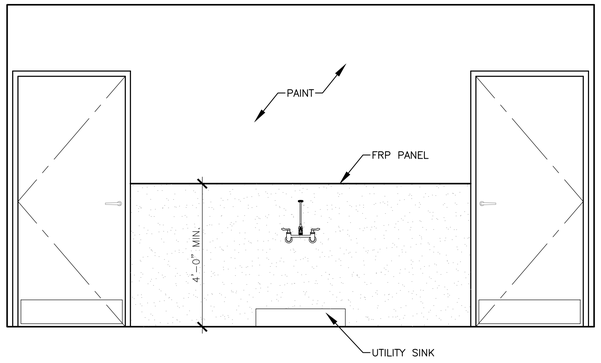
INTERIOR ELEVATIONS

DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08–16–2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH–Behavioral Health_2024	

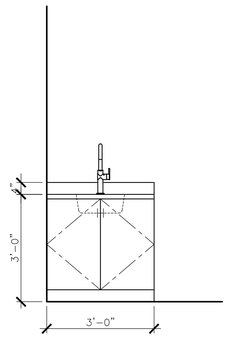
SEAL

SHEET NUMBER

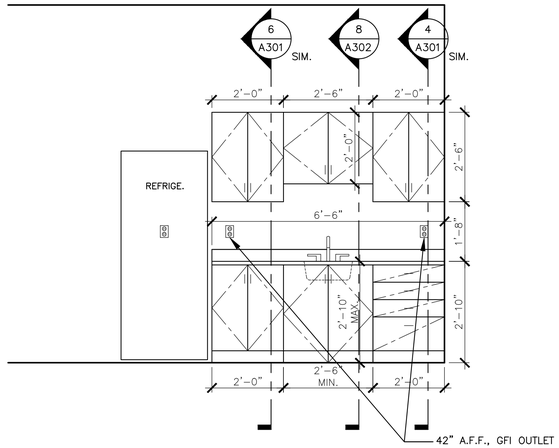
A-203



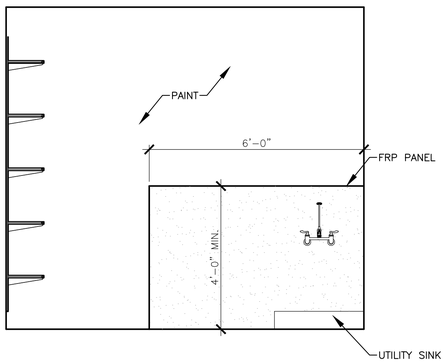
17 / A-204 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



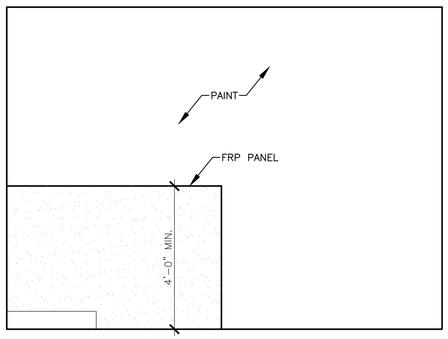
18 / A-204 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



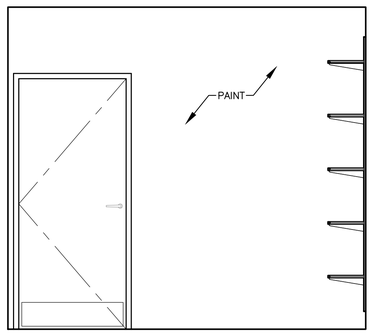
19 / A-204 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



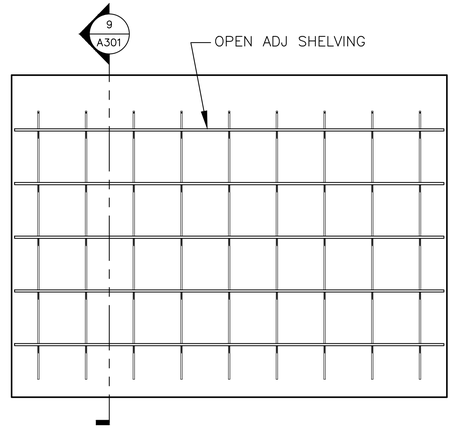
20 / A-204 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



21 / A-204 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



22 / A-204 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"



23 / A-204 **INTERIOR ELEVATION**
SCALE: 1/2" = 1'-0"

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY
HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

INTERIOR ELEVATIONS

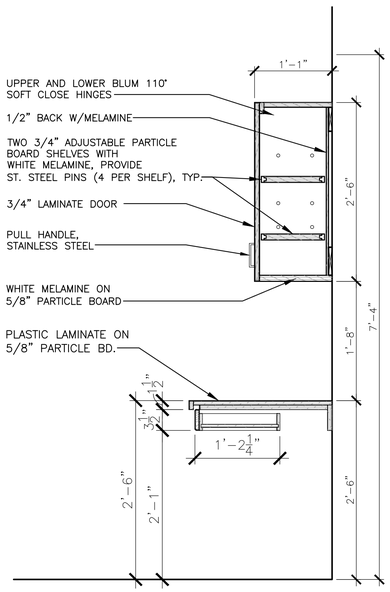
DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-Behavioral Health_2024	

SEAL

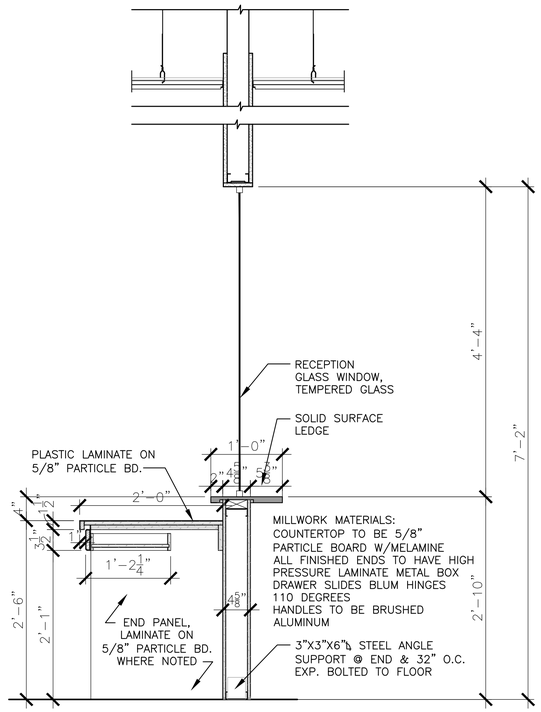
STATE OF CONNECTICUT · PATRICK M. ROSE · #20732 · LICENSED ARCHITECT

SHEET NUMBER

A-204



1 A-301 **MILLWORK SECTION**
SCALE: 1" = 1'-0"



2 A-301 **MILLWORK SECTION**
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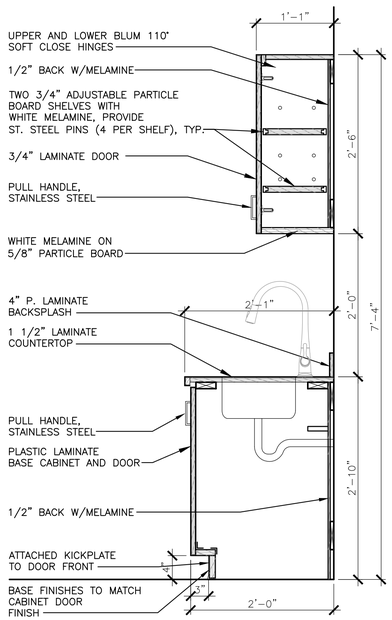

3 A-301 **MILLWORK SECTION**
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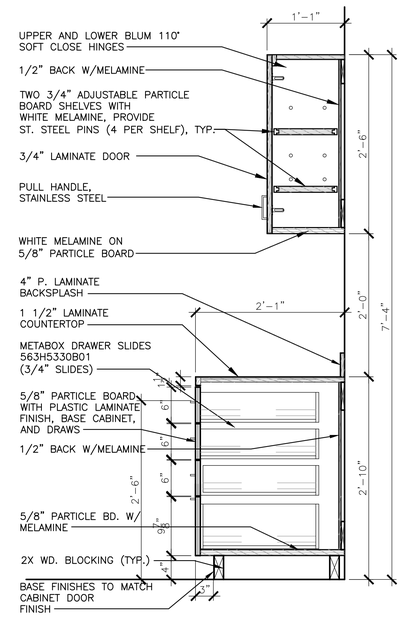
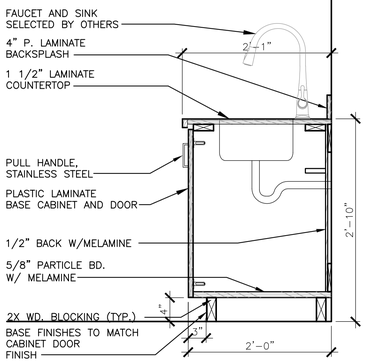
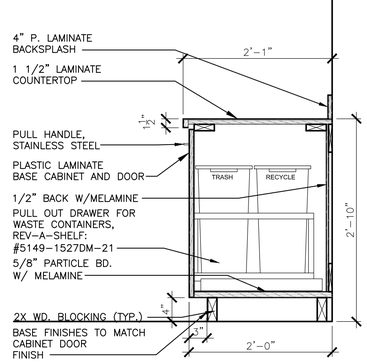


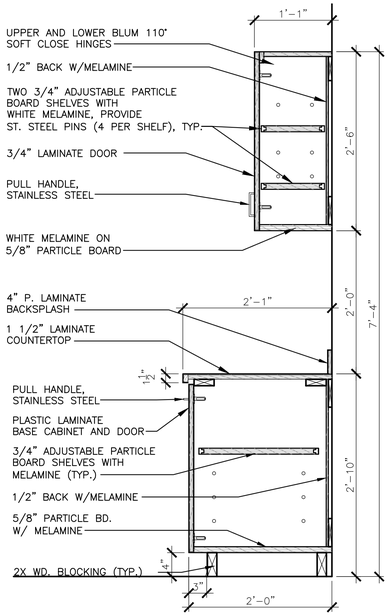
4 A-301 **MILLWORK SECTION**
SCALE: 1" = 1'-0"



5 A-301 **MILLWORK SECTION**
SCALE: 1" = 1'-0"



6 A-301 **MILLWORK SECTION**
SCALE: 1" = 1'-0"



7 A-301 **MILLWORK SECTION**
SCALE: 1 1/2" = 1'-0"

TYPICAL MILLWORK CONSTRUCTION NOTES:

01. FLUSH OVERLAY CONSTRUCTION WITH PLAS. LAMINATE. ALL VERTICAL SURFACES.
02. BODY MEMBERS, RAILS, AND DRAWERS TO BE 5/8" WHITE MELAMINE.
03. CABINET BACKS AND DRAWER BOTTOMS TO BE 1/2" WHITE MELAMINE.
04. ADJUSTABLE SHELVES 3/4" WHITE MELAMINE.
05. ALL DOORS AND FRONTS ARE 11/16" PARTICLE BOARD WITH PVC EDGES TO MATCH LAMINATE.
06. ALL INTERIOR AND SIDES OF THE UPPER AND BASE CABINETS SHALL BE WHITE MELAMINE.
07. FIRE RATED BLOCKING SHALL BE USED IN WALLS.
08. PROVIDE SHIMS AS REQUIRED.
09. ALL FILED DIMENSIONS TO BE VERIFIED IN FIELD PRIOR TO FABRICATION.
10. ALL SELECTED FINISHES TO BE APPROVED BY TENANT.
11. PROVIDE GROMMETS AT COUNTERTOPS.

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

MILLWORK SECTION AND DETAILS

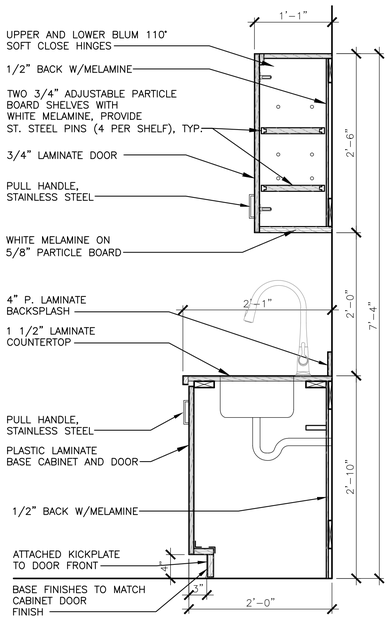
DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-Behavioral Health_2024	

SEAL

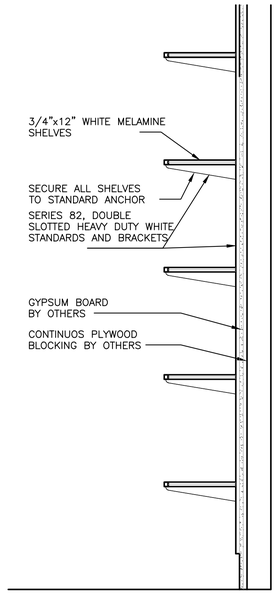
STATE OF CONNECTICUT · PATRICK M. ROSE · 19732 · LICENSED ARCHITECT

SHEET NUMBER

A-301



7 A-302 **MILLWORK SECTION**
SCALE: 1" = 1'-0"



8 A-302 **MILLWORK SECTION**
SCALE: 1" = 1'-0"

TYPICAL MILLWORK CONSTRUCTION NOTES:

01. FLUSH OVERLAY CONSTRUCTION WITH PLAS. LAMINATE. ALL VERTICAL SURFACES.
02. BODY MEMBERS, RAILS, AND DRAWERS TO BE 5/8" WHITE MELAMINE.
03. CABINET BACKS AND DRAWER BOTTOMS TO BE 1/2" WHITE MELAMINE.
04. ADJUSTABLE SHELVES 3/4" WHITE MELAMINE.
05. ALL DOORS AND FRONTS ARE 11/16" PARTICLE BOARD WITH PVC EDGES TO MATCH LAMINATE.
06. ALL INTERIOR AND SIDES OF THE UPPER AND BASE CABINETS SHALL BE WHITE MELAMINE.
07. FIRE RATED BLOCKING SHALL BE USED IN WALLS.
08. PROVIDE SHIMS AS REQUIRED.
09. ALL FILED DIMENSIONS TO BE VERIFIED IN FIELD PRIOR TO FABRICATION.
10. ALL SELECTED FINISHES TO BE APPROVED BY TENANT.
11. PROVIDE GROMMETS AT COUNTERTOPS.

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REVISIONS

NO.	BY	DATE	DESCRIPTION

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1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

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46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

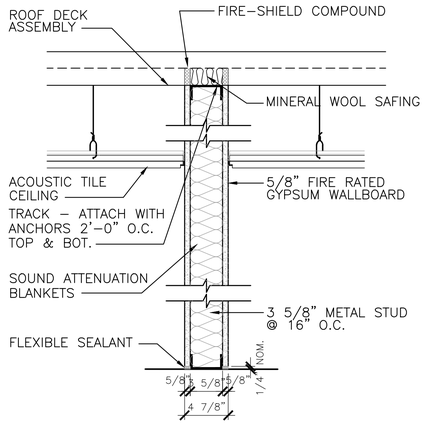
MILLWORK SECTION AND DETAILS

DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-Behavioral Health_2024	

SEAL

SHEET NUMBER

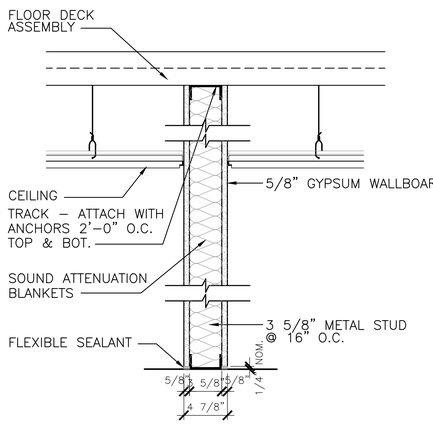
A-302



1 HOUR RATED WALL TYPE 1

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

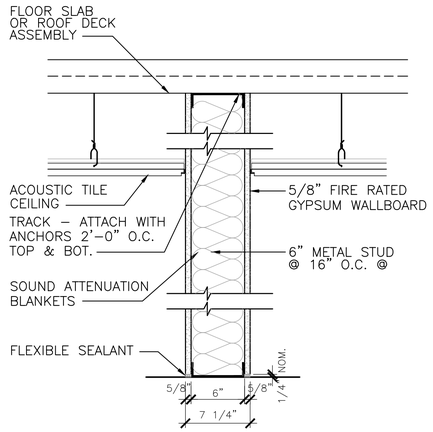
NOTE: PROVIDE M.R. GYPSUM BOARD @ ALL TOILETS WET WALLS



WALL TYPE 2

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

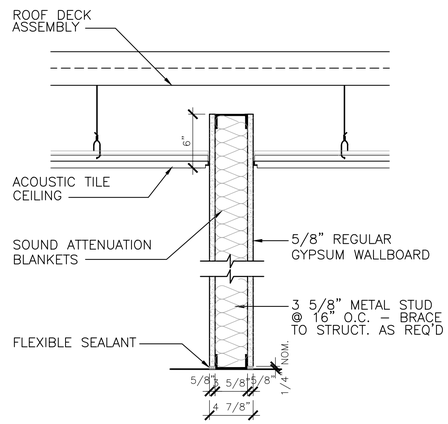
NOTE: PROVIDE M.R. GYPSUM BOARD @ ALL TOILETS WET WALLS



WALL TYPE 3

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

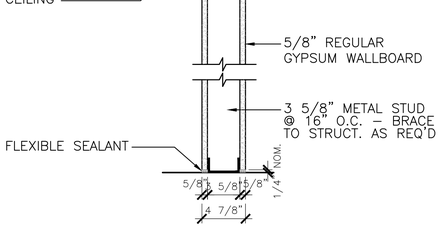
NOTE: PROVIDE M.R. GYPSUM BOARD @ ALL TOILETS WET WALLS



WALL TYPE 4

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

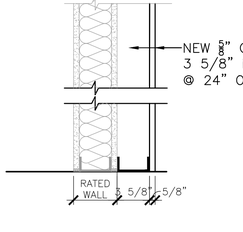
NOTE: PROVIDE M.R. GYPSUM BOARD @ ALL TOILETS WET WALLS



WALL TYPE 5

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

NOTE: PROVIDE M.R. GYPSUM BOARD @ ALL TOILETS WET WALLS



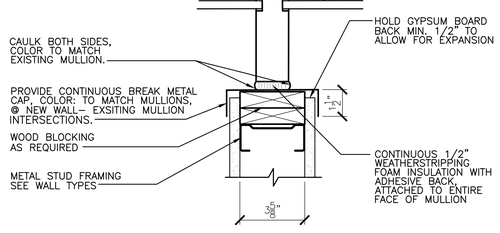
WALL TYPE 6

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

NOTE: PROVIDE M.R. GYPSUM BOARD @ ALL TOILETS WET WALLS

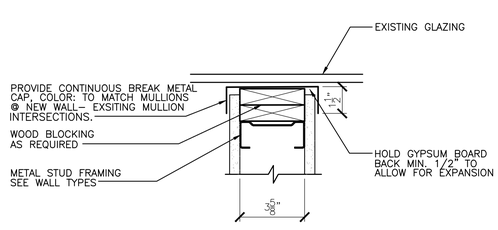
1 A-501 WALL TYPES

SCALE: AS NOTED



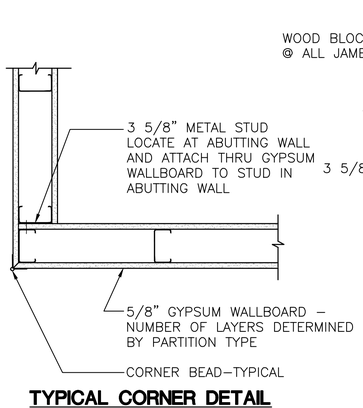
WALL INTERSECTION AT WINDOW MULLION

2 A-501 SCALE: 3" = 1'-0"



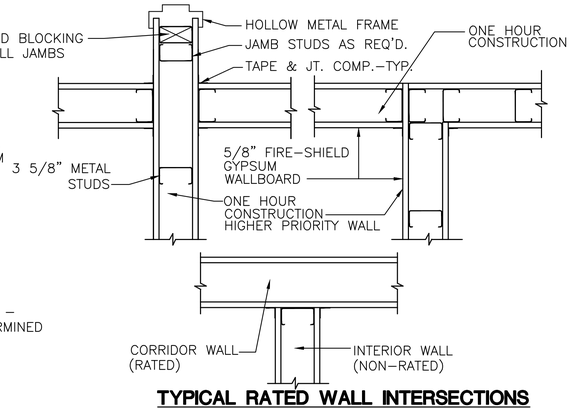
WALL INTERSECTION AT WINDOW GLASS

3 A-501 SCALE: 3" = 1'-0"



TYPICAL CORNER DETAIL

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

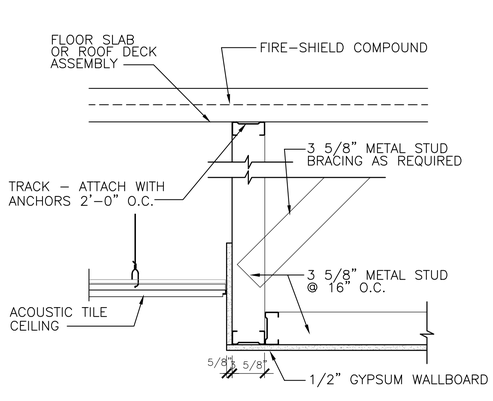


TYPICAL RATED WALL INTERSECTIONS

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

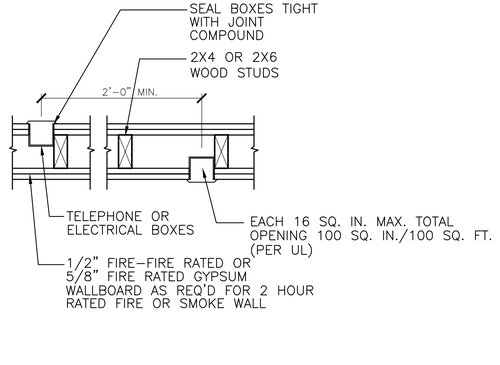
4 A-501 TYPICAL WALL INTERSECTIONS

SCALE: AS NOTED



SOFFIT DETAIL

5 A-501 SCALE: 1 1/2" = 1'-0"



ADJACENT ELECTRICAL BOXES IN RATED PARTITION

6 A-501 SCALE: 1 1/2" = 1'-0"

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

WALL TYPES AND DETAILS

DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-Behavioral Health_2024	

SEAL

SHEET NUMBER

A-501

DOOR & FRAME SCHEDULE

DOOR NO.	DOOR SIZE	THK.	TYPE	MAT.	FIN.	SYSTEM LABEL	FRAMES TYPE	JAMB DETAIL	HEAD DETAIL	FRAMES MAT.	FRAMES FIN.	REMARKS
E1	(2)3'–0" x 7'–0"	1 3/4"	1	AN.	CL.					AN.	CL.	ALUMINUM AND GLASS STOREFRONT
E2	3'–0" x 7'–0"	1 3/4"	2									
E3	3'–0" x 7'–0"	1 3/4"	2									
B01	(2)3'–0" x 7'–0"	1 3/4"	5	AN.	CL.	–	–	–	–	AN.	CL.	ALUMINUM AND GLASS STOREFRONT
B02	3'–0" x 7'–0"	1 3/4"	3	WD.	PT.	–	1	1	1	H.M.	PT.	
B03	3'–0" x 7'–0"	1 3/4"	3	WD.	PT.	–	1	1	1	H.M.	PT.	
B04	3'–0" x 7'–0"	1 3/4"	1	AN.	CL.	–	–	–	–	AN.	CL.	ALUMINUM AND GLASS STOREFRONT
B05	3'–0" x 7'–0"	1 3/4"	3	WD.	PT.	–	1	1	1	H.M.	PT.	
B06	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B07	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B08	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B09	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B10	3'–0" x 7'–0"	1 3/4"	3	WD.	PT.	–	1	1	1	H.M.	PT.	
B11	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B12	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B13	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B14	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B15	3'–0" x 7'–0"	1 3/4"	3	WD.	PT.	–	1	1	1	H.M.	PT.	
B16	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B17	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B18	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B19	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B20	3'–0" x 7'–0"	1 3/4"	3	WD.	PT.	–	1	1	1	H.M.	PT.	
B21	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B22	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B23	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B24	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B25	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B26	(2)3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	20 MIN.	1	1	1	H.M.	PT.	
B27	3'–0" x 7'–0"	1 3/4"	3	WD.	PT.	20 MIN.	1	1	1	H.M.	PT.	
B28	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B29	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B30	3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	–	1	1	1	H.M.	PT.	
B31	(2)3'–0" x 7'–0"	1 3/4"	2	WD.	PT.	20 MIN.	1	1	1	H.M.	PT.	

DOOR NO.	2" HEAD	4" HEAD	18 GAGE FRAME	14 GAGE FRAME	MASONRY ANCHORS	EMA – P&D	ST. STD. ANCHORS	SET UP AND WELD	KNOCK DOWN	18 GAGE DOOR	16 GAGE DOOR	GALVANIZED	PASSAGE	PRIVACY	ENTRANCE	STOREROOM	OFFICE	PUSH/PULL	EMERGENCY	LOCKSET	CLOSER/CLOSERS	PANIC HARDWARE	WALL STOP	HINGE STOP	16" KICK PLATE	6" MOP PLATE	ALUM. THRESHOLD	MARBLE SADDLE
E1															●						●							
E2														●							●							
E3															●						●							
B01	●		●						●						●						●							
B02													●								●							
B03	●		●						●				●								●							
B04	●		●						●						●						●							
B05	●		●						●				●								●							
B06	●		●						●								●						●					
B07	●		●						●								●						●					
B08	●		●						●								●						●					
B09	●		●						●								●						●					
B10	●		●						●				●								●							
B11	●		●						●								●						●					
B12	●		●						●								●						●					
B13	●		●						●								●						●					
B14	●		●						●														●					
B15	●		●						●				●								●							
B16	●		●						●								●						●					
B17	●		●						●								●						●					
B18	●		●						●								●						●					
B19	●		●						●								●						●					
B20	●		●						●				●								●							
B21	●		●						●					●							●							
B22	●		●						●					●							●							
B23	●		●						●					●							●							
B24	●		●						●								●						●					
B25	●		●						●								●						●					
B26	●		●						●				●								●							
B27	●		●						●				●								●							
B28	●		●						●					●							●							
B29	●		●						●							●							●					
B30	●		●						●							●							●					
B31	●		●						●				●								●							

LEGEND

H.M. = HOLLOW METAL
PT. = PAINT
ALUM. = ALUMINUM
AN. = ANODIZED
WD. = WOOD
MA.S. = MASONITE (SOLID)
MA.H. = MASONITE (HOLLOW)
STL. = STEEL
C = VINYL CLAD
CL. = CLEAR ANODIZED
FG. = FIBERGLASS
GL. = GLASS

DOORS AND FRAMES:

D1 SWING DOORS:

METAL FRAMES SHALL BE THROAT DIMENSION EQUAL TO WALL THICKNESS PLUS REQUIRED TOLERANCE, 1/2" BACK BEAD, 2" FACE, 18 GAUGE KNOCKDOWN FRAMES WITH MITERED CORNERS. FIRE RATINGS SHALL BE EQUAL TO DOOR FIRE RATINGS.

DOOR CONSTRUCTION SHALL BE : CORE (SOLID): AWI SECTION 1300; SHC – STANDARD; SOLID CORE FLUSH WOOD DOOR PROVIDE WITH PARTICLE BOARD CORE. PROVIDE FOR 3/4" UNDERCUT OF DOOR. DOOR FACING PLAIN SLICED BIRCH FLUSH INTERIOR DOORS: AWI TYPE 1, PREMIUM QUALITY 5 PLY DOOR, 1/32 TO 1/41 INCH THICK MATCHED GRAIN, PREFINISHED WITH STAIN AND TRANSPARENT FINISH TO MATCH EXISTING. EXPOSED VERTICAL EDGES: OF SAME SPECIES AS FACE VENEER.

DOOR HARDWARE:

BUTTS HINGES SHALL BE 1 1/2" PAIR BALL BEARING HINGES FBB179 AS MANUFACTURED BY STANLEY. SIZE OF HINGES SHALL BE AS FOLLOWS: HEIGHT 4 1/2" FOR DOORS UNDER 3'–6" WIDE. QUANTITY OF HINGES TO BE AS FOLLOWS: 1 1/2" PAIR PER DOOR LEAF FOR DOORS 7'–6" HIGH OR LESS.

LOCKSETS SCHLAGE LOCK COMPANY INTERIOR LOCKSETS AND LATCHSETS, WITH GUARDED LATCHBOLT AND 2 3/4" BACKSET, ATHENS LEVER DESIGN SHALL BE PROVIDED AS REQUIRED BY APPLICABLE CODES. FUNCTION OF LOCKSET AS REQUIRED BY APPLICATION.

CLOSERS LCN: CLOSERS SHALL BE 1460 LINE, WITH FUNCTIONS AND MOUNTING AS REQUIRED.

BUMPERS IVES: WALL BUMPERS SHALL BE IVES #407.

ALL DOORS TO RECEIVE NEW HARDWARE

ALL DOORS ARE REQUIRED TO BE ACCESSIBLE AND SHALL RECEIVE LEVER LOCKSETS AND LATCHSETS

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR 1 CARPET	FLOOR 2 CER. TILE	FLOOR 3 RUBBER	FLOOR 4 CONCRETE	FLOOR 5 LVT	FLOOR 6 VCT	BASE 1 RUBBER	BASE 2 CER. TILE	BASE 3 CARPET	WALLS 1 DRYWALL PAINTED	WALLS 2 WALLPAPER	WALLS 3 CER. TILE	WALLS NOT REQUIRED	WALLS STOREFRONT	CEILING 1 EXP. STRUCTURE	CEILING 2 DRYWALL PAINTED	CEILING 3 EXP. STRUCTURE PTD.	CEILING 4 ACOUSTIC TILE	CEILING 5 NOT REQUIRED	HEIGHT	REMARKS
101	VESTIBULE					●		●							●				●		9'–0"	
102	WAITING AREA					●		●			●								●		9'–0"	
103	RECEPTION OFFICE					●		●			●								●		9'–0"	
104	CORRIDOR					●		●			●								●		9'–0"	
105	EXAM					●		●			●								●		9'–0"	
106	OFFICE #2					●		●			●								●		9'–0"	
107	OFFICE #3					●		●			●								●		9'–0"	
108	OFFICE #1					●		●			●								●		9'–0"	
109	OFFICE #4					●		●			●								●		9'–0"	
110	OFFICE #5					●		●			●								●		9'–0"	
111	OFFICE #6					●		●			●								●		9'–0"	
112	OFFICE #7					●		●			●								●		9'–0"	
113	OPEN WORK AREA					●		●			●								●		10'–0"	
114	CONFERENCE ROOM					●		●			●								●		9'–0"	
115	CONFERENCE ROOM					●		●			●								●		9'–0"	
116	TESTING					●		●			●								●		9'–0"	
117	LAVATORY		●						●		●		●						●		9'–0"	C.T. :BULLNOSE AT ALL EXP EDGES
118	LAVATORY		●						●		●		●						●		9'–0"	C.T. :BULLNOSE AT ALL EXP EDGES
119	LAVATORY		●						●		●		●						●		9'–0"	C.T. :BULLNOSE AT ALL EXP EDGES
120	CORRIDOR					●		●			●								●		9'–0"	
121	W. H.C. LAVATORY		●						●		●		●						●		9'–0"	C.T. :BULLNOSE AT ALL EXP EDGES
122	M. H.C. LAVATORY		●						●		●		●						●		9'–0"	C.T. :BULLNOSE AT ALL EXP EDGES
123	CORRIDOR					●		●			●								●		9'–0"	
124	QUIET ROOM					●		●			●								●		9'–0"	
125	STAFF ROOM					●		●			●								●		9'–0"	
126	JAN. CL. STORAGE						●	●			●								●		9'–0"	
127	I.T. ROOM						●	●			●								●		9'–0"	
128	CORRIDOR					●		●			●								●		9'–0"	
129	STORAGE						●	●			●								●		9'–0"	

NOTE: ALL INTERIOR FINISHES TO BE CLASS A AND COMPLY WITH 2003 IBC, CHAPTER 8

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REVISIONS			
NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

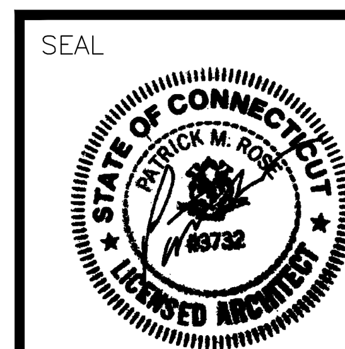
SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

DOOR SCHEDULE AND FINISH SCHEDULE

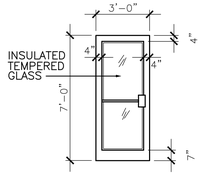
DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08–16–2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH–BEHAVIORAL HEALTH_2024	

SEAL

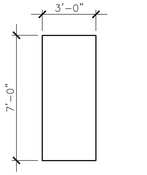


SHEET NUMBER

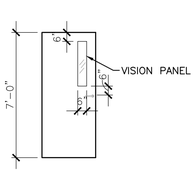
A-601



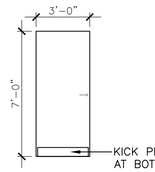
DOOR TYPE 1
SCALE: 1/4" = 1'-0"



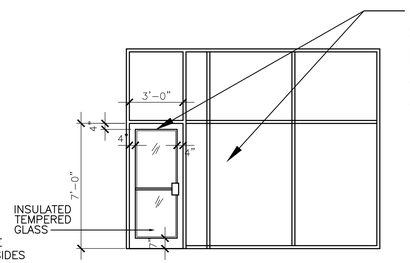
DOOR TYPE 2
SCALE: 1/4" = 1'-0"



DOOR TYPE 3
SCALE: 1/4" = 1'-0"

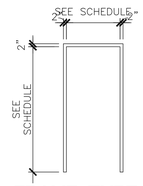


DOOR TYPE 4
SCALE: 1/4" = 1'-0"



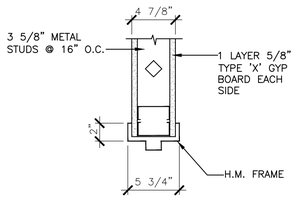
DOOR TYPE 5
SCALE: 1/4" = 1'-0"

1 A-602 DOOR TYPES
SCALE: AS NOTED



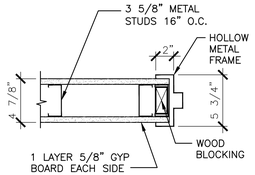
FRAME TYPE 1
SCALE: 1/4" = 1'-0"

2 A-602 FRAME TYPES
SCALE: AS NOTED



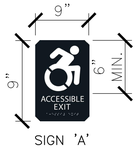
HEAD TYPE 1
SCALE: 1 1/2"=1'-0"

3 A-602 HEAD TYPES
SCALE: AS NOTED

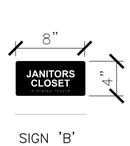


JAMB TYPE 1
SCALE: 1 1/2"=1'-0"

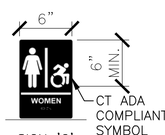
4 A-602 JAMB TYPES
SCALE: AS NOTED



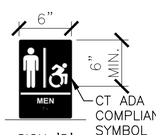
SIGN 'A'



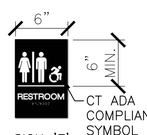
SIGN 'B'



SIGN 'C'



SIGN 'D'



SIGN 'E'

SIGNAGE NOTES:

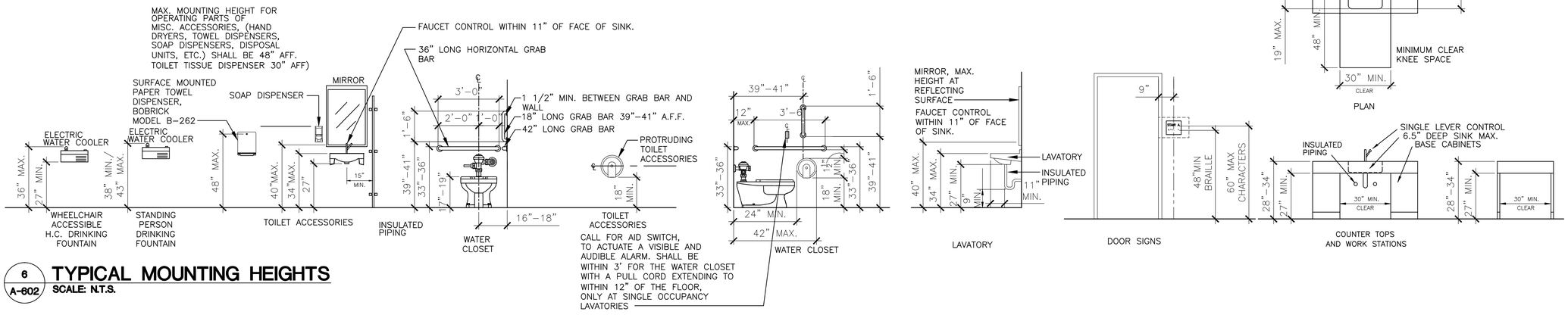
SIGN TEXT TO BE A MINIMUM OF 5/8", MAX. 2" HIGH

SYMBOLS OF ACCESSIBILITY AND THEIR BACKGROUNDS SHALL HAVE A NON-GLARE FINISH. SYMBOLS OF ACCESSIBILITY SHALL CONTRAST WITH THEIR BACKGROUNDS, WITH EITHER A LIGHT SYMBOL ON A DARK BACKGROUND OR A DARK SYMBOL ON A LIGHT BACKGROUND.

PICTOGRAMS SHALL HAVE A FIELD 6" MINIMUM IN HEIGHT. CHARACTERS OR BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD, TYP.

5 A-602 INTERIOR SIGNS
SCALE: N.T.S.

PROVIDE BLOCKING FOR ALL BATHROOMS TO ACCOMODATE FIXTURE AND ACCESSORIES MOUNTING REQUIREMENTS PER CODE
MAINTAIN 1 1/2"MINIMUM FINGER CLEARANCE TO TOP OF FLUSH VALVE.



6 A-602 TYPICAL MOUNTING HEIGHTS
SCALE: N.T.S.

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

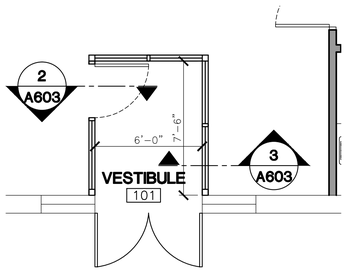
SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE
DOOR/ FRAME & FINISH DETAILS

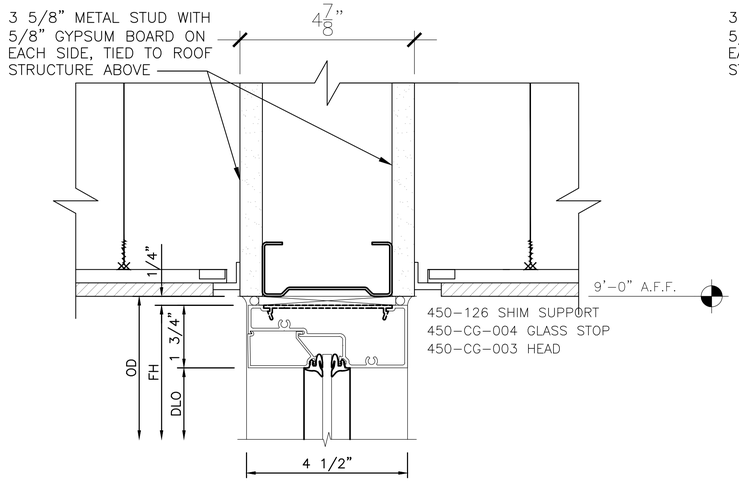
DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-BEHAVIORAL HEALTH_2024	

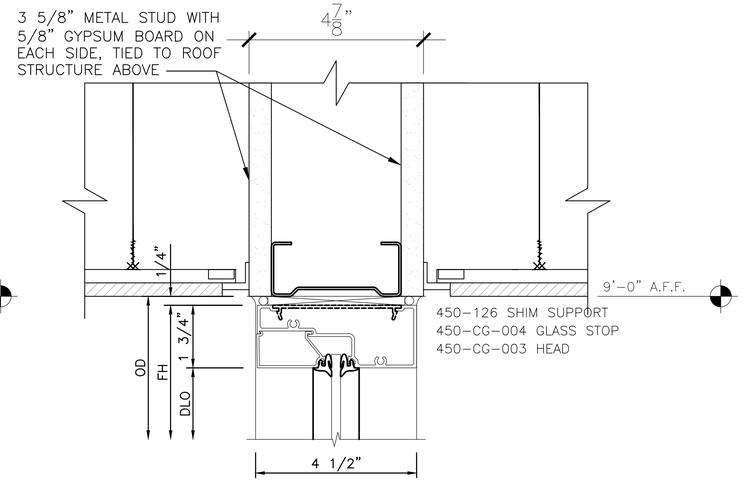
SEAL

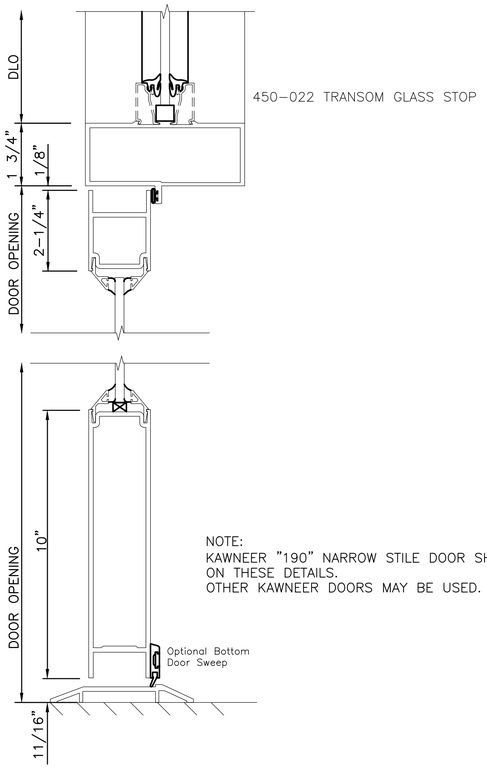
SHEET NUMBER
A-602



1 A-603 **ENLARGED FLOOR PLAN**
SCALE: 1/4" = 1'-0"

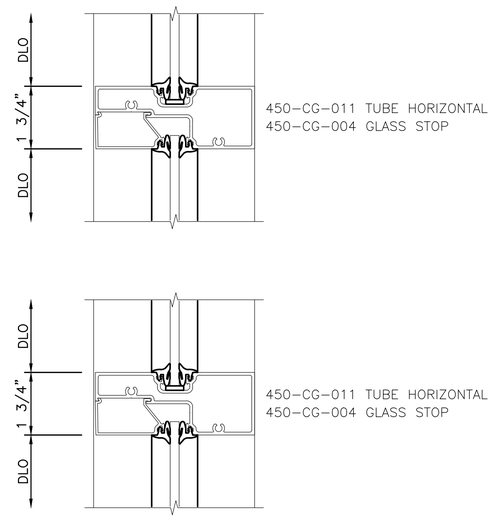




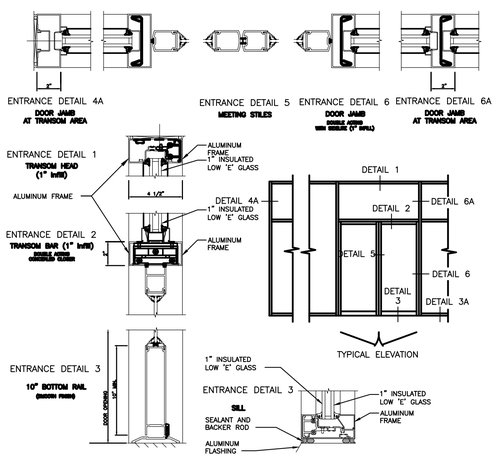


NOTE:
KAWNEER "190" NARROW STILE DOOR SHOWN ON THESE DETAILS.
OTHER KAWNEER DOORS MAY BE USED.

