

MEETING AGENDA - REVISED

Firehouse Sub-Committee

Thursday, April 11, 2024 – 4:30 PM

Zoom

1. Chair call the Meeting to Order
2. Seating of alternates
3. Approval of March 27, 2024 and April 8, 2024 Special Meetings Minutes
4. Review of Budget/Timeline – Fire Station 340
 - a. Budget review
 - Update on appliances purchased
 - b. Change Order Log
 - Update on CO-005 – Town Manager approved change order
 - c. Project schedule
5. Discussion of overhead door installation and potential credit.
6. Discussion of potential change order for an additional cabinet and hood over the stove.
7. Update on Special Meeting site visit to Stations 140 and 440 on April 8, 2024.
8. Adjournment

Join Zoom Meeting

<https://us02web.zoom.us/j/82108554979?pwd=eHNXUXJ3SzkrYWZCYkJtd3ZMR0VQdz09>

Meeting ID: 821 0855 4979

Passcode: 4112024

One tap mobile

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Dial by your location

1 646 876 9923 US (New York)

3. Approval of March 27, 2024 and April 8, 2024 Special Meetings Minutes

MEETING MINUTES

Firehouse Sub-committee

ZOOM Remote Meeting

Special Meeting – March 27, 2024

Members Present:

Colleen Yudichak, Chair, Town Council Member
 Jacob Marie, Vice Chair, Town Council Member (arrived at 5:08PM)
 Megan Massa, Projects/Grants Manager
 Beverly Bellody, Director of Human Services
 Brian Foley, Town Manager
 Scott Lappen, Director, Public Works
 John Littell, Fire Chief/Director of Public Safety

Members Absent: Lisa Hancock, Director of Finance

CHA: Chuck Eaton, Town Engineer/Project Manager

Also Present: Carl Dojan, Assistant Fire Chief, Rob DaBica, Fire Marshal, Peter Gavin, Lawrence Brunoli, Inc.

1. Call to Order – Ms. Yudichak called the meeting to order at 5:00PM.
2. Approval of Meeting Minutes
 - a. February 15, 2024 Regular Meeting Minutes
 - b. February 26, 2024 Special Meeting Minutes

Ms. Bellody motioned to approve the minutes of the February 15th and February 26th meetings.

Ms. Massa seconded the motion.

Discussion: none

A roll call vote was taken. Motion passed unanimously.

[Mr. Marie was not present to vote.]

3. Review of Budget/Timeline – Fire Station 340
 - a. Review Budget

Ms. Massa noted that since the last Budget Summary, money was transferred for the approved change orders. Additionally, a payment was made to the contractor.

Ms. Yudichak asked if the budget for the other two stations is on track from what was expected 4-8 weeks ago. Ms. Massa explained that they do not know what potential change orders may be coming. Currently, a little under \$368K remains in the contingency.
 - b. Change Order Log

Ms. Massa noted that the Change Order Log was updated to reflect the approval of the three change orders. A couple of electrical change orders are pending but they are still being discussed by the contractor and CHA. They can be discussed at the April 11th meeting if needed.

c. Updated Construction Schedule

Ms. Yudichak asked what the numbers indicate as related to drywall. Mr. Gavin explained that it is the rating of the wall i.e. 1-hour wall, 2-hour wall. Mr. DaBica noted it is required by a code provision. In terms of the schedule, Mr. Gavin noted that Mr. Schmidt feels comfortable with the May 31st date. The overhead doors are scheduled over the next few days. Ms. Massa noted that the sign has gone up and looks great.

4. Discussion of email dated August 22, 2023 "Notice of Delay = Insulated Metal Panels Delayed Delivery"

Mr. Marie commented that the delay was mentioned but was not quantified. Ms. Massa noted that it was included with the paperwork for the final change order for the curb changes and extended overhead.

5. Discussion and vote on recommendation to Town Council to add Carl Dojan as an alternate to the Firehouse Subcommittee

Ms. Yudichak and Mr. Marie discussed with Mr. Foley having Assistant Chief Dojan be an alternate to represent the Tolland Fire Department in case Chief Littell is unavailable.

Mr. Marie motioned to recommend to the Council to add Assistant Chief Carl Dojan as an alternate to the Firehouse Subcommittee.

Mr. Foley seconded the motion.

Discussion: none

A roll call vote was taken. Motion passed unanimously.

6. Discussion of the purchase of kitchen appliances and vote to authorize replacing the Denlar D100 36" pre-engineered range hood, including roof mounted fan, with an over-the-range microwave.

Ms. Massa explained that based on the plans, the town is responsible for purchasing and providing the appliances and the contractor will perform the installation. The town was tasked with purchasing a refrigerator, propane stove, and dishwasher. After discussing it with the fire department, the preference was to install an over-the-range microwave in place of the Ansul hood and to only prepare the wiring and plumbing but not purchase the dishwasher. The revised quote for the over-the-stove microwave, stove, and refrigerator is \$2,200 which would come from contingency.

Ms. Massa explained that the Ansul hood is not required by code, but is included in the plans. The contractor was expecting to provide and install the hood with 12x12 duct work to a roof-mounted fan. Swapping this out would require a small redesign and possible differences in cost. Ms. Massa reached out and learned that there would not be an additional charge unless the microwave needs to be vented. Some concerns included that a microwave would not be ADA accessible over the stove and there have been discussions regarding if a residential hood could be used.