2 A-603 **FRAME TYPES**
SCALE: N.T.S.



3 A-603 **FRAME TYPES**
SCALE: N.T.S.



TYPICAL ALUM & GLASS DETAILS
SCALE: 1/8"=1'-0"
ALL STOREFRONT GLAZING SHALL BE TEMPERED SAFETY GLASS BASED ON KAWNEER 451T SYSTEM

4 A-603 **ENTRY STOREFRONT DETAILS**
SCALE: N.T.S.

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE
STOREFRONT DETAILS AND SECTIONS

DESIGNED BY: PMR	SCALE: AS NOTED
DRAWN BY: MS	DATE: 08-16-2024
CHECKED BY: PMR	PROJECT NUMBER: 2531
CAD FILE: R:/2531/ARCH-BEHAVIORAL HEALTH_2024	

SEAL
STATE OF CONNECTICUT · PATRICK M. ROSE · #16732 · LICENSED ARCHITECT

SHEET NUMBER
A-603

GENERAL NOTES

1. PROJECT SCOPE: PROVIDE COMPLETE AND OPERATIONAL SYSTEMS AS OUTLINED IN THE CONTRACT DOCUMENTS INCLUDING ALL NECESSARY MATERIAL, LABOR, AND EQUIPMENT.
2. CONSTRUCTION\CONTRACT DOCUMENTS: CONTRACT DOCUMENTS INCLUDING PLANS, DETAILS, AND ONE-LINE DIAGRAMS SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE WORK. THESE DOCUMENTS ARE DIAGRAMMATIC AND DO NOT SHOW ALL CONNECTORS, FITTINGS, HANGERS, AND ADDITIONAL ELEMENTS WHICH THE CONTRACTOR MUST PROVIDE TO COMPLETE THE SYSTEMS AS OUTLINED IN THE CONTRACT DOCUMENTS. PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCE'S AND CONDITIONS, VISIBLE AND/OR HIDDEN, THAT MAY EXIST, THUS REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE PROJECT AREA BEFORE PERFORMING THE WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BY FIELD MEASUREMENTS.
3. COORDINATION:
   - A) THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL CONSTRUCTION DOCUMENTS AND OTHER TRADES ASSOCIATED WITH THE PROJECT.
   - B) THE CONTRACTOR SHALL VISIT THE SITE OF WORK AND FAMILIARIZE HIMSELF WITH ALL AVAILABLE INFORMATION CONCERNING THE NATURE OF THE INSTALLATION AND CONDITIONS.
   - C) BEFORE SELECTING MATERIAL, EQUIPMENT AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT, CLEARANCES AND INTERCONNECTIONS.
   - D) PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCE'S AND CONDITIONS, VISIBLE AND/OR HIDDEN THAT MAY EXIST; THUS, REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE SPACE BEFORE PERFORMING THE WORK.
   - E) BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
   - F) ARRANGE FOR CHASES, SLOTS, AND OPENINGS IN OTHER BUILDING COMPONENTS DURING PROGRESS OF CONSTRUCTION, TO ALLOW FOR PROPER SYSTEM INSTALLATIONS.
   - G) COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES AND SLEEVES TO BE SET IN POURED IN PLACE CONCRETE AND OTHER STRUCTURAL COMPONENTS, AS THEY ARE CONSTRUCTED.
   - H) SEQUENCE, COORDINATE, AND INTEGRATE INSTALLATIONS OF MATERIALS AND EQUIPMENT FOR EFFICIENT FLOW OF THE WORK. GIVE PARTICULAR ATTENTION TO LARGE EQUIPMENT REQUIRING POSITIONING PRIOR TO CLOSING IN THE BUILDING.
   - I) FAILURE OF THE CONTRACTOR TO ACQUAINT HIMSELF WITH ALL AVAILABLE INFORMATION CONCERNING THE ABOVE CONDITIONS AND NOT PERFORMING PROPER COORDINATION WILL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR ESTIMATING THE DIFFICULTIES AND COSTS FOR SUCCESSFULLY PERFORMING THE COMPLETE WORK UNDER THIS PROJECT.
4. SHUTDOWNS: WRITTEN REQUESTS FOR APPROVAL FOR PLANNED SHUTDOWNS OR INTERRUPTION OF OWNER'S UTILITIES, SYSTEMS AND EQUIPMENT SHALL BE MADE 72 HOURS PRIOR TO THE START OF THE REQUESTED SHUTDOWN PERIODS.
5. CODES AND STANDARDS: THE CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL CODES THAT HAVE JURISDICTION WHERE THE WORK IS BEING PERFORMED. THROUGHOUT THE CONTRACT DOCUMENTS CERTAIN CODES AND STANDARDS ARE REFERENCED. THE CONTRACTOR SHALL USE THE LATEST VERSIONS OF CODES AND STANDARDS REFERENCED UNLESS OTHERWISE NOTED. IF THE CONTRACTOR IS NOT FAMILIAR WITH THE REFERENCED STANDARD THEY SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR DIRECTION.
6. PERMITS: THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL GOVERNING AUTHORITIES.
7. WORKMAN: ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL GOVERNING AUTHORITIES CODES AND REGULATIONS.
8. SUBMITTALS: THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL EQUIPMENT AND MATERIALS BEING PROVIDED BEFORE SUCH EQUIPMENT AND MATERIALS ARE PURCHASED AND INSTALLED. THE SUBMITTALS SHALL BE REVIEWED AND RETURNED BY THE OWNER'S REPRESENTATIVE WITH APPROPRIATE COMMENTS. SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT AND WILL BE RETURNED WITH COMMENTS TO THE CONTRACTOR IN PDF FORMAT.
9. AS-BUILT DOCUMENTATION: THE CONTRACTOR SHALL PROVIDE ONE MARK-UP SET OF CONSTRUCTION DOCUMENTS SHOWING FINAL AS-BUILT CONDITIONS. DOCUMENTS SHALL CLEARLY SHOW THE CHANGES MADE TO THE INSTALLED SYSTEMS.
10. EQUIPMENT WARRANTIES, MAINTENANCE MANUALS AND INSTALLATION MANUALS: TURN OVER TO THE OWNER ALL MANUFACTURERS' WARRANTIES, MAINTENANCE MANUALS, AND INSTALLATION MANUALS FOR EQUIPMENT AND MATERIALS PROVIDED.
11. PHOTOGRAPHS: PHOTOGRAPHS ARE PROVIDED TO SHOW CURRENT CONDITION OF BUILDING SYSTEMS TO ASSIST THE CONTRACTOR. PHOTOGRAPHS DO NOT SHOW ALL AREAS OF THE BUILDING OR ALL SYSTEM CONDITIONS, THUS REQUIRING THE CONTRACTOR TO VISIT THE SITE BEFORE PERFORMING WORK. PHOTOGRAPHS ARE NOT INTENDED TO SHOW SCOPE OF WORK. PLANS, NOTES, SPECIFICATIONS AND OTHER BID DOCUMENTS INDICATE SCOPE OF WORK.
12. TERMINOLOGY:
   - A) THE TERM "INDICATED" SHALL MEAN, "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS, AND RELATED ATTACHMENTS)".
   - B) THE TERM "PROVIDE" SHALL MEAN, "TO FURNISH, INSTALL, AND CONNECT COMPLETELY".
   - C) THE TERM "COORDINATE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "TO MANAGE, INTERFACE, COMMUNICATE, MAKE ARRANGEMENT, BRING INTO ORDER, ADMINISTER AND HANDLE COMPLETELY".
   - D) THE TERM "INTERIOR" IS AN INTERIOR LOCATION WHERE ITS ENVIRONMENT IS HEATED AND/OR AIR CONDITIONED AND NOT SUBJECT TO OUTSIDE WEATHER CONDITIONS.
   - E) THE TERM "EXTERIOR" IS ALL LOCATIONS, WHICH ARE NOT INTERIOR, OR UNDERGROUND.
   - F) THE TERM "INTERIOR FINISHED SPACE" IS INTERIOR SPACES, WHICH ARE USED FOR OFFICES, CORRIDORS, LOBBIES, TOILETS, STORAGE AND FILING ROOMS, LOUNGES, MECHANICAL ROOMS, ELECTRICAL ROOMS, ETC.
13. DEMOLITION: DEMOLITION OF INDICATED ITEMS INCLUDES THE REMOVAL AND PROPER DISPOSAL OF THOSE ITEMS AND ALL ASSOCIATED PIPING, DUCTWORK, WIRING AND HANGERS. ELECTRICAL BRANCH, CONTROL, TELEPHONE, AND ALARM WIRING SHALL BE REMOVED BACK TO PANELBOARDS OR RELATED SYSTEM PANELS OR BACKBOARDS.
14. EQUIPMENT AND MATERIAL INSTALLATIONS:
   - A) ALL EQUIPMENT AND MATERIALS SHALL BE LABELED AND LISTED, AND INSTALLED IN ACCORDANCE WITH THEIR LISTING AND MANUFACTURER'S REQUIREMENTS.
   - B) WHEN A MANUFACTURER RECOMMENDS AN OPTION OR ACCESSORY ITEM FOR THE INSTALLED CONDITION, OPERATION, OR ENVIRONMENT THAT IS TO BE EXPERIENCED, SUCH ITEM SHALL BE SUPPLIED AT NO ADDITIONAL COST TO THE OWNER.
   - C) IF AN EQUIPMENT MANUFACTURER REQUIRES LARGER CAPACITY, CIRCUITRY AND/OR EQUIPMENT, THE CONTRACTOR SHALL PROVIDE SUCH CAPACITY AND/OR EQUIPMENT UNDER HIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER.
   - D) LOCATE ALL EQUIPMENT, WHICH REQUIRES SERVICING IN FULLY ACCESSIBLE POSITIONS. IF REQUIRED FOR BETTER ACCESSIBILITY, FURNISH ACCESS DOORS FOR THAT PURPOSE.
   - E) MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ALLOW FOR BETTER ACCESSIBILITY.
   - F) ALL WORK IN INTERIOR FINISHED SPACES SHALL BE CONCEALED BEHIND WALLS, ABOVE CEILINGS OR HUNG CEILINGS, OR UNDER THE FLOOR. PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAINTING AND/OR REPLACEMENT OF CEILING TILES AS REQUIRED TO PERFORM WORK.
   - G) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO CONFORM WITH APPROVED SUBMITTAL DATA, INCLUDING COORDINATION DRAWINGS (IF REQUIRED), TO GREATEST EXTENT POSSIBLE. CONFORM TO ARRANGEMENTS INDICATED BY THE CONTRACT DOCUMENTS, RECOGNIZING THAT PORTIONS OF THE WORK ARE SHOWN ONLY IN DIAGRAMMATIC FORM. WHERE COORDINATION REQUIREMENTS CONFLICT WITH INDIVIDUAL SYSTEM REQUIREMENTS, REFER CONFLICT TO THE ARCHITECT/ENGINEER.
   - H) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, WHERE INSTALLED EXPOSED IN FINISHED SPACES
   - I) INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.
   - J) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT GIVING RIGHT OF WAY PRIORITY TO SYSTEMS REQUIRED TO BE INSTALLED AT A SPECIFIED SLOPE.
   - K) WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE.
   - L) ASCERTAIN FROM EXAMINATION OF THE DRAWINGS, ANY SPECIAL TEMPORARY OPENINGS IN THE BUILDING REQUIRED FOR THE ADMISSION OF APPARATUS PROVIDED UNDER THIS DIVISION. NOTIFY THE CONTRACTOR WITH SUFFICIENT NOTICE TO PROVIDE THESE OPENINGS. IN THE EVENT OF FAILURE TO GIVE SUFFICIENT NOTICE, THE CONTRACTOR SHALL ASSUME ALL COSTS OF PROVIDING SUCH OPENINGS THEREAFTER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISASSEMBLY AND ASSEMBLY OF EQUIPMENT AS REQUIRED TO PLACE EQUIPMENT IN THEIR FINAL LOCATIONS.
   - M) BEFORE TRENCHING OR DIGGING, CONTACT THE UTILITY COMPANIES BY CALLING THE "CALL BEFORE YOU DIG" SERVICE AT 1-800-922-4455 FOR CONNECTICUT OR "DIG SAFE" AT 1-800-322-4844 FOR MASSACHUSETTS FOR INFORMATION REGARDING THE LOCATION OF UNDERGROUND UTILITIES. DO NOT RELY ON CONTRACT SITE AND BUILDING DRAWINGS FOR UTILITY INFORMATION AS THEY ARE SCHEMATIC IN NATURE AND DO NOT SHOW EXACT INFORMATION OR ALL UTILITY LINES THAT MAY BE PRESENT.
15. FIRE RATINGS: THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS FOR FIRE SEPARATION AND FIRE RATED ASSEMBLIES. ALL PIPING, DUCTWORK AND CONDUITS PASSING THROUGH OR PENETRATING WALLS, CEILINGS AND FLOORS SHALL BE PROVIDED WITH A UL LISTED FIRE STOPPING ASSEMBLIES. UL LISTED FIRE STOPPING ASSEMBLIES SHALL BE SUITABLE FOR THE CONDITIONS ENCOUNTERED AND SHALL BE RATED EQUAL TO THE RATING OF THE WALL, CEILING OR FLOOR. REVIEW FIRE RATED ASSEMBLIES THAT ALLOW PENETRATIONS OF ITEMS SUCH AS OUTLET BOXES AND CONDUITS THAT DO NOT REQUIRE FIRE STOPPING. SPACE AND POSITION THESE DEVICES AS ALLOWED PER THE ASSEMBLY'S UL RATING.
16. SERVICE LABELING: LABEL EQUIPMENT, PIPING, CONDUITS, INCLUDING FANS, AIR HANDLERS, TERMINAL UNITS, PANELBOARDS, ETC. WITH LABELS MADE OF SELF-STICKING, PLASTIC FILM DESIGNED FOR PERMANENT INSTALLATION. LABELS SHALL MATCH DESIGNATIONS AS INDICATED ON CONTRACT DRAWINGS. IDENTIFY PIPING AND CONDUITS IN ACCORDANCE WITH OSHA 29 CFR 1910.144, EXCEPT THAT LABELS OR TAPES MAY BE USED IN LIEU OF PAINTING OR STENCILING. SPACING OF IDENTIFICATION MARKING ON RUNS SHALL NOT EXCEED 50 FEET. MATERIALS FOR LABELS AND TAPES SHALL CONFORM TO CID A-A-1689, AND SHALL BE GENERAL PURPOSE TYPE AND COLOR CLASS.
   - A) IN ADDITION IDENTIFY SERVICES AS INDICATED BELOW:
   - B) EACH POINT OF ENTRY AND EXIT OF PIPE OR CONDUITS PASSING THROUGH WALLS.
   - C) EACH CHANGE IN DIRECTION, I.E., ELBOWS, TEES.
   - D) IN CONGESTED OR HIDDEN AREAS AND AT ALL ACCESS PANELS AT EACH POINT REQUIRED TO CLARIFY SERVICE OR INDICATED HAZARD.
   - E) IN LONG STRAIGHT RUNS, LOCATE LABELS AT DISTANCES WITHIN EYESIGHT OF EACH OTHER NOT TO EXCEED 50 FEET. ALL LABELS SHALL BE VISIBLE AND LEGIBLE FROM THE PRIMARY SERVICE AND OPERATING AREA.
17. MANUFACTURER'S NAMEPLATES: EACH ITEM OF EQUIPMENT SHALL HAVE A NAMEPLATE BEARING THE MANUFACTURER'S NAME, ADDRESS, MODEL NUMBER, AND SERIAL NUMBER SECURELY AFFIXED IN A CONSPICUOUS PLACE; THE NAMEPLATE OF THE DISTRIBUTING AGENT WILL NOT BE ACCEPTABLE.
18. POSTED OPERATING INSTRUCTIONS: PROVIDE FOR EACH SYSTEM AND PRINCIPAL ITEM OF EQUIPMENT AS SPECIFIED FOR USE BY OPERATION AND MAINTENANCE PERSONNEL. PRINT OR ENGRAVE OPERATING INSTRUCTIONS AND FRAME UNDER GLASS OR IN APPROVED LAMINATED PLASTIC. POST INSTRUCTIONS WHERE DIRECTED. FOR OPERATING INSTRUCTIONS EXPOSED TO THE WEATHER, PROVIDE WEATHER-RESISTANT MATERIALS OR WEATHERPROOF ENCLOSURES. OPERATING INSTRUCTIONS SHALL NOT FADE WHEN EXPOSED TO SUNLIGHT AND SHALL BE SECURED TO PREVENT EASY REMOVAL OR PEELING. THE OPERATING INSTRUCTIONS SHALL INCLUDE THE FOLLOWING:
   - A) WIRING DIAGRAMS, CONTROL DIAGRAMS, AND CONTROL SEQUENCE FOR EACH PRINCIPAL SYSTEM AND ITEM OF EQUIPMENT.
   - B) START UP, PROPER ADJUSTMENT, OPERATING, LUBRICATION, AND SHUTDOWN PROCEDURES.
   - C) SAFETY PRECAUTIONS.
   - D) THE PROCEDURE IN THE EVENT OF EQUIPMENT FAILURE.
   - E) OTHER ITEMS OF INSTRUCTION AS RECOMMENDED BY THE MANUFACTURER OF EACH SYSTEM OR ITEM OF EQUIPMENT.
19. WARNING SIGNS: PROVIDE WARNING SIGNS FOR THE ENCLOSURES OF ELECTRICAL EQUIPMENT INCLUDING SUBSTATIONS, PAD-MOUNTED TRANSFORMERS, PAD-MOUNTED SWITCHES, GENERATORS, AND SWITCHGEAR HAVING A NOMINAL RATING EXCEEDING 600 VOLTS.
20. EXTERIOR FERROUS MATERIALS: ALL EXTERIOR FERROUS MATERIALS SHALL BE PROTECTED FROM CORROSION BY ONE OF THE FOLLOWING METHODS:
   - A) COVERED WITH A NON-FERROUS OR NON-CORRODING MATERIAL.
   - B) MATERIALS THAT ARE INSULATED ON THE EXTERIOR.
   - C) MATERIALS THAT ARE GALVANIZED.
   - D) MATERIALS THAT ARE PAINTED. EXTERIOR PAINTING SHALL CONSIST OF A BASE COAT OF AN APPROPRIATE PRIMER AND TWO COATS OF FINAL PAINT. FINAL PAINT COLOR SHALL BE SELECTED BY THE OWNER'S REPRESENTATIVE.

CODE REQUIREMENTS

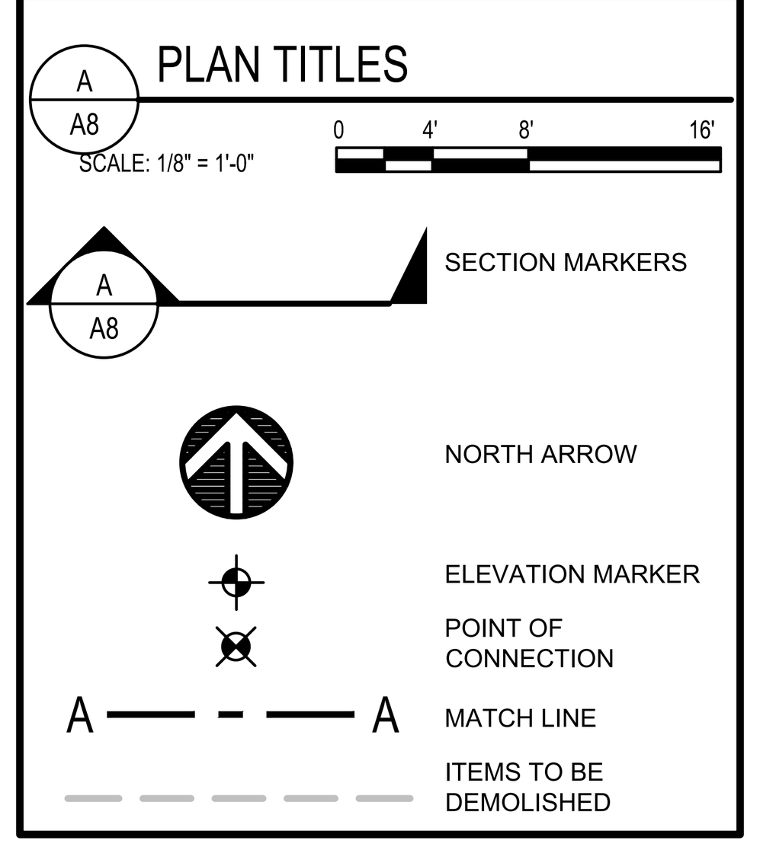
ALL CONSTRUCTION SHALL FOLLOW THE 2022 CONNECTICUT STATE BUILDING CODE WHICH INCLUDES INTERNATIONAL CODE COUNCIL'S 2021 INTERNATIONAL CODES AND REFERENCES THE ICC A117.1-2017 STANDARD FOR ACCESSIBILITY THE 2022 SBC ADOPTS AND MODIFIES THE FOLLOWING MODEL CODES.

2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL EXISTING BUILDING CODE
2021 INTERNATIONAL PLUMBING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL ENERGY CONSERVATION CODE
2020 NATIONAL ELECTRICAL CODE (NFPA 70)
2017 ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS & FACILITIES

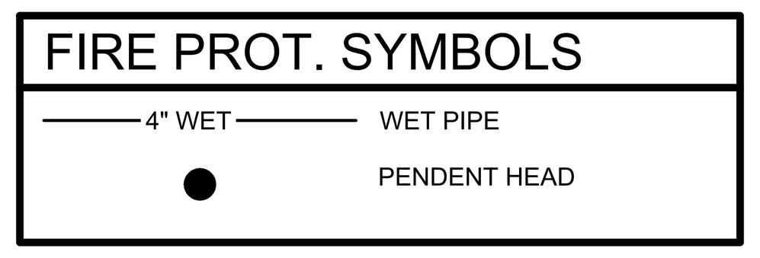
FIRE STOPPING NOTES

1) ALL ITEMS THAT PENETRATE FIRE RATED WALLS, FLOOR/CEILING ASSEMBLIES, OR MEMBRANES SHALL BE INSTALLED WITH THE APPROPRIATE UL LISTED AND LABELED FIRE STOPPING SYSTEM.
2) FIRE STOPPING SYSTEMS MUST BE CHOSEN BASED ON THE SIZE AND MATERIAL OF THE PENETRATING ITEM AS WELL AS THE MATERIAL AND FIRE RATING OF THE BARRIER BEING PENETRATED.
3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FIRE STOPPING SYSTEMS AS REQUIRED.
4) SEE ARCHITECTURAL DRAWINGS FOR LIST OF FIRE RATINGS AND THEIR LOCATIONS. CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL DRAWINGS AS NECESSARY.

GENERAL SYMBOLS



FIRE PROT. SYMBOLS



SPRINKLER SYSTEM SPECIFICATION

PART 1 GENERAL

1.1 REFERENCES

THE PUBLICATIONS LISTED BELOW FORM A PART OF THIS SPECIFICATION TO THE EXTENT REFERENCED. THE PUBLICATIONS ARE REFERRED TO WITHIN THE TEXT BY THE BASIC DESIGNATION ONLY.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 13	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
NFPA 70	NATIONAL ELECTRICAL CODE

1.2 SYSTEM DESCRIPTION

MODIFY EXISTING PIPING AND FURNISH PIPING, OFFSETS, FITTINGS, AND ANY OTHER ACCESSORIES AS REQUIRED TO PROVIDE A COMPLETE INSTALLATION AND TO ELIMINATE INTERFERENCE WITH OTHER CONSTRUCTION. INSTALL SPRINKLER SYSTEM OVER AND UNDER DUCTS, PIPING AND PLATFORMS WHEN SUCH EQUIPMENT CAN NEGATIVELY EFFECT OR DISRUPT THE SPRINKLER DISCHARGE PATTERN AND COVERAGE. PROVIDE WET PIPE SPRINKLER SYSTEM IN ALL AREAS OF THE BUILDING. EXCEPT AS MODIFIED HEREIN, THE SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13 AND NFPA 14. PIPE SIZES SHALL BE DETERMINED BY HYDRAULIC CALCULATION. DESIGN ANY PORTIONS OF THE SPRINKLER SYSTEM THAT ARE NOT INDICATED ON THE DRAWINGS INCLUDING LOCATING SPRINKLERS, PIPING AND EQUIPMENT, AND SIZE PIPING AND EQUIPMENT WHEN THIS INFORMATION IS NOT INDICATED ON THE DRAWINGS OR IS NOT SPECIFIED HEREIN. THE DESIGN OF THE SPRINKLER SYSTEM SHALL BE BASED ON HYDRAULIC CALCULATIONS, AND THE OTHER PROVISIONS SPECIFIED HEREIN.

1.2.1 HYDRAULIC DESIGN

HYDRAULICALLY DESIGN THE SYSTEM FOR LIGHT HAZARD OCCUPANCY PER NFPA 13. HYDRAULIC CALCULATIONS SHALL BE IN ACCORDANCE WITH THE AREA/DENSITY METHOD OF NFPA 13. WATER VELOCITY IN THE PIPING SHALL NOT EXCEED 20 FT/S.

1.2.1.1 HOSE DEMAND

ADD AN ALLOWANCE FOR EXTERIOR HOSE STREAMS OF 100 GPM TO THE SPRINKLER SYSTEM DEMAND AT THE FIRE HYDRANT SHOWN ON THE DRAWINGS CLOSEST TO THE POINT WHERE THE WATER SERVICE ENTERS THE BUILDING.

1.2.1.2 BASIS FOR CALCULATIONS

SPRINKLER SYSTEM: THE DESIGN OF THE SYSTEM SHALL BE BASED UPON EXISTING BUILDING SPRINKLER SYSTEM REQUIREMENTS.

1.2.1.3 HYDRAULIC CALCULATIONS

SUBMIT HYDRAULIC CALCULATIONS, INCLUDING A DRAWING SHOWING HYDRAULIC REFERENCE POINTS AND PIPE SEGMENTS AND AS OUTLINED IN NFPA 13 AND NFPA 14, EXCEPT THAT CALCULATIONS SHALL BE PERFORMED BY COMPUTER USING SOFTWARE INTENDED SPECIFICALLY FOR FIRE PROTECTION SYSTEM DESIGN USING THE DESIGN DATA SHOWN ON THE DRAWINGS. SOFTWARE THAT USES K-FACTORS FOR TYPICAL BRANCH LINES IS NOT ACCEPTABLE. CALCULATIONS SHALL BE BASED ON THE WATER SUPPLY DATA SHOWN ON THE DRAWINGS TO SUBSTANTIATE THAT THE DESIGN AREA USED IN THE CALCULATIONS IS THE MOST DEMANDING HYDRAULICALLY. WATER SUPPLY CURVES AND SYSTEM REQUIREMENTS SHALL BE PLOTTED ON SEMI-LOGARITHMIC GRAPH PAPER SO AS TO PRESENT A SUMMARY OF THE COMPLETE HYDRAULIC CALCULATION. PROVIDE A SUMMARY SHEET LISTING SPRINKLERS IN THE DESIGN AREA AND THEIR RESPECTIVE HYDRAULIC REFERENCE POINTS, ELEVATIONS, ACTUAL DISCHARGE PRESSURES AND ACTUAL FLOWS. ELEVATIONS OF HYDRAULIC REFERENCE POINTS (NODES) SHALL BE INDICATED. DOCUMENTATION SHALL IDENTIFY EACH PIPE INDIVIDUALLY AND THE NODES CONNECTED THERETO. INDICATE THE DIAMETER, LENGTH, FLOW, VELOCITY, FRICTION LOSS, NUMBER AND TYPE FITTINGS, TOTAL FRICTION LOSS IN THE PIPE, EQUIVALENT PIPE LENGTH AND HAZEN-WILLIAMS COEFFICIENT FOR EACH PIPE. FOR GRIDDED SYSTEMS, CALCULATIONS SHALL SHOW PEAKING OF DEMAND AREA FRICTION LOSS TO VERIFY THAT THE HYDRAULICALLY MOST DEMANDING AREA IS BEING USED. ALSO FOR GRIDDED SYSTEMS, A FLOW DIAGRAM INDICATING THE QUANTITY AND DIRECTION OF FLOWS SHALL BE INCLUDED. A DRAWING SHOWING HYDRAULIC REFERENCE POINTS (NODES) AND PIPE DESIGNATIONS USED IN THE CALCULATIONS SHALL BE INCLUDED AND SHALL BE INDEPENDENT OF SHOP DRAWINGS.

1.2.2 SPRINKLER COVERAGE

SPRINKLERS SHALL BE UNIFORMLY SPACED ON BRANCH LINES. IN BUILDINGS PROTECTED BY AUTOMATIC SPRINKLERS, SPRINKLERS SHALL PROVIDE COVERAGE THROUGHOUT 100 PERCENT OF THE BUILDING. THIS INCLUDES, BUT IS NOT LIMITED TO, TELEPHONE ROOMS, ELECTRICAL EQUIPMENT ROOMS, BOILER ROOMS, SWITCHGEAR ROOMS, TRANSFORMER ROOMS, AND OTHER ELECTRICAL AND MECHANICAL SPACES. COVERAGE PER SPRINKLER SHALL BE IN ACCORDANCE WITH NFPA 13, BUT SHALL NOT EXCEED 100 SQUARE FEET FOR EXTRA HAZARD OCCUPANCIES, 130 SQUARE FEET FOR ORDINARY HAZARD OCCUPANCIES, AND 225 SQUARE FEET FOR LIGHT HAZARD OCCUPANCIES. EXCEPTIONS ARE AS FOLLOWS:

1.3 SUBMITTALS

SUBMIT THE FOLLOWING IN ACCORDANCE:

SHOP DRAWINGS
- SUPPORTING ELEMENTS
- SPRINKLER HEADS

PRODUCT DATA
- ABOVEGROUND PIPING MATERIALS
- VALVES
- SPRINKLER HEADS

DESIGN DATA
- DESIGN ANALYSIS AND CALCULATIONS

PART 2 PRODUCTS

PROVIDE DESIGN ANALYSIS AND CALCULATIONS IN ACCORDANCE WITH NFPA 13. SUBMIT CONNECTION DIAGRAMS INDICATING THE RELATIONS AND CONNECTIONS OF THE FOLLOWING ITEMS. INDICATE ON DRAWINGS, THE GENERAL PHYSICAL LAYOUT OF ALL CONTROLS, AND INTERNAL TUBING AND WIRING DETAILS.

2.1 SYSTEM DESCRIPTION

ENSURE FIRE-PROTECTION SYSTEM MATERIALS AND EQUIPMENT PROVIDED UNDER THIS SECTION CONFORM TO THE REQUIREMENTS OF UNDERWRITERS LABORATORIES (UL).

2.2 EQUIPMENT

2.2.1 ABOVEGROUND PIPING MATERIALS

2.2.1.1 TYPE BCS - BLACK CARBON STEEL

PIPE 1/8 THROUGH 1-1/2 INCHES: SCHEDULE 40 FURNACE BUTT WELD BLACK-CARBON STEEL CONFORMING TO ASTM A53/A53M, OR ASTM A135/A135M, TYPE F FURNACE BUTT WELDED; SCHEDULE 10 CONFORMING TO ASTM A135/A135M, GRADE B.

PIPE 2 THROUGH 8 INCHES, WHERE INDICATED: SCHEDULE 40 SEAMLESS OR ELECTRIC-RESISTANCE WELDED BLACK CARBON STEEL, CONFORMING TO ASTM A53/A53M OR ASTM A135/A135M, TYPE E (ELECTRIC-RESISTANCE WELDED), GRADE B, OR TYPE S (SEAMLESS), GRADE B; SCHEDULE 10 CONFORMING TO ASTM A135/A135M, GRADE B.

UNIONS 2 INCHES AND UNDER): 300-POUND PER SQUARE INCH GAGE (PSIG) WORKING STEAM PRESSURE (WSP) FEMALE, SCREWED, BLACK MALLEABLE IRON, WITH GROUND JOINT AND BRASS-TO-IRON SEAT CONFORMING TO ASME B16.39.

STANDARD PIPE COUPLINGS: EXTRA-HEAVY SCREWED BLACK STEEL.

GROOVED PIPE COUPLINGS (ALL SIZES): 175-PSIG MINIMUM WORKING PRESSURE WITH A HOUSING FABRICATED IN TWO OR MORE PARTS OF BLACK MALLEABLE-IRON CASTINGS. PROVIDE COUPLING GASKET MOLDED OF SYNTHETIC RUBBER, CONFORMING TO REQUIREMENTS OF ASTM D2000. PROVIDE COUPLING BOLTS THAT ARE OVAL-NECK, TRACK-HEAD TYPE WITH HEAVY HEXAGONAL NUTS, CONFORMING TO ASTM A183.

FITTINGS 4 INCHES AND UNDER: 175-PSIG WORKING PRESSURE, CAST IRON, SCREWED, CONFORMING TO ASTM A126, CLASS A, AND ASME B16.4.

GROOVED FITTINGS (ALL SIZES): ENSURE 175-PSIG WORKING PRESSURE FITTINGS USED WITH GROOVED COUPLINGS ARE FABRICATED OF BLACK MALLEABLE-IRON CASTINGS. IF A MANUFACTURER'S STANDARD-SIZE MALLEABLE-IRON FITTING PATTERN IS NOT AVAILABLE, USE FABRICATED FITTINGS. FABRICATE FITTINGS FROM GRADE B SEAMLESS-STEEL PIPE AND LONG-RADIUS SEAMLESS WELDING FITTINGS, WITH WALL THICKNESS TO MATCH PIPE, CONFORMING TO ASTM A234/A234M AND ASME B16.9.

2.2.2 SUPPORTING ELEMENTS

PROVIDE PIPING SYSTEM COMPONENTS AND MISCELLANEOUS SUPPORTING ELEMENTS, INCLUDING, BUT NOT LIMITED TO, BUILDING-STRUCTURE ATTACHMENTS; SUPPLEMENTARY STEEL; HANGER RODS, STANCHIONS, AND FIXTURES; VERTICAL-PIPE ATTACHMENTS; HORIZONTAL-PIPE ATTACHMENTS; RESTRAINING ANCHORS; AND GUIDES. ENSURE SUPPORTING ELEMENTS ARE SUITABLE FOR STRESSES IMPOSED BY SYSTEMS PRESSURES AND TEMPERATURES, NATURAL, AND OTHER EXTERNAL FORCES.

PROVIDE FM APPROVED OR UL LISTED SUPPORTING ELEMENTS CONFORMING TO ASME B31.1, MSS SP-58, AND ASME B16.34.

2.2.3 SPRINKLER HEADS

2.2.3.1 HEAD TYPES

USE STANDARD 1/2-INCH ORIFICE SPRINKLER HEADS. HEADS SHALL BE RECESSED TYPE WITH WHITE FINNISH AND WHITE ESCUTCHEONS.

2.2.3.2 SPARES

FURNISH SPARES FOR EACH TYPE OF SPRINKLER HEAD, COMPLETE WITH APPROPRIATE STORAGE CABINET AND WRENCH.

2.2.3.3 HEAD PROTECTION

PROTECT HEADS WITH PAPER OR PLASTIC BAGS DURING PAINTING OPERATIONS. REMOVE PROTECTION IMMEDIATELY UPON FINISHING PAINTING OPERATIONS.

PROVIDE HEAD GUARDS WHEREVER MECHANICAL DAMAGE COULD OCCUR. GUARD FINISH IS RED ENAMEL.

PART 3 EXECUTION

3.1 INSTALLATION

ENSURE INSTALLATION OF SYSTEM MATERIALS AND EQUIPMENT IS IN ACCORDANCE WITH THE RECOMMENDATIONS AND PROVISIONS OF NFPA 13, NFPA 13E, NFPA 14, AND NFPA 24. PERFORM WORK IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. NOTIFY THE OWNER'S REPRESENTATIVE 48 HOURS IN ADVANCE OF THE START OF WORK.

PERFORM ALL INSTALLATION WORK BY LICENSED FIRE PROTECTION SPRINKLER CONTRACTORS, LICENSED FOR SUCH WORK IN THE STATE WHERE THE WORK IS TO BE PERFORMED.

3.1.1 ABOVEGROUND PIPING-SYSTEMS INSTALLATION

RUN PIPING PARALLEL WITH THE LINES OF THE BUILDING. SPACE AND INSTALL PIPING AND COMPONENTS SO THAT A THREADED PIPE FITTING MAY BE REMOVED BETWEEN ADJACENT PIPES AND SO THAT THERE IS NOT LESS THAN 1/2 INCH OF CLEAR SPACE BETWEEN THE FINISHED SURFACE AND OTHER WORK AND BETWEEN THE FINISHED SURFACE OF PARALLEL ADJACENT PIPING. ARRANGE HANGERS ON DIFFERENT ADJACENT SERVICE LINES RUNNING PARALLEL TO BE IN LINE WITH EACH OTHER AND PARALLEL TO THE LINES OF THE BUILDING.

BASE THE LOAD RATING FOR PIPE-HANGER SUPPORTS ON ALL LINES FILLED WITH WATER. DEFLECTION PER SPAN CANNOT NOT EXCEED SLOPE GRADIENT OF PIPE. ENSURE SCHEDULE 40 AND HEAVIER FERROUS PIPE SUPPORTS ARE IN ACCORDANCE WITH THE FOLLOWING MINIMUM ROD SIZE AND MAXIMUM ALLOWABLE HANGER SPACING. FOR CONCENTRATED LOADS SUCH AS VALVES, REDUCE THE ALLOWABLE SPAN PROPORTIONATELY.

SUPPORT VERTICAL RISERS AT THE BASE WHERE POSSIBLE AND AT INTERVALS SPECIFIED. GUIDE PIPING FOR LATERAL STABILITY AS NECESSARY. PLACE CLAMPS UNDER FITTINGS WHEREVER POSSIBLE. SUPPORT CARBON-STEEL PIPE AT EACH FLOOR AT NOT MORE THAN 15-FOOT INTERVALS FOR PIPE 2 INCHES AND SMALLER, AND AT NOT MORE THAN 20-FOOT INTERVALS FOR PIPE 2-1/2 INCHES AND LARGER.

SECURELY SUPPORT PIPE WITH ALLOWANCE FOR THRUST FORCES, THERMAL EXPANSION AND CONTRACTION, AND NOT BE SUBJECT TO MECHANICAL, CHEMICAL, VIBRATIONAL, OR OTHER DAMAGE, IN CONFORMANCE WITH ASME B31.1.

3.1.2 SOUND STOPPING

PROVIDE EFFECTIVE SOUND STOPPING AND ADEQUATE OPERATING CLEARANCE TO PREVENT STRUCTURE CONTACT WHERE PIPING PENETRATES WALLS, FLOORS, OR CEILINGS; INTO OCCUPIED SPACES ADJACENT TO EQUIPMENT ROOMS; WHERE SIMILAR PENETRATIONS OCCUR BETWEEN OCCUPIED SPACES; AND WHERE PENETRATIONS OCCUR FROM PIPE CHASES INTO OCCUPIED SPACES. OCCUPIED SPACES INCLUDE SPACE ABOVE CEILING WHERE NO SPECIAL ACOUSTIC TREATMENT OF CEILING IS PROVIDED. CONSTRUCT PENETRATIONS WITH FINISHES COMPATIBLE WITH SURFACE BEING PENETRATED.

SOUND STOPPING AND VAPOR-BARRIER SEALING OF PIPE SHAFTS, AND LARGE FLOOR AND WALL OPENINGS MAY BE ACCOMPLISHED BY PACKING WITH PROPERLY SUPPORTED MINERAL FIBER INSULATION OR BY FOAMING-IN-PLACE WITH SELF-EXTINGUISHING, 2-POUND DENSITY POLYURETHANE FOAM TO A DEPTH NOT LESS THAN 6 INCHES. FINISH FOAM WITH A RASP. ENSURE VAPOR BARRIER IS NOT LESS THAN 1/8-INCH THICKNESS OF VINYL MASTIC APPLIED TO VISIBLE AND ACCESSIBLE SURFACES. WHERE FIRE STOPPING IS A CONSIDERATION, USE ONLY MINERAL FIBER, AND, IN ADDITION, COVER OPENINGS WITH16-GAGE SHEET METAL.

3.2 FIELD QUALITY CONTROL

3.2.1 FIRE-PROTECTION SYSTEM IDENTIFICATION

CREATE A COORDINATED SYSTEM OF PIPING AND EQUIPMENT IDENTIFICATION WHICH INCLUDES THE FOLLOWING: SERVICE-LABELED PIPING.

3.2.1.1 SERVICE LABELING

LABEL PIPING, INCLUDING THAT CONCEALED IN ACCESSIBLE SPACES, TO DESIGNATE SERVICE. INCLUDE ON EACH LABEL, AN ARROW OR ARROWS TO INDICATE FLOW DIRECTION.

LABEL PIPING AND ARROW IN ACCORDANCE WITH THE FOLLOWING:

a. EACH POINT OF ENTRY AND EXIT THROUGH WALLS.

b. EACH CHANGE IN DIRECTION.

c. IN CONGESTED OR HIDDEN AREAS, AT EACH POINT REQUIRED TO CLARIFY SERVICE OR INDICATE HAZARD.

d. IN LONG STRAIGHT RUNS, LOCATE LABELS AT A DISTANCE VISIBLE TO EACH OTHER, BUT IN NO CASE HAVE THE DISTANCE BETWEEN LABELS EXCEED40 FEET.

e. ENSURE LETTERING IS 2 INCHES HIGH. WHERE THE SIZE OF PIPES IS 2-1/2-INCH OUTSIDE DIAMETER AND SMALLER, ATTACH LABELS TO 16-GAGE ALUMINUM SHEET AND ATTACH TO THE PIPE WITH 12-GAGE GALVANIZED WIRE. ENSURE LABELS ARE LEGIBLE FROM THE PRIMARY SERVICE AND OPERATING AREA.

f. MAKE LABELS OF SELF-STICKING PLASTIC FILM DESIGNED FOR PERMANENT INSTALLATION. PROVIDE LABELS WITH RED LETTERS ON WHITE BACKGROUND.

g. THE LABEL AND VALVE TAG SCHEDULE ABOVE IS NOT CONSTRUED AS DEFINING OR LIMITING THE WORK. LABEL ALL PIPING.

3.2.2 BRANCH-LINE TESTERS

ENSURE BRANCH-LINE TESTERS PERMIT TESTING AND FLUSHING LINES WITHOUT SHUTDOWN OF SYSTEM OR LOSS OF FIRE-PROTECTION CAPABILITY. FIT LINE TESTERS WITH CHAIN-ATTACHED CAPS.

INSTALL LINE TESTERS WHERE INDICATED AND ON MOST REMOTE BRANCH LINES BEING SERVED BY CROSS MAINS, SO THAT TESTING MAY BE ACCOMPLISHED AT THE DEAD CORNERS OF EACH SPRINKLER SYSTEM.

3.2.3 SYSTEM TESTING

OWNER WILL SUPPLY TESTING WATER AT A LOCATION DETERMINED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR APPROVED DISPOSAL OF CONTAMINATED WATER.

PRIOR TO ACCEPTANCE OF THE WORK, TEST COMPLETED SYSTEMS IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. UPON APPROVAL, PROVIDE CERTIFICATES OF TESTING.

CONDUCT A HYDROSTATIC TEST, UNLESS OTHERWISE SPECIFIED. USE ONLY POTABLE WATER FOR TESTING.

PERFORM AIR TESTS, VALVE-OPERATING TESTS, AND DRAINAGE TESTS FOR DRY-PIPE SYSTEMS.

PERFORM FULL-FLOW SYSTEM OPERATING TESTS FOR STANDPIPE SYSTEMS.

PREPARE AND MAINTAIN TEST RECORDS OF PIPING-SYSTEM TESTS. ENSURE RECORDS SHOW PERSONNEL RESPONSIBILITIES, DATES, TEST-GAGE IDENTIFICATION NUMBERS, AMBIENT AND TEST-WATER TEMPERATURES, PRESSURE RANGES, RATES OF PRESSURE DROPS, AND LEAKAGE RATES. EACH TEST ACCEPTANCE REQUIRES THE SIGNATURE OF THE OWNER'S REPRESENTATIVE.

3.2.4 TEST GAGES

ACCEPTABLE TEST GAGES HAVE 4-1/2-INCH DIALS OR LARGER WITH ACCURACY OF PLUS OR MINUS 1/2 OF 1 PERCENT OF FULL-SCALE RANGE AND DIAL GRADUATIONS AND POINTER WIDTH COMPATIBLE WITH READABILITY TO WITHIN ONE-HALF OF THE ACCURACY EXTREMES. MAXIMUM PERMISSIBLE SCALE RANGE FOR A GIVEN TEST IS SUCH THAT THE POINTER DURING A TEST HAS A STARTING POSITION AT MIDPOINT OF THE DIAL OR WITHIN THE MIDDLE THIRD OF THE SCALE RANGE. ENSURE THE CERTIFICATION OF ACCURACY AND CORRECTION TABLE HAS: A DATE WITHIN 90 CALENDAR DAYS PRIOR TO THE TEST, THE TEST GAGE NUMBER, AND THE PROJECT NUMBER.

3.2.5 PNEUMATIC TESTING

PERFORM PNEUMATIC PRESSURE TESTS WHEN FREEZING CONDITIONS MAY OCCUR AND UPON PRIOR APPROVAL BY THE OWNER'S REPRESENTATIVE. USE OIL-FREE COMPRESSED AIR USED FOR TESTING. PNEUMATIC TESTING INCLUDES SWABBING ALL JOINTS UNDER A TEST PRESSURE OF 5 PSIG WITH A STANDARD HIGH FILM STRENGTH SOAP SOLUTION AND OBSERVING FOR BUBBLES.

DURATION OF THE TEST WILL BE DETERMINED BY THE OWNER'S REPRESENTATIVE AND WILL BE FOR 2 HOURS, MINIMUM, TO 24 HOURS, MAXIMUM. TEST MAY BE TERMINATED BY DIRECTION OF THE OWNER'S REPRESENTATIVE AT ANY POINT DURING THIS PERIOD AFTER IT HAS BEEN DETERMINED THAT THE PERMISSIBLE LEAKAGE RATE HAS NOT BEEN EXCEEDED.

3.2.6 TEST AND ACCEPTABLE CRITERIA

PERFORM ABOVE GROUND SYSTEMS PRESSURE TESTS AT 200 PSI AND MAINTAIN THE APPLIED PRESSURE WITHOUT FURTHER ADDITION OF TEST MEDIA FOR NOT LESS THAN 2 HOURS. NO PRESSURE DROP IS ALLOWED.

TEST UNDERGROUND RUBBER-JOINTED FERROUS-PIPE WATER SYSTEMS AT 200 PSI, AND MAINTAIN THE APPLIED TEST PRESSURE FOR NOT LESS THAN 2 HOURS. MAXIMUM ALLOWABLE PRESSURE DROP IS 2 PSI. AFTER SATISFACTORY HYDROSTATIC TESTING, TEST PIPING FOR LEAKAGE AS FOLLOWS:

a. DURATION OF EACH LEAKAGE TEST IS NOT LESS THAN 2 HOURS; DURING THE TEST, SUBJECT THE MAIN TO 200 PSI PRESSURE BASED ON THE ELEVATION OF THE LOWEST SECTION UNDER TEST AND CORRECTED TO THE ELEVATION OF THE TEST GAGE.

b. LEAKAGE IS DEFINED AS THE QUANTITY OF WATER SUPPLIED INTO THE LAID PIPE, OR ANY VALVED SECTION THEREOF, NECESSARY TO MAINTAIN THE SPECIFIED LEAKAGE TEST PRESSURE AFTER THE PIPE HAS BEEN FILLED WITH WATER AND THE AIR EXPELLED.

c. NO PIPING INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IN GALLONS PER HOUR EXCEEDS 0.00054 TIMES THE NUMBER OF JOINTS IN THE LENGTH OF THE PIPE LINE TESTED TIMES THE NOMINAL DIAMETER OF THE PIPE IN INCHES TIMES THE SQUARE ROOT OF THE AVERAGE TEST PRESSURE EXPRESSED AS PSIG. AMOUNT OF LEAKAGE AT THE JOINTS CANNOT EXCEED 2 QUARTS PER 100 JOINTS REGARDLESS OF PIPE DIAMETER.

d. APPLY HYDROSTATIC TESTS TO PIPING WITH CONCRETE THRUST BLOCKING ONLY AFTER THE CONCRETE HAS CURED FOR MORE THAN 7 CALENDAR DAYS.

REPAIR DRIPPING OR WEEPING JOINTS.

3.3 ADJUSTING AND CLEANING

AT THE COMPLETION OF THE WORK, CLEAN ALL PARTS OF THE INSTALLATION. CLEAN EQUIPMENT, PIPES, VALVES, AND FITTINGS OF GREASE, METAL CUTTINGS, AND SLUDGE THAT MAY HAVE ACCUMULATED FROM THE INSTALLATION AND TESTING OF THE SYSTEM. ADJUST AUTOMATIC CONTROL DEVICES FOR PROPER OPERATION.

-- END OF SECTION --

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET

SHEET TITLE

FIRE PROTECTION NOTES AND SYMBOLS

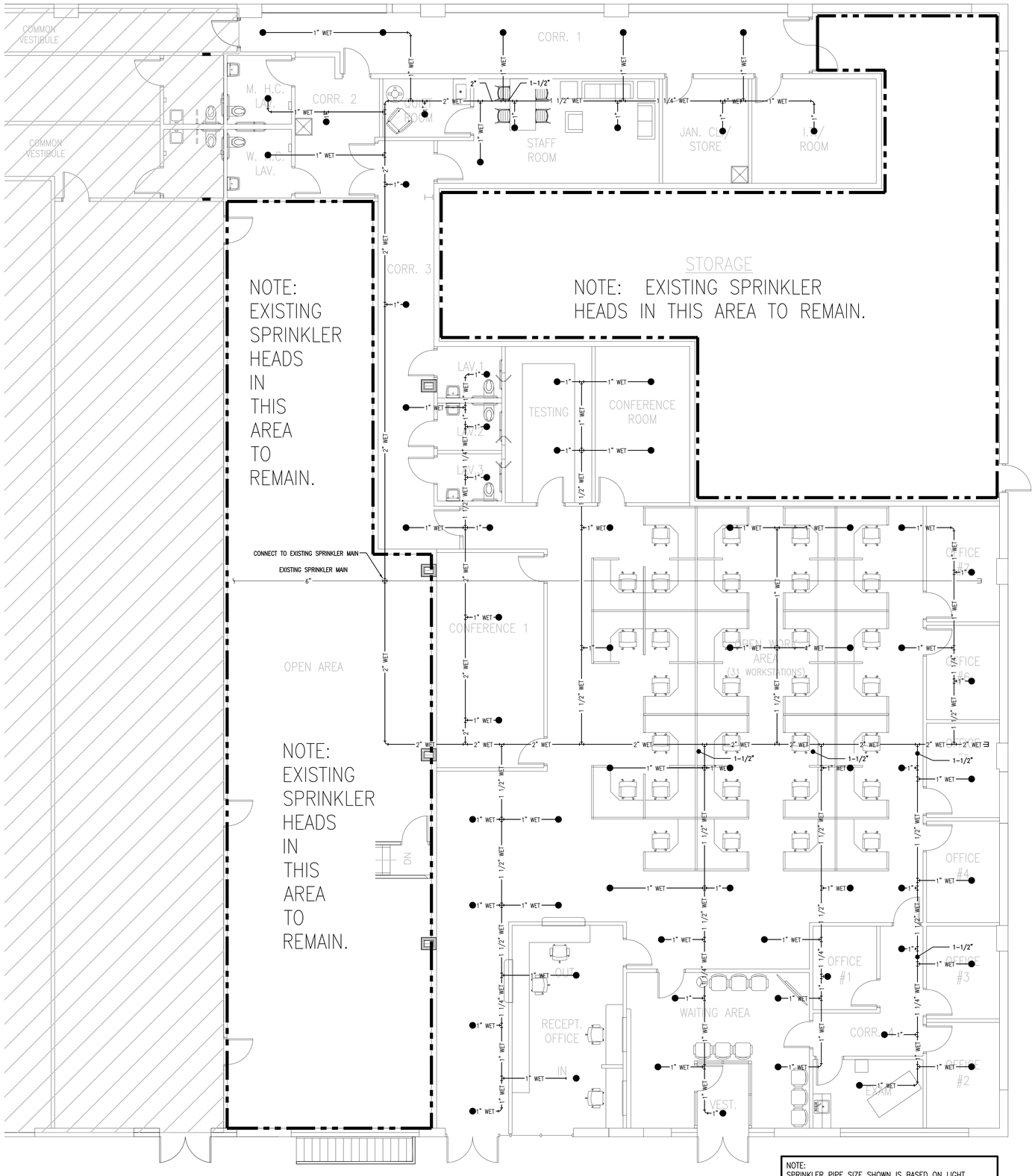
DESIGNED BY:	KWK	SCALE:	AS NOTED
DRAWN BY:	GJG	DATE:	06-26-2024
CHECKED BY:	KWK	PROJECT NUMBER:	C26-06
CAD FILE:	BH-FP001.dwg		

SEAL

PROGRESS SET NOT FOR CONSTRUCTION

SHEET NUMBER

FP001



NOTE:
SPRINKLER PIPE SIZE SHOWN IS BASED ON LIGHT HAZARD PIPE SCHEDULE METHOD. ALL FINAL PIPE SIZES SHALL BE DETERMINED BY HYDRAULIC CALCULATIONS.

1 / FP100 PARTIAL FLOOR PLAN BEHAVIORAL HEALTH

SCALE: 3/16" = 1'-0" 0 2' 4' 8'

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GENERAL NOTES

1. PROJECT SCOPE: PROVIDE COMPLETE AND OPERATIONAL SYSTEMS AS OUTLINED IN THE CONTRACT DOCUMENTS INCLUDING ALL NECESSARY MATERIAL, LABOR, AND EQUIPMENT.
2. CONSTRUCTION\CONTRACT DOCUMENTS: CONTRACT DOCUMENTS INCLUDING PLANS, DETAILS, AND ONE-LINE DIAGRAMS SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE WORK. THESE DOCUMENTS ARE DIAGRAMMATIC AND DO NOT SHOW ALL CONNECTORS, FITTINGS, HANGERS, AND ADDITIONAL ELEMENTS WHICH THE CONTRACTOR MUST PROVIDE TO COMPLETE THE SYSTEMS AS OUTLINED IN THE CONTRACT DOCUMENTS. PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCE'S AND CONDITIONS, VISIBLE AND/OR HIDDEN, THAT MAY EXIST, THUS REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE PROJECT AREA BEFORE PERFORMING THE WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BY FIELD MEASUREMENTS.
3. COORDINATION:
   A) THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL CONSTRUCTION DOCUMENTS AND OTHER TRADES ASSOCIATED WITH THE PROJECT.
   B) THE CONTRACTOR SHALL VISIT THE SITE OF WORK AND FAMILIARIZE HIMSELF WITH ALL AVAILABLE INFORMATION CONCERNING THE NATURE OF THE INSTALLATION AND CONDITIONS.
   C) BEFORE SELECTING MATERIAL, EQUIPMENT AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT, CLEARANCES AND INTERCONNECTIONS.
   D) PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCE'S AND CONDITIONS, VISIBLE AND/OR HIDDEN THAT MAY EXIST; THUS, REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE SPACE BEFORE PERFORMING THE WORK.
   E) BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
   F) ARRANGE FOR CHASES, SLOTS, AND OPENINGS IN OTHER BUILDING COMPONENTS DURING PROGRESS OF CONSTRUCTION, TO ALLOW FOR PROPER SYSTEM INSTALLATIONS.
   G) COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES AND SLEEVES TO BE SET IN POURED IN PLACE CONCRETE AND OTHER STRUCTURAL COMPONENTS, AS THEY ARE CONSTRUCTED.
   H) SEQUENCE, COORDINATE, AND INTEGRATE INSTALLATIONS OF MATERIALS AND EQUIPMENT FOR EFFICIENT FLOW OF THE WORK. GIVE PARTICULAR ATTENTION TO LARGE EQUIPMENT REQUIRING POSITIONING PRIOR TO CLOSING IN THE BUILDING.
   I) FAILURE OF THE CONTRACTOR TO ACQUAINT HIMSELF WITH ALL AVAILABLE INFORMATION CONCERNING THE ABOVE CONDITIONS AND NOT PERFORMING PROPER COORDINATION WILL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR ESTIMATING THE DIFFICULTIES AND COSTS FOR SUCCESSFULLY PERFORMING THE COMPLETE WORK UNDER THIS PROJECT.
4. SHUTDOWNS: WRITTEN REQUESTS FOR APPROVAL FOR PLANNED SHUTDOWNS OR INTERRUPTION OF OWNER'S UTILITIES, SYSTEMS AND EQUIPMENT SHALL BE MADE 72 HOURS PRIOR TO THE START OF THE REQUESTED SHUTDOWN PERIODS.
5. CODES AND STANDARDS: THE CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL CODES THAT HAVE JURISDICTION WHERE THE WORK IS BEING PERFORMED. THROUGHOUT THE CONTRACT DOCUMENTS CERTAIN CODES AND STANDARDS ARE REFERENCED. THE CONTRACTOR SHALL USE THE LATEST VERSIONS OF CODES AND STANDARDS REFERENCED UNLESS OTHERWISE NOTED. IF THE CONTRACTOR IS NOT FAMILIAR WITH THE REFERENCED STANDARD THEY SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR DIRECTION.
6. PERMITS: THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL GOVERNING AUTHORITIES.
7. WORKMAN: ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL GOVERNING AUTHORITIES CODES AND REGULATIONS.
8. SUBMITTALS: THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL EQUIPMENT AND MATERIALS BEING PROVIDED BEFORE SUCH EQUIPMENT AND MATERIALS ARE PURCHASED AND INSTALLED. THE SUBMITTALS SHALL BE REVIEWED AND RETURNED BY THE OWNER'S REPRESENTATIVE WITH APPROPRIATE COMMENTS. SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT AND WILL BE RETURNED WITH COMMENTS TO THE CONTRACTOR IN PDF FORMAT.
9. AS-BUILT DOCUMENTATION: THE CONTRACTOR SHALL PROVIDE ONE MARK-UP SET OF CONSTRUCTION DOCUMENTS SHOWING FINAL AS-BUILT CONDITIONS. DOCUMENTS SHALL CLEARLY SHOW THE CHANGES MADE TO THE INSTALLED SYSTEMS.
10. EQUIPMENT WARRANTIES, MAINTENANCE MANUALS AND INSTALLATION MANUALS: TURN OVER TO THE OWNER ALL MANUFACTURERS' WARRANTIES, MAINTENANCE MANUALS, AND INSTALLATION MANUALS FOR EQUIPMENT AND MATERIALS PROVIDED.
11. PHOTOGRAPHS: PHOTOGRAPHS ARE PROVIDED TO SHOW CURRENT CONDITION OF BUILDING SYSTEMS TO ASSIST THE CONTRACTOR. PHOTOGRAPHS DO NOT SHOW ALL AREAS OF THE BUILDING OR ALL SYSTEM CONDITIONS, THUS REQUIRING THE CONTRACTOR TO VISIT THE SITE BEFORE PERFORMING WORK. PHOTOGRAPHS ARE NOT INTENDED TO SHOW SCOPE OF WORK. PLANS, NOTES, SPECIFICATIONS AND OTHER BID DOCUMENTS INDICATE SCOPE OF WORK.
12. TERMINOLOGY:
    A) THE TERM "INDICATED" SHALL MEAN, "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS, AND RELATED ATTACHMENTS)".
    B) THE TERM "PROVIDE" SHALL MEAN, "TO FURNISH, INSTALL, AND CONNECT COMPLETELY".
    C) THE TERM "COORDINATE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "TO MANAGE, INTERFACE, COMMUNICATE, MAKE ARRANGEMENT, BRING INTO ORDER, ADMINISTER AND HANDLE COMPLETELY".
    D) THE TERM "INTERIOR" IS AN INTERIOR LOCATION WHERE ITS ENVIRONMENT IS HEATED AND/OR AIR CONDITIONED AND NOT SUBJECT TO OUTSIDE WEATHER CONDITIONS.
    E) THE TERM "EXTERIOR" IS ALL LOCATIONS, WHICH ARE NOT INTERIOR, OR UNDERGROUND.
    F) THE TERM "INTERIOR FINISHED SPACE" IS INTERIOR SPACES, WHICH ARE USED FOR OFFICES, CORRIDORS, LOBBIES, TOILETS, STORAGE AND FILING ROOMS, LOUNGES, MECHANICAL ROOMS, ELECTRICAL ROOMS, ETC.
13. DEMOLITION: DEMOLITION OF INDICATED ITEMS INCLUDES THE REMOVAL AND PROPER DISPOSAL OF THOSE ITEMS AND ALL ASSOCIATED PIPING, DUCTWORK, WIRING AND HANGERS. ELECTRICAL BRANCH, CONTROL, TELEPHONE, AND ALARM WIRING SHALL BE REMOVED BACK TO PANELBOARDS OR RELATED SYSTEM PANELS OR BACKBOARDS.
14. EQUIPMENT AND MATERIAL INSTALLATIONS:
    A) ALL EQUIPMENT AND MATERIALS SHALL BE LABELED AND LISTED, AND INSTALLED IN ACCORDANCE WITH THEIR LISTING AND MANUFACTURER'S REQUIREMENTS.
    B) WHEN A MANUFACTURER RECOMMENDS AN OPTION OR ACCESSORY ITEM FOR THE INSTALLED CONDITION, OPERATION, OR ENVIRONMENT THAT IS TO BE EXPERIENCED, SUCH ITEM SHALL BE SUPPLIED AT NO ADDITIONAL COST TO THE OWNER.
    C) IF AN EQUIPMENT MANUFACTURER REQUIRES LARGER CAPACITY, CIRCUITRY AND/OR EQUIPMENT, THE CONTRACTOR SHALL PROVIDE SUCH CAPACITY AND/OR EQUIPMENT UNDER HIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER.
    D) LOCATE ALL EQUIPMENT, WHICH REQUIRES SERVICING IN FULLY ACCESSIBLE POSITIONS. IF REQUIRED FOR BETTER ACCESSIBILITY, FURNISH ACCESS DOORS FOR THAT PURPOSE.
    E) MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ALLOW FOR BETTER ACCESSIBILITY.
    F) ALL WORK IN INTERIOR FINISHED SPACES SHALL BE CONCEALED BEHIND WALLS, ABOVE CEILINGS OR HUNG CEILINGS, OR UNDER THE FLOOR. PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAINTING AND/OR REPLACEMENT OF CEILING TILES AS REQUIRED TO PERFORM WORK.
    G) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO CONFORM WITH APPROVED SUBMITTAL DATA, INCLUDING COORDINATION DRAWINGS (IF REQUIRED), TO GREATEST EXTENT POSSIBLE. CONFORM TO ARRANGEMENTS INDICATED BY THE CONTRACT DOCUMENTS, RECOGNIZING THAT PORTIONS OF THE WORK ARE SHOWN ONLY IN DIAGRAMMATIC FORM. WHERE COORDINATION REQUIREMENTS CONFLICT WITH INDIVIDUAL SYSTEM REQUIREMENTS, REFER CONFLICT TO THE ARCHITECT/ENGINEER.
    H) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, WHERE INSTALLED EXPOSED IN FINISHED SPACES
    I) INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.
    J) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT GIVING RIGHT OF WAY PRIORITY TO SYSTEMS REQUIRED TO BE INSTALLED AT A SPECIFIED SLOPE.
    K) WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE.
    L) ASCERTAIN FROM EXAMINATION OF THE DRAWINGS, ANY SPECIAL TEMPORARY OPENINGS IN THE BUILDING REQUIRED FOR THE ADMISSION OF APPARATUS PROVIDED UNDER THIS DIVISION. NOTIFY THE CONTRACTOR WITH SUFFICIENT NOTICE TO PROVIDE THESE OPENINGS. IN THE EVENT OF FAILURE TO GIVE SUFFICIENT NOTICE, THE CONTRACTOR SHALL ASSUME ALL COSTS OF PROVIDING SUCH OPENINGS THEREAFTER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISASSEMBLY AND ASSEMBLY OF EQUIPMENT AS REQUIRED TO PLACE EQUIPMENT IN THEIR FINAL LOCATIONS.
    M) BEFORE TRENCHING OR DIGGING, CONTACT THE UTILITY COMPANIES BY CALLING THE "CALL BEFORE YOU DIG" SERVICE AT 1-800-922-4455 FOR CONNECTICUT OR "DIG SAFE" AT 1-800-322-4844 FOR MASSACHUSETTS FOR INFORMATION REGARDING THE LOCATION OF UNDERGROUND UTILITIES. DO NOT RELY ON CONTRACT SITE AND BUILDING DRAWINGS FOR UTILITY INFORMATION AS THEY ARE SCHEMATIC IN NATURE AND DO NOT SHOW EXACT INFORMATION OR ALL UTILITY LINES THAT MAY BE PRESENT.
15. FIRE RATINGS: THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS FOR FIRE SEPARATION AND FIRE RATED ASSEMBLIES. ALL PIPING, DUCTWORK AND CONDUITS PASSING THROUGH OR PENETRATING WALLS, CEILINGS AND FLOORS SHALL BE PROVIDED WITH A UL LISTED FIRE STOPPING ASSEMBLIES. UL LISTED FIRE STOPPING ASSEMBLIES SHALL BE SUITABLE FOR THE CONDITIONS ENCOUNTERED AND SHALL BE RATED EQUAL TO THE RATING OF THE WALL, CEILING OR FLOOR. REVIEW FIRE RATED ASSEMBLIES THAT ALLOW PENETRATIONS OF ITEMS SUCH AS OUTLET BOXES AND CONDUITS THAT DO NOT REQUIRE FIRE STOPPING. SPACE AND POSITION THESE DEVICES AS ALLOWED PER THE ASSEMBLY'S UL RATING.
16. SERVICE LABELING: LABEL EQUIPMENT, PIPING, CONDUITS, INCLUDING FANS, AIR HANDLERS, TERMINAL UNITS, PANELBOARDS, ETC. WITH LABELS MADE OF SELF-STICKING, PLASTIC FILM DESIGNED FOR PERMANENT INSTALLATION. LABELS SHALL MATCH DESIGNATIONS AS INDICATED ON CONTRACT DRAWINGS. IDENTIFY PIPING AND CONDUITS IN ACCORDANCE WITH OSHA 29 CFR 1910.144, EXCEPT THAT LABELS OR TAPES MAY BE USED IN LIEU OF PAINTING OR STENCILING. SPACING OF IDENTIFICATION MARKING ON RUNS SHALL NOT EXCEED 50 FEET. MATERIALS FOR LABELS AND TAPES SHALL CONFORM TO CID A-A-1689, AND SHALL BE GENERAL PURPOSE TYPE AND COLOR CLASS.
    A) IN ADDITION IDENTIFY SERVICES AS INDICATED BELOW:
    B) EACH POINT OF ENTRY AND EXIT OF PIPE OR CONDUITS PASSING THROUGH WALLS.
    C) EACH CHANGE IN DIRECTION, I.E., ELBOWS, TEES.
    D) IN CONGESTED OR HIDDEN AREAS AND AT ALL ACCESS PANELS AT EACH POINT REQUIRED TO CLARIFY SERVICE OR INDICATED HAZARD.
    E) IN LONG STRAIGHT RUNS, LOCATE LABELS AT DISTANCES WITHIN EYESIGHT OF EACH OTHER NOT TO EXCEED 50 FEET. ALL LABELS SHALL BE VISIBLE AND LEGIBLE FROM THE PRIMARY SERVICE AND OPERATING AREA.
17. MANUFACTURER'S NAMEPLATES: EACH ITEM OF EQUIPMENT SHALL HAVE A NAMEPLATE BEARING THE MANUFACTURER'S NAME, ADDRESS, MODEL NUMBER, AND SERIAL NUMBER SECURELY AFFIXED IN A CONSPICUOUS PLACE; THE NAMEPLATE OF THE DISTRIBUTING AGENT WILL NOT BE ACCEPTABLE.
18. POSTED OPERATING INSTRUCTIONS: PROVIDE FOR EACH SYSTEM AND PRINCIPAL ITEM OF EQUIPMENT AS SPECIFIED FOR USE BY OPERATION AND MAINTENANCE PERSONNEL. PRINT OR ENGRAVE OPERATING INSTRUCTIONS AND FRAME UNDER GLASS OR IN APPROVED LAMINATED PLASTIC. POST INSTRUCTIONS WHERE DIRECTED. FOR OPERATING INSTRUCTIONS EXPOSED TO THE WEATHER, PROVIDE WEATHER-RESISTANT MATERIALS OR WEATHERPROOF ENCLOSURES. OPERATING INSTRUCTIONS SHALL NOT FADE WHEN EXPOSED TO SUNLIGHT AND SHALL BE SECURED TO PREVENT EASY REMOVAL OR PEELING. THE OPERATING INSTRUCTIONS SHALL INCLUDE THE FOLLOWING:
    A) WIRING DIAGRAMS, CONTROL DIAGRAMS, AND CONTROL SEQUENCE FOR EACH PRINCIPAL SYSTEM AND ITEM OF EQUIPMENT.
    B) START UP, PROPER ADJUSTMENT, OPERATING, LUBRICATION, AND SHUTDOWN PROCEDURES.
    C) SAFETY PRECAUTIONS.
    D) THE PROCEDURE IN THE EVENT OF EQUIPMENT FAILURE.
    E) OTHER ITEMS OF INSTRUCTION AS RECOMMENDED BY THE MANUFACTURER OF EACH SYSTEM OR ITEM OF EQUIPMENT.
19. WARNING SIGNS: PROVIDE WARNING SIGNS FOR THE ENCLOSURES OF ELECTRICAL EQUIPMENT INCLUDING SUBSTATIONS, PAD-MOUNTED TRANSFORMERS, PAD-MOUNTED SWITCHES, GENERATORS, AND SWITCHGEAR HAVING A NOMINAL RATING EXCEEDING 600 VOLTS.
20. EXTERIOR FERROUS MATERIALS: ALL EXTERIOR FERROUS MATERIALS SHALL BE PROTECTED FROM CORROSION BY ONE OF THE FOLLOWING METHODS:
    A) COVERED WITH A NON-FERROUS OR NON-CORRODING MATERIAL.
    B) MATERIALS THAT ARE INSULATED ON THE EXTERIOR.
    C) MATERIALS THAT ARE GALVANIZED.
    D) MATERIALS THAT ARE PAINTED. EXTERIOR PAINTING SHALL CONSIST OF A BASE COAT OF AN APPROPRIATE PRIMER AND TWO COATS OF FINAL PAINT. FINAL PAINT COLOR SHALL BE SELECTED BY THE OWNER'S REPRESENTATIVE.

ABBREVIATIONS

% - PERCENT
(TYP.) - TYPICAL FOR OTHER LOCATIONS
Ø or DIA - DIAMETER
° or DEG - DEGREE
' - FEET
" - INCHES
A - AMPERES
A - COMPRESSED AIR PIPING
ABV - ABOVE
AC - ALTERNATING CURRENT
ACID - ACID WASTE PIPING
ACLC - AIR-COOLED LIQUID CHILLER
AFF - ABOVE FINISHED FLOOR
AHU - AIR HANDLING UNIT
AMP - AMPERE
AS - AIR SEPARATOR
ATM - ATMOSPHERE
ATS - AUTOMATIC TRANSFER SWITCH
AWG - AMERICAN WIRE GAUGE
BHP - BRAKE HORSEPOWER
BKBD - BACKBOARD
BLW - BELOW
BTU - BRITISH THERMAL UNIT
C - CONDENSATE
C - CONDUIT RACEWWAY
C02 - CARBON DIOXIDE
CTV - CLOSED CIRCUIT TELEVISION
CDWR - CONDENSER WATER RETURN
CDWS - CONDENSER WATER SUPPLY
CFM - CUBIC FEET PER MINUTE
CH - CABINET HEATER
CI - CAST IRON
CKT - CIRCUIT
CLG - CEILING
CO - CLEANOUT
CT - COMPRESSION TANK
CV - COEFFICIENT, VALVE FLOW
CW - DOMESTIC COLD WATER
CWR - CHILLED WATER RETURN
CWS - CHILLED WATER SUPPLY
D - DRAIN
D - DRY
DA - DRY AGENT PIPING
DB - DECIBEL
DB - DRY-BULB
DC - DIRECT CURRENT
DCW - DOMESTIC COLD WATER
DHW - DOMESTIC HOT WATER
DHC - DOMESTIC HOT WATER RECIRCULATION
DTW -DOMESTIC TEMPERED WATER
DTC - DOMESTIC TEMPERED WATER RECIR.
DF - DRINKING FOUNTAIN
DI - DEIONIZED WATER PIPING
DL - REFRIGERANT DISCHARGE
DLUG - DELUGE PIPING
DN - DOWN
DS - DRY STANDPIPE PIPING
DTR - DUEL TEMP RETURN
DTS - DUEL TEMP SUPPLY
DWG - DRAWING
EXG - EXISTING
EAT - ENTERING AIR TEMPERATURE
EF - EXHAUST FAN
EGC - EQUIPMENT GROUNDING CONDUCTOR
EL - ELEVATION
EMT - ELECTRICAL METALLIC TUBING
ENT - ENTERING
EQPMT - EQUIPMENT
EWH - ELECTRIC WATER HEATER
EXG - EXISTING
F - FAHRENHEIT
FA - FIRE ALARM
FAAP - FIRE ALARM ANNUNCIATION PANEL
FACP - FIRE ALARM CONTROL PANEL
FC - FAN COIL
FCO - FLOOR CLEANOUT
FD - FLOOR DRAIN
FLR - FLOOR
FM - FM-200
FMP - FIRE MANUAL PULL STATION
FOC - FUEL OIL SUCTION
FOG - FUEL OIL GAUGE
FOR - FUEL OIL RETURN
FOS - FUEL OIL SUPPLY
FOV - FUEL OIL VENT
FP - FIRE PROTECTION
FPM - FEET PER MINUTE
FPS - FEET PER SECOND
FS - FLOW SWITCH
FT - FEET
FU - FUSED
G - LOW PRESSURE NATURAL GAS
GA - GAUGE
GAL - GALLON(S)
GEC - GROUNDING ELECTRODE CONDUCTOR
GFCI - GROUND FAULT CIRCUIT INTERRUPTER
GFI - GROUND FAULT INTERRUPTER
GFP - GROUND FAULT PROTECTION
GMP - GLYCOL MAKE-UP PACKAGE
GPH - GALLONS PER HOUR
GPM - GALLONS PER MINUTE
GRS - SANITARY GREASE
GV - GAS VENT PIPING
HD - HEAD
HGT - HEIGHT
HOA - HAND OFF AUTO
HOR - HORIZONTAL
HP - HORSEPOWER
HPC - HIGH PRESSURE STEAM CONDENSATE
HPG - HIGH PRESSURE NATURAL GAS
HPR - HEAT PUMP WATER RETURN
HPS - HEAT PUMP WATER SUPPLY
HPS - HIGH PRESSURE STEAM
HR - HOUR(S)
HRU - HEAT RECOVERY UNIT
HTWR - HIGH TEMP HOT WATER RETURN
HTWS - HIGH TEMP HOT WATER SUPPLY
HWR - HOT WATER RETURN
HWS - HOT WATER SUPPLY
HWM - HOT WATER MAKE UP
HX - HEAT EXCHANGER
HZ - HERTZ FREQUENCY
ID - INSIDE DIAMETER
IEGC - INSULATED EQUIP. GROUNDING CONDUCTOR
IMC - INTERMEDIATE METAL CONDUIT
IPS - IRON PIPE SIZE
K - THERMAL CONDUCTIVITY
KA.I.C. - KILO-AMPERES INTERRUPTING CURRENT
KVA - KILO VOLT-AMPERES
KW - KILOWATT(S)
KWH - KILOWATT HOUR
KWH - KILOWATT HOUR
LAT - LEAVING AIR TEMPERATURE
LAV - LAVATORY
LBS - POUNDS
LL - REFRIGERANT LIQUIDCINE
LPC - LOW PRESSURE STEAM CONDENSATE
LPS - LOW PRESSURE STEAM
LTD - LEAST TEMPERATURE DIFFERENCE
LTG - LIGHTING
LTWR - LOW TEMP HOT WATER RETURN
LTWS - LOW TEMP HOT WATER SUPPLY
MA - MEDICAL GAS COMPRESSED AIR PIPING
MAX - MAXIMUM
MCCB - MOLDED CASE CIRCUIT BREAKER
MDP - MAIN DISTRIBUTION PANEL
MIN - MINIMUM
MLO - MAIN LUG ONLY
MOCP - MAXIMUM OVERCURRENT PROTECTION
MPC - MED PRESSURE STEAM CONDENSATE
MPG - MED PRESSURE NATURAL GAS
MPS - MED PRESSURE STEAM
MTWR - MED TEMP HOT WATER RETURN
MTWS - MED TEMP HOT WATER SUPPLY
MW - MAKEUP WATER
N/A - NOT APPLICABLE
N2 - MEDICAL GAS NITROGEN
N2O - MEDICAL GAS NITROUS OXIDE PIPING
NC - NOISE CRITERIA
NC - NORMALLY CLOSED
NEC - NATIONAL ELECTRIC CODE
NF - NON-FUSED
NFWH - NON-FREEZE WALL HYDRANT
NO - NORMALLY OPEN
NO - NUMBER
NTS - NOT TO SCALE
O2 - MEDICAL GAS OXYGEN
OA - OUTSIDE AIR
OD - STORM OVERFLOW
OS&Y - OUTSIDE STEM & YOKE
OZ - OUNCE
P - POLE
PA - PRE ACTION PIPING
PAA - PUBLIC ADDRESS AMPLIFIER
PC - PUMPED CONDENSATE
PD - PRESSURE DROP OR DIFFERENCE
PH - PHASE
PIV - POST INDICATING VALVE
PROP - PROPANE
PROPV - PROPANE VENT
PSI - POUNDS PER SQUARE INCH
PSIA - PSI ABSOLUTE
PSIG - PSI GAUGE
PWR - POWER
QTY - QUANTITY
R12 - REFRIGERANT (12,22,ETC.)
RA - RETURN AIR
RCVR - RECEIVER
RECIRC - RECIRCULATE
RECPT - RECEPTACLE
RH - RELATIVE HUMIDITY
RM - ROOM
RPDA - REDUCE PRESSURE PRINCIPLE
RPM - REVOLUTIONS PER MINUTE
RSC - RIGID STEEL CONDUIT
RTU - ROOF TOP UNIT
SA - SUPPLY AIR
SAN - SANITARY
SEC - SECOND
SF - SAFETY FACTOR
SF - SQUARE FEET
SHR - SHOWER
SK - SINK
SL - REFRIGERANT SUCTION
SP - SPRINKLER PIPE
SP - STATIC PRESSURE
SPEC - SPECIFICATIONS
SPLY - SUPPLY
SS - SERVICE SINK
STD - STANDARD
STRM - STORM PIPING
SUCT - SUCTION
SWBD - SWITCHBOARD
TEMP - TEMPERATURE
T-STAT - THERMOSTAT
TWR - DOMESTIC TEMPERED WATER RETURN
TWS - DOMESTIC TEMPERED WATER
TX - TRANSFORMER #1
TYP - TYPICAL
U - HEAT TRANSFER COEFFICIENT
UH - UNIT HEATER
UR - URINAL
V - VOLT
VA - VOLT AMPERE
VAC - MEDICAL GAS VACUUM
VAC - VOLTS-ALTERNATING CURRENT
VAV - VARIABLE AIR VOLUME
VEL - VELOCITY
VENT - VENTILATION
VERT - VERTICAL
VH - VENT HOOD
VL - REFRIGERANT VAPORCINE
VOL - VOLUME
VTR - VENT THRU ROOF
W - WASTE
W - WATT(S)
WAG - MEDICAL GAS WAG
WB - WET BULB
WC - WATER CLOSET
WCO - WALL CLEANOUT
WO - WASTE OIL
WP - WEATHERPROOF
WS - WET STANDPIPE PIPING
WSHPS - WATER SOURCE HEAT PUMP SUPPLY
WSHPR - WATER SOURCE HEAT PUMP RETURN
WSHPD - WATER SOURCE HEAT PUMP DRAIN
WSHPM - WATER SOURCE HEAT PUMP MAKE UP

PLUMBING SPECIFICATIONS

1. GENERAL

1.1 SUMMARY: THIS SECTION INCLUDES MATERIAL REQUIREMENTS AND INSTALLATION REQUIREMENTS FOR PLUMBING SYSTEMS. THE FOLLOWING ITEMS ARE INCLUDED IN THIS SECTION: DOMESTIC WATER DISTRIBUTION SYSTEMS, DRAINAGE AND VENT SYSTEMS, PLUMBING FIXTURES AND EQUIPMENT, SUPPORTS AND ANCHORS, PLUMBING SYSTEM INSULATION AND JOINT SEALERS.

1.2 REGULATORY REQUIREMENTS: COMPLY WITH THE PROVISIONS OF THE FOLLOWING: INTERNATIONAL MECHANICAL CODE, INTERNATIONAL PLUMBING CODE, CONNECTICUT BUILDING CODE, CONNECTICUT LIFE SAFETY CODE AND NFPA NATIONAL ELECTRIC CODE.

2. PRODUCTS

2.1 DOMESTIC WATER DISTRIBUTION SYSTEMS: SEE PLUMBING PIPING MATERIAL SCHEDULE.

B. VALVES AND SPECIALTIES:

1. BALL VALVES, 1 INCH AND SMALLER: RATED FOR 150 PSI SATURATED STEAM PRESSURE, 400 PSI WOG PRESSURE; TWO-PIECE CONSTRUCTION; WITH BRONZE BODY CONFORMING TO ASTM B 62, STANDARD (OR REGULAR) PORT, CHROME-PLATED BRASS BALL, REPLACEABLE "TEFLON" OR "TFE" SEATS AND SEALS, BLOWOUT-PROOF STEM, AND VINYL-COVERED STEEL HANDLE.

2.2 SANITARY DRAINAGE AND VENT SYSTEMS: SEE PLUMBING PIPING MATERIAL SCHEDULE.

2.3 PLUMBING FIXTURES AND EQUIPMENT

A. PROVIDE PLUMBING FIXTURES AND TRIM, FITTINGS, OTHER COMPONENTS, AND SUPPORTS AS INDICATED ON THE CONTRACT DRAWINGS.

2.4 SUPPORTS AND ANCHORS

A. HANGERS AND SUPPORT COMPONENTS SHALL BE FACTORY FABRICATED OF MATERIALS, DESIGN, AND MANUFACTURER COMPLYING WITH MSS SP-58. COMPONENTS SHALL HAVE GALVANIZED COATINGS WHERE INSTALLED FOR PIPING AND EQUIPMENT THAT WILL NOT HAVE FIELD-APPLIED FINISH. PIPE ATTACHMENTS SHALL HAVE NONMETALLIC COATING FOR ELECTROLYTIC PROTECTION WHERE ATTACHMENTS ARE IN DIRECT CONTACT WITH COPPER TUBING.

2.5 PLUMBING SYSTEM INSULATION

A. INSULATION GENERAL: CONFORM TO THE FOLLOWING CHARACTERISTICS FOR INSULATION INCLUDING FACINGS, CEMENTS, AND ADHESIVES, WHEN TESTED ACCORDING TO ASTM E 84, BY UL OR OTHER TESTING OR INSPECTING ORGANIZATION ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. LABEL INSULATION WITH APPROPRIATE MARKINGS OF TESTING LABORATORY. INTERIOR INSULATION: FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS. EXTERIOR INSULATION: FLAME SPREAD RATING OF 75 OR LESS AND A SMOKE DEVELOPED RATING OF 150 OR LESS.

B. INSULATION: SEE PLUMBING PIPING & EQUIPMENT INSULATION SCHEDULE.

2.6 JOINT SEALERS

A. JOINT SEALER PRODUCTS SHALL BE TESTED IN ACCORDANCE WITH ASTM E-119, ASTM E-814 AND ASTM E-84. ALL PRODUCTS SHALL NOT CONTAIN ASBESTOS OR PCB'S. ALL JOINT SEALERS SHALL BE INSTALLED IN U.L. LISTED CONFIGURATIONS.

3. EXECUTION

3.1 INSTALLATION OF DOMESTIC WATER DISTRIBUTION SYSTEMS: SEE PLUMBING PIPING MATERIAL SCHEDULE.

B. FIRE BARRIER PENETRATIONS: WHERE PIPES PASS THOUGH FIRE-RATED WALLS, PARTITIONS, CEILINGS, AND FLOORS, MAINTAIN THE FIRE-RATED INTEGRITY.

C. TEST WATER DISTRIBUTION PIPING AS FOLLOWS: TEST FOR LEAKS AND DEFECTS ALL NEW WATER DISTRIBUTION PIPING SYSTEMS AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED OR REPAIRED. IF TESTING IS PERFORMED IN SEGMENTS, SUBMIT A SEPARATE REPORT FOR EACH TEST, COMPLETE WITH A DIAGRAM OF THE PORTION OF THE SYSTEM TESTED.

D. REPAIR ALL LEAKS AND DEFECTS WITH NEW MATERIALS AND RETEST SYSTEM OR PORTION THEREOF UNTIL SATISFACTORY RESULTS ARE OBTAINED.

E. CLEAN AND DISINFECT WATER DISTRIBUTION PIPING AS FOLLOWS: PURGE ALL NEW WATER DISTRIBUTION PIPING SYSTEMS AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED PRIOR TO USE. USE THE PURGING AND DISINFECTING PROCEDURE PROSCRIBED BY THE AUTHORITY HAVING JURISDICTION OR, IN CASE A METHOD IS NOT PRESCRIBED BY THAT AUTHORITY, THE PROCEDURE DESCRIBED IN EITHER AWWA C651, OR AWWA C652.

3.2 INSTALLATION OF SANITARY DRAINAGE AND VENT SYSTEMS

A. PREPARATION FOUNDATION FOR UNDERGROUND BUILDING DRAINS: GRADE TRENCH BOTTOMS TO PROVIDE A SMOOTH, FIRM, AND STABLE FOUNDATION, FREE FROM ROCK, THROUGHOUT THE LENGTH OF THE PIPE. REMOVE UNSTABLE, SOFT, AND UNSUITABLE MATERIALS AT THE SURFACE UPON WHICH PIPES ARE TO BE LAID AND BACKFILL WITH CLEAN SAND OR PEA GRAVEL TO INDICATED INVERT ELEVATION. SHAPE BOTTOM OF TRENCH TO FIT BOTTOM OF PIPE FOR 90-DEGREES (BOTTOM 1/4 OF THE CIRCUMFERENCE). FILL UNEVENNESS WITH TAMPED SAND BACKFILL. AT EACH PIPE JOINT DIG BELL HOLES TO RELIEVE THE BELL OF THE PIPE OF ALL LOADS, AND TO ENSURE CONTINUOUS BEARING OF THE PIPE BARREL ON THE FOUNDATION.

B. PIPE APPLICATIONS : SEE PLUMBING PIPING MATERIAL SCHEDULE.

C. FIRE BARRIER PENETRATIONS: WHERE PIPES PASS THROUGH FIRE RATED WALLS, PARTITIONS, CEILINGS, AND FLOORS, MAINTAIN THE FIRE RATED INTEGRITY.