Mr. Eaton explained that when the building was being planned, the Ansul hood was discussed because it is a fire station. A call may come in when personnel are cooking on the stove, and it may be left on. The Ansul hood has a fire extinguisher built in. Ms. Massa added that there is an annual inspection cost for the hood, and she received an estimate from Mr. Eaton for the hood, ductwork, and fan of approximately \$15K. Assistant Chief Dojan commented that they discussed having a commercial hood at Station 140 but does not recall a conversation about a hood at Station 340. Station 340 is a substation, does not warrant a commercial hood, and they did not agree to it. This was not discussed. To say they will not receive a \$15K credit vs. having a residential hood is “ridiculous”. He noted that he is speaking as a taxpayer.

Mr. DaBica commented that it needs to be ADA compliant, and an overhead microwave would not be compliant with the code.

Ms. Massa clarified that she believes they are saying that the Ansul hood is not needed. The microwave was an option. They would want something over the stove that vents. Her recommendation, after speaking with the building official, is to have a countertop microwave. Assistant Chief Dojan noted after speaking with the project manager, given the ADA requirements, a microwave over the stove would not be applicable. With the gas stove, a hood ducted to the outside is needed. Mr. DaBica agreed.

Mr. Marie asked if a hood (\$15K) is needed. Ms. Massa explained that the plans have a propane stove with a commercial hood with built-in fire suppression. Such a hood requires annual inspections and ductwork that goes to the roof-mounted fan. The estimated project cost is \$15K. The fire department is suggesting a hood without fire suppression. In speaking with the contractor, she did not see that the town would receive a substantial credit with such a change. Mr. Gavin explained that the Ansul vented system only shows up in elevation for the millwork cabinetry drawings. The final set of plans did not include a hood because it was not in the specs. They would need to work on whether or not a credit is owed if the Ansul system is eliminated. The Subcommittee needs to decide what it would like to do and they will work toward providing it but cost will need to be considered.

Mr. Marie asked if they had a residential hood if the cost would be less than \$15K. Mr. Gavin explained that venting would be an increased cost to the project because it was not in the specs. Mr. Marie asked when a decision would be needed. Mr. Gavin responded if they give him an idea, they can start looking at what it will take to make it happen.

Mr. Foley asked if a hood is needed over the stove. Ms. Massa responded that it is not required by code but is recommended. Mr. DaBica confirmed that it is not required. Mr. Foley noted that every penny saved on the kitchen can be put into the other projects and is in favor of a \$100 fan over the stove with a light if anything. Chief Littell noted that the microwave can go on the countertop. Mr. Marie agreed. Ms. Yudichak confirmed that they would not be charged \$15K. Mr. Gavin commented that standard millwork cabinetry is over the stove and units are available with a light and fan system that vents into the room. They will need to coordinate 120 power above the stove for the hood, but it should not be a problem.

A discussion took place regarding the kitchen appliances. Mr. Eaton recommended separating the hood from the appliances. The hood is included in the contract while the appliances are supplied by the town. He will work with Ms. Massa on a change order to switch out the hood to

one without fire suppression. Mr. Foley noted that he wants a dishwasher, and the town will get the appliances. It has been roughed in with plumbing. He would rather have the dishwasher than pay for a false door to be installed.

In regard to a vote, it was noted that the hood was never included so a vote is not needed to replace it.

7. Adjournment

Mr. Foley to adjourn at 5:47PM.

Chief Littell seconded the motion.

Discussion: none

A roll call vote was taken. Motion passed unanimously.

Lisa A. Pascuzzi

Firehouse Sub-committee Clerk

MEETING MINUTES
Firehouse Sub-committee
Special Meeting Site Walk
Station 140/440—April 8th,2024 4:30 PM

Members Present:

Colleen Yudichak, Chair, Town Council Member

Jacob Marie, Vice Chair, Town Council Member

Megan Massa, Projects/Grants Manager

Brian Foley, Town Manager

John Littell, Fire Chief/Director of Public Safety

Members Absent: Lisa Hancock, Director of Finance; Scott Lappen, Director, Public Works;

Bev Bellody, -Director of Human Services

CHA: Chuck Eaton, Town Engineer/Project Manager

Also Present Carl Dojan, Assistant Fire Chief, Rob DaBica, Fire Marshal, Jim Paquin, Building Official

1. Call to Order—Ms. Yudichak called the meeting to order at 4:34 PM. To discuss TFD priorities for stations 140 and 440. 140, 64 Crystal Lake Road.

Assistant Fire Chief Carl Dojan provided an overview of station numbers 140 and 440. The items discussed were the prioritized items provided by TFD leadership to the Firehouse subcommittee back in the February 15th, 2024 meetin.

These priorities would be paid for with the remaining funds from the current project station 340- 247 Gehring Road- on June 30, 2023—Tolland was awarded \$1,000,000 towards the Fire Station Projects by CT Bond. The balance from station 340 and the awared bond will help pay priorities for both stations 140 and 440.

Station 140 Priorities Overview:

Foundation, Bay Additions, Updated HVAC, and Apparatus Bay Replacement. The subcommittee did a walkaround inside and outside of Station 140.

2.) Motion for Recess at 5:00 PM by Jaco Marie seconded by Brian Foley, motioned passed unanimously

3.)Returned from session at 5:18 PM - Station 440 107 Plains Road

Station 440 107 Priorities-Overview

Items discussed: Roofing Replacement, Repoint Massonary, Apparatus Bay Slab replacement
The subcommittee did a walk around inside and outside of station 440.

Megan Masa seconded the motion to adjourn at 6:00 PM by Brian Foley, and the motion passed unanimously.

Submitted by: Colleen Yudichak- Chair of Fire House Sub-committee

4. Review of Budget/Timeline – Fire Station 340
 - a. Budget review

Fire Station 340 Budget Summary

Updated: 4/10/2024

Expense Accounts

Munis Account	Line	Original Budget	Adjusted Budget	Spent	Encumbrances	Available Budget
722420	Architectural Engineering	\$ 232,415.00	\$ 241,415.00	\$ 226,616.68	\$ 14,798.32	\$ -
722440	Building Contractor	\$ 2,257,000.00	\$ 2,332,225.60	\$ 1,708,070.55	\$ 624,155.05	\$ -
722460	Testing & Inspections	\$ 9,621.33	\$ 9,621.33	\$ 9,621.33	\$ -	\$ -
722495	Contingency	\$ 451,400.73	\$ 363,137.37	-	\$ -	\$ 363,137.37
722480	Bonding/Legal Costs	\$ 72,268.00	\$ 72,268.00	\$ -	\$ -	\$ 72,268.00
722497	Insurance/Builders Risk	\$ 4,000.00	\$ 4,982.00	\$ 2,491.00	\$ -	\$ 2,491.00
722410	Advertising	\$ 572.94	\$ 572.94	\$ 572.94	\$ -	\$ -
733330	Misc. Reimbursables	\$ -	\$ 655.00	\$ 655.00	\$ -	\$ -
744600	Other Equipment	\$ -	\$ 2,400.76	\$ -	\$ -	\$ 2,400.76
Total		\$ 3,029,678.76	\$ 3,027,278.00	\$ 1,948,027.50	\$ 638,953.37	\$ 437,896.37

Change Orders Log

Number	Date	Amount	Transfer to Account	Description
CO-001	8/2/2023	\$ 3,680.00	722440 - Building Contractor	Well Pump
CO-002	3/4/2024	\$ 39,134.00	722440 - Building Contractor	Foundation changes
CO-002	3/4/2024	\$ 25,000.00	722440 - Building Contractor	Extended Overhead
CO-003	3/4/2024	\$ 3,588.00	722440 - Building Contractor	Plymovent Fan
CO-004	3/4/2024	\$ 1,479.90	722440 - Building Contractor	Sewer riser
CO-005	4/10/2024	\$ 2,343.70	722440 - Building Contractor	(2) Plymovent Hoses
		\$ 75,225.60		

Potential Change Orders Approved by the Subcommittee

Number	Date	Amount	Transfer to Account	Description
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- 4. Review of Budget/Timeline – Fire Station 340
 - a. Change Order Log
 - Update on CO-005 – Town Manager approved change order



LB#	Owner C.O. #	Initiator	Date Initiated	Description	Date Submitted/Approved	Submitted	Time (Cal. Days)	Approved	In Court
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PCO-001		Email	02/15/23	Unforeseen Condition - Existing Foundation Walls 8'					
PCO-002	COP-003	RFI-002	03/10/23	Add Concrete Curb at Perimeter to Raise Metal Panel Above Finish Grade					
PCO-003		Email	04/18/23	Changes to Foundation Footings					
PCO-004	COP-004	Email	05/01/23	Electric Meter Location Change					
PCO-005		RFI-005	05/08/23	Modify Footings on Column Line 5					
PCO-008		Email	10/17/23	Add Precast Riser & Sewer Frame and Cover at Distribution Box					
PCO-009		Email	10/18/23	Changes to Grade Beam Design to Accommodate 4" Drain Line					

[illegible][illegible][illegible]



AIA® Document G701® – 2017

Change Order

PROJECT: *(Name and address)*
Tolland Fire Department Replacement of
Fire Stations 340 and 440
Tolland, CT

CONTRACT INFORMATION:
Contract For: General Construction

Date: January 3, 2023

CHANGE ORDER INFORMATION:
Change Order Number: 005

Date: April 5, 2024

OWNER: *(Name and address)*
Town of Tolland
21 Tolland Green, Tolland CT

ARCHITECT: *(Name and address)*
CHA
400 Capital BLVD, Rocky Hill, CT

CONTRACTOR: *(Name and address)*
Lawrence Brunoli, Inc
11 Eastview Drive, Farmington, CT

THE CONTRACT IS CHANGED AS FOLLOWS:

(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)

Due to the age and deteriorated condition of the salvaged Plymovent Vent Hoses, the two salvaged hoses will be replaced. See attached breakdown of equipment and costs.

The original Contract Sum was	\$ 2,257,000.00
The net change by previously authorized Change Orders	\$ 71,402.00
The Contract Sum prior to this Change Order was	\$ 2,328,402.00
The Contract Sum will be increased by this Change Order in the amount of	\$ 2,343.70
The new Contract Sum including this Change Order will be	\$ 2,330,745.70

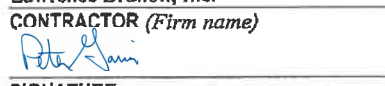
The Contract Time will be increased by Zero (0) days.
The new date of Substantial Completion will be May 31, 2024

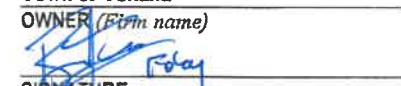
NOTE: This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.