D. PIPING SYSTEM TEST: TEST DRAINAGE AND VENT SYSTEM IN ACCORDANCE WITH THE PROCEDURES OF THE AUTHORITY HAVING JURISDICTION. REPAIR ALL LEAKS AND DEFECTS USING NEW MATERIALS AND RETEST SYSTEM OR PORTION THEREOF UNTIL SATISFACTORY RESULTS ARE OBTAINED.

E. ADJUSTING AND CLEANING: CLEAN INTERIOR OF PIPING SYSTEM. REMOVE DIRT AND DEBRIS AS WORK PROGRESSES. CLEAN DRAIN STRAINERS, DOMES, AND TRAPS. REMOVE DIRT AND DEBRIS

3.3 INSTALLATION OF HANGERS AND SUPPORTS

A. INSTALL HANGERS, SUPPORTS, CLAMPS AND ATTACHMENTS TO SUPPORT PIPING PROPERLY FROM BUILDING STRUCTURE; COMPLY WITH MSS SP-69 AND SP-89. ARRANGE FOR GROUPING OF PARALLEL RUNS OF HORIZONTAL PIPING SUPPORTED TOGETHER ON FIELD-FABRICATED, HEAVY-DUTY TRAPEZE HANGERS WHERE POSSIBLE. INSTALL SUPPORTS WITH MAXIMUM SPACINGS COMPLYING WITH MSS SP-69. WHERE PIPING OF VARIOUS SIZES IS SUPPORTED TOGETHER BY TRAPEZE HANGERS, SPACE HANGERS FOR SMALLEST PIPE SIZE OR INSTALL INTERMEDIATE SUPPORTS FOR SMALLER DIAMETER PIPE AS SPECIFIED ABOVE FOR INDIVIDUAL PIPE HANGERS.

3.4 INSTALLATION OF PLUMBING SYSTEM INSULATION: SEE PLUMBING PIPING & EQUIPMENT INSULATION SCHEDULE.

3.5 JOINT SEALER INSTALLATIONS

A. VERIFY ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS TO DETERMINE WHERE ALL PIPING PASSES THROUGH FIRE/SMOKE RATED WALLS, CEILINGS, FLOORS OR OTHER BUILDING ELEMENTS THAT REQUIRE PENETRATIONS TO BE SEALED. INSTALL ALL JOINT SEALERS AS SPECIFIED PER THE MANUFACTURER. ALL JOINT SEALING SYSTEMS SHALL BE U.L. RATED AND INSTALLED IN U.L. LISTED CONFIGURATIONS.

CODE REQUIREMENTS

ALL CONSTRUCTION SHALL FOLLOW THE 2022 CONNECTICUT STATE BUILDING CODE WHICH INCLUDES INTERNATIONAL CODE COUNCIL'S 2021 INTERNATIONAL CODES AND REFERENCES THE ICC A117.1-2017 STANDARD FOR ACCESSIBILITY
THE 2022 SBC ADOPTS AND MODIFIES THE FOLLOWING MODEL CODES.

2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL EXISTING BUILDING CODE
2021 INTERNATIONAL PLUMBING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL ENERGY CONSERVATION CODE
2020 NATIONAL ELECTRICAL CODE (NFPA 70)
2017 ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS & FACILITIES

GENERAL SYMBOLS

1 / P001 — PLAN TITLES
SCALE: 1/8" = 1'-0" (0, 4', 8', 16')
NORTH ARROW

PLUMBING PIPE SYMBOLS

2" DCW	DOMESTIC COLD WATER
2" DHW	DOMESTIC HOT WATER
1/2" DHC	DOMESTIC HOT WATER RECIRCULATION
4" SAN	SANITARY SEWER DRAIN
4" SAN (dashed)	SANITARY SEWER DRAIN BELOW
2" V	VENT

PLUMBING SYMBOLS

ELBOW UP
ELBOW DOWN
TEE
TEE UP
TEE DOWN
HOSE BIBB
CONCENTRIC TRANSITION
ECCENTRIC TRANSITION
END CAP
UNION
BALL VALVE
BUTTERFLY VALVE
CHECK VALVE
GLOBE VALVE
GATE VALVE NRS
GATE VALVE OS&Y
PLUG VALVE LEVER
PRESSURE REGULATING VALVE
PRESSURE RELIEF VALVE
RELIEF VALVE
END OF LINE CLEANOUT
CLEANOUT TO GRADE

GENERAL SYMBOLS

1 / P001 — PLAN TITLES
SCALE: 1/4" = 1'-0" (0, 2', 4', 8')
NORTH ARROW

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET

SHEET TITLE

PLUMBING NOTES & SYMBOLS

DESIGNED BY:	KWK	SCALE:	AS NOTED
DRAWN BY:	BAB	DATE:	06-26-2024
CHECKED BY:	KWK	PROJECT NUMBER:	C26-06
CAD FILE:	BH-P001.dwg		

SEAL

PROGRESS SET NOT FOR CONSTRUCTION

SHEET NUMBER

P001

PLUMBING FIXTURE AND FITTING SCHEDULE					
FIXTURE	DESCRIPTION	MANUFACTURER	FIXTURE or EQUIPMENT	FAUCET or CONTROLS	NOTES, FITTINGS, ACCESSORIES
EWH1	ELECTRIC WATER HEATER	STATE A.O. SMITH (OR EQUAL)	40 GALLON ELECTRIC WATER HEATER; MODEL DEL-40, 4 KW, 208V/1PH/60HZ (OR EQUAL).	PROVIDE WITH HEATGUARD TANK BOOSTER ACTUATED MIXING VALVE. SEE PIPING DIAGRAM, SHEET P101.	PROVIDE WITH ALUMINUM DRAIN PAN 3" LARGER IN DIAMETER THAN WATER HEATER.
EWH2	TANKLESS ELECTRIC WATER HEATER	EEMAX (OR EQUAL)	TANKLESS ELECTRIC WATER HEATER; LAV ADVANTAGE SERIES / MODEL SPEX3208T (OR EQUAL).	ELECTRIC: 208 VOLT, SINGLE PHASE. TEMPERATURE RANGE: 70°F - 140°F. MIN. OPERATING PRESSURE 30 PSI MAX. OPERATING PRESSURE 150 PSI.	MOUNT BELOW FIXTURE BEING SERVED. SEE DOMESTIC PLANS AND RISER DIAGRAMS.
FCO	FLOOR CLEANOUT	TO BE SELECTED BY CONTRACTOR	TO BE SELECTED BY CONTRACTOR	N/A	UNLESS OTHERWISE NOTED, SIZE TO MATCH PIPE SIZE. ACCESS SHALL BE PROVIDED TO ALL CLEANOUTS.
LAV1 (*ADA)	WALL HUNG LAVATORY	AMERICAN STANDARD (OR EQUAL)	LUCERNE VITREOUS CHINA, WALL HUNG LAVATORY WITH FRONT OVERFLOW AND FAUCET LEDGE; MODEL 0355.912 (OR EQUAL).	PROVIDE WITH RELIANT SINGLE CONTROL LAVATORY FAUCET WITH INDEXED METAL LEVER HANDLE, LESS DRAIN AND POP-UP HOLE; MODEL 7385.004.	*ADA COMPLIANT WHEN INSTALLED SO THAT TOP OF FRONT RIM IS 34" FROM FINISHED FLOOR WITH 27" HIGH KNEE CLEARANCE.
MSB	MOP SERVICE BASIN	FIAT PRODUCTS (OR EQUAL)	MOLDED STONE, INTEGRAL DRAIN MOP SERVICE BASIN TO GO; MODEL MSBIDTG2424.	MODEL SPECIFIED INCLUDES 830AA FAUCET, 832AA HOSE & BRACKET, 888CC MOP HANGER BRACKET AND QIC3XH GASKET AND 3" QUICK DRAIN CONNECTOR.	N/A
SK1	SINGLE BOWL SINK	ELKAY (OR EQUAL)	LUSTERTONE 304 STAINLESS STEEL 22"x19-1/2"x5-1/2" SINGLE HOLE, CENTER DRAIN, SINGLE BOWL DROP-IN SINK; MODEL LRAD221955 (OR EQUAL).	PROVIDE WITH ELKAY SINGLE HOLE DECK MOUNT FAUCET WITH GOOSENECK SPOUT & TWIN LEVER HANDLES CHROME; MODEL LKD2223C (OR EQUAL).	PROVIDE WITH ELKAY 3-1/2" DRAIN; TYPE 304 STAINLESS STEEL BODY STRAINER AND TAILPIECE; MODEL LK18B (OR EQUAL).
SK2	SINGLE BOWL SINK	ELKAY (OR EQUAL)	LUSTERTONE 304 STAINLESS STEEL 15"x22"x7-5/8" SINGLE HOLE, CENTER DRAIN, SINGLE BOWL DROP-IN SINK; MODEL LR1522 (OR EQUAL).	PROVIDE WITH ELKAY SINGLE HOLE DECK MOUNT FAUCET WITH GOOSENECK SPOUT & TWIN LEVER HANDLES CHROME; MODEL LKD2223C (OR EQUAL).	PROVIDE WITH ELKAY 3-1/2" DRAIN; TYPE 304 STAINLESS STEEL BODY STRAINER AND TAILPIECE; MODEL LK18B (OR EQUAL).
WC1 (*ADA)	WALL-MOUNT, FLUSH VALVE WATER CLOSET	AMERICAN STANDARD (OR EQUAL)	AFWALL, MILLENIUM FLOWSE, VITREOUS CHINA, DIRECT FED SIPHON JET ACTION, 1.28 GPF FLUSHOMETER TOILET SYSTEM; MODEL 2856.128 (OR EQUAL)	MANUAL PISTON TYPE FLUSH VALVE INCLUDED WITH MODEL SELECTED. PROVIDE WITH AMERICAN STANDARD ELONGATED HEAVY DUTY BOWL OPEN FRONT SEAT LESS COVER; MODEL 5901.100.	*ADA COMPLIANT WHEN INSTALLED SO THAT TOP OF SEAT IS 17 TO 19 INCHES FROM FINISHED FLOOR.

GENERAL NOTE:
CONTRACTOR SHALL VERIFY ALL PLUMBING FIXTURES, FITTINGS, FAUCETS, CONTROLS, ACCESSORIES, ETC. PRIOR TO ORDERING AND INSTALLATION.

PLUMBING FIXTURE CONNECTIONS AND PIPING SCHEDULE (MINIMUM SIZES)				
FIXTURE TYPE OR PIPING:	WASTE (INCHES), NOTE 1	VENT (INCHES), NOTE 2	HOT WATER (INCHES) NOTE 3	COLD WATER (INCHES)
LAVATORY (LAV#)	1 1/2	1 1/2	1/2	1/2
MOP SERVICE BASIN (MSB)	3	1 1/2	1/2	1/2
SINK (SK#)	1 1/2	1 1/2	1/2	1/2
WATER CLOSET (WC#), FLUSH TANK	4	2	N/A	1
UNDERFLOOR (CONCRETE/SUBSOIL) VENT PIPING	N/A	2	N/A	N/A
UNDERFLOOR (CONCRETE/SUBSOIL) WASTE PIPING	4	N/A	N/A	N/A

NOTES:
1. MINIMUM SANITARY SIZE AT FIXTURE WHEN SIZE IS NOT SHOWN ON DRAWINGS.
2. MINIMUM VENT SIZE AT FIXTURE WHEN SIZE IS NOT SHOWN ON DRAWINGS.
3. MINIMUM DOMESTIC WATER SIZE AT FIXTURE WHEN SIZE IS NOT SHOWN ON DRAWINGS.

PLUMBING PIPING MATERIAL SCHEDULE						
PIPING SYSTEM	ABBREVIATION	OPERATING TEMPERATURE (°F) OR PRESSURE (PSI)	SERVICE PRESSURE (PSI)	PIPE DIAMETER, NPS (INCH)	PIPE MATERIAL \ SCHEDULE OR TYPE \ SPECIFICATION	JOINT MATERIAL \ TYPE \ SPECIFICATION
DOMESTIC WATER	DCW, DHW, DHC, DTW, DTC	45 - 200	150	0.5 - 2.0	CPR \ L \ ASTM B88 HARD DRAWN	WC \ SOLDER SOCKET \ ASME B16.22
DOMESTIC WATER	DCW, DHW, DHC, DTW, DTC	45 - 200	150	2.5 - 4.0	CPR \ L \ ASTM B88 HARD DRAWN	WC \ SOLDER SOCKET \ ASME B16.22
DOMESTIC WATER WITHIN 10 FEET OF DOMESTIC WATER HEATERS.	DCW, DHW, DHC, DTW, DTC	45 - 200	150	0.5 - 4.0	CPR \ L \ ASTM B88 HARD DRAWN	WC \ SOLDER SOCKET \ ASME B16.22
SANITARY PIPING	SAN	45 - 140	N/A	1.25 - 8.0	PVC \ 40 \ ASTM D 1784 & D 2665	PVC \ DWV \ ASTM D 1784 & D 2665
VENT PIPING	V	45 - 140	N/A	1.25 - 8.0	PVC \ 40 \ ASTM D 1784 & D 2665	PVC \ DWV \ ASTM D 1784 & D 2665

NOTES
1. VALVE JOINT TYPE INCLUDES OTHER VALVES AND ITEMS NOT SHOWN IN SCHEDULE (I.E. STRAINERS, BALANCING VALVES)
2. DRAWINGS MAY INDICATE DIFFERENT VALVE TYPE. VALVE TYPE SHALL BE AS SHOWN ON DRAWINGS UNLESS OTHERWISE INDICATED.

PIPE MATERIAL SCHEDULE	
CPR	COPPER
PVC	POLYVINYLCHLORIDE

JOINT MATERIAL SCHEDULE	
PVC	POLYVINYLCHLORIDE
WC	WROUGHT COPPER

PLUMBING PIPE SUPPORT SCHEDULE, NOTE 1			
PIPE MATERIAL	PIPE SIZE (IN)	MAX. HORIZONTAL SUPPORT SPACING (FT)	MAX. VERTICAL SUPPORT SPACING (FT)
CPR (COPPER)	1.25 & SMALLER	6	10
CPR (COPPER)	1.5 & LARGER	10	10
PVC (POLYVINYLCHLORIDE)	1.25 & LARGER	4	10, NOTE 2

NOTES:
1. PIPE SUPPORTS BASED ON STRAIGHT RUNS WITH NO VALVES. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED.
2. FOR PIPING 2 INCHES & SMALLER, PROVIDE MID STORY GUIDE.

PLUMBING PIPING & EQUIPMENT INSULATION SCHEDULE														
PIPING SYSTEM, NOTE 1	LOCATION	PIPING TEMP. (°F)	INSULATION THICKNESS BASED ON PIPE DIAMETER (IN), NOTE 2						INSULATION MATERIAL, NOTE 3	K-FACTOR AT A 75°F MEAN TEMP.	JACKET TYPE, NOTE 3	FITTING COVER TYPE	PRODUCT, NOTE 4	MANUFACTURER, NOTE 4
			RUNOUTS <2	<=1	1.0 - 1.25	1.5 - 3.5	4 - 6	>=8						
DOMESTIC COLD WATER	INTERIOR	45 - 60	0.5	0.5	0.5	0.5	0.5	0.5	CLOSED CELL ELASTOMERIC FOAM	0.25	N/A	N/A	AP ARMAFLEX	ARMACELL
HOT WATER	INTERIOR	141 -200	0.5	1.5	1.5	2.0	2.0	2.0	CLOSED CELL ELASTOMERIC FOAM	0.25	N/A	N/A	AP ARMAFLEX	ARMACELL
SANITARY & WASTE	EXTERIOR & COLD SPACES, NOTE 5	N/A	N/A	N/A	1.5	1.5	1.5	1.5	GLASS MINERAL WOOL	0.23	ASJ+	PVC	EARTHWOOL 1000*	KNAUF

NOTES:
1. SEE PIPING SCHEDULE FOR PIPING TYPES.
2. RUNOUTS ARE AREAS WERE PIPING IS RUN IN PARTITIONS WITHIN CONDITIONED SPACES.
3. INSULATION AND JACKET SHALL HAVE A MAXIMUM FLAME SPREAD OF 25 & SMOKE DEVELOPMENT OF 50 PER ASTM E 84.
4. OR EQUAL MANUFACTURERS ARE ACCEPTABLE.
5. CONTRACTOR TO VERIFY ROUTING OF SANITARY AND WASTE PIPING IN AREAS THAT MAY HAVE THE POTENTIAL OF FREEZING. ALL PLUMBING TRAPS LOCATED IN COLD SPACES WITH THE POTENTIAL OF FREEZING SHALL BE HEAT TAPED.

GENERAL DOMESTIC WATER VALVE SCHEDULE									
DESIGNATION, NOTE 2	TYPE	DESCRIPTION	SIZE RANGE NPS (INCH), NOTE 3	BODY MATERIAL	ASME CLASS RATING, NOTE 4	STANDARD	CONNECTION TYPE	MODEL, NOTE 5	MANUFACTURER, NOTE 5
V-BALL	BALL	LEAD FREE TWO PIECE, FULL PORT, BRONZE WITH STAINLESS-STEEL TRIM	0.5 - 3.0	BRONZE	600 PSI CWP	MSS SP-110	SOLDER OR THREADED	S-585-66-LF OR T-585-66-LF	NIBCO
V-CHECK	LIFT CHECK	LEAD FREE BRONZE LIFT CHECK	0.5 - 2.0	BRONZE	200 PSI CWP	MSS SP-139	SOLDER OR THREADED	S-413-Y-LF OR T-413-Y-LF	NIBCO
V-GATE-OS&Y	GATE	LEAD FREE OS&Y EPOXY COATED CAST IRON GATE VALVE	2.5 - 12.0	EPOXY COATED CAST IRON	250 PSI CWP	MSS=SP-70	FLANGED	SERIES 408-OSYRW	WATTS
V-GLOBE	GLOBE	BRONZE GLOBE VALVE WITH NONMETALLIC TFE DISC & UNION BONNET	0.5 - 3.0	BRONZE	125	MSS SP-80	SOLDER OR THREADED	S-235-Y OR T-235-Y	NIBCO
V-STR	Y-STRAINER	WYE PATTERN LEAD FREE BRONZE STRAINER	0.5 - 4.0	BRONZE	CLASS 125	N/A	SOLDER OR THREADED	LF777S OR LFS777S	WATTS

NOTES:
1. SEE PIPING SCHEDULE SYSTEM TYPES AND ABBREVIATIONS.
2. IF DRAWING DOES NOT INDICATE DESIGNATION USE VALVE SYMBOL FOR TYPE.
3. ALL VALVE SIZES SHALL MATCH CONNECTED PIPE SIZE UNLESS OTHERWISE NOTED.
4. DEFINITIONS, CWP-COLD WORKING PRESSURE.
5. OR EQUAL VALVE TYPES AND MANUFACTURERS ARE ACCEPTABLE.

GENERAL SYMBOLS

1 / P001 PLAN TITLES

SCALE: 1/4" = 1'-0" 0 2' 4' 8'

NORTH ARROW

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET

SHEET TITLE

PLUMBING SCHEDULES

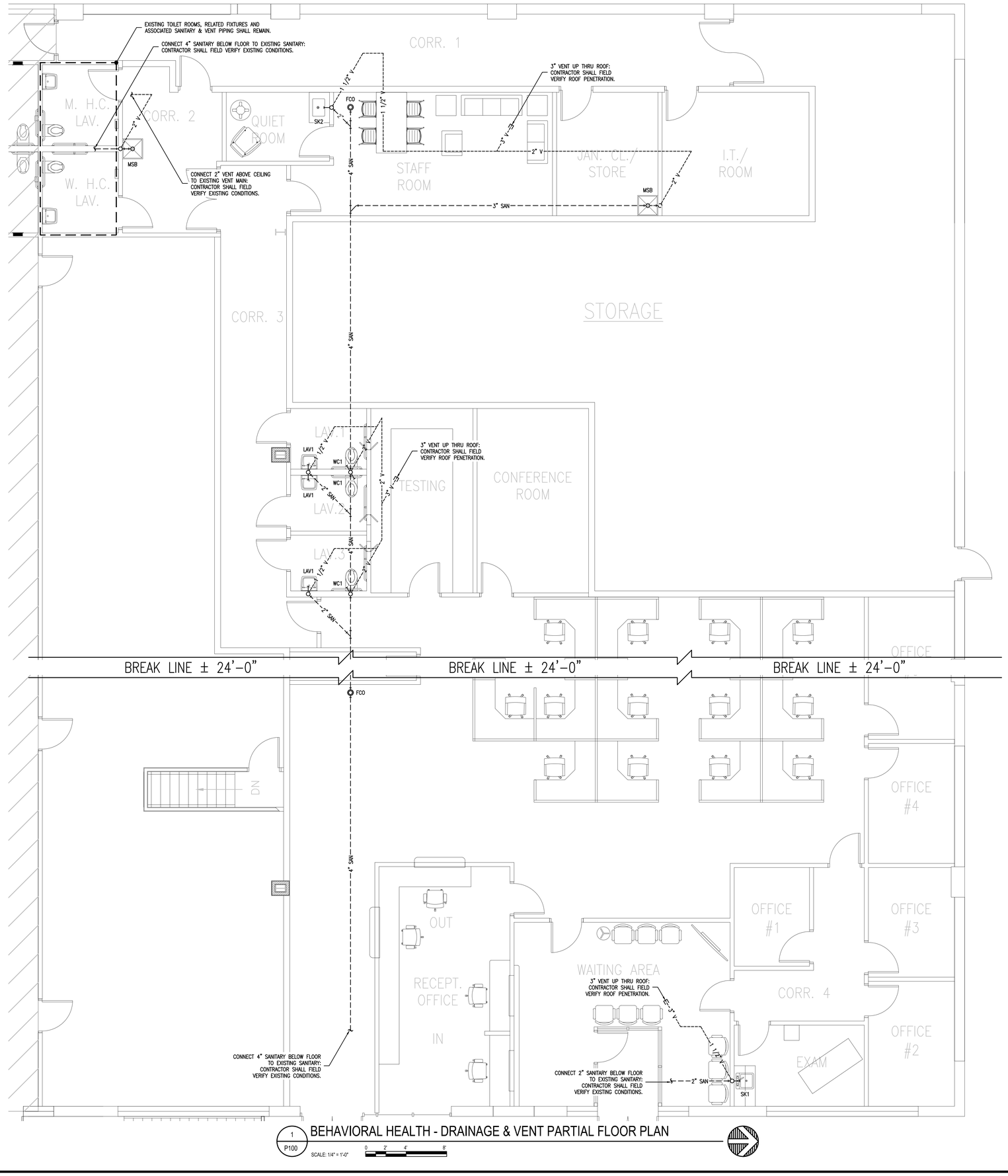
DESIGNED BY:	KWK	SCALE:	AS NOTED
DRAWN BY:	BAB	DATE:	06-26-2024
CHECKED BY:	KWK	PROJECT NUMBER:	C26-06
CAD FILE:			BH-P001.dwg

SEAL

PROGRESS SET NOT FOR CONSTRUCTION

SHEET NUMBER

P002



1 P100 BEHAVIORAL HEALTH - DRAINAGE & VENT PARTIAL FLOOR PLAN

SCALE: 1/4" = 1'-0" 0 2' 4' 8'

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REVISIONS

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Prepared For:

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46 ALBION STREET

SHEET TITLE

PLUMBING PARTIAL FLOOR PLAN

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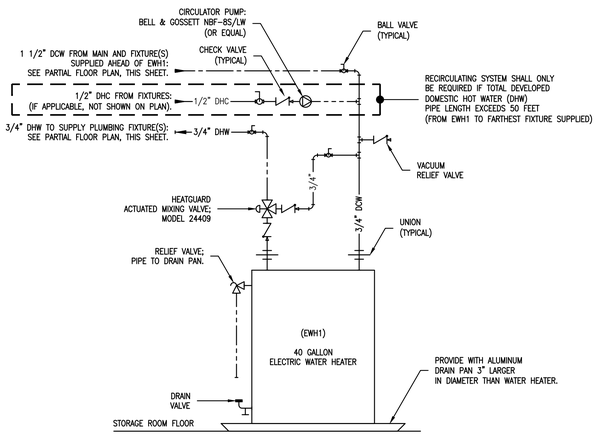
DRAWN BY:	BAB	DATE:	06-26-2024
CHECKED BY:	KWK	PROJECT NUMBER:	C26-06
CAD FILE:			BH-P100.dwg

SEAL

PROGRESS SET NOT FOR CONSTRUCTION

SHEET NUMBER

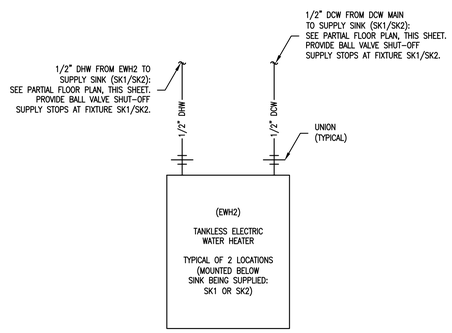
P100



PIPING RISER DIAGRAM
ELECTRIC WATER HEATER (EWH1)

1 / P101

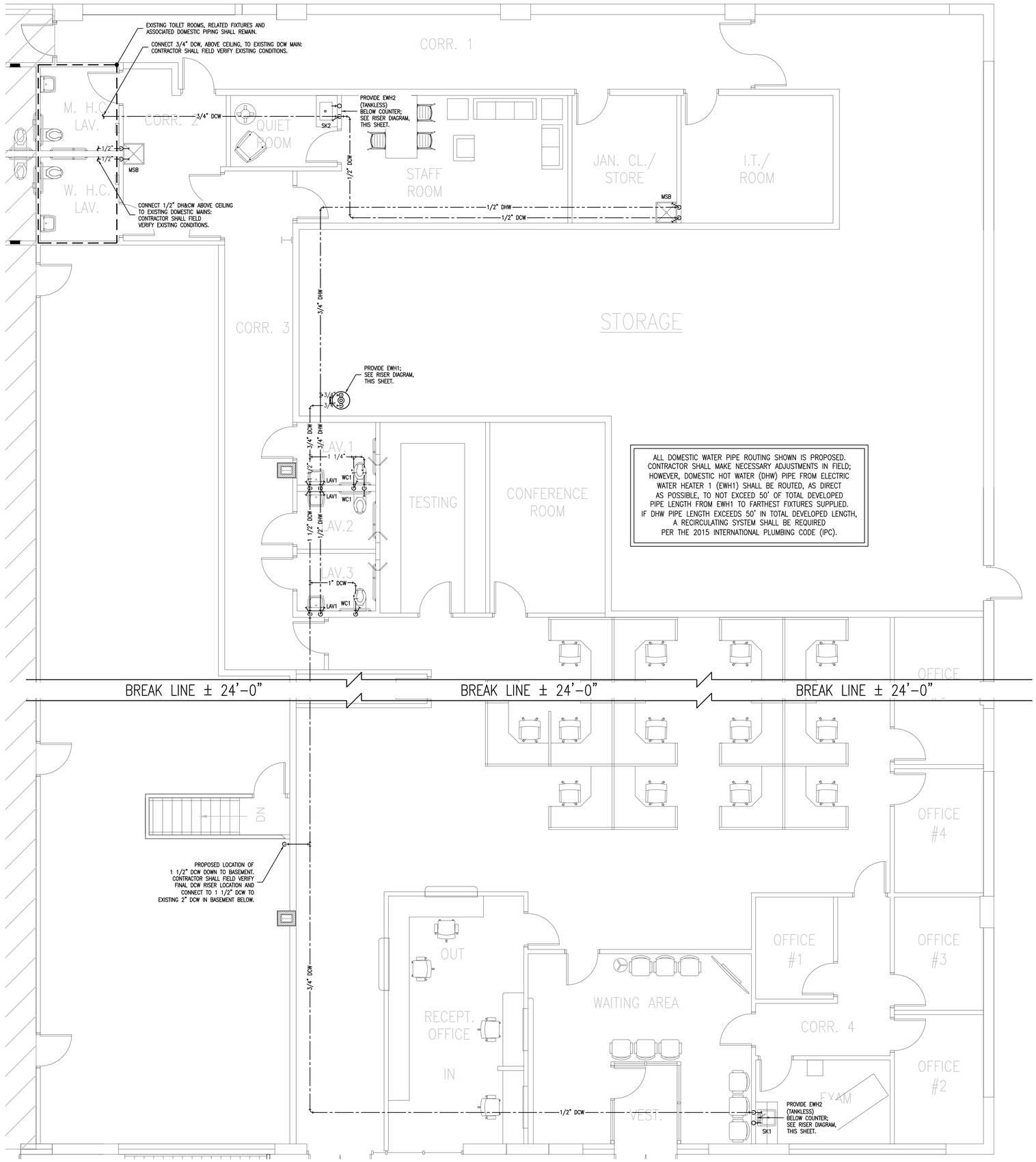
NO SCALE



PIPING RISER DIAGRAM
TANKLESS ELECTRIC WATER HEATER (EWH2)

2 / P101

NO SCALE



ALL DOMESTIC WATER PIPE ROUTING SHOWN IS PROPOSED. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS IN FIELD; HOWEVER, DOMESTIC HOT WATER (DHW) PIPE FROM ELECTRIC WATER HEATER 1 (EWH1) SHALL BE ROUTED, AS DIRECT AS POSSIBLE, TO NOT EXCEED 50' OF TOTAL DEVELOPED PIPE LENGTH FROM EWH1 TO FARTHEST FIXTURES SUPPLIED. IF DHW PIPE LENGTH EXCEEDS 50' IN TOTAL DEVELOPED LENGTH, A RECIRCULATING SYSTEM SHALL BE REQUIRED PER THE 2015 INTERNATIONAL PLUMBING CODE (IPC).

BEHAVIORAL HEALTH - DOMESTIC WATER PARTIAL FLOOR PLAN

3 / P101

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

0 2' 4' 8'

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PLUMBING
PARTIAL FLOOR PLAN

DESIGNED BY:	KWK	SCALE:	AS NOTED
DRAWN BY:	BAB	DATE:	06-26-2024
CHECKED BY:	KWK	PROJECT NUMBER:	C26-06
CAD FILE:			BH-P100.dwg

SEAL

PROGRESS SET
NOT FOR CONSTRUCTION

SHEET NUMBER

P101

GENERAL NOTES

1. PROJECT SCOPE: PROVIDE COMPLETE AND OPERATIONAL SYSTEMS AS OUTLINED IN THE CONTRACT DOCUMENTS INCLUDING ALL NECESSARY MATERIAL, LABOR, AND EQUIPMENT.
2. CONSTRUCTION/CONTRACT DOCUMENTS: CONTRACT DOCUMENTS INCLUDING PLANS, DETAILS, AND ONE-LINE DIAGRAMS SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE WORK. THESE DOCUMENTS ARE DIAGRAMMATIC AND DO NOT SHOW ALL CONNECTORS, FITTINGS, HANGERS, AND ADDITIONAL ELEMENTS WHICH THE CONTRACTOR MUST PROVIDE TO COMPLETE THE SYSTEMS AS OUTLINED IN THE CONTRACT DOCUMENTS. PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCE'S AND CONDITIONS, VISIBLE AND/OR HIDDEN, THAT MAY EXIST, THUS REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE PROJECT AREA BEFORE PERFORMING THE WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BY FIELD MEASUREMENTS.
3. COORDINATION:
   A) THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL CONSTRUCTION DOCUMENTS AND OTHER TRADES ASSOCIATED WITH THE PROJECT.
   B) THE CONTRACTOR SHALL VISIT THE SITE OF WORK AND FAMILIARIZE HIMSELF WITH ALL AVAILABLE INFORMATION CONCERNING THE NATURE OF THE INSTALLATION AND CONDITIONS.
   C) BEFORE SELECTING MATERIAL, EQUIPMENT AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT, CLEARANCES AND INTERCONNECTIONS.
   D) PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCE'S AND CONDITIONS, VISIBLE AND/OR HIDDEN THAT MAY EXIST; THUS, REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE SPACE BEFORE PERFORMING THE WORK.
   E) BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
   F) ARRANGE FOR CHASES, SLOTS, AND OPENINGS IN OTHER BUILDING COMPONENTS DURING PROGRESS OF CONSTRUCTION, TO ALLOW FOR PROPER SYSTEM INSTALLATIONS.
   G) COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES AND SLEEVES TO BE SET IN POURED IN PLACE CONCRETE AND OTHER STRUCTURAL COMPONENTS, AS THEY ARE CONSTRUCTED.
   H) SEQUENCE, COORDINATE, AND INTEGRATE INSTALLATIONS OF MATERIALS AND EQUIPMENT FOR EFFICIENT FLOW OF THE WORK. GIVE PARTICULAR ATTENTION TO LARGE EQUIPMENT REQUIRING POSITIONING PRIOR TO CLOSING IN THE BUILDING.
   I) FAILURE OF THE CONTRACTOR TO ACQUAINT HIMSELF WITH ALL AVAILABLE INFORMATION CONCERNING THE ABOVE CONDITIONS AND NOT PERFORMING PROPER COORDINATION WILL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR ESTIMATING THE DIFFICULTIES AND COSTS FOR SUCCESSFULLY PERFORMING THE COMPLETE WORK UNDER THIS PROJECT.
4. SHUTDOWNS: WRITTEN REQUESTS FOR APPROVAL FOR PLANNED SHUTDOWNS OR INTERRUPTION OF OWNER'S UTILITIES, SYSTEMS AND EQUIPMENT SHALL BE MADE 72 HOURS PRIOR TO THE START OF THE REQUESTED SHUTDOWN PERIODS.
5. CODES AND STANDARDS: THE CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL CODES THAT HAVE JURISDICTION WHERE THE WORK IS BEING PERFORMED. THROUGHOUT THE CONTRACT DOCUMENTS CERTAIN CODES AND STANDARDS ARE REFERENCED. THE CONTRACTOR SHALL USE THE LATEST VERSIONS OF CODES AND STANDARDS REFERENCED UNLESS OTHERWISE NOTED. IF THE CONTRACTOR IS NOT FAMILIAR WITH THE REFERENCED STANDARD THEY SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR DIRECTION.
6. PERMITS: THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL GOVERNING AUTHORITIES.
7. WORKMAN: ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL GOVERNING AUTHORITIES CODES AND REGULATIONS.
8. SUBMITTALS: THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL EQUIPMENT AND MATERIALS BEING PROVIDED BEFORE SUCH EQUIPMENT AND MATERIALS ARE PURCHASED AND INSTALLED. THE SUBMITTALS SHALL BE REVIEWED AND RETURNED BY THE OWNER'S REPRESENTATIVE WITH APPROPRIATE COMMENTS. SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT AND WILL BE RETURNED WITH COMMENTS TO THE CONTRACTOR IN PDF FORMAT.
9. AS-BUILT DOCUMENTATION: THE CONTRACTOR SHALL PROVIDE ONE MARK-UP SET OF CONSTRUCTION DOCUMENTS SHOWING FINAL AS-BUILT CONDITIONS. DOCUMENTS SHALL CLEARLY SHOW THE CHANGES MADE TO THE INSTALLED SYSTEMS.
10. EQUIPMENT WARRANTIES, MAINTENANCE MANUALS AND INSTALLATION MANUALS: TURN OVER TO THE OWNER ALL MANUFACTURERS' WARRANTIES, MAINTENANCE MANUALS, AND INSTALLATION MANUALS FOR EQUIPMENT AND MATERIALS PROVIDED.
11. PHOTOGRAPHS: PHOTOGRAPHS ARE PROVIDED TO SHOW CURRENT CONDITION OF BUILDING SYSTEMS TO ASSIST THE CONTRACTOR. PHOTOGRAPHS DO NOT SHOW ALL AREAS OF THE BUILDING OR ALL SYSTEM CONDITIONS, THUS REQUIRING THE CONTRACTOR TO VISIT THE SITE BEFORE PERFORMING WORK. PHOTOGRAPHS ARE NOT INTENDED TO SHOW SCOPE OF WORK. PLANS, NOTES, SPECIFICATIONS AND OTHER BID DOCUMENTS INDICATE SCOPE OF WORK.
12. TERMINOLOGY:
   A) THE TERM "INDICATED" SHALL MEAN, "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS, AND RELATED ATTACHMENTS)".
   B) THE TERM "PROVIDE" SHALL MEAN, "TO FURNISH, INSTALL, AND CONNECT COMPLETELY".
   C) THE TERM "COORDINATE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "TO MANAGE, INTERFACE, COMMUNICATE, MAKE ARRANGEMENT, BRING INTO ORDER, ADMINISTER AND HANDLE COMPLETELY".
   D) THE TERM "INTERIOR" IS AN INTERIOR LOCATION WHERE ITS ENVIRONMENT IS HEATED AND/OR AIR CONDITIONED AND NOT SUBJECT TO OUTSIDE WEATHER CONDITIONS.
   E) THE TERM "EXTERIOR" IS ALL LOCATIONS, WHICH ARE NOT INTERIOR, OR UNDERGROUND.
   F) THE TERM "INTERIOR FINISHED SPACE" IS INTERIOR SPACES, WHICH ARE USED FOR OFFICES, CORRIDORS, LOBBIES, TOILETS, STORAGE AND FILING ROOMS, LOUNGES, MECHANICAL ROOMS, ELECTRICAL ROOMS, ETC.
13. DEMOLITION: DEMOLITION OF INDICATED ITEMS INCLUDES THE REMOVAL AND PROPER DISPOSAL OF THOSE ITEMS AND ALL ASSOCIATED PIPING, DUCTWORK, WIRING AND HANGERS. ELECTRICAL BRANCH, CONTROL, TELEPHONE, AND ALARM WIRING SHALL BE REMOVED BACK TO PANELBOARDS OR RELATED SYSTEM PANELS OR BACKBOARDS.
14. EQUIPMENT AND MATERIAL INSTALLATIONS:
   A) ALL EQUIPMENT AND MATERIALS SHALL BE LABELED AND LISTED, AND INSTALLED IN ACCORDANCE WITH THEIR LISTING AND MANUFACTURER'S REQUIREMENTS.
   B) WHEN A MANUFACTURER RECOMMENDS AN OPTION OR ACCESSORY ITEM FOR THE INSTALLED CONDITION, OPERATION, OR ENVIRONMENT THAT IS TO BE EXPERIENCED, SUCH ITEM SHALL BE SUPPLIED AT NO ADDITIONAL COST TO THE OWNER.
   C) IF AN EQUIPMENT MANUFACTURER REQUIRES LARGER CAPACITY, CIRCUITRY AND/OR EQUIPMENT, THE CONTRACTOR SHALL PROVIDE SUCH CAPACITY AND/OR EQUIPMENT UNDER HIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER.
   D) LOCATE ALL EQUIPMENT, WHICH REQUIRES SERVICING IN FULLY ACCESSIBLE POSITIONS. IF REQUIRED FOR BETTER ACCESSIBILITY, FURNISH ACCESS DOORS FOR THAT PURPOSE.
   E) MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ALLOW FOR BETTER ACCESSIBILITY.
   F) ALL WORK IN INTERIOR FINISHED SPACES SHALL BE CONCEALED BEHIND WALLS, ABOVE CEILINGS OR HUNG CEILINGS, OR UNDER THE FLOOR. PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAINTING AND/OR REPLACEMENT OF CEILING TILES AS REQUIRED TO PERFORM WORK.
   G) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO CONFORM WITH APPROVED SUBMITTAL DATA, INCLUDING COORDINATION DRAWINGS (IF REQUIRED), TO GREATEST EXTENT POSSIBLE. CONFORM TO ARRANGEMENTS INDICATED BY THE CONTRACT DOCUMENTS, RECOGNIZING THAT PORTIONS OF THE WORK ARE SHOWN ONLY IN DIAGRAMMATIC FORM. WHERE COORDINATION REQUIREMENTS CONFLICT WITH INDIVIDUAL SYSTEM REQUIREMENTS, REFER CONFLICT TO THE ARCHITECT/ENGINEER.
   H) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, WHERE INSTALLED EXPOSED IN FINISHED SPACES
   I) INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.
   J) INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT GIVING RIGHT OF WAY PRIORITY TO SYSTEMS REQUIRED TO BE INSTALLED AT A SPECIFIED SLOPE.
   K) WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE.
   L) ASCERTAIN FROM EXAMINATION OF THE DRAWINGS, ANY SPECIAL TEMPORARY OPENINGS IN THE BUILDING REQUIRED FOR THE ADMISSION OF APPARATUS PROVIDED UNDER THIS DIVISION. NOTIFY THE CONTRACTOR WITH SUFFICIENT NOTICE TO PROVIDE THESE OPENINGS. IN THE EVENT OF FAILURE TO GIVE SUFFICIENT NOTICE, THE CONTRACTOR SHALL ASSUME ALL COSTS OF PROVIDING SUCH OPENINGS THEREAFTER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISASSEMBLY AND ASSEMBLY OF EQUIPMENT AS REQUIRED TO PLACE EQUIPMENT IN THEIR FINAL LOCATIONS.
   M) BEFORE TRENCHING OR DIGGING, CONTACT THE UTILITY COMPANIES BY CALLING THE "CALL BEFORE YOU DIG" SERVICE AT 1-800-922-4455 FOR CONNECTICUT OR "DIG SAFE" AT 1-800-322-4844 FOR MASSACHUSETTS FOR INFORMATION REGARDING THE LOCATION OF UNDERGROUND UTILITIES. DO NOT RELY ON CONTRACT SITE AND BUILDING DRAWINGS FOR UTILITY INFORMATION AS THEY ARE SCHEMATIC IN NATURE AND DO NOT SHOW EXACT INFORMATION OR ALL UTILITY LINES THAT MAY BE PRESENT.
15. FIRE RATINGS: THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS FOR FIRE SEPARATION AND FIRE RATED ASSEMBLIES. ALL PIPING, DUCTWORK AND CONDUITS PASSING THROUGH OR PENETRATING WALLS, CEILINGS AND FLOORS SHALL BE PROVIDED WITH A UL LISTED FIRE STOPPING ASSEMBLY. UL LISTED FIRE STOPPING ASSEMBLIES SHALL BE SUITABLE FOR THE CONDITIONS ENCOUNTERED AND SHALL BE RATED EQUAL TO THE RATING OF THE WALL, CEILING OR FLOOR. REVIEW FIRE RATED ASSEMBLIES THAT ALLOW PENETRATIONS OF ITEMS SUCH AS OUTLET BOXES AND CONDUITS THAT DO NOT REQUIRE FIRE STOPPING. SPACE AND POSITION THESE DEVICES AS ALLOWED PER THE ASSEMBLY'S UL RATING.
16. SERVICE LABELING: LABEL EQUIPMENT, PIPING, CONDUITS, INCLUDING FANS, AIR HANDLERS, TERMINAL UNITS, PANELBOARDS, ETC. WITH LABELS MADE OF SELF-STICKING, PLASTIC FILM DESIGNED FOR PERMANENT INSTALLATION. LABELS SHALL MATCH DESIGNATIONS AS INDICATED ON CONTRACT DRAWINGS. IDENTIFY PIPING AND CONDUITS IN ACCORDANCE WITH OSHA 29 CFR 1910.144, EXCEPT THAT LABELS OR TAPES MAY BE USED IN LIEU OF PAINTING OR STENCILING. SPACING OF IDENTIFICATION MARKING ON RUNS SHALL NOT EXCEED 50 FEET. MATERIALS FOR LABELS AND TAPES SHALL CONFORM TO CID A-A-1689, AND SHALL BE GENERAL PURPOSE TYPE AND COLOR CLASS.
   A) IN ADDITION IDENTIFY SERVICES AS INDICATED BELOW:
   B) EACH POINT OF ENTRY AND EXIT OF PIPE OR CONDUITS PASSING THROUGH WALLS.
   C) EACH CHANGE IN DIRECTION, I.E., ELBOWS, TEES.
   D) IN CONGESTED OR HIDDEN AREAS AND AT ALL ACCESS PANELS AT EACH POINT REQUIRED TO CLARIFY SERVICE OR INDICATED HAZARD.
   E) IN LONG STRAIGHT RUNS, LOCATE LABELS AT DISTANCES WITHIN EYESIGHT OF EACH OTHER NOT TO EXCEED 50 FEET. ALL LABELS SHALL BE VISIBLE AND LEGIBLE FROM THE PRIMARY SERVICE AND OPERATING AREA.
17. MANUFACTURER'S NAMEPLATES: EACH ITEM OF EQUIPMENT SHALL HAVE A NAMEPLATE BEARING THE MANUFACTURER'S NAME, ADDRESS, MODEL NUMBER, AND SERIAL NUMBER SECURELY AFFIXED IN A CONSPICUOUS PLACE; THE NAMEPLATE OF THE DISTRIBUTING AGENT WILL NOT BE ACCEPTABLE.
18. POSTED OPERATING INSTRUCTIONS: PROVIDE FOR EACH SYSTEM AND PRINCIPAL ITEM OF EQUIPMENT AS SPECIFIED FOR USE BY OPERATION AND MAINTENANCE PERSONNEL. PRINT OR ENGRAVE OPERATING INSTRUCTIONS AND FRAME UNDER GLASS OR IN APPROVED LAMINATED PLASTIC. POST INSTRUCTIONS WHERE DIRECTED. FOR OPERATING INSTRUCTIONS EXPOSED TO THE WEATHER, PROVIDE WEATHER-RESISTANT MATERIALS OR WEATHERPROOF ENCLOSURES. OPERATING INSTRUCTIONS SHALL NOT FADE WHEN EXPOSED TO SUNLIGHT AND SHALL BE SECURED TO PREVENT EASY REMOVAL OR PEELING. THE OPERATING INSTRUCTIONS SHALL INCLUDE THE FOLLOWING:
   A) WIRING DIAGRAMS, CONTROL DIAGRAMS, AND CONTROL SEQUENCE FOR EACH PRINCIPAL SYSTEM AND ITEM OF EQUIPMENT.
   B) START UP, PROPER ADJUSTMENT, OPERATING, LUBRICATION, AND SHUTDOWN PROCEDURES.
   C) SAFETY PRECAUTIONS.
   D) THE PROCEDURE IN THE EVENT OF EQUIPMENT FAILURE.
   E) OTHER ITEMS OF INSTRUCTION AS RECOMMENDED BY THE MANUFACTURER OF EACH SYSTEM OR ITEM OF EQUIPMENT.
19. WARNING SIGNS: PROVIDE WARNING SIGNS FOR THE ENCLOSURES OF ELECTRICAL EQUIPMENT INCLUDING SUBSTATIONS, PAD-MOUNTED TRANSFORMERS, PAD-MOUNTED SWITCHES, GENERATORS, AND SWITCHGEAR HAVING A NOMINAL RATING EXCEEDING 600 VOLTS.
20. EXTERIOR FERROUS MATERIALS: ALL EXTERIOR FERROUS MATERIALS SHALL BE PROTECTED FROM CORROSION BY ONE OF THE FOLLOWING METHODS:
   A) COVERED WITH A NON-FERROUS OR NON-CORRODING MATERIAL.
   B) MATERIALS THAT ARE INSULATED ON THE EXTERIOR.
   C) MATERIALS THAT ARE GALVANIZED.
   D) MATERIALS THAT ARE PAINTED. EXTERIOR PAINTING SHALL CONSIST OF A BASE COAT OF AN APPROPRIATE PRIMER AND TWO COATS OF FINAL PAINT. FINAL PAINT COLOR SHALL BE SELECTED BY THE OWNER'S REPRESENTATIVE.