CHA
ARCHITECT *(Firm name)*

SIGNATURE
Charles Eaton, Sr Project Manager
PRINTED NAME AND TITLE
April 8, 2024
DATE

Lawrence Brunoli, Inc.
CONTRACTOR *(Firm name)*

SIGNATURE
Peter Gavin, PM
PRINTED NAME AND TITLE
April 9, 2024
DATE

Town of Tolland
OWNER *(Firm name)*

SIGNATURE
Brian Foley, Town Manager
PRINTED NAME AND TITLE
April 9, 2024
DATE

CHANGE ORDER PROPOSAL WORKSHEET

Change Order Proposal No.: **COP-012**

Date: **4/3/2024**

Company: **Lawrence Brunoli, Inc.**
Company Name (Typed)

Owner: *Town of Tolland*

Project Name: Replacement of Fire Station 340

Plymovent System - Add Two New Hoses

Quant.	Unit	Description of Material and Equipment	Unit Cost	Total
Line #1		Material Subtotal		\$0.00

No. of Workers	Labor Classification	Hours	Base Rate	Tax	Fringe	Pension	Misc. Ins. & Comp.	Total Rate	Total
Line #2		Labor Subtotal							\$0.00

Line #3	Total Labor and Materials	\$	-
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Line #4 Amt.	Overhead and Profit % Mark-up on Own Work	Allow %	Applicable %	Total
	\$0.00 to \$5,000	15%	15%	\$ -
	\$5,001 to \$15,000	15%	15%	\$ -
	\$15,001 to \$25,000	15%	15%	\$ -
	\$25,000 and Greater	15%	15%	\$ -
Line #5	Total Mark-up on Contractor's Own Work (15%)			\$ -

Subcontractor Cost (from attached proposed change order form)			Total
Trade	Name of Subcontractor		
HVAC	Air Cleaning Specialists of New England	\$	2,038.00
		\$	-
		\$	-
Line #6	Subcontractor Total	\$	2,038.00

Line #7	General Contractor's Mark-up on Subcontractor Work	15%	\$ 305.70
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Line #8	Bond Cost	0.00563	\$ -
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Line #8.1	Extended Overhead	t.b.d.	\$ -
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Line #9	Total Proposed Change Order Amount	\$	2,343.70
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1525 Hanover Street
Hanover, MA 02339
Phone 781-826-9755
Fax 781-829-0240

www.aircleaningspecialistsne.com

of New England LLC

PROPOSAL

DATE:	April 4 th , 2024				
TO:	Lawrence Brunoli, Inc				
ATTN:	Peter Gavin	Phone		FAX:	

REF: Tolland CT. Fire Station

Replace Two (2) 4" x25' Yellow and Black Plymovent Hoses with airline

Hose # 00000116331, 4" x 25' \$894.00 each x (2) = \$1788.00

Labor: \$250.00

Proposed By: Tom Perry
Project Manager

Accepted By:

Megan Massa

Subject: FW: [EXTERNAL]New Fire Station, Plymovent

From: tperry@aircleaningne.com <tperry@aircleaningne.com>

Sent: Friday, March 22, 2024 10:31 AM

To: John Littell <jlittell@Tollandct.gov>

Subject: [EXTERNAL]New Fire Station, Plymovent

Good morning Chief Littell. It's been a while. I hope you and yours are well.

As you probably already know, we have installed the one New Plymovent and re-installed the older two Plymovents at your new Fire Station.

The two older hoses are in rough shape and are too short. My suggestion is to replace the two hoses. 25' of Hose is \$894.00 each.

Please let me know if you want to go with the new hoses.

Thank you, Tom

4. Review of Budget/Timeline – Fire Station 340
c. Project schedule

April

2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4		6
7	8	9	10	11	12	13
		CFMF-Recess Soffit DW DWF Elec Rough Shower Stall Delivery	CFMF (Mech/Elec) DW-Recess Soffit DWF Elec Rough Mech Insulation Pipe Insulation	DW 2-Hr Wall Kitchen DWF Elec Rough Mech Rough Inspection - Mech	DW 2-Hr Wall Kitchen DWF-FT-Kitchen Smoke Seal-Kitchen Elec Rough Mech Rough Pipe Insulation	
14	15	16	17	18	19	20
CFMF (Kitchen Soffit) DW 1-Hr Wall Janitor DWF Smoke Seal-Corridors Elec Rough Mech Rough	DW 2-Hr Wall (Office) DWF-FT-Janitor Smoke Seal-Janitor Smoke Seal-Office Elec Rough Mech Rough	CFMF (Janitor Ceiling) DW 2-Hr Wall (Office) DWF Elec Rough Mech Rough	DW 1-Hr Wall Mech/Elec Smoke Seal-Mech/Elec DWF-FT-Mech/Elec Elec Rough Mech Rough	DW Restrooms DWF-FT-Office Elec Rough Mech Rough		
21	22	23	24	25	26	27
DW Restrooms DWF Hollow Metal Doorframes DWF	DWF Hollow Metal Doors Painting	DWF Glass Painting	DWF Glass Painting	DWF Glass Painting	DWF Painting	
28	29	30				
DWF Painting	DWF Painting					