CODE REQUIREMENTS

ALL CONSTRUCTION SHALL FOLLOW THE 2022 CONNECTICUT STATE BUILDING CODE WHICH INCLUDES INTERNATIONAL CODE COUNCIL'S 2021 INTERNATIONAL CODES AND REFERENCES THE ICC A117.1-2017 STANDARD FOR ACCESSIBILITY
THE 2022 SBC ADOPTS AND MODIFIES THE FOLLOWING MODEL CODES.

2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL EXISTING BUILDING CODE
2021 INTERNATIONAL PLUMBING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL RESIDENTIAL CODE
2021 INTERNATIONAL ENERGY CONSERVATION CODE
2021 INTERNATIONAL SWIMMING POOL AND SPA CODE
2020 NATIONAL ELECTRICAL CODE (NFPA 70)
2017 ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS & FACILITIES

GENERAL SYMBOLS

PLAN TITLES
A / A8 — SCALE: 1/8" = 1'-0"
0 4' 8' 16'

A / A8 — SECTION MARKERS

NORTH ARROW

DUCTWORK SYMBOLS

12Ø — DOUBLE LINE ROUND DUCT (DIMENSIONS IN INCHES)
24x12 — DOUBLE LINE RECTANGULAR DUCT, FIRST NUMBER IS VIEW SIZE, SECOND NUMBER IS DEPTH SIZE (DIMENSIONS IN INCHES)
8Ø — FLEX DUCT WITH SIZE (DIMENSIONS INCHES)
SUPPLY UP OR DN
RETURN DUCT UP OR DN
EXHAUST DUCT UP OR DN
MANUAL BALANCING DAMPER
SLF4P-6x6-200 — SUPPLY DIFFUSER WITH DESIGNATION, NECK SIZE & CFM
RPF24T-6-200 — RETURN GRILLE WITH DESIGNATION, NECK SIZE & CFM
SLF4P-6x6-200 OR RPF24T-6-200 — SUPPLY OR RETURN GRILLE WITH DESIGNATION, NECK SIZE & CFM
EPF24T-6-75 — EXHAUST GRILLE WITH DESIGNATION, NECK SIZE & CFM

CONTROL SYMBOLS

T — THERMOSTAT

DUCTWORK SPECIFICATION

PART 1 GENERAL

1.1 QUALITY ASSURANCE: EXCEPT AS OTHERWISE SPECIFIED, APPROVAL OF MATERIALS AND EQUIPMENT IS BASED ON MANUFACTURER'S PUBLISHED DATA.

A. WHERE MATERIALS AND EQUIPMENT ARE SPECIFIED TO CONFORM TO THE STANDARDS OF THE UNDERWRITERS LABORATORIES, THE LABEL OF OR LISTING WITH REEXAMINATION IN UL BLD MAT DIR, AND UL 6 IS ACCEPTABLE AS SUFFICIENT EVIDENCE THAT THE ITEMS CONFORM TO UNDERWRITERS LABORATORIES REQUIREMENTS. IN LIEU OF SUCH LABEL OR LISTING, SUBMIT A WRITTEN CERTIFICATE FROM ANY NATIONALLY RECOGNIZED TESTING AGENCY, ADEQUATELY EQUIPPED AND COMPETENT TO PERFORM SUCH SERVICES, STATING THAT THE ITEMS HAVE BEEN TESTED AND THAT THE UNITS CONFORM TO THE SPECIFIED REQUIREMENTS. OUTLINE METHODS OF TESTING USED BY THE SPECIFIED AGENCIES.

B. WHERE MATERIALS OR EQUIPMENT ARE SPECIFIED TO BE CONSTRUCTED OR TESTED, OR BOTH, IN ACCORDANCE WITH THE STANDARDS OF THE ASTM INTERNATIONAL (ASTM), THE ASME INTERNATIONAL (ASME), OR OTHER STANDARDS, A MANUFACTURER'S CERTIFICATE OF COMPLIANCE OF EACH ITEM IS ACCEPTABLE AS PROOF OF COMPLIANCE.

C. CONFORMANCE TO SUCH AGENCY REQUIREMENTS DOES NOT RELIEVE THE ITEM FROM COMPLIANCE WITH OTHER REQUIREMENTS OF THESE SPECIFICATIONS.

PART 2 PRODUCTS

2.1 DUCT SYSTEMS

2.1.1 METAL DUCTWORK: PROVIDE METAL DUCTWORK CONSTRUCTION, INCLUDING ALL FITTINGS AND COMPONENTS, THAT COMPLIES WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE", AS SUPPLEMENTED AND MODIFIED BY THIS SPECIFICATION.

A. PROVIDE RADIUS TYPE ELBOWS WITH A CENTERLINE RADIUS OF 1.5 TIMES THE WIDTH OR DIAMETER OF THE DUCT WHERE SPACE PERMITS. OTHERWISE, ELBOWS HAVING A MINIMUM RADIUS EQUAL TO THE WIDTH OR DIAMETER OF THE DUCT OR SQUARE ELBOWS WITH FACTORY FABRICATED TURNING VANES ARE ALLOWED.

B. PROVIDE SEALANTS THAT ARE SUITABLE FOR THE RANGE OF AIR DISTRIBUTION AND AMBIENT TEMPERATURES TO WHICH IT IS EXPOSED. DO NOT USE PRESSURE SENSITIVE TAPE AS A SEALANT.

C. MAKE SPIRAL LOCK SEAM DUCT, AND FLAT OVAL WITH DUCT SEALANT AND LOCK WITH NOT LESS THAN 3 EQUALLY SPACED DRIVE SCREWS OR OTHER APPROVED METHODS INDICATED IN SMACNA "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE". APPLY THE SEALANT TO THE EXPOSED MALE PART OF THE FITTING COLLAR SO THAT THE SEALER IS ON THE INSIDE OF THE JOINT AND FULLY PROTECTED BY THE METAL OF THE DUCT FITTING. APPLY ONE BRUSH COAT OF THE SEALANT OVER THE OUTSIDE OF THE JOINT TO AT LEAST 2 INCH BAND WIDTH COVERING ALL SCREW HEADS AND JOINT GAP. DENTS IN THE MALE PORTION OF THE SLIP FITTING COLLAR ARE NOT ACCEPTABLE. FABRICATE OUTDOOR AIR INTAKE DUCTS AND PLENUMS WITH WATERTIGHT SOLDERED OR BRAZED JOINTS AND SEAMS.

2.1.2 INSULATED NONMETALLIC FLEXIBLE DUCT RUNOUTS: USE FLEXIBLE DUCT RUNOUTS ONLY WHERE INDICATED. RUNOUT LENGTH IS INDICATED ON THE DRAWINGS, AND IS NOT TO EXCEED 5 FEET. PROVIDE RUNOUTS THAT ARE PREINSULATED, FACTORY FABRICATED, AND THAT COMPLY WITH NFPA 90A AND UL 181. PROVIDE EITHER FIELD OR FACTORY APPLIED VAPOR BARRIER. PROVIDE NOT LESS THAN 20 OUNCE GLASS FABRIC DUCT CONNECTORS COATED ON BOTH SIDES WITH NEOPRENE. WHERE COIL INDUCTION OR HIGH VELOCITY UNITS ARE SUPPLIED WITH VERTICAL AIR INLETS, USE A STREAMLINED, VANED AND MITERED ELBOW TRANSITION PIECE FOR CONNECTION TO THE FLEXIBLE DUCT OR HOSE. PROVIDE A DIE-STAMPED ELBOW AND NOT A FLEXIBLE CONNECTOR AS THE LAST ELBOW TO THESE UNITS OTHER THAN THE VERTICAL AIR INLET TYPE. INSULATED FLEXIBLE CONNECTORS ARE ALLOWED AS RUNOUTS. PROVIDE INSULATED MATERIAL AND VAPOR BARRIER THAT CONFORM TO THE REQUIREMENTS OF SECTION 23 07 00 THERMAL INSULATION FOR MECHANICAL SYSTEMS. DO NOT EXPOSE THE INSULATION MATERIAL SURFACE TO THE AIR STREAM.

2.1.3 GENERAL SERVICE DUCT CONNECTORS: PROVIDE A FLEXIBLE DUCT CONNECTOR APPROXIMATELY 6 INCHES IN WIDTH WHERE SHEET METAL CONNECTIONS ARE MADE TO FANS OR WHERE DUCTS OF DISSIMILAR METALS ARE CONNECTED. FOR ROUND/OVAL DUCTS, SECURE THE FLEXIBLE MATERIAL BY STAINLESS STEEL OR ZINC-COATED, IRON CLINCH-TYPE DRAW BANDS. FOR RECTANGULAR DUCTS, INSTALL THE FLEXIBLE MATERIAL LOCKED TO METAL COLLARS USING NORMAL DUCT CONSTRUCTION METHODS. PROVIDE A COMPOSITE CONNECTOR SYSTEM THAT COMPLIES WITH NFPA 701 AND IS CLASSIFIED AS "FLAME-RETARDED FABRICS" IN UL BLD MAT DIR.

PART 3 EXECUTION

3.1 GENERAL: SEE DUCTWORK SCHEDULE FOR SYSTEM MATERIALS, PRESSURE CLASSIFICATIONS AND SEALANT REQUIREMENTS.

3.2 INSTALLATION

A. INSTALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS AND APPROVED MANUFACTURER'S INSTALLATION INSTRUCTIONS. ACCOMPLISH INSTALLATION BY WORKERS SKILLED IN THIS TYPE OF WORK. PERFORM INSTALLATION SO THAT THERE IS NO DEGRADATION OF THE DESIGNED FIRE RATINGS OF WALLS, PARTITIONS, CEILINGS, AND FLOORS.

B. NO INSTALLATION IS PERMITTED TO BLOCK OR OTHERWISE IMPEDE ACCESS TO ANY EXISTING MACHINE OR SYSTEM. INSTALL ALL HINGED DOORS TO SWING OPEN A MINIMUM OF 120 DEGREES. PROVIDE AN AREA IN FRONT OF ALL ACCESS DOORS THAT CLEARS A MINIMUM OF 3 FEET. IN FRONT OF ALL ACCESS DOORS TO ELECTRICAL CIRCUITS, CLEAR THE AREA THE MINIMUM DISTANCE TO ENERGIZED CIRCUITS AS SPECIFIED IN OSHA STANDARDS, PART 1910.333 (ELECTRICAL-SAFETY RELATED WORK PRACTICES)AND AN ADDITIONAL 3 FEET.

3.2.2 FLEXIBLE DUCT

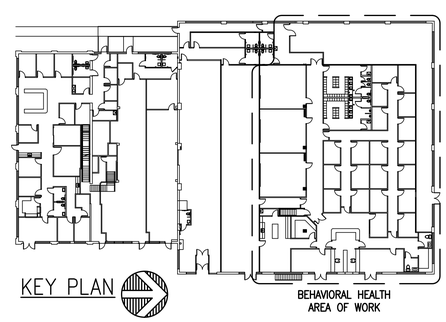
INSTALL PRE-INSULATED FLEXIBLE DUCT IN ACCORDANCE WITH THE LATEST PRINTED INSTRUCTIONS OF THE MANUFACTURER TO ENSURE A VAPOR TIGHT JOINT. PROVIDE HANGERS, WHEN REQUIRED TO SUSPEND THE DUCT, OF THE TYPE RECOMMENDED BY THE MANUFACTURER AND SET AT THE INTERVALS RECOMMENDED.

3.2.3 METAL DUCTWORK: INSTALL ACCORDING TO SMACNA "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE" UNLESS OTHERWISE INDICATED. INSTALL DUCT SUPPORTS FOR SHEET METAL DUCTWORK ACCORDING TO SMACNA "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE", UNLESS OTHERWISE SPECIFIED. DO NOT USE FRICTION BEAM CLAMPS INDICATED IN SMACNA. ANCHOR RISERS ON HIGH VELOCITY DUCTS IN THE CENTER OF THE VERTICAL RUN TO ALLOW ENDS OF RISER TO MOVE DUE TO THERMAL EXPANSION. ERECT SUPPORTS ON THE RISERS THAT ALLOW FREE VERTICAL MOVEMENT OF THE DUCT. ATTACH SUPPORTS ONLY TO STRUCTURAL FRAMING MEMBERS AND CONCRETE SLABS. DO NOT ANCHOR SUPPORTS TO METAL DECKING UNLESS A MEANS IS PROVIDED AND APPROVED FOR PREVENTING THE ANCHOR FROM PUNCTURING THE METAL DECKING. WHERE SUPPORTS ARE REQUIRED BETWEEN STRUCTURAL FRAMING MEMBERS, PROVIDE SUITABLE INTERMEDIATE METAL FRAMING. WHERE C-CLAMPS ARE USED, PROVIDE RETAINER CLIPS.

3.6 TESTING, ADJUSTING, AND BALANCING: PERFORM TAB IN ACCORDANCE WITH THE REQUIREMENTS OF THE TAB PROCEDURAL STANDARD RECOMMENDED BY THE TAB TRADE ASSOCIATION THAT APPROVED THE TAB FIRM'S QUALIFICATIONS. COMPLY WITH REQUIREMENTS OF AABC "NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE", NEBB "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING AND BALANCING) ENVIRONMENTAL SYSTEMS", OR SMACNA "HVAC SYSTEMS - TESTING, ADJUSTING AND BALANCING". ALL RECOMMENDATIONS AND SUGGESTED PRACTICES CONTAINED IN THE TAB PROCEDURAL STANDARDS ARE CONSIDERED MANDATORY. SUBMIT TAB REPORTS TO THE OWNER'S REPRESENTATIVE.

3.7 PERFORMANCE TESTS: AFTER TESTING, ADJUSTING, AND BALANCING IS COMPLETE AS SPECIFIED, TEST EACH SYSTEM AS A WHOLE TO SEE THAT ALL ITEMS PERFORM AS INTEGRAL PARTS OF THE SYSTEM AND TEMPERATURES AND CONDITIONS ARE EVENLY CONTROLLED THROUGHOUT THE BUILDING. RECORD THE TESTING DURING THE APPLICABLE SEASON. MAKE CORRECTIONS AND ADJUSTMENTS AS NECESSARY TO PRODUCE THE CONDITIONS INDICATED OR SPECIFIED. CONDUCT CAPACITY TESTS AND GENERAL OPERATING TESTS BY AN EXPERIENCED ENGINEER. PROVIDE TESTS THAT COVER A PERIOD OF NOT LESS THAN 3 DAYS FOR EACH SYSTEM AND DEMONSTRATE THAT THE ENTIRE SYSTEM IS FUNCTIONING ACCORDING TO THE SPECIFICATIONS.

3.9 INSULATION: SEE DUCT INSULATION SCHEDULES FOR INSULATION MATERIAL AND INSTALLATION REQUIREMENTS.



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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET

SHEET TITLE

MECHANICAL NOTES AND SYMBOLS

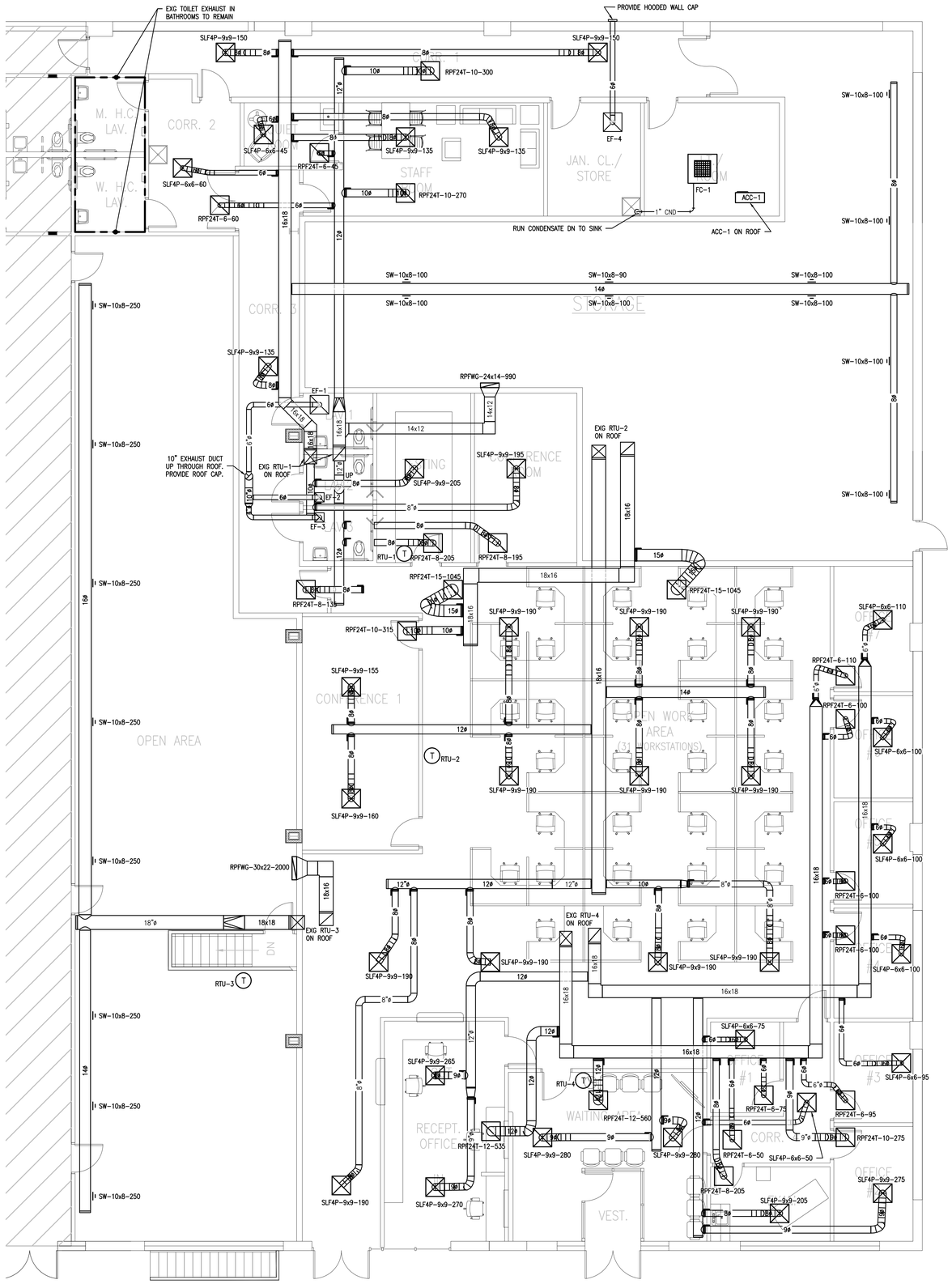
DESIGNED BY:	KWK	SCALE:	AS NOTED
DRAWN BY:	GJG	DATE:	06-26-2024
CHECKED BY:	KWK	PROJECT NUMBER:	C26-06
CAD FILE:			BH-M001.dwg

SEAL

PROGRESS SET NOT FOR CONSTRUCTION

SHEET NUMBER

M001



1 M100 PARTIAL FLOOR PLAN BEHAVIORAL HEALTH

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

0 2' 4' 8'

DUCTWORK CONSTRUCTION SCHEDULE, NOTE 1			
DUCTWORK SYSTEM	DUCTWORK MATERIAL	PRESSURE CLASS (IWG), NOTE 2	SEAL CLASS, NOTE 3
SUPPLY, NOTE 4	GALVANIZED STEEL	+2	A
RETURN, NOTE 4	GALVANIZED STEEL	-2	A
GENERAL EXHAUST POSITIVE PRESSURE	GALVANIZED STEEL	+1	B
GENERAL EXHAUST NEGATIVE PRESSURE	GALVANIZED STEEL	-1	B

NOTES:
1. ALL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SMACNA 2005 "HVAC DUCT CONSTRUCTION STANDARDS".
2. PRESSURE CLASSIFICATIONS ARE BASED ON SMACNA 2005 "HVAC DUCT CONSTRUCTION STANDARDS".
3. SEAL CLASS A: SEAL ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS & DUCT WALL PENETRATIONS. SEAL CLASS B: SEAL ALL TRANSVERSE JOINTS & LONGITUDINAL SEAMS .
4. INTERNALLY INSULATE 10 FEET OF SUPPLY AND RETURN DUCTWORK FROM UNITS.

DUCTWORK INSULATION SCHEDULE										
DUCT SYSTEM	LOCATION	DUCT TEMP. (°F)	INSULATION MATERIAL, NOTE 3	INSULATION DENSITY (LB/CF)	INSULATION THICKNESS (IN), NOTE 1	K-FACTOR AT A 75°F MEAN TEMP. (BTU*IN/HR*ST*F)	MIN. INSTALLED R-VALUE (H*FT^2/BTU)	JACKET TYPE, NOTE 3	PRODUCT, NOTE 2	MANUFACTURER, NOTE 2
HEATING & COOLING SUPPLY	INDIRECTLY CONDITIONED SPACE	55 TO 110	INORGANIC GLASS MINERAL WOOL BLANKET	0.75	2-3/16	0.29	6	FSK	FRIENDLY FEEL DUCT WRAP WITH ECOSE TECHNOLOGY	KNAUF
HEATING & COOLING RETURN	INDIRECTLY CONDITIONED SPACE	60 TO 74	NOT REQUIRED	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EXHAUST BETWEEN BACK DRAFT DAMPER & OUTDOOR DISCHARGE	INDIRECTLY CONDITIONED SPACE	0 TO 95	INORGANIC GLASS MINERAL WOOL BLANKET	0.75	2-3/16	0.29	6	FSK	FRIENDLY FEEL DUCT WRAP WITH ECOSE TECHNOLOGY	KNAUF
DUCTWORK LINER, NOTE 4	INDIRECTLY CONDITIONED SPACE	55 TO 110	COATED RIGID FIBER GLASS PLENUM LINER BOARD	N/A	1.5	0.23	6.3	N/A	LINACOUSTIC R-300	JOHNS MANVILLE

NOTES:
1. THICKNESS IS BASED ON LABEL.
2. OR EQUAL MANUFACTURERS ARE ACCEPTABLE.
3. INSULATION AND JACKET SHALL HAVE A MAXIMUM FLAME SPREAD OF 25 & SMOKE DEVELOPMENT OF 50 PER ASTM E 84.
4. PROVIDE AS INDICATED ON DRAWINGS, SPECIFICATIONS OR OTHER SCHEDULES. LINED DUCTWORK DOES NOT NEED TO BE INSULATED. EXTERIOR DUCTWORK NEEDS TO BE SEALED WEATHER TIGHT.

ROOF UNIT SCHEDULE				
DESIGNATION	EXISTING RTU-1	EXISTING RTU-2	EXISTING RTU-3	EXISTING RTU-4
LOCATION	ROOF	ROOF	ROOF	ROOF
SERVICE	NE PART OF BUILDING	NW PART OF BUILDING	SW PART OF BUILDING	SE PART OF BUILDING
DESCRIPTION	ROOF TOP UNIT	ROOF TOP UNIT	ROOF TOP UNIT	ROOF TOP UNIT
SUPPLY AIR FLOW (CFM)	2,100	2,100	2,400	2,100
VENTILATION AIR FLOW (CFM)	637	408	423	228
EXT. STATIC PRESS. (IN. H2O)	2.5	2.5	2.5	2.5
HEATING TYPE	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS
HEATING LOAD (MBH)	49.4	43.9	62.2	44.8
HEATING INPUT (MBH), NOTE 1	135	135	135	135
HEATING OUTPUT (MBH), NOTE 1	109	109	109	109
COOLING TYPE	DX COIL	DX COIL	DX COIL	DX COIL
COOLING COIL TOTAL LOAD (MBH)	66.5	58.1	71.9	52.1
COOLING COIL SENS. LOAD (MBH)	45.5	43.2	55.5	41.9
COOLING COIL LAT. LOAD (MBH)	21.0	14.9	16.4	10.2
	76.9 / 66.3	75.6 / 64.9	75.3 / 63.3	74.4 / 63.5
COOLING COIL LAT. DB/WB (°F)	56.8 / 55.9	55.5 / 55.6	53.9 / 52.8	55.9 / 54.9
CONDENSER EAT. DB/WB (°F)	85.6 / 72.9	85.6 / 72.9	85.6 / 72.9	85.6 / 72.9
FILTERS	REPLACE W/ MERV 8	REPLACE W/ MERV 8	REPLACE W/ MERV 8	REPLACE W/ MERV 8
ACCESSORIES	REPLACE THERMOSTAT WITH 7 DAY PROGRAMABLE TYPE	REPLACE THERMOSTAT WITH 7 DAY PROGRAMABLE TYPE	REPLACE THERMOSTAT WITH 7 DAY PROGRAMABLE TYPE	REPLACE THERMOSTAT WITH 7 DAY PROGRAMABLE TYPE
SUPPLY AND RETURN DUCT SMOKE DETECTORS W REMOTE TEST STATIONS	PROVIDE	PROVIDE	PROVIDE	PROVIDE
ELECTRICAL (V/PH/HZ)	208/3/60	208/3/60	208/3/60	208/3/60
ELECTRICAL MCA (AMPS)	37	37	37	37
ELECTRICAL MOCP (AMPS)	50	50	50	50
MODEL	RKKA-A073CL13E	RKKA-A073CL13E	RKKA-A073CL13E	RKKA-A073CL13E
MANUFACTURER	RHEEM	RHEEM	RHEEM	RHEEM

NOTES:
1. VERIFY IN FIELD.

EXHAUST FAN SCHEDULE				
DESIGNATION	EF-1	EF-2	EF-3	EF-4
LOCATION	CEILING	CEILING	CEILING	CEILING
SERVICE	LAV 1	LAV 2	LAV 3	JAN CLOSET/STORE
AIR FLOW (CFM)	75	75	75	75
EXT. STATIC PRESS. (IWG)	0.250	0.250	0.250	0.250
AMCA SOUND RATING (SONES)	1.6	1.6	1.6	1.6
FAN RPM	950	950	950	950
BACK DRAFT DAMPER	PROVIDE	PROVIDE	PROVIDE	PROVIDE
ACCESSORIES	HOODED WALL CAP	HOODED WALL CAP	HOODED WALL CAP	HOODED WALL CAP
LOCAL ELECTRICAL DISCONNECT	PROVIDE	PROVIDE	PROVIDE	PROVIDE
ELECTRICAL (V/PH/HZ)	120/1/60	120/1/60	120/1/60	120/1/60
WEIGHT (LBS)	17	17	17	17
MODEL	SP-A110	SP-A110	SP-A110	SP-A110
MANUFACTURER	GREENHECK OR EQUAL	GREENHECK OR EQUAL	GREENHECK OR EQUAL	GREENHECK OR EQUAL

DUCTLESS SPLIT SYSTEM SCHEDULE	
INDOOR UNIT	
DESIGNATION	FC-1
LOCATION	IT ROOM
SERVICE	IT ROOM
DESCRIPTION	CEILING CASSETT
SUPPLY AIR FLOW (CFM)	800
TOTAL COOLING (BTU/HR)	24,000
LIQUID LINED SIZE (IN)	3/8
VAPOR LINE SIZE	5/8
CONDENSATE SIZE (IN)	1-1/4
THERMOSTAT	PROVIDE WIRED WALL TYPE
ACCESSORIES	BLUE DIAMOND (ADVANCED) CONDENSATE PUMP & SENSOR
ELECTRICAL CONNECTION TYPE	INDOOR UNIT IS POWERED BY OUTDOOR UNIT, NOTE 2
ELECTRICAL DISCONNECT TYPE, NOTE 1	LOOSE EXTERNAL
ELECTRICAL (V/PH/HZ)	208/1/60
ELECTRICAL MCA (AMPS)	1
ELECTRICAL MOCP (AMPS)	15
WEIGHT (LBS)	56
MODEL	PLA-A24NHA7
OUTDOOR UNIT	
DESIGNATION	ACC-1
LOCATION	ROOF
SERVICE	FC-1
DESCRIPTION	COOLING ONLY AIR COOLED CONDENSING UNIT
TOTAL COOLING (BTU/HR)	24,000
ACCESSORIES	STAND, SIDE ADVANCED WING BAFFLE (NOTE 3)
ELECTRICAL CONNECTION TYPE	HARD WIRED FLEXIBLE
ELECTRICAL DISCONNECT TYPE, NOTE 1	LOOSE EXTERNAL
ELECTRICAL (V/PH/HZ)	208/1/60
ELECTRICAL MCA (AMPS)	19
ELECTRICAL MOCP (AMPS)	25
WEIGHT (LBS)	151
MODEL	PUY-A24NHA7
MANUFACTURER	MITSUBISHI ELECTRIC

NOTES:
1. FOR EXTERNAL DISCONNECT, PROVIDE SEPARATE WITH UNIT. DISCONNECT TYPE SHALL BE HEAVY DUTY AND RATED FOR THE MOTOR HORSE POWER OF THE UNIT AND ELECTRIC CIRCUIT AS INDICATED ON ELECTRICAL DRAWINGS.
2. COORDINATE WITH ELECTRICIAN TO PROVIDE WIRING BETWEEN FAN COIL AND ACC UNIT
3. REQUIRED FOR LOW AMBIENT COOLING.

REGISTER, GRILLE, AND DIFFUSER SCHEDULE										
DESIGNATION	DESCRIPTION	LOCATION	FRAME STYLE	NECK SIZE (IN), NOTE 1	FACE SIZE (IN)	MAXIMUM AIR FLOW (CFM)	MAX NC	STATIC PRESS DROP (IWG)	COLOR	MODEL, NOTE 2	MANUFACTURER, NOTE 2
SUPPLY											
SLF4P-6X6	STEEL 4-WAY LOUVERED FACE DIRECTION DIFFUSER	CEILING	LAY-IN TEE BAR PANEL	6 x 6	12X12	110	<15	0.066	WHITE	SMD	PRICE OR EQUAL
SLF4P-9X9	STEEL 4-WAY LOUVERED FACE DIRECTION DIFFUSER	CEILING	LAY-IN TEE BAR PANEL	9 x 9	15X15	310	24	0.105	WHITE	SMD	PRICE OR EQUAL
SLF4P-12X12	STEEL 4-WAY LOUVERED FACE DIRECTION DIFFUSER	CEILING	LAY-IN TEE BAR PANEL	12 x 12	18X18	500	24	0.086	WHITE	SMD	PRICE OR EQUAL
SW-10x8	ALUMINUM ROUND DUCT GRILLES W/22° DEFLECTION	DUCT	SURFACE MOUNT	10x8	10x8	276	<15	0.022	WHITE	SDG	PRICE OR EQUAL
RETURN											
RPF24T-6	STEEL PERFORATED FACE	CEILING	LAY-IN TEE BAR	6	24 x 24	110	<15	-0.053	WHITE	PDDR	PRICE OR EQUAL
RPF24T-8	STEEL PERFORATED FACE	CEILING	LAY-IN TEE BAR	8	24 x 24	230	<15	-0.073	WHITE	PDDR	PRICE OR EQUAL
RPF24T-10	STEEL PERFORATED FACE	CEILING	LAY-IN TEE BAR	10	24 x 24	400	<15	-0.091	WHITE	PDDR	PRICE OR EQUAL
RPF24T-12	STEEL PERFORATED FACE	CEILING	LAY-IN TEE BAR	12	24 x 24	650	<15	-0.116	WHITE	PDDR	PRICE OR EQUAL
RPF24T-14	STEEL PERFORATED FACE	CEILING	LAY-IN TEE BAR	14	24 x 24	1000	19	-0.148	WHITE	PDDR	PRICE OR EQUAL
RPFWG-24x14	ALUMINUM LOUVER FACE W/0° DEFLECTION	WALL	SURFACE MOUNT	N/A	24x14	1040	21	0.05	WHITE	610Z	PRICE OR EQUAL
RPFWG-30x22	ALUMINUM LOUVER FACE W/0° DEFLECTION	WALL	SURFACE MOUNT	N/A	30x22	2145	24	0.035	WHITE	610Z	PRICE OR EQUAL

NOTES:
1. SINGLE NUMBER INDICATES ROUND CONNECTION.
2. OR EQUAL MODELS AND MANUFACTURERS ARE ACCEPTABLE.

MECHANICAL PIPING MATERIAL SCHEDULE						
PIPING SYSTEM	ABBREVIATION	OPERATING TEMPERATURE (°F) OR PRESSURE (PSI)	SERVICE PRESSURE (PSI)	PIPE DIAMETER, NPS (INCH)	PIPE MATERIAL \ SCHEDULE OR TYPE \ SPECIFICATION	JOINT MATERIAL \ TYPE \ SPECIFICATION
COOLING COIL CONDENSATE	C	65°F	N/A	0.5 - 4.0	PVC\ 40 \ ASTM D 2665	PVC \ SOCKET SOLVENT CEMENT \ ASTM F 891
REFRIGERANT	LL & VL	45°F - 150°F	150	0.5 - 2.0	CPR-ACR \ \ ASTM B280	WC \ SOCKET BRAZED \ ASME B16.22

NOTES
1. VALVE JOINT TYPE INCLUDES OTHER VALVES AND ITEMS NOT SHOWN IN SCHEDULE (I.E. STRAINERS, BALANCING VALVES)
2. DRAWINGS MAY INDICATE DIFFERENT VALVE TYPE. VALVE TYPE SHALL BE AS SHOWN ON DRAWINGS UNLESS OTHERWISE INDICATED.

PIPE MATERIAL SCHEDULE	
CPR-ACR	COPPER AIR-CONDITIONING REFRIGERATION
PVC	POLYVINYLCHLORIDE

JOINT MATERIAL SCHEDULE	
PVC	POLYVINYLCHLORIDE
WC	WROUGHT COPPER

MECHANICAL PIPING & EQUIPMENT INSULATION SCHEDULE												
PIPING SYSTEM, NOTE 1	LOCATION	PIPING TEMP. (°F)	INSULATION THICKNESS BASED ON PIPE DIAMETER (IN), NOTE 2						INSULATION MATERIAL, NOTE 3	K-FACTOR AT A 75°F MEAN TEMP.	JACKET TYPE, NOTE 3	FITTING COVER TYPE	PRODUCT, NOTE 4	MANUFACTURER, NOTE 4
			RUNOUTS <2	<=1	1.0 - 1.25	1.5 - 3.5	4 - 6	>=8						
REFRIGERANT VAPOR	INTERIOR	45	0.5	0.5	1.0	1.0	1.0	1.0	CLOSED CELL ELASTOMERIC FOAM	0.25	N/A	N/A	AP ARMAFLEX	ARMACELL
REFRIGERANT VAPOR	EXTERIOR	45	1.0	1.0	1.5	1.5	1.5	1.5	CLOSED CELL ELASTOMERIC FOAM	0.25	N/A	N/A	AP ARMAFLEX	ARMACELL

NOTES:
1. SEE PIPING SCHEDULE FOR PIPING TYPES.
2. RUNOUTS ARE AREAS WERE PIPING IS RUN IN PARTITIONS WITHIN CONDITIONED SPACES.
3. INSULATION AND JACKET SHALL HAVE A MAXIMUM FLAME SPREAD OF 25 & SMOKE DEVELOPMENT OF 50 PER ASTM E 84.
4. OR EQUAL MANUFACTURERS ARE ACCEPTABLE.

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REVISIONS

NO.	BY	DATE	DESCRIPTION

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET

SHEET TITLE

MECHANICAL PARTIAL FLOOR PLAN

DESIGNED BY:	KWK	SCALE:	AS NOTED
DRAWN BY:	GJG	DATE:	06-26-2024
CHECKED BY:	KWK	PROJECT NUMBER:	C26-06
CAD FILE:			BH-M100.dwg

SEAL

PROGRESS SET NOT FOR CONSTRUCTION

SHEET NUMBER

M100

GENERAL REQUIREMENTS

GENERAL

AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, EACH BIDDER SHALL VISIT THE SITE TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA WILL BE ALLOWED IF THE CONTRACTOR FAILS TO NOTIFY THE ENGINEER/OWNER IN WRITING OF ANY DISCREPANCIES THAT HE MAY HAVE NOTED BETWEEN THE EXISTING CONDITIONS AND DRAWINGS AND SPECIFICATIONS.

THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS OF HIS OWN OR OTHERS AT THE SITE, AND SHALL BE RESPONSIBLE FOR CORRECTNESS OF SAME AS RELATED TO HIS WORK.

THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR ALL COORDINATION OF ANY ITEMS REGARDING UTILITY COMPANIES. ALL COSTS ASSOCIATED WITH UTILITY COMPANIES SHALL BE INCLUDED IN CONTRACTOR'S BASE BID AND SHALL BE CONSIDERED A PART OF THIS PROJECT.

GENERAL CONSTRUCTION NOTES

1. THIS IS AN EXISTING BUILDING. ALL WORK MUST BE COORDINATED WITH THE G.C. AND THE BUILDING OWNER. SCHEDULING AND CONTAINMENT OF WORK AREAS SHALL BE DONE IN CONJUNCTION WITH THE OWNER'S MAINTENANCE STAFF.
2. PERSONNEL SAFETY IS OF PRIME IMPORTANCE. NO HAZARDOUS CONDITIONS SHALL BE ALLOWED. EVERY CARE MUST BE TAKEN TO PROTECT CONSTRUCTION AND OTHER PERSONNEL. CLEANUP SHALL BE DONE ON A DAILY BASIS.
3. THE ELECTRICAL CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS INSTRUCTION AND OR REQUIREMENTS FOR PROPER OPERATION AND MAINTENANCE.
4. THE TERM "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL IN COMPLETE WORKING ORDER.
5. ALL THE WIRE SIZES ARE BASED ON COPPER THHN 75°C, ALUMINUM SHALL NOT BE USED.
6. AT NO TIME SHALL THIS BUILDING BE WITHOUT POWER, FIRE ALARM, LIFE SAFETY SYSTEMS, ETC. WHEN IT IS NECESSARY TO DISCONNECT ANY EXISTING ITEM BEFORE THE NEW DEVICE OR SYSTEM IS ACTIVE, THEN THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE REQUIRED SAFETY AND GIVE WRITTEN NOTICE 48 HOURS IN ADVANCE TO THE ARCHITECT/ENGINEER/OWNER.
7. THIS JOB IS COMPOSED OF RENOVATIONS TO AN EXISTING BUILDING. BEFORE SUBMITTING THE BID, THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING CONDITIONS UNDER WHICH THE WORK AND WORK OF OTHER TRADES WILL BE INSTALLED. THIS CONTRACT INCLUDES ALL NECESSARY OFFSETS, TRANSITIONS, MODIFICATIONS AND RELOCATION OF EXISTING EQUIPMENT FOR INSTALLATION OF NEW ELECTRICAL EQUIPMENT AND NEW EQUIPMENT OF OTHER TRADES. POWER DEVICES, CONDUIT, WIRING, ETC.). ALL NEW AND EXISTING EQUIPMENT AND SYSTEMS SHALL BE FULLY OPERATIONAL UNDER THIS CONTRACT BEFORE THE JOB IS COMPLETE. THE ELECTRICAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS MADE, ANY OMISSIONS OR ERRORS MADE AS A RESULT OF THE ELECTRICAL CONTRACTOR'S FAILURE WITH HIS INSPECTION OF EXISTING CONDITIONS AND REVIEW OF ALL OTHER TRADE DOCUMENTS.
8. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT AND WIRING METHODS HAVE BEEN TAKEN FROM ON SITE SURVEYS. DUE TO OBSTRUCTIONS ALONG WALLS NOT EVERY DEVICE LOCATION MAY HAVE BEEN ACCURATELY DETERMINED. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF ALL EXISTING ELECTRICAL EQUIPMENT THAT WILL REQUIRE MODIFICATION DUE TO THE RENOVATION WORK PRIOR TO PRICING AND COMMENCEMENT OF WORK.
9. ALL LIGHTING CIRCUITS SHALL BE TERMINATED IN THE CEILING IN JUNCTION BOXES OR PULLED BACK TO THE PANEL WHERE THE CIRCUIT ORIGINATES. ALL OTHER AREAS TO REMAIN "AS IS" AND ALL ELECTRICAL APPURTENANCES, DEVICES AND ACCESSORIES SHALL REMAIN OPERATIONAL.
10. THE CONTRACTOR SHALL VERIFY THAT ANY EXISTING CIRCUIT WIRING TO BE REMOVED DOES NOT DISRUPT SERVICE TO EXISTING ELECTRICAL APPURTENANCES AND DEVICES TO REMAIN. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY DEVICES, EQUIPMENT AND ACCESSORIES REQUIRED TO MAINTAIN SERVICE TO ALL EXISTING ELECTRICAL DEVICES AND EQUIPMENT.
11. THE CONTRACTOR SHALL REMOVE ALL CONDUIT AND WIRING ASSOCIATED WITH DEVICES AND EQUIPMENT TO BE REMOVED BACK TO THE SOURCE OF POWER, UNLESS OTHERWISE NOTED.
12. THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW TYPED PANELBOARD SCHEDULES DEPICTING REMOVED AND/OR ADDED CIRCUITS FOR ALL RENOVATION WORK IN PANELBOARDS IN THE SCOPE OF WORK AREAS.
13. ALL EMPTY CONDUIT SYSTEMS PROVIDED SHALL CONTAIN A PULL WIRE FOR FUTURE PULLING OF CONDUCTORS.
14. ALL DEMOLITION ACTIVITIES MUST BE COORDINATED WITH THE OWNER AND THE GENERAL CONTRACTOR TO MINIMIZE INTERRUPTION OF REQUIRED SERVICES OR TO ALLOW FOR COMPENSATORY MEASURES TO BE TAKEN.
15. ALL EXISTING WIRING IN THE CEILING NOT BEING REUSED SHALL BE REMOVED.
16. NO WIRING SHALL BE REUSED WITHOUT ENGINEERS APPROVAL.
17. ANY AND ALL ELECTRICAL CONDUIT STUB-UPS SHALL BE CUT TO FLOOR LEVEL.
18. WHERE WIRES ARE BEING REMOVED FROM A CONDUIT, CONTRACTOR SHALL PROVIDE AND INSTALL A DRAG LINE IN THE CONDUIT. TAG.
19. ALL EXISTING CONDUITS TO REMAIN SHALL BE TAGGED WITH SEATON TAGS OR EQUAL AS NECESSARY.
20. CONTRACTOR SHALL INSTALL TEMPORARY LIGHTING IN SCOPE AREAS AS NECESSARY.
21. DEMOLITION AND REMOVALS ARE A PART OF THE SCOPE OF WORK. ALL UNUSED ELECTRICAL ITEMS SHALL BE REMOVED AS MUCH AS POSSIBLE. THE ELECTRICAL PLANS DO NOT SHOW ALL OF THE ELECTRICAL REMOVAL WORK. CONTRACTOR SHALL REVIEW ALL TRADE DRAWINGS ARCHITECTURAL, PLUMBING, AND MECHANICAL FOR ANY ADDITIONAL ELECTRICAL ITEMS TO BE REMOVED.
22. ASBESTOS OR UNKNOWN MATERIAL ENCOUNTERED DURING THE CONSTRUCTION SUSPECTED TO BE ASBESTOS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR RESOLUTION. STOP ALL WORK IN VICINITY OF SUSPECTED MATERIALS IMMEDIATELY IN THIS EVENT.
23. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS WITHIN THE DEMOLITION WORK DEPICTED ON THE DRAWING AND SHALL ASCERTAIN THE EXTENT OF WORK REQUIRED WITHIN THE DEMOLITION AREA PRIOR TO PRICING AND COMMENCEMENT OF WORK.
24. THE CONTRACTOR SHALL ENSURE THAT ALL CIRCUITS REQUIRED TO BE REMOVED OR RELOCATED, ARE DE-ENERGIZED AND REMAIN DE-ENERGIZED FOR THE DURATION OF THE DEMOLITION ACTIVITY. THE CONTRACTOR SHALL FIELD VERIFY THE CIRCUITS AND IDENTIFY ANY ADDITIONAL CIRCUITS THAT MAY INTERFERE WITH DEMOLITION BOUNDARY, SUCH THAT PERSONAL SAFETY IS ENSURED, AND EQUIPMENT REQUIRED TO REMAIN OPERABLE IS MAINTAINED.

GENERAL NOTES

NOTE: CONTRACTOR SHALL MEAN ELECTRICAL CONTRACTOR

1. ALL DIMENSIONS AND EXACT EQUIPMENT LOCATIONS ARE TO BE VERIFIED WITH MECHANICAL AND ARCHITECTURAL DRAWINGS AND CONDITIONS IN THE FIELD.
2. THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND CONSULT WITH MECHANICAL DRAWINGS FOR POWER REQUIREMENTS OF THOSE TRADES. ALL EXISTING PANELBOARDS SHALL BE PROVIDED WITH A TYPED SCHEDULE.
3. A COPY OF ALL SCHEDULES SHALL BE SUBMITTED TO ARCHITECT AND ENGINEER.
4. THE WORK SHALL BE COORDINATED WITH ALL OTHER TRADES AND PROVIDE OTHERS WITH NECESSARY INFORMATION TO COMPLETE THIS INSTALLATION. DRAWINGS ARE TO BE USED IN CONJUNCTION WITH SPECIFICATIONS ISSUED FOR THIS INSTALLATION.
5. ANY WORK INSTALLED CONTRARY TO, OR WITHOUT APPROVAL BY THE ENGINEER SHALL BE SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER AND NO EXTRA COMPENSATION WILL BE ALLOWED THE CONTRACTOR FOR MAKING THESE CHANGES.
6. CONDUIT & CABLE RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS.
7. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENTS A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS APPROVED BY THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL SHALL BE MAINTAINED AS INDICATED ON THE DRAWINGS.
8. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ACCESS TO ALL CONCEALED EQUIPMENT. LABEL ALL CONCEALED JUNCTION BOXES.
9. THE CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH SMOKE & FIRE RATED PARTITIONS AND SLABS WITH A UL LISTED SMOKE AND/OR FIRE STOP TO MAINTAIN THE INTEGRITY OF THE FIRE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR WALL RATINGS. PROVIDE SHOP DRAWINGS FOR ALL PENETRATIONS. REFER TO DIVISION 7 FOR ADDITIONAL REQUIREMENTS.
10. VERIFY CEILING FINISH CONSTRUCTION WITH FINAL ARCHITECTURAL DRAWINGS PRIOR TO ORDERING FIXTURES AND ARRANGEMENTS TO BE COMPATIBLE WITH TYPE OF CEILING WHICH FIXTURE IS TO BE MOUNTED.
11. ALL EXISTING WIRING THAT IS NOT IN USE SHALL BE REMOVED. SURFACE MOUNTED PANEL BOARD AND OTHER SUCH EQUIPMENT SHALL BE MOUNTED WITH A 1/4" AIR SPACE BETWEEN THE ENCLOSURE AND WALL. THE DISTANCE FROM TOP CIRCUIT BREAKER HANDLE TO FLOOR SHALL NOT EXCEED 6'-6" AFF. UNLESS NOTED OTHERWISE. A 1/2" UNISTRUT MAY BE USED.
12. CONTROL STATIONS SHALL HAVE PLASTIC ENGRAVED NAMEPLATES DENOTING EQUIPMENT CONTROLLED. (USE WHITE LETTERS ON BLACK BACKGROUND)
13. ALL PULLBOXES, JUNCTION BOXES, AND SWITCH BOXES INSIDE AREA SHALL BE NEMA 1.
14. ALL JUNCTION BOXES INDICATED AND/OR REQUIRED SHALL BE SIZED TO ACCOMMODATE INCOMING AND OUTGOING FEEDERS.
15. MC CABLE SHALL BE USED IN FURRED OUT WALLS AND HUNG CEILING AREA'S FOR LIGHTING AND GENERAL RECEPTACLES.
16. SWITCHES SHALL BE MOUNTED 4'-0" AND RECEPTACLES 1'-6" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
17. ALL BRANCH CIRCUIT WIRES & ALL FEEDERS SHALL BE PERMANENTLY TAGGED AT THE PANEL CONNECTIONS WITH "BRADY" MARKERS.
18. ELECTRICAL CONTRACTOR SHALL REVISE ALL EXISTING CIRCUITING & CONDUIT AS NOTED. CONTRACTOR SHALL VERIFY CONDITION OF EXISTING WIRING TO BE REUSED & REPLACE AS REQUIRED.
19. PROVIDE JUNCTION BOX AND RUN 1" CONDUIT TO ABOVE CEILING FOR EACH TIME CLOCK AND THERMOSTAT LOCATIONS AS SHOWN ON MECHANICAL PLANS.
20. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS EXACT LOCATION OF ALL OUTLETS & SWITCHES.
21. MAINTAIN AND RESTORE, IF INTERRUPTED, ALL CONDUITS AND FEEDERS PASSING THROUGH RENOVATED AREAS AND SERVICING UNDISTURBED AREAS.
22. PARTIAL BRANCH CIRCUIT WIRING DENOTING EXISTING CONTROL OR SWITCHING ON THE DRAWINGS IS SHOWN FOR REFERENCE/CLARIFICATION ONLY, AND IS NOT TO BE CONSTRUED TO IMPLY COMPLETE CIRCUIT WIRING. THE LOCATION OF THE INTERCONNECTION OF CONTROL DEVICE, AND EQUIPMENT CONTROLLED IS DIAGRAMMATIC ONLY.
23. THE ELECTRICAL CONTRACTOR SHALL SEISMICALLY BRACE ALL ELECTRICAL ITEMS AS REQUIRED BY STATE OF CT. BUILDING CODE. PROVIDE ALL SEISMIC ANCHORS AND SUPPORTS. PROVIDE DETAILS ACCEPTABLE TO REVIEW AGENCIES FOR SUPPORTS AND ANCHORS OF ACTUAL EQUIPMENT SUPPLIED. REFER TO "GUIDELINES AND DETAILS FOR SEISMIC RESTRAINTS".
24. EACH CIRCUIT SHALL HAVE ITS OWN NEUTRAL. NEUTRALS ARE NOT ALLOWED TO BE SHARED, ESPECIALLY ON LIGHTING CIRCUITS.
25. ALL EMERGENCY LIGHTS SHALL OPERATE FOR A MINIMUM OF 90 MINUTES AND SHALL BE TESTED AS PER NFPA 72 STANDARDS.
26. ALL RECEPTACLES LOCATED WITHIN SIX FEET OF ANY SINK, TOILET OR ANY WATER SOURCE, INCLUDING EXTERIOR RECEPTACLES SHALL BE G.F.C.I., WEATHER-RESISTANT TYPE. ALL EXTERIOR RECEPTACLES SHALL BE PROVIDED WITH WEATHER-PROOF, 'EXTRA-DUTY', LOCKABLE, IN-USE COVERS.

LIGHTING AND SWITCHES

SYMBOL	DESCRIPTION
	2' X 2' LED TROFFER LUMINAIRE – RECESSED MTD.
	2' X 2' LED TROFFER LUMINAIRE – REC. MTD. W/ EM.
	EXIT SIGN – CEILING MTD, SHADED AREA INDICATES FACE, CHEVRON SHOWS DIRECTION SELF-CONTAINED BATTERY AND CHARGER
S	SINGLE POLE TOGGLE SWITCH
S_3	THREE POLE TOGGLE SWITCH
S_P	SINGLE POLE TOGGLE SWITCH WITH PILOT LIGHT
OS	CEILING MOUNTED OCCUPANCY SENSOR
VS	CEILING MOUNTED VACANCY SENSOR

FIRE ALARM DEVICES

SYMBOL	DESCRIPTION
	HORN/STROBE UNIT
F	MANUAL PULL STATION
EXT	HORN/STROBE UNIT – EXTERIOR WEATHERPROOF
	STROBE ONLY UNIT
S	SMOKE DETECTOR
FACP	FIRE ALARM CONTROL PANEL
D	DUCT SMOKE DETECTOR

ELECTRICAL ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
A	AMPS	JB	JUNCTION BOX
AC	ABOVE COUNTER	KCMIL	THOUSAND CIRCULAR MILLS
AFCI	ARC FAULT CIRCUIT INTERRUPTING	KVA	KILOVOLT-AMPERE
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AFG	ABOVE FINISHED GRADE	LP	LIGHTING PANEL
AL	ALUMINUM	MCB	MAIN CIRCUIT BREAKER
AM	AMMETER	MCC	MOTOR CONTROL CENTER
ATC	AUTOMATIC TEMPERATURE CONTROL	MLO	MAIN LUGS ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MTD	MOUNTED
AWG	AMERICAN WIRE GAUGE	NIC	NOT IN CONTRACT
C	CONDUIT	NTS	NOT TO SCALE
CAT.	CATALOG	NC	NORMALLY CLOSED
CB	CIRCUIT BREAKER	NL	NEW LOCATION OF EXISTING
CATV	CABLE TELEVISION	NO	NORMALLY OPEN
CCTV	CLOSED CIRCUIT TELEVISION	NR	NEW TO REPLACE EXISTING
CKT	CIRCUIT	P	POLE
CLG	CEILING	PNL	PANEL
CU	COPPER	PH, ø	PHASE
DP	DISTRIBUTION PANEL	PP	POWER PANEL
DISC. SW.	DISCONNECT SWITCH	RE	REMOVE EXISTING
EF	EXHAUST FAN	RL	RELOCATE EXISTING
EM	EMERGENCY	RR	REMOVE AND REPLACE
EWC	ELECTRIC WATER COOLER	RGS	RIGID GALVANIZED STEEL
EX	EXISTING	TEL	TELEPHONE
GFCI	GROUND FAULT CIRCUIT INTERRUPT.	TYP	TYPICAL
GND	GROUND	U.G.	UNDER GROUND
HOA	HAND-OFF-AUTOMATIC	V	VOLTS
HP	HORSE POWER	W	WATTS
HZ	HERTZ	WP	WEATHER PROOF
IG	ISOLATED GROUND	XFMR	TRANSFORMER

POWER & BRANCH CIRCUITING

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE
	QUADRUPLEX RECEPTACLE
	G.F.C.I. DUPLEX RECEPTACLE
	CEILING MOUNTED DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE WITH USB PORTS
	DISCONNECT SWITCH
	HOME RUN
J	JUNCTION BOX
	SINGLE GANG BACKBOX & COVERPLATE
FBV	FLOOR POKE-THRU BOX WITH RECEPT. & DATA

COMMUNICATION DEVICES

SYMBOL	DESCRIPTION
	DATA/TELEPHONE PORT
2	DATA PORT-NUMBER DENOTES QTY.
	CEILING MOUNTED DATA PORT
	WIRELESS ACCESS POINT (WAP)
	AUDIO/VISUAL PORT

DEVICE MOUNTING HEIGHTS

SYMBOL	DESCRIPTION
	DUPLEX OR QUAD RECEPTACLE AT 18" A.F.F. UNLESS OTHERWISE NOTED ON PLANS
$S\ S_3\ S_S$	TOGGLE SWITCHES AT 48" TO TOP OF PLATE A.F.F.
	DATA/TELEPHONE PORT AT 18" TO CENTER A.F.F.
	DATA PORT AT 18" TO CENTER A.F.F. U.N.O.

SYMBOLS SHOWN ARE FOR REFERENCE ONLY AND DO NOT CONSTITUTE A CHECK LIST OF DEVICES REQUIRED BY THE CONTRACTOR

NOTES:

1. FOR COMPLETE DESCRIPTION OF LUMINAIRES SEE LUMINAIRE SCHEDULE ON DRAWING E-1.

ELECTRICAL DRAWING LIST

DWG. NO.	REV.	DRAWING TITLE
EG-1	1	GENERAL NOTES, SYMBOL LEGENDS, ELECTRICAL ABBREVIATIONS & DWG. LIST
ES-1	1	ELECTRICAL SPECIFICATIONS
ES-2	1	ELECTRICAL SPECIFICATIONS
E-1	1	LIGHTING SCHEDULE, DETAILS AND COMCHECK REPORT
E-2	1	FIRE ALARM RISER DIAGRAM, DETAILS & NOTES
E-3	1	ELECTRICAL RISER DIAGRAM, SCHEDULES AND NOTES
EL-1	1	LIGHTING REFLECTED CEILING PLAN
EL-2	1	LIGHTING PHOTOMETRIC FLOOR PLAN
EL-3	1	LIGHTING CONTROLS FLOOR PLAN
EP-1	1	POWER & FIRE ALARM FLOOR PLAN & NOTES

MECHANICAL DRAWING LIST

DWG. NO.	REV.	DRAWING TITLE
FP001	1	FIRE PROTECTION NOTES AND SYMBOLS
FP100	1	FIRE PROTECTION PARTIAL FLOOR PLAN
P001	1	PLUMBING NOTES & SYMBOLS
P100	1	PLUMBING PARTIAL FLOOR PLAN
P101	1	PLUMBING PARTIAL FLOOR PLAN
M001	1	MECHANICAL NOTES & SYMBOLS
M100	1	MECHANICAL PARTIAL FLOOR PLAN

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REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	SK	07/03/24	REVISED BACKGROUNDS

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
48 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE
GENERAL NOTES, SYMBOL LEGENDS, ABBREV. & DRAWING LISTS

DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11-23-20
CHECKED BY: MVM	PROJECT NUMBER: 200943-1
CAD FILE: EG1.dwg	

SEAL
100% For Review
07/03/2024

SHEET NUMBER
EG-1

GENERAL PROVISIONS FOR ELECTRICAL WORK

REFERENCES
THIS SECTION COVERS THE GENERAL REQUIREMENTS FOR ELECTRICAL WORK; EXAMINE ALL CONTRACT DRAWINGS AND ALL OTHER SECTIONS OF THE SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO THE WORK OF THIS DIVISION.

DEFINITIONS
`PROVIDE' TO FURNISH, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION OF PARTICULAR WORK REFERRED TO UNLESS SPECIFICALLY OTHERWISE NOTED.
`INSTALL' TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES. `FURNISH' TO PURCHASE, PROCURE, ACQUIRE AND DELIVER COMPLETE WITH RELATED ACCESSORIES.
`WORK' LABOR, MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES, AND OTHER ITEMS REQUIRED FOR PROPER AND COMPLETE INSTALLATION.
`WIRING' RACEWAY, FITTINGS, WIRE, BOXES AND RELATED ITEMS.
`CONCEALED' EMBEDDED IN MASONRY OR OTHER CONSTRUCTION, INSTALLED IN FURRED SPACES, WITHIN DOUBLE PARTITIONS OR HUNG CEILINGS.
`SIMILAR' OR `EQUAL' - EQUAL IN MATERIALS, WEIGHT, SIZE, DESIGN AND EFFICIENCY OF SPECIFIED PRODUCT.
`CONTRACTOR' - THE ELECTRICAL CONTRACTOR.
`NOTED' - AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.

SCOPE
THIS WORK SHALL CONSIST OF THE FURNISHING OF ALL LABOR, MATERIALS AND SERVICES REQUIRED COMPLETE, READY FOR CORRECT OPERATION, ALL ELECTRICAL WORK CALLED FOR BY THE ACCOMPANYING DRAWINGS AND SPECIFICATIONS. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES. THE DATA INDICATED IN THESE SPECIFICATIONS AND DRAWINGS ARE AS EXACT AS COULD BE SECURED, BUT THEIR ABSOLUTE ACCURACY IS NOT GUARANTEED. DO NOT SCALE DRAWINGS. EXACT LOCATIONS, DISTANCES, LEVELS AND OTHER CONDITIONS WILL BE GOVERNED BY THE BUILDING. USE THE DRAWINGS AND SPECIFICATIONS FOR GUIDANCE AND SECURE THE ENGINEER'S APPROVAL OF CHANGES IN LOCATION. CIRCUITS, WHERE SHOWN ON AN ELECTRICAL DRAWING, ARE SO INDICATED PRIMARILY FOR THE PURPOSE OF INDICATING THE GENERAL CIRCUIT PLAN AND DO NOT NECESSARILY INDICATE THE EXACT LOCATION OF ROUTING OF RACEWAYS UNLESS SPECIFICALLY SO INDICATED. CIRCUITS SHALL BE RUN TO SUIT CONDITIONS CONSIDERING STRUCTURAL FEATURES, CONSTRUCTION METHODS AND GOOD PRACTICE.
ALL EQUIPMENT AND SYSTEMS SHALL BE FULLY OPERATIONAL UNDER THIS CONTRACT BEFORE THE JOB IS CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS HE MAKES, ANY OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE WITH THE EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS OF ALL TRADES.

CODES, REGULATIONS AND STANDARDS
ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING APPROVED CODES:
CSBC - STATE BUILDING CODE 2022
CSFSC - STATE FIRE CODE 2022
CFPC - STATE FIRE PROTECTION CODE 2022
IPC - INTERNATIONAL PLUMBING CODE 2021
IMC - INTERNATIONAL MECHANICAL CODE 2021
IBC - INTERNATIONAL BUILDING CODE 2021
IECC - INTERNATIONAL ENERGY CONSERVATION CODE 2021
IEBC - EXISTING BUILDING CODE 2021
A117.1 - ACCESSABLE AND USEABLE BUILDING AND FACILITIES 2017
NFPA - NATIONAL FIRE PROTECTION CODE (WHERE REFERENCED)
OSHA - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
NFPA 101 - LIFE SAFETY CODE 2017 (FOR EXISTING BUILDINGS)
NFPA 99 - HEALTH FACILITIES CODE
NFPA 72 - NATIONAL FIREALARM CODE 2017
NFPA 70 - NATIONAL ELECTRIC CODE 2020
NFPA 13 - STANDARDS FOR INSTALLATION OF A SPRINKLER SYSTEM 2013
EPA - ENVIRONMENTAL PROTECTION ASSOCIATION
NEMA - NATIONAL ELECTRICALS MANFACTURERS ASSOCIATION
ACI 318 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE 2014

PERMITS, FEES AND INSPECTIONS
THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES APPLICABLE. THE CONTRACTOR SHALL FILE ALL DRAWINGS, COMPLETE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS FROM THE PROPER AUTHORITY OR AGENCY HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION COVERING HIS WORK. THE CONTRACTOR SHALL SEE THAT ALL REQUIRED INSPECTIONS AND TESTS ARE MADE AND SHALL COOPERATE TO MAKE THESE TESTS AS THOROUGH AND AS READILY MADE AS POSSIBLE.

MATERIALS AND WORKMANSHIP
ALL MATERIALS AND APPARATUS REQUIRED FOR THE WORK, EXCEPT AS OTHERWISE SPECIFIED, SHALL BE NEW AND OF FIRST-CLASS QUALITY AND SHALL BE FURNISHED, DELIVERED, ERECTED, CONNECTED AND FINISHED IN EVERY DETAIL AND SO SELECTED AND ARRANGED AS TO FIT PROPERLY INTO THE BUILDING SPACES. WHERE NO SPECIFIC KIND OR QUALITY OF MATERIAL IS GIVEN, A FIRST-CLASS STANDARD ARTICLE AS ACCEPTED BY THE ENGINEER SHALL BE FURNISHED. ALL EQUIPMENT AND MATERIALS SHALL BE SPECIFICATION GRADE AND BEAR THE UNDERWRITER'S LABEL. NO SUBSTITUTE OR ALTERNATE EQUIPMENT, MATERIALS, ETC., WILL BE CONSIDERED FOR THIS PROJECT.
ALL WORK SHALL BE OF A QUALITY CONSISTENT WITH GOOD TRADE PRACTICE AND SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER. THE ENGINEER/OWNER RESERVES THE RIGHT TO REJECT ANY WORK WHICH, IN HIS OPINION, HAS BEEN INSTALLED IN A SUB-STANDARD, DANGEROUS OR UNSERVICEABLE MANNER. THE CONTRACTOR SHALL REPLACE SAID WORK IN A SATISFACTORY MANNER AT NO EXTRA CHARGE TO THE OWNER.

GUARANTEES
ALL WORKMANSHIP AND MATERIALS SHALL BE FULLY GUARANTEED FOR A PERIOD OF TWO YEARS AFTER ACCEPTANCE OF THE ENTIRE INSTALLATION COVERED BY THIS CONTRACT. SHOULD ANY DEFECTS OCCUR DURING THIS GUARANTEE PERIOD, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DEFECTIVE EQUIPMENT, MATERIALS AND/OR WORK AT NO EXTRA CHARGE.

RECORD DRAWINGS
MAINTAIN, AT THE JOB SITE, A SET OF ELECTRICAL DRAWINGS INDICATING ALL CHANGES IN LOCATION OF EQUIPMENT, PANELS, DEVICES, FROM THE ORIGINAL LAYOUT. PLAINLY MARK IN RED, ALL CHANGES ON THE DRAWINGS. CONTRACTOR SHALL SUPPLY TWO COMPLETE SETS OF AS-BUILT AND DIGITALLY CLOSE OUT MANUALS TO THE ENGINEER / OWNER.

COORDINATION
ALL WORK SHALL BE CARRIED OUT IN CONJUNCTION WITH OTHER TRADES AND FULL COOPERATION SHALL BE GIVEN IN ORDER THAT ALL WORK MAY PROCEED WITH A MINIMUM OF DELAY AND INTERFERENCE.

SHOP DRAWINGS
SUBMIT ONE (1) DIGITAL COPY FOR REVIEW, DETAILED SHOP DRAWINGS OF ALL EQUIPMENT AND MATERIALS SPECIFIED. THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION TO THE ENGINEER FOR REVIEW. NO MATERIAL OR EQUIPMENT MAY BE DELIVERED TO THE JOB SITE OR INSTALLED UNTIL THE CONTRACTOR HAS IN HIS POSSESSION, REVIEWED SHOP DRAWINGS FOR THE PARTICULAR MATERIAL OR EQUIPMENT. SHOP DRAWINGS SHALL BE SPECIFIC WITH ITEMS SUBMITTED FOR APPROVAL CLEARLY IDENTIFIED. SHOP DRAWINGS MAY BE SUBMITTED ELECTRONICALLY (PDF FORMAT) WITH ITEMS SUBMITTED CLEARLY IDENTIFIED.
THE FOLLOWING IS A LIST OF ELECTRICAL ITEMS THAT MUST BE SUBMITTED FOR REVIEW:
- PANELBOARDS
- SAFETY / DISCONNECT SWITCHES
- CIRCUIT BREAKERS
- LIGHTING
- FUSES
- CONDUIT, WIRE & CABLE
- FIRE ALARM EQUIPMENT; CUT SHEETS, RISER DIAGRAMS WITH PROGRAMABLE ADDRESSES AND DETAILED CONNECTION DIAGRAMS
- FIRE ALARM FLOOR PLANS WITH DEVICE WIRING CIRCUITS
- DEVICES (RECEPTACLES, TOGGLE SWITCHES ETC.)
- AUTOMATIC LIGHTING CONTROLS
- LIGHTING
- RECEPTACLE AND LIGHTING DEVICES
- REFER TO DRAWINGS FOR ADDITIONAL REQUIREMENTS
- VOLTAGE DROP CALCULATIONS

OPERATING INSTRUCTIONS/MANUALS
THE CONTRACTOR SHALL FURNISH FOR DELIVERY TO THE ENGINEER, FOUR (4) COMPLETE BOUND SETS OF TYPEWRITTEN OR BLUEPRINTED INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT INCLUDED IN THIS DIVISION. MANUFACTURER'S ADVERTISING LITERATURE OR CATALOGS WILL NOT BE ACCEPTABLE FOR OPERATING AND MAINTENANCE INSTRUCTIONS. INCLUDE ALL APPROVED SHOP DRAWINGS IN MANUALS.
THE CONTRACTOR, IN THE ABOVE-MENTIONED INSTRUCTIONS, SHALL INCLUDE THE MAINTENANCE SCHEDULE FOR THE PRINCIPAL ITEMS OF EQUIPMENT FURNISHED UNDER THIS DIVISION.
AN AUTHORIZED MANUFACTURER'S REPRESENTATIVE SHALL ATTEST IN WRITING THAT HIS EQUIPMENT HAS BEEN PROPERLY INSTALLED PRIOR TO STARTUP. THESE LETTERS WILL BE BOUND INTO THE OPERATING AND MAINTENANCE BOOKS.

EQUIPMENT PROTECTION
PROPERLY AND COMPLETELY PROTECT AGAINST ALL DAMAGE, ALL APPARATUS, EQUIPMENT, ETC., INCLUDED IN THIS CONTRACT, AS THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE TO SAME FURNISHED BY HIM UNTIL FINAL ACCEPTANCE.

PROPERTY PROTECTION
THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY AND/OR REQUIRED TO PROTECT OWNER'S PROPERTY WITHIN THE WORKING AREAS FROM DUST, DEBRIS AND OTHER MATTER.

MANUFACTURER'S INSTRUCTIONS
INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS FOR PROPER OPERATION AND MAINTENANCE.

EQUIPMENT PAINTING AND CLEANING
THOROUGHLY CLEAN ALL ELECTRICAL EQUIPMENT DEVICES AND ENCLOSURES UPON COMPLETION OF ALL WORK. REPAINT ANY EQUIPMENT WHOSE FINISH IS DAMAGED OR RUSTED. MATCH MANUFACTURER'S ORIGINAL FINISH.

PENETRATION SEALANT
ALL PENETRATIONS SHALL BE SEALED WITH 3M CP25WB+ INTUMESCENT FIRE BARRIER PENETRATION SEALANT OR APPROVED EQUIVALENT, APPLIED PER MANUFACTURER'S AND U.L. GUIDELINES.

CUTTING, PATCHING, REPAIRING AND PAINTING
THE GENERAL CONTRACTOR SHALL PERFORM ALL CUTTING, PATCHING, REPAIRING AND PAINTING FOR ALL ELECTRICAL ITEMS AND EQUIPMENT CALLED FOR UNDER THIS CONTRACT.

FIRE STOPS AND SEALS
PENETRATIONS THROUGH FIRE-RATED WALLS, CEILINGS OR FLOORS IN WHICH CABLES OR CONDUITS PASS SHALL BE FILLED SOLIDLY BY U.L. APPROVED FIRE-STOP MATERIALS CLASSIFIED FOR AN HOURS RATING EQUAL TO THE FIRE RATING OF THE WALL, CEILING OR FLOOR. PROVIDE 3M BRAND FIRE BARRIER CP25WB+ SEALANT OR APPROVED EQUAL.
SEALING BUSHINGS SHALL BE USED ON CONDUIT AND CABLE ENDS TO EFFECTIVELY PREVENT THE INTRUSION OF WATER, A DAMP OR CORROSIVE ATMOSPHERE, DRAFT OR DUST.

ACCESS PANELS
THE GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ACCESS PANELS AND DOORS AS REQUIRED FOR ACCESS TO INACCESSIBLE PULLBOXES, JUNCTION BOXES AND OTHER SPECIALTIES. THE CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ACCESS PANELS AND DOORS WITH THE GENERAL CONTRACTOR AND OTHER TRADES. FINAL LOCATIONS SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER. ALL ACCESS PANELS SHALL BE PAINTED PER ARCHITECTS ALL ACCESS PANELS SHALL BE PAINTED PER ARCHITECTS APPROVAL.

INTERRUPTION OF EXISTING SERVICES
PRIOR TO PERFORMING WORK REQUIRING INTERRUPTION OF EXISTING SERVICES, THE CONTRACTOR SHALL SECURE FROM THE OWNER APPROVAL OF THE PROPOSED OPERATION. (48 HOURS IN ADVANCE) WORK SHALL BE ARRANGED FOR CONTINUOUS PERFORMANCE. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, INCLUDING OVERTIME TO ASSURE THAT THE EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE NECESSARY CONNECTIONS.

TEMPORARY LIGHT AND POWER
FURNISH AND INSTALL TEMPORARY ELECTRICAL SERVICE OF SUFFICIENT SIZE FOR POWER AND LIGHTING USE BY ALL TRADE CONTRACTORS DURING THE COURSE OF CONSTRUCTION. ALL TEMPORARY WORK SHALL BE DONE IN COMPLIANCE WITH ALL APPLICABLE ARTICLES IN THE NATIONAL ELECTRIC CODE, O.S.H.A. AND ALL THE REQUIREMENTS OF ANY AUTHORITY OF JURISDICTION OVER THE WORK. PROVIDE A TEMPORARY POWER CONNECTION TO THE TRAILER(S) AS REQUIRED. THE LOCATION OF THE TRAILER IS TO BE DETERMINED ON SITE. PROVIDE FEEDER TO THE TRAILER(S) OF SUFFICIENT SIZE TO POWER HEATING,AIR CONDITIONING AND GENERAL POWER AND LIGHTING.

PRODUCTS

DESCRIPTION
ALL MATERIALS AND EQUIPMENT PROVIDED UNDER THIS SECTION SHALL BE NEW, FIRST GRADE, BEST OF THEIR RESPECTIVE KINDS AND IN NO WAY SHALL THEY BE LESS THAN THE QUALITY AND INTENT SET FORTH UNDER THIS SECTION, AND SHALL MEET THE REQUIREMENTS OF ALL WITH ALL APPLICABLE CODES AND STANDARDS.

WIRE
CONDUCTORS SHALL BE U.L. LISTED, 600 VOLTS, 90 DEG. C., SINGLE CONDUCTOR TYPE THWN/ THHN/ XHHW, 98% CONDUCTIVITY ANNEALED UNCOATED COPPER WITH PVC INSULATION COVERED WITH NYLON SHEATH JACKET. TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF UNDERWRITERS LABORATORIES STANDARD 83. WIRE SHALL BE IDENTIFIED BY SURFACE MARKING INDICATING MANUFACTURER'S IDENTIFICATION, CONDUCTOR SIZE AND METAL, VOLTAGE RATING, U.L. SYMBOL AND TYPE DESIGNATION. CONDUCTORS SHALL BE STRANDED. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE INDICATED. MANUFACTURED BY ROME CABLE, TRIANGLE WIRE & CABLE, GENERAL CABLE OR ESSEX WIRE & CABLE. NOTE, ALL WIRING SHALL MEET THE REQUIREMENTS OF THE INSTALLATION.

ARMORED CABLE (AC)
ARMORED CABLE SHALL BE OF INTERLOCKING GALVANIZED STEEL ARMOR CONSTRUCTION. COLOR CODED THERMOPLASTIC/NYLON INSULATION THHN, 90 DEGREE C., 600 VOLTS, COPPER CONDUCTORS. MINIMUM SIZE SHALL BE EQUIPMENT COPPER GROUND CONDUCTOR. MARKER TAPE AND CABLE TAPE OVER #12 AWG UNLESS OTHERWISE INDICATED. MANUFACTURED BY AMERICAN FLEXIBLE CONDUIT, TRIANGLE WIRE AND CABLE, GENERAL CABLE, STANDARD CABLE.

ELECTRICAL METALLIC TUBING (EMT)
ELECTRICAL METALLIC TUBING SHALL BE GALVANIZED THIN WALL STEEL CONDUIT. MANUFACTURED BY TRIANGLE WIRE AND CABLE, ALLIED TUBE AND CONDUIT, REPUBLIC OR STEELDUCT. THE CONNECTORS AND COUPLINGS SHALL BE HEAVY DUTY, STEEL-ZINC PLATED, SET SCREW TYPE. THIS IS NOT ACCEPTABLE WHEN CONCEALED IN CONCRETE.

FLEXIBLE METALLIC CONDUIT (FMC)
FLEXIBLE METALLIC CONDUIT SHALL BE OF HEAVY GALVANIZED SHEET METAL STRIP IN INTERLOCKED CONSTRUCTION. MANUFACTURED BY TRIANGLE WIRE AND CABLE, AMERICAN FLEXIBLE CONDUIT OR ELECTRI-FLEX. THE CONNECTORS SHALL BE SQUEEZE TYPE MALLEABLE IRON, CADMIUM PLATED.

RIGID GALVANIZED STEEL CONDUIT (RGS)
RIGID STEEL CONDUIT SHALL BE FULL WEIGHT, HEAVY WALL STEEL PIPE WITH GALVANIZED PROTECTIVE COATING. MANUFACTURED BY TRIANGLE WIRE AND CABLE, ALLIED TUBE AND CONDUIT, REPUBLIC OR STEELDUCT. CONDUIT FITTINGS SHALL BE MALLEABLE IRON, CADMIUM PLATED WITH FULL THREADED HUBS.

RIGID POLYVINYL CHLORIDE CONDUIT (PVC)
RIGID POLYVINYL CHLORIDE CONDUIT SHALL BE SCHEDULE 40, 90 DEGREES C., U.L. RATED. ALL PVC CONDUIT AND FITTINGS SHALL BE SOLVENT WELDED. MANUFACTURED BY CARLON, ELECTRI-FLEX OR PLASTILINE. SCHEDULE 80 IS ACCEPTABLE UNDER DRIVEWAYS & PARKING LOTS.

LIQUID-TIGHT FLEXIBLE CONDUIT
CONDUIT SHALL BE CONSTRUCTED OF HEAVY GALVANIZED SHEET METAL STRIP, SPIRALLY-WOUND INTERLOCKED CONSTRUCTION WITH AN EXTRUDED POLYVINYL GRAY JACKET. CONDUIT SHALL BE UL LABELED AND CONFORM TO THE APPLICATION AND ENVIRONMENT IN WHICH IT WILL BE USED. ALL CONNECTIONS, COUPLINGS AND FITTINGS SHALL BE OF HIGH QUALITY TYPE SPECIFICALLY DESIGNED FOR THIS PURPOSE. MANUFACTURED BY O/Z GEDNEY OR ELECTRI-FLEX.

METAL CLAD CABLE (MC)
METAL CLAD CABLE SHALL BE OF INTERLOCKING ALUMINUM ARMOR CONSTRUCTION. COLOR CODED THERMOPLASTIC/NYLON INSULATION THHN, 90 DEGREE C., 600 VOLTS, COPPER CONDUCTORS AND INTERNAL INSULATED EQUIPMENT COPPER GROUND CONDUCTOR. MARKER TAPE AND CABLE TAPE OVER CONDUCTORS. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE INDICATED. MANUFACTURED BY AMERICAN FLEXIBLE CONDUIT, TRIANGLE WIRE AND CABLE, GENERAL CABLE OR STANDARD CABLE.

NON-METALLIC SHEATHED CABLE TYPE NM
NMC CABLE SHALL BE COLOR CODED PVC JACKET WITH COLOR CODED THERMOPLASTIC/NYLON INSULATION THHN, 90 DEGREE C., 600 VOLTS, COPPER CONDUCTORS AND INTERNAL INSULATED COPPER GROUND CONDUCTOR. WIRE SHALL BE UL LISTED. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE INDICATED. MANUFACTURED BY TRIANGLE WIRE, GENERAL CABLE OR EQUAL. NOTE THAT WIRE AMPACITY IS LIMITED TO 60 DEGREE CELCIUS CONDUCTORS PER NEC.

FITTINGS
JUNCTION AND DEVICE BOXES SHALL BE NON-METALLIC AND BOXES IN RATED WALLS. NON -METALLIC OUTLET BOX (QBWY) MOLDED PLASTIC RATED FOR 1 HR.
CONDUIT BODIES FOR RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE MALLEABLE IRON-ZINC PLATED WITH TAPERED HUBS AND GASKETED ALUMINUM COVER. CONDUIT BODIES FOR ELECTRICAL METALLIC TUBING (EMT) SHALL BE CAST ALUMINUM-ALUMINUM ENAMEL FINISH WITH SET SCREW HUBS AND ALUMINUM COVER. INSULATION BUSHINGS SHALL BE HIGH IMPACT THERMOSETTING PHENOLIC WITH A 150 DEG. C. UL TEMPERATURE RATING. INSULATED GROUNDING BUSHINGS SHALL BE MALLEABLE IRON ZINC PLATED WITH MOLDED ON PHENOLIC INSULATION AND LAY-IN GROUNDING LUG. CONDUIT LOCKNUTS SHALL BE HEAVY NUT STOCK STEEL-ZINC PLATED. OFFSET NIPPLES SHALL BE MALLEABLE IRON ZINC PLATED WITH RIGID CONDUIT THREADING AND 3/4" OFFSET. CONNECTORS AND COUPLINGS FOR ELECTRICAL METALLIC TUBING (EMT) SHALL BE HEAVY STEEL -ZINC PLATED WITH PRE-SET/PRE-SHAKED SET SCREWS. CONDUIT STRAPS SHALL BE SNAP-TYPE, DOUBLE RIBBED STEEL-ZINC PLATED. METAL CLAD CABLE AND FLEXIBLE METALLIC CONDUIT CONNECTORS SHALL BE MALLEABLE IRON-ZINC PLATED, MALE HUB THREADS WITH LOCKNUT. CONDUIT FITTINGS SHALL BE AS MANUFACTURED BY O-Z GEDNEY, CROUSE-HINDS OR APPLETON OR APPROVED EQUAL BY ENGINEER.

SUPPORT SYSTEMS
SUPPORT CHANNEL SHALL BE ROLL-FORMED 12 OR 14 GAUGE STEEL, SOLID BASE OR BOLT HOLE BASE - HOT DIP GALVANIZED FINISH. COMPLETE WITH ANGLE FITTINGS, SPRING NUTS, CONDUIT SUPPORTS, 3/8" THREADED RODS, ETC., MANUFACTURED BY UNISTRUT, KINDORF OR B-LINE SYSTEMS.

CABLE TIES
CABLE TIES SHALL BE FABRICATED OF ONE-PIECE HALAR WITH NO METAL PARTS, EQUAL TO BURNDY, T&B, PANDUIT, BLACKBURN OR APPROVED EQUAL BY ENGINEER. (BLACK EXTERIOR CABLE TIES WILL BE USED INDOORS & OUTDOORS).

FUSES
FUSES SHALL NOT BE INSTALLED UNTIL THE EQUIPMENT IS READY TO BE ENERGIZED. THIS MEASURE PREVENTS FUSE DAMAGE DURING SHIPMENT OF THE EQUIPMENT FROM THE MANUFACTURER TO THE JOB SITE.
ALL FUSES SHALL BE INSTALLED BY THE CONTRACTOR. FUSES SHALL BE OF THE SAME MANUFACTURER; EATON, BUSSMAN OR APPROVED EQUAL BY THE ENGINEER. TYPE DESCRIBED BELOW SHALL BE U.L. LISTED DUAL ELEMENT TIME DELAY TYPE.
CIRCUIT 0 TO 600 AMPERE SHALL BE PROTECTED BY DUAL ELEMENT, TIME DELAY, CURRENT LIMITING FUSES WITH AN INTERRUPTING RATING OF 200,000 A.I.C., U.L. LISTED CLASS 'RK1'. CIRCUIT 601 TO 3000 AMPERE SHALL BE PROTECTED BY DUAL ELEMENT, TIME DELAY, CURRENT LIMITING FUSES WITH AN INTERRUPTING RATING OF 200,000 A.I.C., U.L. LISTED CLASS "L" KPL-C.
MOTOR CIRCUITS SHALL BE PROTECTED BY DUAL ELEMENT, TIME DELAY, CURRENT LIMITING FUSES WITH AN INTERRUPTING RATING OF 200,000 A.I.C., U.L. LISTED CLASS "RK1".
LARGE MOTORS SHALL BE PROTECTED BY DUAL ELEMENT, TIME DELAY, CURRENT LIMITING FUSES WITH AN INTERRUPTING RATING OF 200,000 A.I.C., U.L. LISTED CLASS "L" KPL-C.
CIRCUIT BREAKER PANELBOARDS SHALL BE PROTECTED BY DUAL ELEMENT, TIME DELAY, CURRENT FUSES WITH AN INTERRUPTING RATING OF 200,000 A.I.C., U.L. LISTED CLASS "RK1".
FUSES SHALL HAVE A VOLTAGE RATING BASED ON DISTRIBUTION REQUIREMENTS SYSTEMS.
UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THE SPARE FUSES LISTED BELOW.
10% (MINIMUM OF THREE) OF EACH TYPE AND RATING INSTALLED, 0 TO 600 AMPERES.
THREE FUSES OF EACH RATING INSTALLED OF 601 AMPERE OR LARGER. SPARE FUSE CABINET CATALOGUE # (LITTLE FUSE LFSC OR APPROVED EQUAL BY ENGINEER) SHALL PROVIDED TO STORE THE ABOVE SPARE FUSES (SIZE 30" H x 24" W x 12" D).