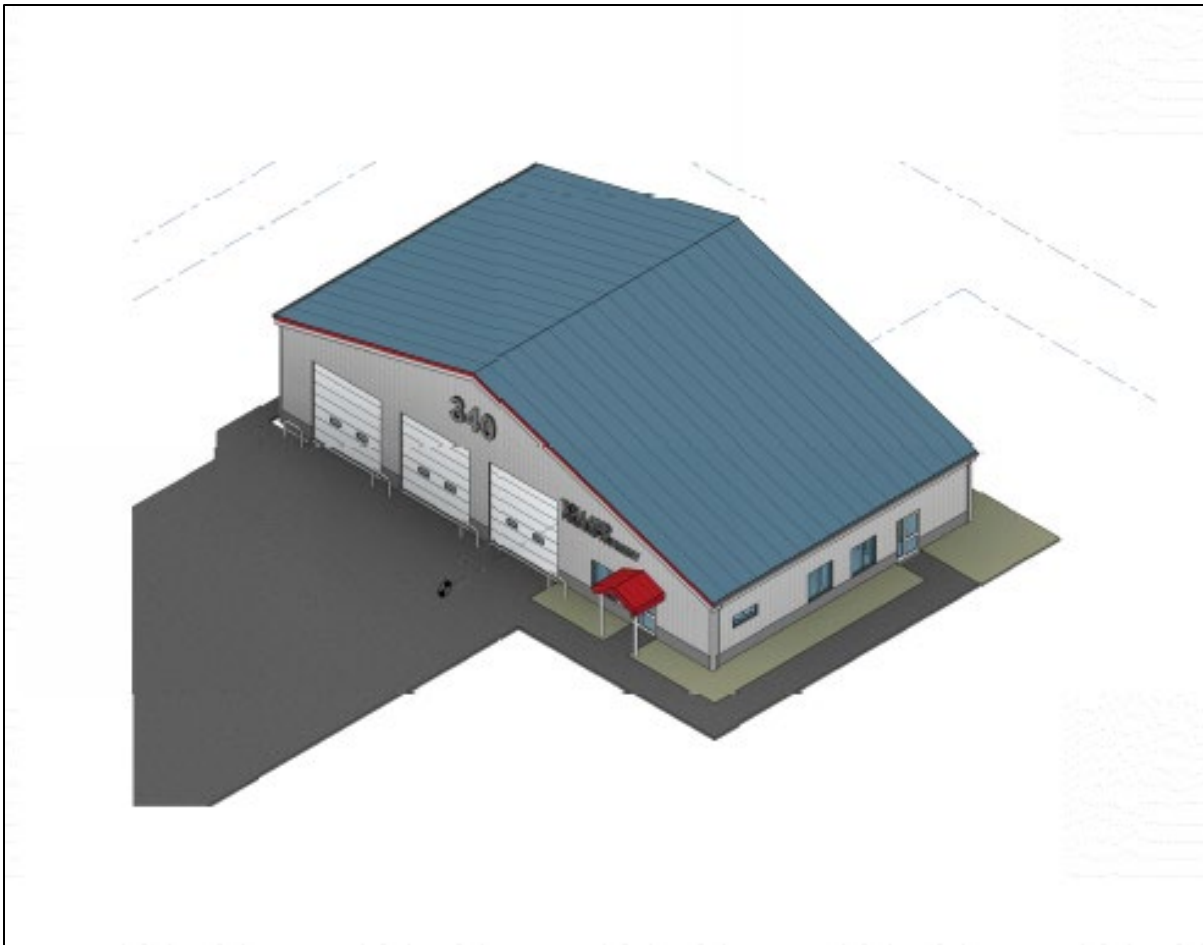
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May

2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			<div>1</div> <div>Painting Wainscoat Restrooms</div> <div>Banner Water</div>	<div>2</div> <div>Painting Wainscoat Restrooms</div>	<div>3</div> <div>Painting</div>	<div>4</div>
<div>5</div>	<div>6</div> <div>Painting Ceiling Grid</div>	<div>7</div> <div>Painting Ceiling Grid</div>	<div>8</div> <div>Painting MEP in Ceiling Grid</div> <div>MEP – Fixtures / Trim</div>	<div>9</div> <div>Painting MEP in Ceiling Grid</div> <div>MEP – Fixtures / Trim</div>	<div>10</div> <div>Painting MEP in Ceiling Grid</div> <div>MEP – Fixtures / Trim</div>	<div>11</div>
<div>12</div>	<div>13</div> <div>MEP in Ceiling Grid</div> <div>MEP – Fixtures / Trim</div> <div>Flooring</div>	<div>14</div> <div>MEP in Ceiling Grid</div> <div>MEP – Fixtures / Trim</div> <div>Flooring</div>	<div>15</div> <div>Inspection – Above ATC</div> <div>Flooring Restroom Accessories</div>	<div>16</div> <div>Flooring Ceiling Pads</div> <div>Restroom Accessories</div>	<div>17</div> <div>Flooring Ceiling Pads</div>	<div>18</div>
<div>19</div>	<div>20</div> <div>Millwork Signage</div> <div>Doors and Hardware</div>	<div>21</div> <div>Millwork Signage</div> <div>Doors and Hardware</div>	<div>22</div> <div>Millwork Doors and Hardware</div> <div>Systems Startup / Testing</div>	<div>23</div> <div>Inspection -Finals</div> <div>Systems Startup / Testing</div>	<div>24</div> <div>Landscaping Systems Startup / Testing</div>	<div>25</div>
<div>26</div>	<div>27</div> <div>Landscaping</div>	<div>28</div> <div>Landscaping</div>	<div>29</div> <div>Landscaping</div>	<div>30</div> <div>Punch List</div>	<div>31</div> <div>Punch List Substantial Complete</div>	

5. Discussion of overhead door installation and potential credit.



6. Discussion of potential change order for an additional cabinet and hood over the stove.

Megan Massa

From: Megan Massa
Sent: Thursday, March 28, 2024 2:26 PM
To: 'Eaton, Chuck'
Cc: Brian Foley; Colleen Yudichak; Jacob Marie; Jim Paquin
Subject: FS340 - Hood shown on plans
Attachments: Pages from Permit Set - Transmitted to Tolland 4.19.23-2.pdf

Importance: High

Hi Chuck,

I would like the contractor to respond formally on providing the Town a credit for the hood. The Building Official and I have reviewed the plans the contractor has submitted to the Town. The hood is Ansul hood is shown and called out on 3 pages of the plan, including the Electrical plan. Peter is correct, it is not shown on his mechanical plan, but I feel this is his error. There are enough mentions of the Ansul hood within his architect's construction drawings, as submitted for the building permit, that indicate Peter was aware the Ansul hood was part of the project scope. If he was unclear, he should have sent an RFI. Additionally, the Building Official noted that the mechanical page set starts with number M101, and he believes a mechanical drawing page (M100) has been omitted from the final permit set. I have attached the pages from LBI's permit set that show the hood, for reference.

I would also like to draw your/Peter's attention to the General Note #11 on A001 (page 1 of the attached):

"ALL CONTRACTORS SHALL REVIEW DRAWINGS AND PROJECT MANUAL. IF THERE IS A DISCREPANCY BETWEEN THE TWO OR ANY OTHER PARTS OF THE DOCUMENTS, THE HIGHER VALUE (IN DOLLARS) SHALL PREVAIL AS THE SCOPE OF WORK THAT WILL BE PRICED UNLESS OTHERWISE DIRECTED IN WRITING BY THE ARCHITECT DURING THE BIDDING PERIOD."

I appreciate your assistance with this matter.

Thanks,

Megan Massa
Projects and Grants Manager
Town of Tolland
Direct: 860-871-3605
Fax: 860-871-3663
mmassa@tollandct.gov

ABBREVIATIONS		S.O.G. SPEC.		SLAB ON GRADE SPECIFICATIONS		SYMBOL LEGEND	
A.C.T.	ACOUSTICAL CEILING TILE	SQ.	SQUARE	SQ. FT.	SQUARE FEET	101 A	- DOOR NUMBER
ADJ.	ADJUSTABLE	STL	STEEL	STL	STEEL	?	- WINDOW TYPE
ALUM.	ALUMINUM	S.F.	STEP FOOTING	S	STORM	2	- ROOM NAME
A.B.	ANCHOR BOLT	STRUCT.	STRUCTURAL	SUSP.	SUSPENDED, SUSPENSION	?	- ROOM NUMBER
APPROX.	APPROXIMATE	TECH.	TECHNOLOGY	T	TELEPHONE	2	- PARTITION TYPE
ARCH.	ARCHITECTURAL	T&B	TOP AND BOTTOM	T.O.	TOP OF	?	- PARTITION TYPE
A.C.P.	ASBESTOS CEMENT PIPE	T.O.F.	TOP OF FRAME	T/S	TOP OF SLAB	X	- CONSTRUCTION NOTE
ASPH.	ASPHALT	T.O.S.	TOP OF STEEL	T.W.	TOP OF WALL	X	- GLAZING TYPE
AVG.	AVERAGE	TYP.	TYPICAL	U.O.N.	UNLESS OTHERWISE NOTED	2	- EXTERIOR ELEVATION NUMBER
BSMT.	BASEMENT	V.I.F.	VERIFY IN FIELD	VERT.	VERTICAL	A101	- SHEET NUMBER
BRG.	BEARING	V.B.	VINYL BASE	V.C.T.	VINYL COMPOSITE TILE	2	- INTERIOR ELEVATION NUMBER
BIT.	BITUMINOUS	W.	WATER	W.C.J.	WALL CONTROL JOINT	A101	- SHEET NUMBER
BLK.	BLOCK	W.W.F.	WELDED WIRE FABRIC	W.W.M.	WELDED WIRE MESH	2	- BUILDING SECTION NUMBER
BD.	BOARD	W.W.	WELDED WIRE MESH	W.D.	WOOD	A101	- SHEET NUMBER
B.S.	BOTH SIDES	@	AT	O	DIAMETER	2	- WALL SECTION NUMBER
BRK.	BRICK					A101	- SHEET NUMBER
BLDG.	BUILDING						- REFERENCE POINT
C.I.	CAST IRON						- REVISION MARK
C.I.P.	CAST IN PLACE CONCRETE						
C.B.	CATCH BASIN						
C.B.R.	CATCH BASIN TO BE REMOVED						
CLG.	CEILING						
C.	CENTER LINE						
Q. BD.	CHALK BOARD						
C.O.	CLEAN OUT						
COL.	COLUMN						
CONC.	CONCRETE						
C.M.U.	CONCRETE MASONRY UNIT						
CONF.	CONFERENCE						
CONT.	CONTINUOUS, CONTINUE						
CONTR.	CONTRACTOR						
CONTR. JOINT	CONTRACT JOINT						
C.C.	CURB CUT						
DET.	DETAIL						
DIA.	DIAMETER						
DIM.	DIMENSION						
DR.	DOOR						
DN.	DOWN						
DWG.	DRAWING						
EA.	EACH						
E.F. / E.W.	EACH FACE / EACH WAY						
ED.	EDUCATION						
E / ELEC.	ELECTRICAL						
EL. / ELEV.	ELEVATION						
EMER.	EMERGENCY						
ENCL.	ENCLOSURE						
ENT.	ENTRANCE						
EP.	EPOXY PAINT						
EQ.	EQUAL						
EXAM.	EXAMINATION						
EXIST.	EXISTING						
EXP.	EXPANSION						
E.J.	EXPANSION JOINT						
EXT.	EXTERIOR						
F.S.	FAR SIDE						
FIN.	FINISH, FINISHED						
F.F.	FINISHED FLOOR						
FIXT.	FIXTURE						
FL.	FLOOR						
F.P.	FOLDING PARTITION						
FT.	FOOT						
FTG.	FOOTING						
FDN.	FOUNDATION						
F.D.	FLOOR DRAIN						
G.	GAS						
GA.	GAUGE						
GEN.	GENERAL						
G.C.	GENERAL CONTRACTOR						
GYP.	GYPSUM						