OUTLET BOXES
OUTLET BOXES SHALL BE GALVANIZED STEEL, FLUSH OR SURFACE MOUNTED AND OF PROPER TYPE AND SIZE AS REQUIRED FOR THE PARTICULAR APPLICATION. SIZE AND TYPE DICTATED BY THE NUMBER OF DEVICES, NUMBER OF CONDUCTORS AND WIRING METHOD UTILIZED. BOXES SHALL BE ADEQUATE SIZE FOR THE INSTALLATION OF CONDUCTORS WITHOUT EXCESSIVE BENDING OR CRIMPING OF THE CONDUCTORS AND DAMAGING OF CONDUCTOR INSULATION. MANUFACTURED BY STEEL CITY, OR RACO.
OUTLET BOXES SHALL BE SECURED FIRMLY IN PLACE TO THE BUILDING STRUCTURE AND SET TRUE AND SQUARE. PROVIDE SUITABLE MEANS TO SUPPORT OUTLET BOX TO TAKE THE WEIGHT OF THE LIGHTING FIXTURE OR DEVICE. OUTLET BOXES OR BOX EXTENSION RINGS SHALL BE SET FLUSH TO THE FINISHED WALL OR CEILING. BOXES MUST BE SO ATTACHED THAT THEY WILL NOT `ROCK', `SHIFT' OR `MOVE IN AND OUT' WHEN DEVICES ARE USED. IN NO CASE SHALL BOXES BE INSTALLED BACK-TO-BACK IN A COMMON WALL DIVIDING TWO SPACES.
WHERE MORE THAN ONE OUTLET IS SHOWN OR SPECIFIED TO BE THE SAME ELEVATION OR ONE ABOVE THE OTHER, ALIGN THEM EXACTLY ON CENTER LINES HORIZONTALLY OR VERTICALLY. MULTIPLE SWITCHES SHOWN AT ONE LOCATION SHALL BE INSTALLED GANGED TOGETHER UNDER ONE WALL PLATE. SWITCHES SHALL BE ARRANGED IN AN ORDER APPROPRIATE TO THE LOCATIONS OF LIGHTING FIXTURE BEING CONTROLLED. BOXES MUST BE ATTACHED SO THAT THEY SET FLUSH TO THE FINISHED WALL OR CEILING.

SAFETY/DISCONNECT SWITCHES
DISCONNECT/SAFETY SWITCHES SHALL BE MOTOR RATED, METAL ENCLOSED, INTERLOCKING, CARTRIDGE FUSED, HEAVY DUTY TYPE, WITH APPROPRIATE VOLTAGE RATINGS. QUICK-MAKE, QUICK-BREAK MECHANISMS. SOLID NEUTRAL, U.L. LISTED. SWITCHES SHALL HAVE PROPER TYPE METAL ENCLOSURES; STANDARD, WEATHERPROOF, DUSTPROOF, ETC., TO SUIT THEIR SPECIFIC LOCATIONS. MANUFACTURED BY SIEMENS, GENERAL ELECTRIC, SQUARE `D', OR EATON.

JUNCTION BOXES, PULLBOXES AND WIREWAYS
JUNCTION BOXES, PULLBOXES AND WIREWAYS SHALL BE OF PROPER TYPE AND SIZES AS REQUIRED. CODE GAUGE, GALVANIZED STEEL WITH KNOCKOUTS AND FLANGES TO RECEIVE THE COVERS. COVERS SHALL BE FLAT, OF THE SAME MATERIAL AS THE BOX AND FASTENED TO THE BOX WITH MACHINE SCREWS. MANUFACTURED BY HOFFMAN, SQUARE `D' OR LEE PRODUCTS.

WIRING DEVICES
ALL DEVICES SHOULD BE SPECIFICATION GRADE, U.L. LISTED, SELF-GROUNDING WITH GROUND LUG SIDE AND BACK WIRED.COLOR BY ARCHITECT. MANUFACTURED BY HUBBELL, LEVITON, EATON, LEGRAND.
SINGLE POLE SWITCHES: 20A @ 120/277V
BASIS OF DESIGN:
SINGLE POLE SWITCHES: CS120x
THREE-WAY SWITCHES: CS320x
FOUR-WAY SWITCHES: CS420x
SINGLE POLE SWITCHES & PILOT: HB1221Px
RECEPTACLES: 20A @ 120/277V (TAMPER RESISTANT)
BASIS OF DESIGN:
DUPLEX RECEPTACLE: 5362-SGx
DUPLEX RECEPTACLE - GFCI: GFTxRST20WU
DUPLEX RECEPTACLE - AFCI: AFTR2-x-20
DUPLEX RECEPTACLE - AFCI / GFCI: AGTR2-x-20
DUPLEX RECEPTACLE - AFCI / GFCI 2 POLE: AGTR2-x-20A 2 POLE
WALL PLATES FOR SWITCHES AND RECEPTACLES SHALL BE ALUMINUM. CONFIRM WITH OWNER.

LUMINAIRES
FURNISH AND INSTALL ALL LUMINAIRES AS SPECIFIED ON THE DRAWINGS, COMPLETE WITH ALL ACCESSORIES, LOUVERS, LAMPS/LEDS AND MOUNTING HARDWARE. THE LUMINAIRES SHOWN ARE MARKED AS TYPES A, B, C, ETC. PROVIDE LAMPS FOR ALL LUMINAIRES OF WATTAGES AND TYPES INDICATED.
LED DRIVERS SHALL BE THERMALLY REGULATED WITH OVERLOAD AND SHORT CIRCUIT PROTECTION AND RATED LIFETIME OF 50,000 HOURS AS MANUFACTURED BY ADVANCE, GENERAL ELECTRIC OR OSRAM/SYLVANIA.
LED LAMPS SHALL BE MANUFACTURED WITH TIGHT BINNING TO MAINTAIN KELVIN TEMPERATURE BETWEEN +/- 100K. INDOOR LIGHTING TO BE 3000 K, UNLESS NOTED OTHERWISE, MIN. CRI OF 80. MIN. LIFETIME OF 50,000 HOURS AT 70% LUMEN MAINTENANCE AS MANUFACTURED BY CREE, NICHIA, LUMILEDS, PHILIPS OR OSRAM/SYLVANIA.
LED LUMINAIRES - PROVIDE WITH CONTROL-TYPE COMPATIBLE DRIVERS, PROVIDE LM 79 & LM 80 REPORTS WITH LUMINAIRE SUBMITTAL. MANUFACTURER AS INDICATED ON LUMINAIRE SCHEDULE ON THE ELECTRICAL DRAWING. ALL LED LUMINAIRES SHALL BE ELIGIBLE FOR REBATES FROM THE UNITED ILLUMINATING CO GUIDELINES RECESSED TROFFER LUMINAIRES SHALL BE LISTED WITH DESIGN LIGHTS CONSORTIUM (DLC).
FURNISH AND INSTALL NEW LED'S/DRIVERS DURING THE COURSE OF CONSTRUCTION UP TO AND INCLUDING THE DATE OF FINAL COMPLETION OF THE PROJECT.
CLEAN AND REMOVE ALL PAINT, STICKERS, DIRT, SMUDGES AND FINGERPRINTS FROM LUMINIARES AFTER FINAL BUILDING CLEAN-UP.
ALL LUMINAIRES SHALL HAVE SAFETY #12 JACK CHAINS FASTENED FROM BUILDING STRUCTURE ABOVE TO LUMINAIRES PER MANUFATURER'S INSTRUCTIONS. SEE DETAIL ON DRAWING E100.

FIRE ALARM SYSTEM
FURNISH AND INSTALL ALL MATERIALS, EQUIPMENT, LABOR AND SERVICE REQUIRED TO PROVIDE A COMPLETE FIRE ALARM SYSTEM AS INDICATED ON DRAWINGS. ALL NEW EQUIPMENT SHALL MATCH THE EXISTING SYSTEM MANUFACTURER.
THE EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.E.C. IN COMPLIANCE WITH N.F.P.A. 72 PROVIDE ALL NECESSARY WIRING FOR PROPER WORKING ORDER.
ALL WIRING SHALL BE U.L. APPROVED FOR APPLICATION AND MEET ALL NATIONAL, STATE, AND LOCAL ELECTRICAL CODES, N.F.P.A. 72.
JUNCTION BOXES SHALL BE RED AND LABELED 'FIRE ALARM'. WIRING COLOR CODE SHALL BE MAINTAINED THROUGHOUT THE INSTALLATION. THE AUTHORIZED REPRESENTATIVE SHALL PROVIDE ON-SITE SUPERVISION OF INSTALLATION. FINAL CONNECTION BETWEEN EQUIPMENT AND THE WIRING SYSTEMS SHALL BE MADE UNDER DIRECT SUPERVISION OF THE MANUFACTURER'S REPRESENTATIVE FOR FINAL SIGN-OFF ON NFPA 72 FORM.
ALL FIRE ALARM CONDUIT EXPOSED SHALL BE RED.

PANELBOARDS
PANELBOARDS SHALL BE THE COMBINATION THERMAL/MAGNETIC CIRCUIT BREAKER TYPE, WITH THE NUMBER OF BRANCH CIRCUITS AS INDICATED ON THE DRAWINGS. GROUND BUS AND LUGS. PANELS SHALL BE U.L. LISTED. DOOR-IN-DOOR DESIGN. BOXES SHALL BE CORROSION RESISTANT, ZINC FINISH GALVANIZED. FRONTS SHALL BE REINFORCED STEEL POWDER FINISH PAINTED LIGHT GRAY (ANSI-61) AND SHALL BE EQUIPPED WITH CONCEALED HINGES AND CONCEALED TRIM ADJUSTING SCREWS. DIRECTORY CARD HOLDERS SHALL BE CLEAR LEXAN PERMANENTLY MOUNTED TO THE FRONT DOOR AND ALL DOOR LOCKS SHALL BE CORROSION-PROOF VALOX WITH RETRACTABLE LATCH, KEYED ALIKE. BUS BARS SHALL BE SEQUENCED PHASE FULLY INSULATED, COPPER, 22,000 RMS, SYMMETRICAL. PANELBOARD RATINGS SHALL BE DISPLAYED ON THE DEAD FRONT SHIELD AND TOTALLY VISIBLE WITH THE DOOR OPEN. BRANCH CIRCUIT BREAKERS SHALL BE QUICK-MAKE, QUICK-BREAK, THERMAL-MAGNETIC TYPE WITH VISIBLE TRIP POSITION. MANUFACTURED BY EATON, SIEMENS OR SQUARE 'D' OR AN APPROVED EQUAL BY THE ENGINEER.

CIRCUIT BREAKERS
COPPER, 10,000 RMS SYMMETRICAL. CIRCUIT BREAKERS SHALL BE PUSH-IN TYPE. PANELBOARD RATINGS SHALL BE DISPLAYED ON THE DEAD FRONT SHIELD AND TOTALLY VISIBLE WITH THE DOOR OPEN. MANUFACTURED BY EATON, SEIMENS, OR SQUARE `D',.
ALL MULTI-POLE BREAKERS SHALL BE EQUIPPED WITH HANDLE TIES FOR MULTI-POLE USE. SEE PANEL SCHEDULE FOR CIRCUIT BREAKER SIZES, TYPES AND SHORT CIRCUIT INTERRUPTING, (AIC) RATINGS. MINIMUM AIC RATING SHALL BE INDICATED ON THE SCHEDULES. MANUFACTURED BY EATON, SIEMENS, SQUARE 'D' OR CUTLER HAMMER.

PHASE SEQUENCE AND BALANCING
MAINTAIN CORRECT PHASE SEQUENCING OF ALL FEEDERS AND CIRCUITS WITH PHASE IDENTIFICATION AND MAINTAINING CORRECT RELATIONSHIP THROUGHOUT THE ENTIRE SYSTEM. BALANCE ALL FEEDERS AND CIRCUITS TO WITHIN 10 PERCENT.

POWER AND CONTROL WIRING
FURNISH AND INSTALL ALL POWER WIRING, CONTROL WIRING, CONDUIT AND FITTINGS FOR ALL PLUMBING, HEATING AND VENTILATING AND AIR CONDITIONING EQUIPMENT AND FINAL CONNECTIONS. MANUAL MOTOR STARTERS SHALL BE FURNISHED, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR. EVERY MOTOR SHALL BE PROVIDED WITH RUNNING OVERLOAD PROTECTION. UPON COMPLETION OF THE WORK, CHECK OUT EACH PIECE OF THE ELECTRICALLY OPERATED EQUIPMENT FOR PROPER OPERATION OF EACH ITEM. ITEMS TO BE CHECKED ARE VOLTAGE, ROTATION AND OVERLOAD PROTECTION.

EXECUTION

INSTALLATION
ALL WORK, MATERIALS AND MANNER OF INSTALLING SAME SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE NATIONAL ELECTRIC CODE. ALL CONDUIT AND WIRING SHALL BE INSTALLED CONCEALED UNLESS OTHERWISE NOTED. WIRING IN UNFINISHED ROOMS SHALL BE INSTALLED EXPOSED USING WIRE MOLD OR EQUAL, AS APPROVED BY THE OWNER/ARCHITECT.

RACEWAYS
RACEWAYS, ENCLOSURES AND BOXES SHALL BE MECHANICALLY JOINED TO FORM A CONTINUOUS ELECTRICAL CONDUCTOR. THE CONTRACTOR SHALL PROVIDE AND ERECT APPROVED TYPE PULL BOXES AS REQUIRED. MINIMUM SIZE CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED.
FURNISH LOCKNUTS AND BUSHINGS FOR ALL CONDUIT TERMINATIONS IN ALL OUTLET BOXES, PANELS, PULL BOXES, ETC.
RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE USED FOR WIRING IN THE FOLLOWING LOCATIONS:
1. WITHIN CONCRETE SLABS - 3/4" MAXIMUM.
2. EXPOSED TO MOISTURE AND MECHANICAL INJURY.
3. ELECTRICAL METALLIC TUBING (EMT) SHALL BE USED FOR CONCEALED AND EXPOSED WIRING
4. LIGHTING, RECEPTACLE AND POWER BRANCH CIRCUIT WIRING.

EXCEPTION: IN FINISHED SPACES, CONSULT ENGINEER
ALL CONDUITS SHALL BE INSTALLED IN PARALLEL AND PERPENDICULAR TO THE BUILDING ALL CONDUIT SHALL BE SUPPORTED USING CADMIUM PLATED CONDUIT STRAPS AND HANGERS.
SEPARATE CONDUIT SYSTEMS SHALL BE INSTALLED FOR NORMAL AND EMERGENCY POWER.
PROVIDE WIRING TO ALL OUTLETS, EQUIPMENT APPARATUS AND OTHER SPECIALTIES UNDER THIS DIVISION THAT WHICH IS FURNISHED OR PROVIDED UNDER OTHER DIVISIONS OR BY THE OWNER.
THE TERM `WIRING' SHALL BE CONSIDERED TO BE COMPRISED OF THE CONDUIT, CONNECTIONS, ETC.
ALL WIRING ON DRAWINGS IS SIZED FOR TYPE THWN/THHN COPPER CONDUCTORS. MINIMUM SIZE WIRE SHALL BE #12 UNLESS OTHERWISE INDICATED. ALL WIRING SHALL BE COLOR CODED.
CARE SHALL BE EXERCISED IN PULLING CONDUCTORS INTO RACEWAYS SO AS NOT TO INJURE THE INSULATION. CABLE PULLING LUBRICANT SHALL BE USED TO ASSIST IN PULLING. CONDUCTOR WITHIN PANELBOARDS, JUNCTION BOXES, TROUGHS AND OTHER EQUIPMENT WHERE CONCENTRATIONS OF CONDUCTORS ARE ENCLOSED, SHALL BE NEATLY ARRANGED AND TIED WITH CABLE TIES.
CIRCUITS SHALL BE SO CONNECTED TO THE PANELBOARDS THAT THE TOTAL LOAD IS DISTRIBUTED AS NEARLY AS POSSIBLE, EQUALLY BETWEEN EACH LINE AND NEUTRAL. 10% WILL BE CONSIDERED A REASONABLE AND ALLOWABLE UNBALANCE. BRANCH CIRCUIT WIRING FOR SWITCHES, RECEPTACLES, DEVICES AND LIGHTING IN DRYWALL CONSTRUCTION AND ACCESSIBLE HUNG CEILING SPACE, SHALL BE INSTALLED IN METAL CLAD CABLE `MC'. CABLE SHALL BE SUPPORTED FROM STRUCTURE 4' O.C. WITH NYLON CABLE TIES. PROVIDE APPROPRIATE GROMMETS FOR HORIZONTAL RUNS IN METAL STUD PARTITIONS. CABLE SHALL NOT LAY ON CEILING STRUCTURE OR TILES. PROVIDE ANTI-SHORT BUSHINGS (RED HEAD) UNDER ARMOR JACKET AT TERMINATIONS.
NEUTRALS ARE NOT TO BE COMBINED OR HAVE A COMMON NEUTRAL. WIRING IN OUTLET BOXES, JUNCTION BOXES, CABINETS PANELBOARDS OR EQUIPMENT SHALL HAVE A MINIMUM OF EIGHT (8") INCHES LENGTH LEADS FOR CONNECTING WIRING DEVICES TO MAKE UP CIRCUIT SPLICES.
INSTALL COPPER GREEN INSULATED GROUNDING CONDUCTOR IN ALL CONDUITS & RACEWAYS.
SPLICING SHALL BE DONE WITH INSULATED OR NON-INSULATED CONNECTORS OF APPROPRIATE TYPES AND CURRENT-CARRYING CAPACITY. NON-INSULATED CONNECTORS SHALL BE WRAPPED WITH INSULATING TAPE TO THE THICKNESS OF THE INSULATION OF THE CONDUCTORS BEING SPLICED. ELECTRICAL TAPE SHALL BE 3M OR SUPER 88 SCOTCH VINYL FLAME-RETARDANT, COLD AND WEATHER RESISTANT.
SPLICES FOR CONDUCTORS, SIZES #10 AWG OR SMALLER SHALL BE MADE WITH U.L. LISTED SPRING-TYPE CONNECTORS OR APPROPRIATE CURRENT CARRYING CAPACITY. EQUAL TO 3M SCOTCHLOK, BUCHANAN OR T&B. SPLICES FOR STRANDED CONDUCTORS, SIZES #10 AWG OR SMALLER SHALL BE MADE WITH UL LISTED CRIMP-TYPE. EQUAL TO 3M SCOTCHLOK, BUCHANAN

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REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	SK	07/03/24	REVISED BACKGROUNDS

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

ELECTRICAL SPECIFICATIONS

DESIGNED BY:		SCALE:	AS NOTED
DRAWN BY:	SK/EJ	DATE:	11-23-20
CHECKED BY:	MVM	PROJECT NUMBER:	200943-1
CAD FILE: ES1.dwg			

SEAL

100% For Review
07/03/2024

SHEET NUMBER

ES-1

SPLICES
SPLICES, TAPS AND TERMINALS FOR CONDUCTORS #6 AWG AND LARGER SHALL BE MADE WITH UL LISTED BOLTED PRESSURE CONNECTORS OF BRONZE OR COPPER CONSTRUCTION, OF APPROPRIATE CURRENT CARRYING CAPACITY. EQUAL TO O-Z/GEDNEY, BURNDY OR BLACKBURN.

CONDUCTOR IDENTIFICATION
CONDUCTORS #6 AWG AND SMALLER SHALL HAVE COLOR-CODED INSULATION.
CONDUCTORS #4 AWG AND LARGER SHALL BE IDENTIFIED WITH TAPES APPLIED NEAR THE ENDS OF THE CONDUCTORS.
FEEDERS AND BRANCH CIRCUIT CONDUCTORS SHALL BE IDENTIFIED FOR PHASE ROTATION.

	208/120V/3PH	480/277V/3PH
PHASE A	BLACK	YELLOW
PHASE B	RED/BLACK WITH RED TAPE	BROWN
PHASE C	RED/BLACK	ORANGE
NEUTRAL	WHITE	WHITE
GROUND	GREEN	GREEN

ALL FEEDERS, MAINS AND BRANCH CIRCUIT CONDUCTORS SHALL BE TAGGED AT BOTH ENDS WITH WIRE MARKERS IN ALL PANELS, MOTOR CONTROLS, JUNCTION BOXES, OUTLET BOXES AND DEVICE

IDENTIFICATION
FURNISH AND INSTALL NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT, IDENTIFYING ITEMS BY NAME, FUNCTION AND/OR CONTROL..
IDENTIFYING NAMEPLATES SHALL BE LAMINATED, PLASTIC TYPE, CONSISTING OF TWO BLACK PLASTIC SHEETS WITH ONE WHITE PLASTIC SHEET BONDED TO AND BETWEEN THE TWO OUTER BLACK SHEETS AND HAVING THE LETTERS ENGRAVED IN ONE BLACK TO THE DEPTH OF THE WHITE PLASTIC. FASTEN NAMEPLATES TO EQUIPMENT WITH SUITABLE ADHESIVES.
ALL PANELS SHALL HAVE TYPEWRITTEN CIRCUIT DIRECTORIES IDENTIFYING ALL BRANCH CIRCUITS.
USE PLASTIC-COATED WIRE MARKERS OF THE SELF-ADHESIVE, WRAPAROUND TYPE WITH PERMANENT FACTORY-PRINTED NUMBER, LETTERS AND SYMBOLS.
WIRE MARKERS SHALL BE SECURELY ATTACHED AT BOTH ENDS, IDENTIFYING PANEL AND CIRCUIT BREAKER NUMBERS. CIRCUIT BREAKER NUMBERS.
ALL CONDUCTORS SHALL BE PERMANENTLY TAGGED AT TIME OF INSTALLATION. LABELS SHALL BE EQUAL TO T&B, PANDUIT OR IDEAL.

GROUNDING
ALL ELECTRICAL WORK SHALL BE GROUNDED AND BONDED IN FULL CONFORMANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE AND LOCAL REQUIREMENTS.
ALL ELECTRICAL EQUIPMENT, TRANSFORMERS, PANELBOARD ENCLOSURES, MOTOR FRAMES, SAFETY SWITCHES, METAL ENCLOSURES, ELECTRICAL DEVICE ENCLOSURES AND ALL OTHER EQUIPMENT SHALL BE MADE TO FORM A CONTINUOUS CONDUCTING, GROUND PATH OF LOW IMPEDANCE FOR GROUND FAULT CIRCUITS AND OPERATION OF THE CIRCUIT PROTECTIVE DEVICES WITHIN EACH CIRCUIT PROVIDE GROUNDING CONDUCTOR IN ALL CONDUITS.
GROUND CONNECTIONS WITH THE GROUNDING CONDUCTORS SHALL BE MADE AT EACH OUTLET BOX, LIGHTING FIXTURE, MOTOR AND OTHER EQUIPMENT COMPONENTS BY MEANS OF A POSITIVELY SECURED GROUNDING CLAMP, SCREW OR CLIP CONNECTIONS TO GROUNDING.
RODS, OTHER GROUNDING ELECTRODE CONDUCTORS SHALL BE MADE WITH CADWELD TYPE, EXOTHERMIC WELD PROCESS UNLESS OTHERWISE NOTED. CONNECTIONS TO PIPES SHALL BE MADE WITH APPROVED BRONZE OR BRASS CLAMPS.
BONDING SHALL BE PROVIDED TO ASSURE ELECTRICAL CONTINUITY AND THE CAPACITY TO SAFELY CONDUCT ANY FAULT CURRENT LIKELY TO BE IMPOSED.
ALL DEVICES (SWITCHES, RECEPTACLES, ETC.,) SHALL BE GROUNDED TO CONDUIT SYSTEM WITH SIX (6") INCH SOLID COPPER #12 AWG INSULATED WIRE (GREEN) CONNECTED TO GROUND SCREW ON DEVICE AND FASTENED TO BACKBOX WITH10-32 x 3/8" SLOTTED HEXAGON HEAD WASHER FACE GROUND SCREW WITH GREEN DYE FINISH.

CCTV SYSTEM
ALL WORK RELATED TO THE CCTV SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF CUSTOMER'S I.T. CONSULTANT.

DATA INSFRASTRUCTURE SYSTEM
ALL WORK RELATED TO THE DATA INFRASTRUCTURE SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF COSTUMER'S I.T. CONSULTANT.

SEISMIC RESTRAINT
SEISMIC LATERAL RESTRAINTS DESIGNED AND CONSTRUCTED TO RESIST HORIZONTAL MOVEMENT IN ANY DIRECTION SHALL BE INSTALLED ON ALL SUSPENDED CONDUITS 2 1/2 INCHES IN DIAMETER OR GREATER. QUANTITY AND LOCATION OF THE LATERAL RESTRAINTS SHALL BE BASED ON THE CONDUIT SYSTEM LAYOUT AND IN GENERAL, SHALL BE INSTALLED AT CONDUIT BENDS, JUNCTION BOXES, AND APPROXIMATELY EVERY 20 FEET ALONG CONDUIT RUNS. SEISMIC LATERAL RESTRAINTS ARE NOT REQUIRED FOR ANY PIPING SUSPENDED BY INDIVIDUAL HANGERS 12 INCHES OR LESS IN LE HE PIPE TO THE BOTTOM OF THE SUPPORT FOR THE HANGER.PIPE TO THE BOTTOM OF THE SUPPORT FOR THE HANGER.

VOLTAGE DROP (MANDATORY)
ANY CONDUCTOR (ONE WAY) MEASURING IN EXCESS OF 125 FEET SHALL BE CALCULATED AS REQUIRED. CONTACT ENGINEER FOR ASSISTANCE IF REQUIRED. NOTE MAXIMUM VOLTAGE DROP IS 3%, PER 2017 N.E.C. SUBMIT TO ENGINEER FOR APPROVAL.

DRY TYPE TRANSFORMERS (INDOORS)
DRY TYPE TRANSFORMERS SHALL BE U.L. LISTED IN ACCORDANCE WITH ANSI #C89.2 AND NEMA ST-20 STANDARDS. TEMPERATURE RISE OF 150 DEGREES C. VENTILATED ENCLOSURE FOR INDOOR 200% RATED NEUTRAL BUS, SOUND RATING 42 TO 45 DECIBELS. MANUFACTURED BY EATON, ABB, SQUARE D AT CONDUIT BENDS, JUNCTION BOXES, AND APPROXIMATELY EVERY 20 FEET ALONG CONDUIT RUNS. SEISMIC LATERAL RESTRAINTS OR CUTLER HAMMMER.

DRY TYPE TRANSFORMERS (K FACTOR)(WHERE SPECIFIED)
DRY TYPE TRANSFORMERS SHALL BE U.L. LISTED K 13 RATED, IN ACCORDANCE WITH ANSI C89.2 & NEMA ST-20 STANDARDS. TEMPERATURE RISE OF 150 DEGREES C. VENTILATED ENCLOSURE FOR INDOOR USE, PAINT COLOR ANSI #61 GRAY. 480 VOLT PRIMARY, SECONDARY 208Y/120 VOLTS, THREE-PHASE 60 HERTZ WITH 6 2.5% TAP (2 ABOVE/4 BELOW) COPPER WINDINGS, 200% RATED NEUTRAL BUS, SOUND RATING 42 TO 45 DECIBELS. MANUFACTURED BY EATON, ABB, SQUARE D.

JUNCTION BOXES, PULLBOXES AND WIREWAYS
JUNCTION BOXES, PULL BOXES AND WIREWAYS SHALL BE OF PROPER TYPE AND SIZES AS REQUIRED. CODE GAUGE GALVANIZED STEEL KNOCKOUTS AND FLANGES TO RECEIVE THE COVERS. COVERS SHALL BE FLAT, OF THE SAME MATERIAL AS THE BOX AND FASTENED TO THE BOX WITH MACHINE SCREWS. MANUFACTURED BY HOFFMAN, SQUARE D OR APPROVED EQUALS BY ENGINEER.

BACKBOARDS
BACKBOARDS SHALL BE FIRE-RETARDANT, 3/4" TYPE PLYWOOD OF SUFFICIENT SIZE FOR MOUNTING EQUIPMENT. PAINT ALL SIDES WITHTWO (2) COATS OF FIRE-RETARDANT GRAY ENAMEL PAINT.

GROUND RODS
GROUND RODS SHALL BE HIGH STRENGTH STEEL CORE WITH WITH ELECTROLYTIC ALLY BONDED COPPER JACKET. GROUND RODS SHALLCONFORM TO REQUIREMENTS OF THE U.L. SPEC. NO. 467 (ANSI C-33.8-1972). MINIMUM SIZE SHALL BE 5/8 INCH DIAMETER BY EIGHT (8') FEET UNLESS OTHERWISE INDICATED. MANUFACTURED BY ERICO, BLACKBURN OR GALVIN.

AUTOMATIC LIGHTING CONTROLS
REFER TO DLC (DESIGN LIGHT CONSORTIUM) NETWORK LIGHTING CONTROLS SYSTEM V2.0 SPECIFICATIONS AND IECC 2015 REQUIREMENTS. APPROVED MANUFACTURERS: ACUITY BRANDS, PHILLIPS, COOPER INDUSTRIES, HUBBEL, EATON, LEGRAND, GENERAL ELECTRIC, LUTRON, SCHNEIDER OR APPROVED EQUAL BY THE LIGHTING DESIGNER.

UNDERGROUND WIRING
ALL UNDERGROUND WIRE SHALL BE RATED FOR UNDERROUND AND HAVE TYPE XHHW INSULATION.

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PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
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Prepared For:

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46 ALBION STREET
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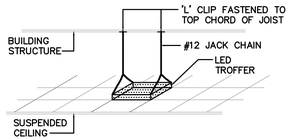
SHEET TITLE
ELECTRICAL SPECIFICATIONS

DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11-23-20
CHECKED BY: MVM	PROJECT NUMBER: 200943-1
CAD FILE: ES2.dwg	

SEAL

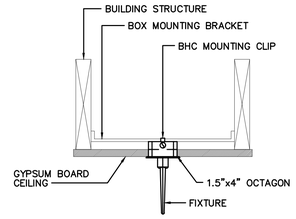
100% For Review
07/03/2024

SHEET NUMBER
ES-2



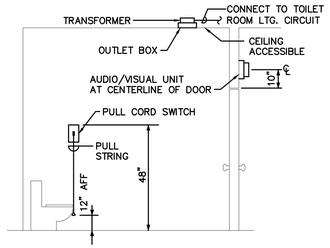
TYPICAL 2'X2' & 2'X4' LED LUMINAIRE MOUNTING DETAIL

NOT TO SCALE



EXIT SIGN CEILING MOUNTING DETAIL (GYPSUM BOARD CEILING)

NOT TO SCALE



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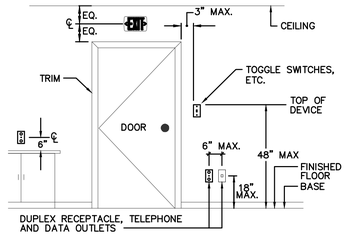
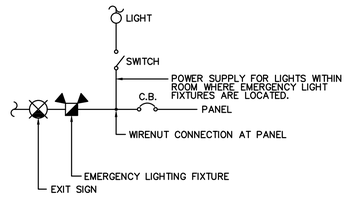


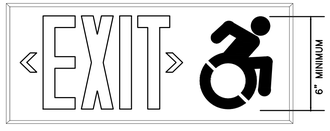
TYPICAL DEVICE MOUNTING DETAIL

NOT TO SCALE



TYPICAL DETAIL FOR EMERGENCY LIGHTING CONNECTION

NOT TO SCALE



NOTES:
1. EXIT SIGN SHALL CONFORM TO THE REQUIREMENTS OF ICC/ANSI A117.1, AMERICAN NATIONAL INSTITUTE FOR ACCESSIBLE AND USABLE FACILITIES AND BUILDINGS.

H.C. ACCESSIBLE EXIT SIGN DETAIL

NOT TO SCALE

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	EST. WATTS	CATALOG NUMBER	LAMP QTY.	LAMP TYPE	VOLTS	MOUNTING	REMARKS
A1	MERCURY	24	LR205-22G-2600-35K-1%-UNI	–	LED	120	SUSPENDED CEILING	2'X2' LED TROFFER 4" DEPTH
B	MERCURY	43	LR205-24G-4800-35K-1%-UNI	–	LED	120	SUSPENDED CEILING	2'X4' LED TROFFER 4" DEPTH
B1	MERCURY	28	LR205-24G-3700-35K-1%-UNI	–	LED	120	SUSPENDED CEILING	2'X4' LED TROFFER 4" DEPTH
B2	MERCURY	51	LR205-24G-5700-35K-1%-UNI	–	LED	120	SUSPENDED CEILING	2'X4' LED TROFFER 4" DEPTH
C	MERCURY	43	LW3-4-3800-35K-AW-1%-UNI	–	LED	120	SURFACE	4' LED STRIP, 3"W X 2-3/4"H
AEM	MERCURY	37	LR205-22G-3800-35K-1%-UNI-EM10	–	LED	120	SUSPENDED CEILING	2'X2' LED TROFFER 4" DEPTH
BEM	MERCURY	43	LR205-24G-4800-35K-1%-UNI-EM10	–	LED	120	SUSPENDED CEILING	2'X4' LED TROFFER 4" DEPTH, EMERGENCY LIGHTING OPTION
B1EM	MERCURY	28	LR205-24G-3700-35K-1%-UNI-EM10	–	LED	120	SUSPENDED CEILING	2'X4' LED TROFFER 4" DEPTH, EMERGENCY LIGHTING OPTION
B2EM	MERCURY	51	LR205-24G-3700-35K-1%-UNI-EM10	–	LED	120	SUSPENDED CEILING	2'X4' LED TROFFER 4" DEPTH, EMERGENCY LIGHTING OPTION
CEM	MERCURY	43	LW3-4-3800-35K-AW-1%-UNI-EM10	–	LED	120	SURFACE	4' LED STRIP, 3"W X 2-3/4"H, EMERGENCY LIGHTING OPTION
EX	ISOLITE	2.5	UEL-EM-R-1C2M-MTEBR	–	LED	120	SUSPENDED CEILING	EDGELIT EMERGENCY EXIT SIGN, NI-CAD BATTERY BACKUP, RED LETTERING, ALUMINUM SATIN FRAME
EX1	ISOLITE	1	LPX-CT-EM-R-ISA-U-WH-MTEBP	–	LED	120	SUSPENDED CEILING	EMERGENCY EXIT SIGN, WITH ISA FOR STATE OF CT, NI-CAD BATTERY BACKUP, RED LETTERING, EXTRUDED ALUM. HOUSING
EX2	ISOLITE	2.5	RL-EM-R-U-WH-MTEB-SD	–	LED	120	WALL MOUNT	EMERGENCY EXIT SIGN, NI-CAD BATTERY BACKUP, RED LETTERING, THERMOPLASTIC HOUSING

NOTES
1. ALL FIXTURES ON THE LIGHTING SCHEDULE SHALL BE COORDINATED WITH THE OWNER AND ARCHITECT.
2. CONTRACTOR SHALL VERIFY LOADS OF ALL FIXTURES SELECTED AND COORDINATE WITH CIRCUITING REQUIRED.

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title:
Project Type: Alteration

Construction Site: 46 Albion Street, Bridgeport, Connecticut
Owner/Agent:
Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Healthcare Facility:Exam/Treatment	9687	1.40	13562
		Total Allowed Watts =	13562

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Healthcare Facility: Exam/Treatment (9687 sq.ft.)				
LED: A1: LED Panel 19W:	1	11	24	264
LED: B: LED Panel 44W:	1	25	43	1075
LED: B1: LED Panel 33W:	1	36	28	1008
LED: B2: LED Panel 54W:	1	10	51	510
LED: C: LED Linear 33W:	1	18	43	774
			Total Proposed Watts =	3631

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Michael V. Musco, P.E. — Name - Title
Michael Musco — Signature
06/03/24 — Date

Project Title:
Data filename:
Report date: 06/03/24
Page 1 of 5

ELECTRICAL NOTES:
1. REFER TO DRAWING EG-1 FOR GENERAL NOTES, LEGENDS, ABBREVIATIONS AND DRAWING LISTS.
2. REFER TO DRAWING ES-1 FOR ELECTRICAL SPECIFICATIONS.
3. THE FINAL LOCATIONS OF ALL LIGHTING SWITCHES SHALL BE COORDINATED WITH THE OWNER AND THE ARCHITECT.
4. THE LIGHTING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE 2021 IECC & 2020 NEC.
5. INSTALL ALL LUMINAIRES IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND REQUIREMENTS FOR PROPER OPERATION AND MAINTENANCE.

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BEHAVIORAL HEALTH CARE CLINIC

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Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE
LIGHTING SCHEDULE, DETAILS AND COMCHECK REPORT

DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11-23-20
CHECKED BY: MVM	PROJECT NUMBER: 200943-1
CAD FILE: E1.dwg	

SEAL
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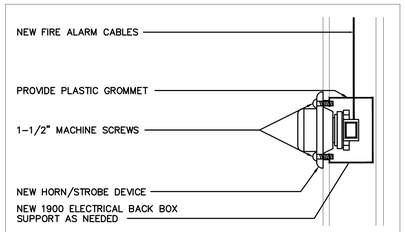
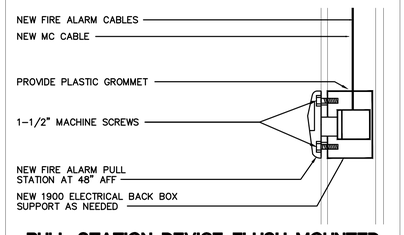
SHEET NUMBER
E-1



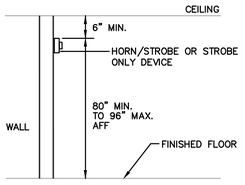
HORN/STROBE OR STROBE ONLY DEVICE FLUSH MOUNTED NO CONDUIT IN WALL

NOT TO SCALE



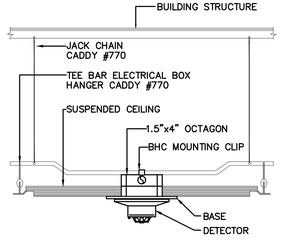
PULL STATION DEVICE FLUSH MOUNTED NO CONDUIT IN WALL

NOT TO SCALE



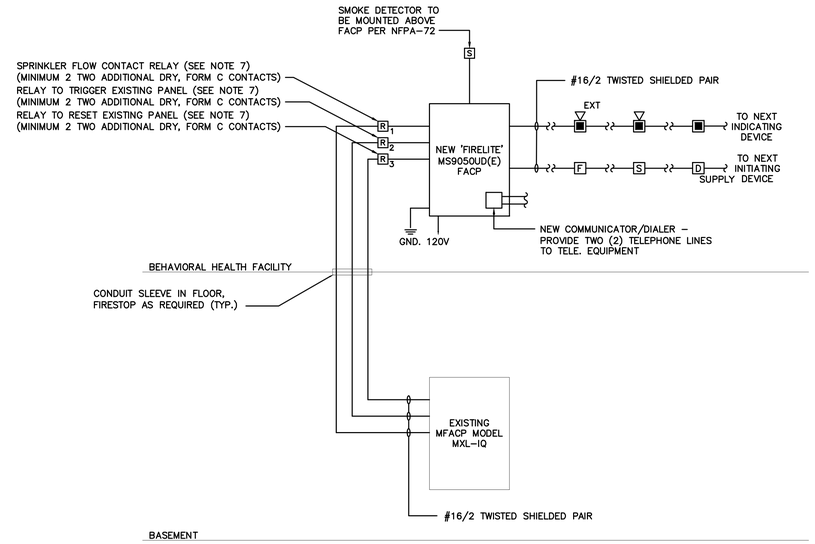
HORN/STROBE & STROBE ONLY MOUNTING HEIGHT DETAIL

NOT TO SCALE



SMOKE/HEAT DETECTOR MOUNTING DETAIL

NOT TO SCALE

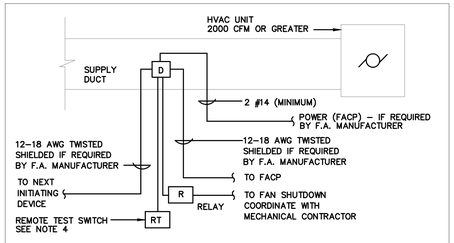


FIRE ALARM NOTES:

1. ALL FIRE ALARM PULL STATIONS SHALL BE INSTALLED AT 48" TO TOP OF DEVICE ABOVE FINISHED FLOOR.
2. A PERMANENT LABEL SHALL BE PLACED ON THE FIRE ALARM CONTROL PANEL STATING, "FIRE ALARM PANEL ONLY TO BE RESET BY FIRE DEPARTMENT". SUBMIT A COPY FOR REVIEW DURING THE SHOP DRAWING SUBMITTAL PROCESS FOR REVIEW BY THE ENGINEER & FIRE DEPARTMENT.
3. BREAKS IN THE FIRE ALARM RISER ARE INDICATED. ACTUAL WIRING OF SYSTEM TO BE DETERMINED IN THE FIELD
4. FIRE ALARM CONTROL PANEL SHALL BE MANUFACTURED BY FIRELITE OR SILENT KNIGHT.
5. MINIMUM SIZE SHALL BE AS INDICATED ON THE RISER DIAGRAM & IN THE FIRE ALARM SPECIFICATIONS. THE CONTRACTOR SHALL INCREASE THE WIRING SIZE TO AVOID IMPROPER VOLTAGE DROP(S).
6. THE SUPPLIER OF THE NEW FIRE ALARM SYSTEM WILL BE REQUIRED TO INTERFACE WITH BOTH THE NEW SYSTEM FOR THE BEHAVIORAL CARE FACILITY AND THE EXISTING BUILDING FIRE ALARM SYSTEM. EACH PANEL SHALL HAVE THE ABILITY TO TRIGGER AND RESET THE FIRE ALARM AS WELL AS ALERTING THE OTHER PANEL OF A TRIGGERED OR RESET FIRE ALARM. A COMPLETE PROCEDURE NEEDS TO BE APPROVED BY THE ENGINEER AND THE LOCAL FIRE MARSHAL AT THE TIME OF SHOP DRAWING SUBMITTAL BY THE CONTRACTOR.
7. LOCATIONS OF SPRINKLER FLOW CONTACT RELAY, RELAY TO TRIGGER FIRE ALARM, AND RELAY TO RESET EXISTING PANEL BY CONTRACTOR.

TYPICAL FIRE ALARM RISER DIAGRAM

SCALE: NONE



NOTES:

1. RELAY DRY CONTACTS ARE RATED FOR 120V-5A MAX. CONTRACTOR SHALL BE RESPONSIBLE FOR INTERPOSING RELAY AS REQUIRED.
2. CONTRACTOR SHALL PROVIDE DUCT SMOKE DETECTORS ON THE SUPPLY AIR SYSTEMS OF HVAC UNITS WITH A DESIGN CAPACITY 2,000 OR GREATER CFM IN THE SUPPLY AIR DUCT. FOR UNITS WITH A DESIGN CAPACITY 15,000 OR GREATER CFM, THE CONTRACTOR SHALL PROVIDE DUCT SMOKE DETECTORS ON THE SUPPLY AND RETURN AIR SYSTEMS OF THE HVAC UNITS.
3. CONTRACTOR SHALL VERIFY WIRING SIZES WITH FIRE ALARM EQUIPMENT MANUFACTURER.
4. VERIFY TEST SWITCH LOCATION WITH ARCHITECT/OWNER/ENGINEER.

TYPICAL FAN SHUTDOWN DETAIL

NOT TO SCALE

FIRE ALARM SYSTEM SEQUENCE OF OPERATION

ACTIVATION OF THE MANUAL PULL STATION, SPRINKLER WATER FLOW SWITCH, DUCT SMOKE DETECTOR, WILL INITIATE A GENERAL ALARM CONDITION AND ACTIVATE THE FOLLOWING:

- AN ALARM CONDITION WILL APPEAR ON THE BUILDING FACP.
- LOG AN ALARM CONDITION ON THE FIRE ALARM CONTROL PANEL.
- ACTIVATE ALL FIRE ALARM STROBES.
- SOUND A TEMPORAL HORN TONE ON ALL HORN / STROBES.
- EVACUATION OF THE BUILDING AS PER THE LOCAL FIRE MARSHAL (AHJ)

A FIRE ALARM SYSTEM TROUBLE CONDITION (OPEN CIRCUIT TROUBLE ETC), SUPERVISORY SWITCH, PRESSURE SWITCH OR A FLOW SWITCH WILL INITIATE THE FOLLOWING:

- A TROUBLE CONDITION WILL APPEAR ON THE BUILDING FACP.
- LOG A TROUBLE EVENT ON THE FIRE ALARM CONTROL PANEL.