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VOLUME 2

PROJECT GENERAL NOTES

- THESE GENERAL NOTES ARE INTENDED TO COMPLEMENT THE CONTRACT DOCUMENTS. REFER TO THE CONTRACT DOCUMENTS FOR DETAILED INFORMATION AND ADDITIONAL REQUIREMENTS.
- ALL WORK INCLUDED IN THIS CONTRACT SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL LAWS, STATUTES, ORDINANCES, CODES, RULES AND REGULATIONS, OR LAWFUL ORDERS OF PUBLIC AUTHORITY. PROMPTLY REPORT ANY NONCONFORMITY DISCOVERED TO THE ARCHITECT.
- THE INTENT OF THE CONTRACT DOCUMENTS IS TO INCLUDE ALL ITEMS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF WORK BY THE CONTRACTOR AND TO PROVIDE A COMPLETE, FULLY OPERATIONAL BUILDING. PROVIDE ALL LABOR, MATERIALS AND INCIDENTALS NECESSARY TO ACHIEVE THIS INTENT.
- FAILURE OF THE DRAWINGS OR SPECIFICATIONS TO INDICATE EACH INCIDENTAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING THE NECESSARY ITEMS AS PART OF THIS CONTRACT. THE DRAWINGS SHOW THE DESIGN, LOCATION, DESCRIBE THE QUALITY LEVEL AND CONSTRUCTION TECHNIQUES IN A GENERAL SENSE ONLY.
- ALL DETAILS ARE TYPICAL. WHAT IS SHOWN IN ONE CONDITION APPLIES TO ALL OTHER SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE.
- VERIFY THE FOLLOWING ITEMS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH WORK, AND PROCEED WITH THE WORK ONLY AFTER SUCH DISCREPANCIES ARE RESOLVED:
 - EXISTING CONDITIONS
 - WALLS, FLOORS, ROOFS, AND SUBSTRATES WHERE PRODUCTS AND SYSTEMS ARE TO BE INSTALLED
 - SIZE AND CONDITION OF WINDOW, DOOR, LOUVER, AND OTHER OPENINGS WHERE PRODUCTS AND SYSTEMS ARE TO BE INSTALLED
 - THE EXISTENCE, SIZE, AND LOCATION OF ALL EXISTING UTILITIES, MECHANICAL, AND ELECTRICAL SYSTEMS
 - DISCREPANCIES BETWEEN OR WITHIN THE CONTRACT DOCUMENTS
 - UNSATISFACTORY SOILS: REPORT THE LOCATION OF ALL UNSUITABLE SOIL MATERIALS BELOW ANTICIPATED LEVELS OF FOOTINGS OR SLABS PRIOR TO SETTING FORMS
 - MECHANICAL, ELECTRICAL, AND PLUMBING WHICH IMPACT CEILING INSTALLATION HEIGHTS OR THE BUILDING APPEARANCE
 - DIMENSIONAL DISCREPANCIES
- COORDINATE THE WORK OF ALL SUBCONTRACTORS.
- DO NOT PENETRATE STRUCTURAL BEAMS, COLUMNS, OR SHEAR WALLS UNLESS SPECIFICALLY DETAILED OTHERWISE.
- PROVIDE BOND-OUTS, BLOCKING, SLEEVES AND PIPES AS REQUIRED FOR ALL WALL, FLOOR, ROOF, AND CEILING PENETRATIONS
 - MAINTAIN CONTINUITY OF FIRES RATED ASSEMBLIES AND SMOKE ASSEMBLIES. SEAL ALL PENETRATIONS TO CONFORM TO U.L. RATED ASSEMBLIES AND ALL NFPA AND IBC REQUIREMENTS. REFER TO THE CODE PLANS FOR ADDITIONAL CODE REFERENCES
 - ALL PENETRATIONS SHALL COMPLY WITH THE ACOUSTICAL ASSEMBLY RATING REQUIRED FOR EACH WALL OR FLOOR ASSEMBLY
- COORDINATE THE WORK TO ACHIEVE THE GIVEN VISUAL AND PERFORMANCE REQUIREMENTS OF MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS WITHIN THE INDICATED SPACE.
- PROVIDE WORK HOLES OR ADEQUATE ACCESS AS REQUIRED TO INSTALL NEW SYSTEMS IN CONCEALED SPACES.
- PRODUCTS SHALL BEAR UL CLASSIFICATION WHERE REQUIRED BY DESIGN. DO NOT REMOVE OR PAINT OVER UL CLASSIFICATIONS.