FIRE ALARM RISER NOTES:

1. CONTACT VENDOR FOR FINAL CONDUIT SIZES AND JUNCTION BOX REQUIREMENTS.
2. SPRINKLER FLOW AND TAMPER SWITCHES SHALL BE FURNISHED AND INSTALLED BY DIVISION 15, AND WIRED BY DIVISION 16 INCLUDING INSTALLATION OF ADDRESSABLE MODULE ADJACENT TO EACH SWITCH.
3. REFER TO MECHANICAL DRAWINGS FOR ALL LOCATIONS OF SWITCHES.
4. DUCT MOUNTED SMOKE DETECTORS SHALL BE FURNISHED AND INSTALLED BY DIV. 16. PROVIDE DETECTORS IN THE SUPPLY DUCT OF AIR HANDLING UNITS, PRESSURIZATION FANS, AND ANY OTHER UNITS OVER 2000 CFM. CONNECT CONTROL CIRCUIT FOR THE UNIT (MAX 1A) TO THE PROGRAMMABLE RELAY CONTACTS IN THE ASSOCIATED DETECTOR. INSTALL REMOTE TEST AND INDICATOR STATION FOR EACH DETECTOR IN THE LOCATION DESIGNATED BY THE OWNER.
5. ALL WIRING SHALL COMPLY WITH APPLICABLE SECTIONS OF THE NATIONAL ELECTRICAL CODE 2020.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE THE CONDUIT SYSTEM AS REQUIRED AND DETAILED IN THE SPECIFICATIONS FOR FIRE ALARM SYSTEM.
7. FAN SHUTDOWN, DAMPER CONTROL, AND SMOKE EVACUATION WILL BE PROVIDED THROUGH THE SOFTWARE CONNECTION. SUPPLIER SHALL INCLUDE THIS FUNCTIONALITY INSTEAD OF A RELAY TYPE INTERFACE.
8. REFER TO DWG. EG-1 FOR GEN. NOTES, LEGENDS, ABBREV. & DWG. LIST.
9. REFER TO DRAWING EP-1 FOR FIRE ALARM CONTROL PANEL AND FIRE ALARM DEVICE LOCATIONS AND COUNTS.
10. SYSTEM INITIATION:
    1. THE FOLLOWING DEVICES WILL CAUSE A GENERAL ALARM WHICH INCLUDES NOTIFICATION OF FIRE DEPARTMENT, ACTIVATION OF ALL NOTIFICATION DEVICES (HORN/STROBES) & EVACUATION OF BUILDING AS PER THE LOCAL FIRE MARSHAL
       A. DUCT SMOKE DETECTORS (IF REQUIRED)
       B. FLOW SWITCHES (IF REQUIRED)
       C. PULL STATIONS
       D. SMOKE DETECTORS
    2. THE FOLLOWING DEVICES WILL SEND TROUBLE SIGNAL TO THE MAIN FIRE ALARM PANEL AND WILL ALSO SEND A SIGNAL TO THE LOCAL FIRE DEPARTMENT. THIS TROUBLE ALARM WILL NOT ACTIVATE THE HORNS OR STROBES AND WILL NOT CAUSE AN EVACUATION OF BUILDING.
       A. TAMPER SWITCHES (IF REQUIRED)
       B. PRESSURE SWITCHES (IF REQUIRED)
       C. SUPERVISORY SWITCHES (IF REQUIRED)
11. INSTALLATIONS SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL BUILDING CODES.
12. WIRING REQUIREMENTS ARE AS FOLLOWS:
    USE OF STRANDED CONDUCTORS WITH MAXIMUM 7 STRANDS FOR #16 AND MAX. 19 STRANDS FOR SIZES #14 OR LARGER IS PERMITTED.
    USE ONLY APPROVED FIRE ALARM CABLES OR WIRES WITHIN METAL CONDUITS, TERMINATE ALL WIRING WITH U.L. LISTED DEVICES.
13. CONTRACTOR SHALL REFER TO MECHANICAL AND FIRE PROTECTION DRAWINGS FOR EXACT COUNT OF FLOW, PRESSURE AND TAMPER SWITCHES, AND BE RESPONSIBLE FOR ALL REQUIRED UNITS AND CONNECTIONS.
14. NO SMOKE DETECTOR SHALL BE LOCATED WITHIN 3 FEET OF A SUPPLY AIR OUTLET, CONTRACTOR SHALL REFER TO NFPA 72 FOR ADDITIONAL GUIDELINES.
15. ALL INITIATION AND SIGNALING CIRCUITS SHALL BE CLASS B.
16. ALL LOW VOLTAGE WIRING MAY RUN IN A COMMON CONDUIT.
17. RUN AC POWER AND CONTROL WIRING (FAN SHUTDOWN ETC.) IN SEPARATE CONDUIT, DO NOT RUN WITHIN ANY OTHER CONDUIT CARRYING FIRE ALARM SYSTEM WIRING.
18. NO PARALLEL BRANCHING OR "T" SPLICES ARE PERMITTED ON SIGNALING CIRCUITS.
19. DETECTOR AND SIGNALING POLARITY SHALL BE OBSERVED.
20. ALL WIRING SHALL BE CHECKED FOR OPENS, SHORTS, AND GROUNDS.
21. ALL ENCLOSURES AND CONDUITS SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE.
22. ALL WIRING SHALL BE IN ELECTRICAL METAL CONDUIT UNLESS OTHERWISE INDICATED ON FLOOR PLANS OR SPECIFICATIONS. CONFIRM TYPE WITH ARCHITECT.
23. INTERLOCKS SHALL NOT EXCEED RATED CURRENT OF CONTACTS.
24. INSTALLATION SHALL BE COMPLETED IN A PROFESSIONAL, WORKMANLIKE MANNER.
25. DO NOT LOAD EACH CIRCUIT ZONE WITH MORE THAN 60% OF CAPACITY.

FIRE ALARM SYSTEM TESTING:

THE CONTRACTOR SHALL PROVIDE THE SERVICE OF A COMPETENT, FACTORY TRAINED ENGINEER OR TECHNICIAN BY THE FIRE ALARM EQUIPMENT MANUFACTURER TO TECHNICALLY SUPERVISE AND PARTICIPATE DURING ALL OF THE ADJUSTMENTS AND TESTS FOR THE NEW FIRE ALARM SYSTEM. THE NEW FIRE ALARM SYSTEM SHALL BE TESTED IN THREE PHASES AS FOLLOWS:

1. THE CONTRACTOR SHALL TEST EACH COMPONENT OF THE NEW SYSTEM TO ENSURE ITS PROPER FUNCTION. THE CONTRACTOR SHALL REPLACE ANY COMPONENTS THAT FAILED TO OPERATE CORRECTLY DURING THE FIRST TEST. EACH REPLACED COMPONENT SHALL THEN BE TESTED AND RETESTED UNTIL IT OPERATES AS REQUIRED.
2. ONCE THE FIRST PHASE IS COMPLETE THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR A WITNESS TEST OF THE ENTIRE FIRE ALARM SYSTEM. THIS TEST SHALL BE PERFORMED BY THE CONTRACTOR. EACH COMPONENT SHALL BE THOROUGHLY TESTED. ANY FAILED COMPONENTS SHALL BE REPLACED AND RETESTED UNTIL THE COMPONENT OPERATES AS REQUIRED.
3. ONCE THE SECOND PHASE OF TESTING IS COMPLETED, THE CONTRACTOR SHALL CONTACT THE FIRE MARSHAL AND PERFORM A WITNESS TEST IN THE PRESENCE OF THE FIRE MARSHAL. THE CONTRACTOR SHALL THOROUGHLY TEST EACH COMPONENT OF THE FIRE ALARM SYSTEM AS DIRECTED BY THE FIRE MARSHAL. ANY FAILED COMPONENTS SHALL BE REPLACED AND RETESTED IN THE PRESENCE OF THE FIRE MARSHAL UNTIL THE SYSTEM OPERATES AS REQUIRED AND APPROVED BY THE FIRE MARSHAL.

THE CONTRACTOR SHALL FURNISH ALL REQUIRED EQUIPMENT TO ADEQUATELY PERFORM THE TEST, INCLUDING BUT NOT LIMITED TO FLASH LIGHTS, TWO-WAY COMMUNICATION DEVICES, AND ANY OTHER DEVICES REQUIRED TO PERFORM THESE TESTS.

THE TESTS SHALL BE PERFORMED DURING PREMIUM TIME WHEN THE OFFICE PERSONNEL ARE NOT PRESENT. THE CONTRACTOR SHALL PAY FOR ANY AND ALL CHARGES INCURRED BY THE FIRE MARSHAL TO PERFORM THESE TESTS.

FIRE ALARM SUBMITTAL PROCESS:

THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN AS TO HOW THE ABOVE SHALL BE ACCOMPLISHED. THIS PLAN SHALL INCLUDE A SCHEDULE OF DATES AND ANTICIPATED TIME EXPECTED FOR EACH, ALONG WITH ANY RESOURCES REQUIRED TO ACCOMPLISH THIS TASK.

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REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	SK	07/03/24	REVISED BACKGROUNDS

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

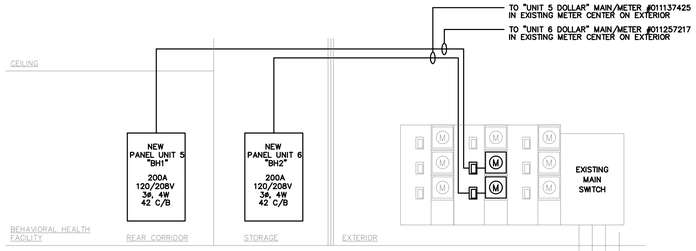
SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE
FIRE ALARM RISER DIAGRAM, DETAILS & NOTES

DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11-23-20
CHECKED BY: MVM	PROJECT NUMBER: 200943-1
CAD FILE: E1.dwg	

SEAL
100% For Review
07/03/2024

SHEET NUMBER
E-2



PARTIAL ELECTRICAL RISER DIAGRAM

NOT TO SCALE

ELECTRICAL RISER DIAGRAM NOTES:

1. REFER TO DRAWING EP1 FOR LOCATIONS OF PANELBOARDS.
2. PROVIDE ALL PANELBOARDS WITH NEW CIRCUIT DIRECTORIES & PANEL LABELS, PER 2020 NEC, ARTICLE 408.4.
3. MAINTAIN MINIMUM 3'-0" CLEARANCE IN FRONT OF ELECTRICAL PANELS PER THE 2020 NEC.
4. PROVIDE ALL REQUIRED GROUNDING AND BONDING OF THE ELECTRICAL SYSTEM PER THE 2020 NEC, ARTICLE 250.

1020 FAIRFIELD AVENUE, BRIDGEPORT – ELECTRICAL LOAD ANALYSIS – UNIT 5

CONNECTED LOADS, KW	
LIGHTING	1.61 KW
MECHANICAL EQUIPMENT	19.56
RECEPTACLES	8.82
WATER HEATING	4.00
MOTORS (EXHAUST FANS)	1.50
TOTAL KW LOADS	35.49 KW
TOTAL AMPS LOAD AT 120/208, 3ø	98.58 A
TOTAL FUTURE LOAD AMPS (125%)	123.22 A
RECOMMENDED SERVICE SIZE	200A, 208/120V, 3ø

1020 FAIRFIELD AVENUE, BRIDGEPORT – ELECTRICAL LOAD ANALYSIS – UNIT 6

CONNECTED LOADS, KW	
LIGHTING	2.01 KW
MECHANICAL EQUIPMENT	15.4
RECEPTACLES	8.82
WATER HEATING	6.00
TOTAL KW LOADS	48.25 KW
TOTAL AMPS LOAD AT 120/208, 3ø	134.03 A
TOTAL FUTURE LOAD AMPS (125%)	167.54 A
RECOMMENDED SERVICE SIZE	200A, 208/120V, 3ø

Panel Tag-	BH1
Panel Location-	BACK CORRIDOR
Voltage (Phase-Ground/Phase-Phase)	120 / 208
Phase-	3
Wire-	4
Rated Amps-	200
A/C	22k
MCB-	200
Mounting-	Recessed

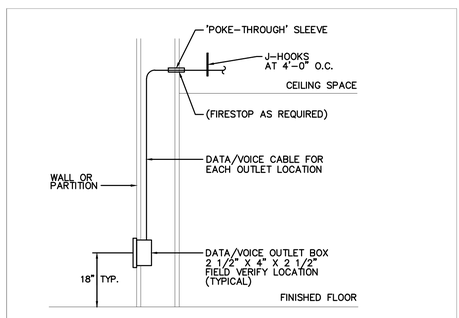
Circuit	Description	Kw	New/ Existing	Load Type	Breaker Size	Poles	Wire Size	A	B	C	A	B	C	Wire Size	Poles	Breaker Size	Load Type	New/ Existing	Kw	Description	Circuit
1	LIGHTING	0.76	N	L	20A	1		0.8			0.7				1	20A	R	N	0.72	RECEPTACLES CONFERENCE ROOM	2
3	LIGHTING	0.85	N	L	20A	1			0.9			0.5			1	20A	R	N	0.54	RECEPTACLES TESTING ROOM	4
5	RECEPTACLES TESTING ROOM	0.36	N	L	20A	1				0.4			0.5		1	20A	R	N	0.54	RECEPTACLES TESTING ROOM	6
7	BATHROOM GFCI RECEPTACLES	0.54	N	L	20A	1		0.5			0.7				1	20A	R	N	0.72	CORRIDOR RECEPTACLES	8
9	STORAGE RECEPTACLES	0.54	N	L	20A	1			0.5			0.7			1	20A	R	N	0.72	STORAGE RECEPTACLES	10
11	JANITOR CLOSET RECEPTACLES	0.72	N	R	20A	1				0.7			1.1		1	20A	R	N	1.08	STAFF ROOM RECEPTACLES	12
13	RTU-1	7.70	N	NC	50A	3		2.6			0.7				1	20A	R	N	0.72	IT RM RECEPTACLES	14
15									2.6			0.4			1	20A	R	N	0.36	BATHROOM GFCI RECEPTACLES	16
17										2.6			0.5		1	20A	R	N	0.54	CORRIDOR RECEPTACLES	18
19	RTU-2	7.70	N	NC	50A	3		2.6			0.7				1	20A	R	N	0.72	QUIET ROOM RECEPTACLES	20
21									2.6			0.8			1	20A	R	N	0.75	BATHROOM EXHAUST FANS EF1, EF2, EF3	22
23										2.6			0.5		1	20A	NC	N	0.50	EXISTING BATHROOM EXHAUST FANS	24
25	EWH-1	4.00	N	NC	30A	2		2.0			0.7				1	20A	L	N	0.25	BATHROOM EXHAUST FAN EF4	26
27									2.0			0.1			2	20A	R	N	0.10	FC-1	28
29			N	R	20A	1				0.0			0.1						0.10		30
31			N	R	20A	1		0.0			2.0				2	25A	R	N	1.98	ACC-1	32
33			N	R	20A	1			0.0			2.0							1.98		34
35	SPARE		N	R	20A	1				0.0			0.0		1	20A	R	N		SPARE	36
37	SPARE		N	R	20A	1		0.0			0.0				1	20A	R	N		SPARE	38
39	SPARE		N	R	20A	1			0.0			0.0			1	20A	R	N		SPARE	40
41	SPARE		N	R	20A	1				0.0			0.0		1	20A	R	N		SPARE	42

Panel Tag-	BH2
Panel Location-	STORAGE
Voltage (Phase-Ground/Phase-Phase)	120 / 208
Phase-	3
Wire-	4
Rated Amps-	200
A/C	22k
MCB-	200
Mounting-	Recessed

Circuit	Description	Kw	New/ Existing	Load Type	Breaker Size	Poles	Wire Size	A	B	C	A	B	C	Wire Size	Poles	Breaker Size	Load Type	New/ Existing	Kw	Description	Circuit
1	LIGHTING	1.24	N	L	20A	1		1.2			1.1				1	20A	R	N	1.08	CONFERENCE ROOM RECEPTACLES	2
3	LIGHTING	0.77	N	L	20A	1			0.8			0.5			1	20A	R	N	0.54	CORRIDOR RECEPTACLES	4
5	OFFICE RECEPTACLES	0.90	N	L	20A	1				0.9			0.9		1	20A	R	N	0.90	OFFICE RECEPTACLES	6
7	OFFICE RECEPTACLES	0.72	N	L	20A	1		0.7			0.5				1	20A	R	N	0.54	WAITING AREA RECEPTACLES	8
9	WAITING AREA RECEPTACLES	0.54	N	R	20A	1			0.5			0.7			1	20A	R	N	0.72	OFFICE RECEPTACLES	10
11	EXAM ROOM RECEPTACLES	0.72	N	R	20A	1				0.7			1.4		1	20A	R	N	1.44	OFFICE RECEPTACLES	12
13	OFFICE RECEPTACLES	1.44	N	R	20A	1		1.4			1.4				1	20A	R	N	1.44	OFFICE RECEPTACLES	14
15	RTU-3	7.70	N	NC	50A	3			2.6			0.9			1	20A	R	N	0.90	OPEN OFFICE RECEPTACLES	16
17										2.6			1.4		1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	18
19								2.6			1.4				1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	20
21	RTU-4	7.70	N	NC	50A	3			2.6			1.4			1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	22
23										2.6			1.4		1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	24
25								2.6			1.4				1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	26
27	EWH-2	3.00	N	NC	30A	2			1.5			1.4			1	20A	NC	N	1.44	OPEN OFFICE RECEPTACLES	28
29										1.5			1.4		1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	30
31	EWH-2	3.00	N	NC	30A	2		1.5			1.4				1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	32
33									1.5			1.4			1	20A	R	N	1.44	OPEN OFFICE RECEPTACLES	34
35	SPARE		N	R	20A	1				0.7					1	20A				SPARE	36
37	SPARE				20A	1									1	20A				SPARE	38
39	SPARE				20A	1									1	20A				SPARE	40
41	SPARE				20A	1									1	20A				SPARE	42

MECHANICAL EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	KW	AMPS	VOLT	PH	PLUG-IN	DIR CONN	CKT BKR	FEEDERS	PANEL
EWH-1	ELECTRIC WATER HEATER	4	19.2	208V	1ø	–	YES	30A–2P	2#10 + 1#10GND	REFER TO E–3
EWH-2	ELECTRIC WATER HEATER	3	14.4	208V	1ø	–	YES	20A–2P	2#12 + 1#12GND	REFER TO E–3
RTU-1	ROOF TOP UNIT	7.7	37	208V	3ø	–	YES	50A–3P	3#8 + 1#10GND	REFER TO E–3
RTU-2	ROOF TOP UNIT	7.7	37	208V	3ø	–	YES	50A–3P	3#8 + 1#10GND	REFER TO E–3
RTU-3	ROOF TOP UNIT	7.7	37	208V	3ø	–	YES	50A–3P	3#8 + 1#10GND	REFER TO E–3
RTU-4	ROOF TOP UNIT	7.7	37	208V	3ø	–	YES	50A–3P	3#8 + 1#10GND	REFER TO E–3
FC-1	FAN COIL UNIT	–	1	208V	1ø	–	YES	20A–2P	3#12 + 1#12GND	REFER TO E–3
ACC-1	FAN COIL UNIT	3.95	19	208V	1ø	–	YES	25A–2P	3#10 + 1#10GND	REFER TO E–3
EF-1	EXHAUST FAN	–	1	120V	1ø	–	YES	20A–1P	2#12 + 1#12GND	REFER TO E–3
EF-2	EXHAUST FAN	–	1	120V	1ø	–	YES	20A–1P	2#12 + 1#12GND	REFER TO E–3
EF-3	EXHAUST FAN	–	1	120V	1ø	–	YES	20A–1P	2#12 + 1#12GND	REFER TO E–3
EF-4	EXHAUST FAN	–	1	120V	1ø	–	YES	20A–1P	2#12 + 1#12GND	REFER TO E–3



TYPICAL DATA/VOICE CABLE WIRING TO OUTLET INSTALLATION DETAIL

NOT TO SCALE

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REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	SK	07/03/24	REVISED BACKGROUNDS

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

ELECTRICAL RISER DIAGRAM, SCHEDULES AND NOTES

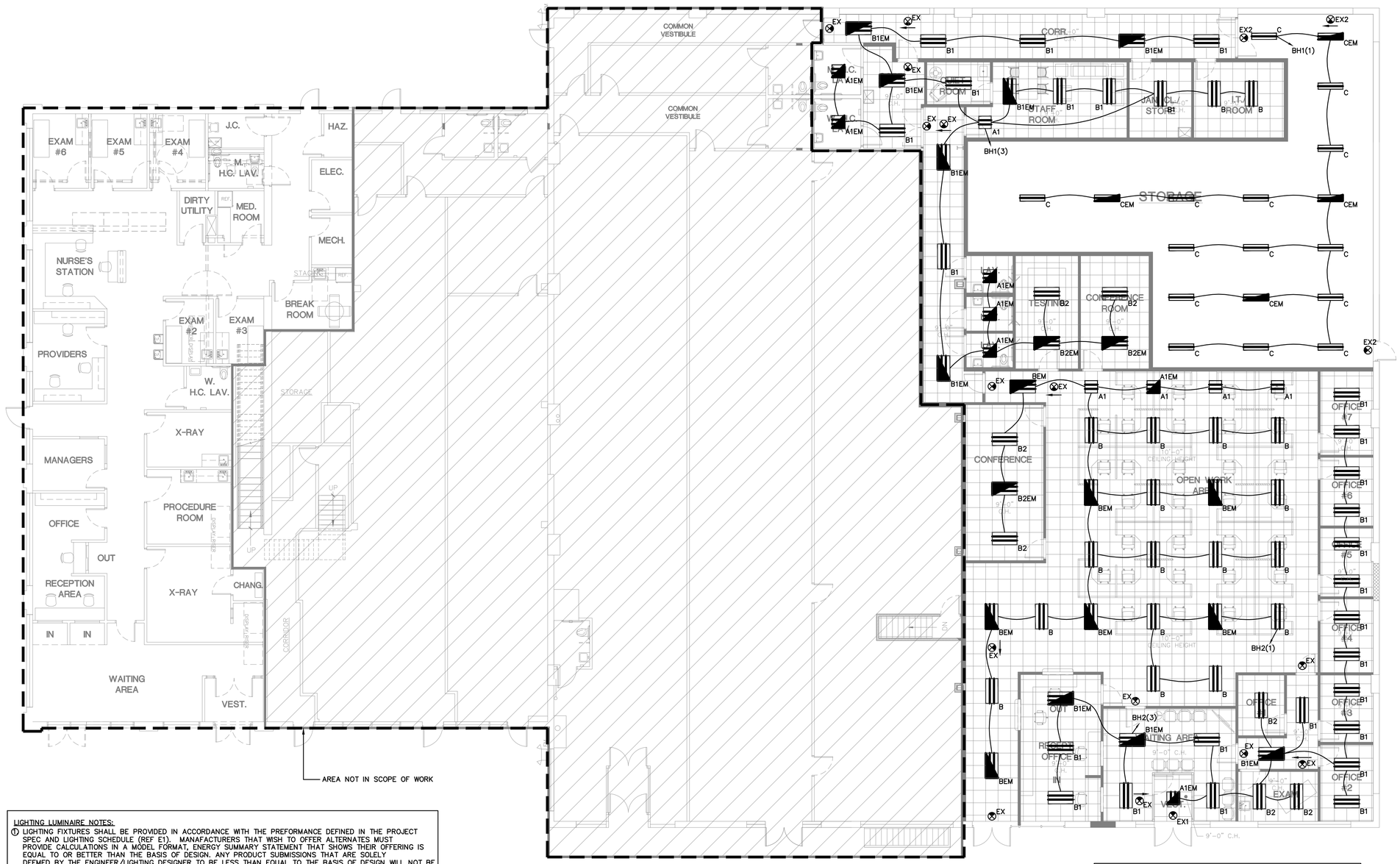
DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11–23–20
CHECKED BY: MVM	PROJECT NUMBER: 200943–1
CAD FILE: E3.dwg	

SEAL

100% For Review
07/03/2024

SHEET NUMBER

E-3



LIGHTING LUMINAIRE NOTES:

① LIGHTING FIXTURES SHALL BE PROVIDED IN ACCORDANCE WITH THE PREFORMANCE DEFINED IN THE PROJECT SPEC AND LIGHTING SCHEDULE (REF E1). MANAFACTURERS THAT WISH TO OFFER ALTERNATES MUST PROVIDE CALCULATIONS IN A MODEL FORMAT, ENERGY SUMMARY STATEMENT THAT SHOWS THEIR OFFERING IS EQUAL TO OR BETTER THAN THE BASIS OF DESIGN. ANY PRODUCT SUBMISSIONS THAT ARE SOLELY DEEMED BY THE ENGINEER/LIGHTING DESIGNER TO BE LESS THAN EQUAL TO THE BASIS OF DESIGN WILL NOT BE ACCEPTED AS AN ALTERNATE; THERE WILL BE NO ACCEPTIONS GRANTED.

NOTES:

1. REFER TO DRAWING EG1 FOR GENERAL NOTES, LEGENDS, ABBREVIATIONS AND DRAWING LIST.
2. EXIT SIGNS SHALL BE PROVIDED WITH 2#12 + 1#12G TO NEAREST SPARE 120V CIRCUIT BREAKER IN ELECTRICAL PANELS PROVIDED FOR SPACE.
3. ALL NEW WIRING WORK SHALL BE INSTALLED IN THE WALLS. IF WIRING MUST BE EXPOSED, THEN IT SHALL BE INSTALLED IN SURFACE METAL RACEWAY (WIREMOLD OR EQUAL), AS APPROVED BY OWNER.
4. ALL LIGHTING FIXTURES ARE TO BE COORDINATED WITH THE OWNER. THE CONTRACTOR SHALL VERIFY ALL FINISHES AND COLORS WITH ARCHITECT/OWNER.
5. THE LIGHTING SYSTEM AND THE INSTALLATION OF ALL LUMINAIRES SHALL COMPLY WITH THE 2020 NATIONAL ELECTRICAL CODE, 2021 IECC AND ALL LOCAL AND STATE OF CT CODES.
6. COORDINATE SWITCHING CONFIGURATIONS OF NEW LUMINAIRES WITH THE ARCHITECT. CONTRACTOR SHALL REVIEW THE WATTAGES OF LUMINAIRES SELECTED AND NOT 'OVERLOAD' CIRCUITS OVER 80% CAPACITY.
7. ALL WIRING FOR LIGHTING CIRCUITS SHALL BE 2#12 + 1#12 GND. UNLESS OTHERWISE INDICATED.
8. FINAL LOCATIONS OF ALL LIGHTING SWITCHES SHALL BE COORDINATED WITH THE OWNER AND THE ARCHITECT.
9. COORDINATE ALL LIGHTING LOADS WITH THE LUMINAIRES THAT ARE SELECTED AND THEIR CIRCUITS.
10. CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF LUMINAIRES WITH THE MECHANICAL DEVICES AND EQUIPMENT (DUCTWORK AND PIPING) AS NECESSARY.
11. ALL LUMINAIRES SELECTED SHALL BE SUPPORTED AND MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED BY THE 2020 NEC.
12. COORDINATE THE MOUNTING HEIGHTS OF ALL LUMINAIRES SUPPLIED WITH THE OWNER/ARCHITECT AS REQUIRED.
13. THE CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH SMOKE AND/OR FIRE RATED PARTITIONS AND SLABS WITH A UL LISTED SMOKE AND/OR FIRE STOP TO MAINTAIN THE INTEGRITY OF THE FIRE AND/OR SMOKE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR ALL WALL RATINGS. PROVIDE A SHOP DRAWINGS FOR ALL PENETRATIONS. REFER TO DIVISION 7 FOR ADDITIONAL REQUIREMENTS.
14. REFER TO DRAWING E1 FOR LIGHTING DETAILS, NOTES, LUMINAIRE SCHEDULE & COMCHECK REPORT
15. REFER TO DRAWING ES1 FOR ELECTRICAL SPECIFICATIONS.
16. THE EXIT SIGNS SHALL BE VISIBLE AT A MINIMUM OF 100 FEET. AT NO POINT SHALL EXIT SIGNS EXCEED 100 FEET FROM ONE TO THE OTHER IN ACCESS CORRIDOR. CHEVRONS SHALL BE IDENTIFIABLE AT A MINIMUM DISTANCE OF 40 FEET.
17. FLOOR LEVEL PROXIMITY EXIT SIGNS SHALL BE INSTALLED AS REQUIRED BY THE 2021 IBC, 2022 CSBC & COORDINATED WITH THE ARCHITECTS LATEST EGRESS PLANS.

LIGHTING REFLECTED CEILING PLAN

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

ALL EXTERIOR LIGHTING FIXTURES ARE BY THE BUILDING OWNER. CONTRACTOR SHALL CONFIRM LIGHT FIXTURES ARE INCLUDED WITH EMERGENCY LIGHTING CAPABILITIES AS REQUIRED BY 2022 CSBC, SECTION 1008. TYPICAL FOR ALL THREE EXITS FROM TENANT SPACE

PROJECT NORTH

GENERAL NOTES

1. – THE INFORMATION SHOWN ON THIS DRAWING IS BASED UPON THE INFORMATION SHOWN ON THE BUILDING PLANS AND LIMITED FIELD INVESTIGATIONS AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THIS CONTRACTOR SHALL VERIFY THE INFORMATION INDICATED ON THIS DRAWING AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES
2. – THIS CONTRACTOR IS REQUIRED TO PERFORM THIS WORK IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, PRIOR TO SUBMITTING HIS BID. REGULATIONS, ORDINANCES, ETC., AND TO MEET THE REQUIREXENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND OWNER, WHETHER OR NOT SPECIFICALLY INDICATED OR SPECIFIED ON THIS DRAWING.
3. – ALL PENETRATIONS THRU FLOOR AND WALLS SHALL BE FIRE STOPPED WITH "THOMAS AND BETTS" – FLAMESAFE, TYPE FST FIRESTOP COMPOUND OR APPROVED EQUIVALENT, CONFORMING TO ASME E814/UL1479.

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REVISIONS

NO.	BY	DATE	DESCRIPTION
1	SK	07/03/24	REVISED BACKGROUNDS

PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

LIGHTING REFLECTED CEILING PLAN

DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11-23-20
CHECKED BY: MVM	PROJECT NUMBER: 200943-1
CAD FILE: EL-1.dwg	

SEAL

100% For Review
07/03/2024

SHEET NUMBER

EL-1

Filename: Southwest Comm Health Center - Bridgeport - 2024 REV 1.AGI

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Lum. Lumens	Lum. Watts	LLF	Mounting Height	Description
	9	A1	SINGLE	3636	24	0.620	9, 10	Mecury LR205-22G-2600-35K-1%-UNI
	25	B	SINGLE	4765	42.72	0.900	9, 10	Mercury LR205-24G-4800-35K-1%-UNI
	36	B1	SINGLE	4765	28	0.660	9	Mercury LR205-24G-3700-35K-1%-UNI
	10	B2	SINGLE	4765	51	1.080	9	Mercury LR205-24G-5700-35K-1%-UNI
	18	C	SINGLE	3852	42.32	0.900	11	Mercury LW3-4-3800-35K-AW-1%-UNI

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Common Area to Storage Corridor_Floor	Illuminance	Fc	16.51	21.4	10.9	1.51	1.96
Conference Room_Workplane	Illuminance	Fc	38.13	56.7	16.6	2.30	3.42
Exam Room_Workplane	Illuminance	Fc	56.79	68.8	43.5	1.31	1.58
HC LAV Corridor_Floor	Illuminance	Fc	20.38	25.0	12.4	1.64	2.02
IT Room_Workplane	Illuminance	Fc	34.34	53.2	15.0	2.29	3.55
Janitor Closet_Workplane	Illuminance	Fc	16.70	28.8	8.3	2.01	3.47
LAV_Floor	Illuminance	Fc	13.57	15.7	11.8	1.15	1.33
Office 1_Workplane	Illuminance	Fc	36.09	50.3	25.3	1.43	1.99
Office 2_Workplane	Illuminance	Fc	34.58	42.0	26.3	1.31	1.60
Office Corridor_Floor	Illuminance	Fc	17.95	23.2	12.5	1.44	1.86
Open Work Area_Workplane	Illuminance	Fc	36.77	51.4	10.0	3.68	5.14
Quiet Room_Workplane	Illuminance	Fc	23.28	31.6	17.4	1.34	1.82
Reception Office_Workplane	Illuminance	Fc	24.29	34.5	13.8	1.76	2.50
Small Conference Room_Workplane	Illuminance	Fc	35.58	53.3	16.3	2.18	3.27
Staff Room Corridor_Floor	Illuminance	Fc	13.83	19.5	2.9	4.77	6.72
Staff Room_Workplane	Illuminance	Fc	28.11	40.8	12.8	2.20	3.19
Storage Room_Workplane	Illuminance	Fc	25.11	40.2	3.8	6.61	10.58
Testing_Workplane	Illuminance	Fc	38.62	55.7	18.8	2.05	2.96
Vestibule_Floor	Illuminance	Fc	13.48	15.4	12.0	1.12	1.28
Waiting Area_Workplane	Illuminance	Fc	25.27	34.6	14.8	1.71	2.34

Greg Loda / Evan White
Lighting Affiliates
1208 Cromwell Ave
Rocky Hill, CT 06067

website: www.lightingaffiliates.com
Voice Number : (860) 721-1171 x 219
Email Address : gloda@lightingaffiliates.com

LIGHTING PHOTOMETRIC FLOOR PLAN

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

PROJECT NORTH

GENERAL NOTES

1. – THE INFORMATION SHOWN ON THIS DRAWING IS BASED UPON THE INFORMATION SHOWN ON THE BUILDING PLANS AND LIMITED FIELD INVESTIGATIONS AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THIS CONTRACTOR SHALL VERIFY THE INFORMATION INDICATED ON THIS DRAWING AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES
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PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

LIGHTING PHOTOMETRIC FLOOR PLAN

DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11-23-20
CHECKED BY: MVM	PROJECT NUMBER: 200943-1
CAD FILE: EL-2.dwg	

SEAL

100% For Review
07/03/2024

SHEET NUMBER

EL-2

LIGHTING CONTROLS FLOOR PLAN

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

PRODUCT LEGEND
LC1.0

11	DP1	NPP16 D EFP Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection
4	OS1	CM PDT 10 Ceiling Mount Sensor, Passive Dual Technology, Large Motion / Extended Range 360° Lens
18	OS2	NCM PDT 10 RJB Low Voltage Ceiling Mount Sensor, Passive Dual Technology, Large Motion / Extended Range 360° Lens, Rear RJ-45 Ports
9	PP1	MP20 Mini Power Pack
1	PP2	PP20 Power Pack
10	PP3	NPP20 PL Power/Relay Pack, Plug Load
10	SO1	WSXA PDT D SA WH Aesthetic Wall Switch Sensor, Passive Dual Technology, Occupancy Controlled Dimming, Vacancy (default) or Auto-On
7	SO2	WSXA PDT WH Aesthetic Wall Switch Sensor, Passive Dual Technology
2	SW1	SPODMA 3X XX Wall Switch, Multi-Way
5	SW2	NPODMA 4P DX WH nLight Wired Aesthetic Wallpod, Four Pole, Raise/Lower Dimming Without Wires
2	SW3	NPODMA DX WH nLight Wired Aesthetic Wallpod, Raise/Lower Dimming Without Wires

PROJECT NOTES

1 **THIS DESIGN IS TO BE USED FOR REFERENCE ONLY AND BASED ON BEST PRACTICES. PLEASE VERIFY ALL CIRCUTING, LOADS AND CONTROL INTENT IN ALL SPACES.>>

2 **NO EMERGENCY LIGHTING OR CIRCUITS HAVE BEEN IDENTIFIED. THEREFORE, NO EMERGENCY DEVICES HAVE BEEN PROVIDED.>>

3 **NO EXTERIOR OR SITE LIGHTING CONTROLS HAVE BEEN INCLUDED. IF REQUIRED, PLEASE PROVIDE MORE INFORMATION AND REQUEST A REVISED DESIGN.>>

PROJECT NORTH

GENERAL NOTES

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PROJECT TITLE

BEHAVIORAL HEALTH CARE CLINIC

1020 FAIRFIELD AVENUE
BRIDGEPORT, CT 06605

Prepared For:

SOUTHWEST COMMUNITY HEALTH CENTER
46 ALBION STREET
BRIDGEPORT, CT 06605

SHEET TITLE

LIGHTING CONTROLS FLOOR PLAN

DESIGNED BY:	SCALE: AS NOTED
DRAWN BY: SK/EJ	DATE: 11-23-20
CHECKED BY: MVM	PROJECT NUMBER: 200943-1
CAD FILE: EL-3.dwg	

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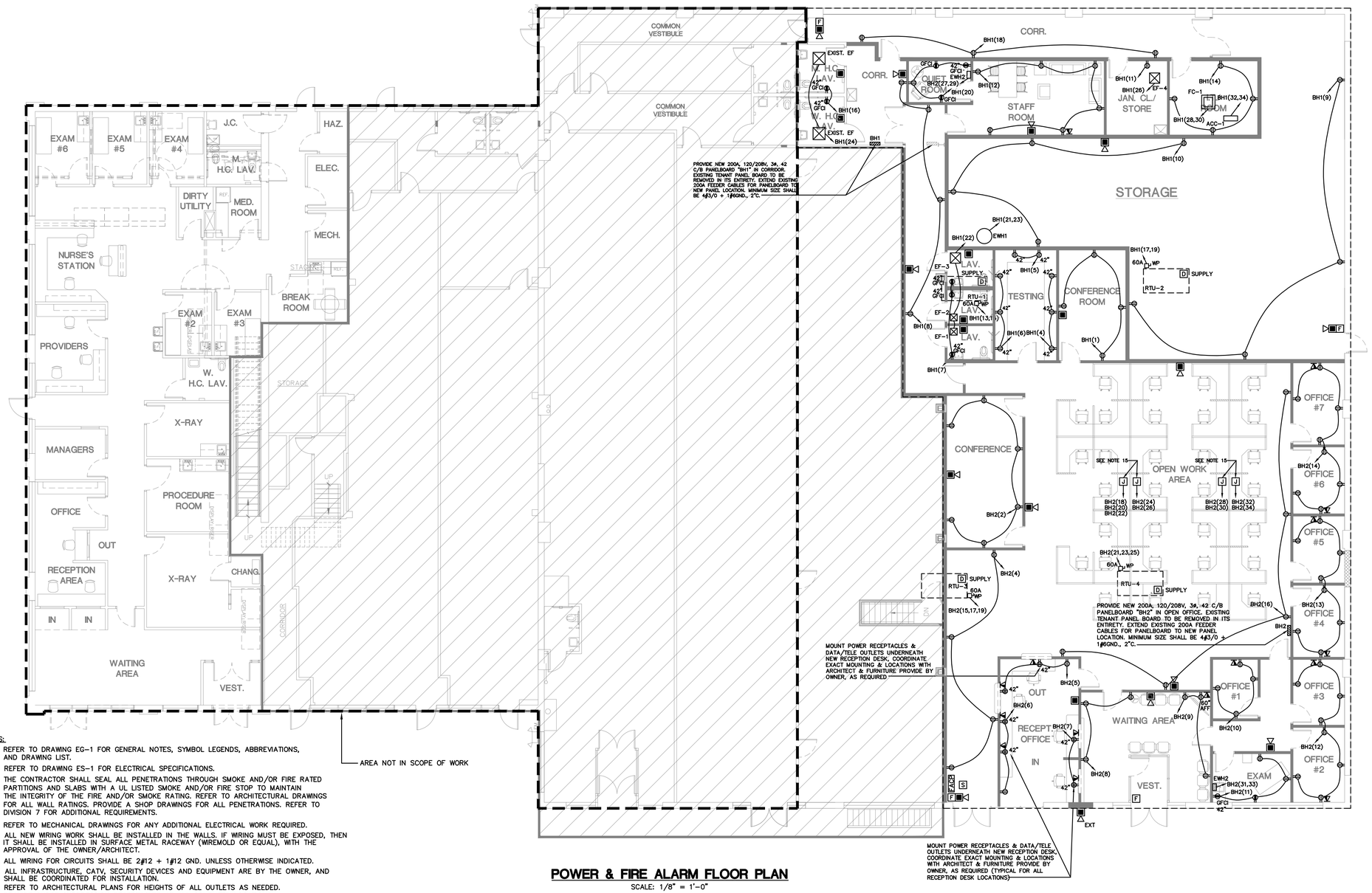
07/03/2024

SHEET NUMBER

EL-3



AREA NOT IN SCOPE OF WORK

POWER & FIRE ALARM FLOOR PLAN

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

NOTES:

1. REFER TO DRAWING EG-1 FOR GENERAL NOTES, SYMBOL LEGENDS, ABBREVIATIONS, AND DRAWING LIST.
2. REFER TO DRAWING ES-1 FOR ELECTRICAL SPECIFICATIONS.
3. THE CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH SMOKE AND/OR FIRE RATED PARTITIONS AND SLABS WITH A UL LISTED SMOKE AND/OR FIRE STOP TO MAINTAIN THE INTEGRITY OF THE FIRE AND/OR SMOKE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR ALL WALL RATINGS. PROVIDE A SHOP DRAWINGS FOR ALL PENETRATIONS. REFER TO DIVISION 7 FOR ADDITIONAL REQUIREMENTS.
4. REFER TO MECHANICAL DRAWINGS FOR ANY ADDITIONAL ELECTRICAL WORK REQUIRED.
5. ALL NEW WIRING WORK SHALL BE INSTALLED IN THE WALLS. IF WIRING MUST BE EXPOSED, THEN IT SHALL BE INSTALLED IN SURFACE METAL RACEWAY (WIREMOLD OR EQUAL), WITH THE APPROVAL OF THE OWNER/ARCHITECT.
7. ALL WIRING FOR CIRCUITS SHALL BE 2#12 + 1#12 GND. UNLESS OTHERWISE INDICATED.
8. ALL INFRASTRUCTURE, CATV, SECURITY DEVICES AND EQUIPMENT ARE BY THE OWNER, AND SHALL BE COORDINATED FOR INSTALLATION.
9. REFER TO ARCHITECTURAL PLANS FOR HEIGHTS OF ALL OUTLETS AS NEEDED.
10. PROVIDE SURGE SUPPRESSION RECEPTACLES AT ALL COMPUTER LOCATIONS.
11. PROVIDE TAMPER RESISTANT RECEPTACLES PER 2020 NEC, ARTICLE 406.12(5) FOR ALL BUSINESS OFFICES, CORRIDORS, WAITING ROOMS (CLINICS, MEDICAL AND DENTAL OFFICES, OUTPATIENT FACILITIES)
12. REFER TO DRAWING E-2 FOR FIRE ALARM RISER DIAGRAM, DETAILS AND NOTES.
13. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE EXISTING CONDITIONS FOR THE INSTALLATION OF ALL NEW FIRE ALARM DEVICES, INCLUDING EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT.
14. THE FIRE ALARM SYSTEM AND THE INSTALLATION OF ALL F.A. DEVICES SHALL COMPLY WITH THE 2020 NATIONAL ELECTRICAL CODE, NFPA 72 AND LATEST STATE OF CT CODES.
15. ELECTRICAL CONTRACTOR SHALL PROVIDE JUNCTION BOX AT THE CEILING FOR CONNECTION OF POWER AND DATA WIRING FOR DESK AREA.

PROJECT NORTH

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Prepared For:

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SHEET TITLE

POWER & FIRE ALARM FLOOR PLAN & NOTES

DESIGNED BY:		SCALE:	AS NOTED
DRAWN BY:	SK/EJ	DATE:	11-23-20
CHECKED BY:	MVM	PROJECT NUMBER:	200943-1
CAD FILE: EP1.dwg			

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