DEFINITIONS:

- NEW:** INDICATES ITEMS THAT SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACT. TYPICALLY USED TO ENSURE CLARITY BETWEEN VARIOUS COMPONENTS OF THE DRAWINGS. NOT ALL ITEMS ARE LABELED AS "NEW" WHEN IT IS OBVIOUS BY OTHER INDICATION.
- EXISTING:** EXISTING BUILDING OR SITE COMPONENTS WHICH ARE IN PLACE AT THE START OF CONSTRUCTION. NOT ALL ITEMS ARE LABELED AS "EXISTING" WHEN IT IS OBVIOUS BY OTHER INDICATION.
- REPAIR:** RESTORE TO SUITABLE OR APPROPRIATE OPERATING AND AESTHETIC CONDITION.
- RESTORE:** BRING BACK TO FORMER CONDITION, BY REPAIRING OR PATCHING AS REQUIRED.
- PATCH:** RESTORE TO CONDITION MATCHING EXISTING ADJACENT CONSTRUCTION, SURFACE TEXTURE AND FINISH.
- N.I.C. (NOT IN CONTRACT):** WORK WHICH IS NOT INCLUDED IN THIS CONTRACT, BUT WHICH MAY REQUIRE CONTRACTOR COORDINATION.
- REMOVE:** DISMANTLE AND/OR EXTRACT FROM THE PREMISES ENTIRELY. DISPOSE OF OFF OF THE SITE UNLESS NOTED OTHERWISE.
- REPLACE:** DISMANTLE AND/OR EXTRACT FROM THE PREMISES ENTIRELY. DISPOSE OF OFF OF THE SITE UNLESS NOTED OTHERWISE. PROVIDE NEW MATERIAL AS INDICATED.
- DAMAGES:** EXISTING BUILDING OR SITE COMPONENTS, NOT SCHEDULED FOR WORK, WHICH ARE DAMAGED. SUCH ELEMENTS AND COMPONENTS SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITION BY METHODS APPROVED BY THE ARCHITECT.
- DEMOLISH:** DISMANTLE AND/OR EXTRACT FROM THE PREMISES ENTIRELY. DISPOSE OF OFF OF THE SITE UNLESS NOTED OTHERWISE.

SALVAGE: REMOVE AND REINSTALL OR REMOVE AND DELIVER TO THE OWNER, AS INDICATED. SALVAGED COMPONENTS MAY BE FOR LIMITED REUSE, TO MATCH EXISTING CONDITIONS OR TO PATCH AND REPAIR AS INDICATED.

GENERAL ARCHITECTURAL NOTES

1.

THE DRAWINGS USE A SYSTEM OF KEYED NOTES ON PLANS, ELEVATIONS AND DETAILS. INSTRUCTIONS FOR SPECIFIC COMPONENTS OF THE WORK ARE KEYED TO THE DRAWINGS. BUILDING SYSTEMS (PARTITIONS, ROOF & FOUNDATION) ARE KEYED TO FLOOR PLANS, WALL SECTIONS, ROOF PLAN AND OTHER DETAILS AS APPROPRIATE.

2.

MAINTAIN MINIMUM MANEUVERING CLEARANCES AT DOORS IN COMPLIANCE WITH THE ADA ACCESSIBILITY GUIDELINES (ADAAG), INCLUDING BUT NOT LIMITED TO THE FOLLOWING EXCEPT FROM 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

1. Add 2 x 1 Swinging Doors and Gates. Swinging doors and gates shall have maneuvering clearances complying with Table 404.2.4.1.

Table 404.2.4.1 Maneuvering Clearances at Manual Swinging Doors and Gates

Type of Use		Minimum Maneuvering Clearance	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway (Beyond latch side unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	45 inches (1220 mm)	0 inches (0 mm) ^a
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Push	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Pull	54 inches (1370 mm) ^b	22 inches (559 mm) ^b
From latch side	Pull	48 inches (1220 mm) ^c	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm) ^d	24 inches (610 mm)

1. Add 12 inches (305 mm) if closer and latch are provided.

2. Add 6 inches (150 mm) if closer and latch are provided.

3. Beyond hinge side.

4. Add 6 inches (150 mm) if closer is provided.

3.

ALL MOUNTING HEIGHTS AND CLEARANCES AT TOILET ROOMS AND ELSEWHERE SHALL COMPLY WITH THE LATEST VERSION OF THE ADA ACCESSIBILITY GUIDELINES (ADAAG).

•

BARRIER-FREE CLEARANCES ARE GIVEN. THESE **CLEAR** DIMENSIONS SHALL BE MAINTAINED IN CASES OF DISCREPANCY.

•

ALL DIMENSIONS GIVEN FOR FIXTURE AND ACCESSORY LOCATIONS ARE **CLEAR** DIMENSIONS FROM FINISHED SURFACES, UNLESS NOTED OTHERWISE. COORDINATE ACTUAL DIMENSIONS WITH WALL CONSTRUCTION AND FINISHES.

•

LOCATE ALL CONTROLS, FLUSH VALVES, SHUTOFFS AND SIMILAR ITEMS IN ACCORDANCE WITH THE LATEST VERSION OF THE ADA ACCESSIBILITY GUIDELINES (ADAAG).

•

SOME ITEMS MAY INDICATE A RANGE IN MOUNTING HEIGHT. MAINTAIN A CONSISTENT MOUNTING HEIGHT, WITHIN THE GIVEN RANGE, THROUGHOUT THE PROJECT, UNLESS NOTED OTHERWISE.

4.

MAINTAIN **CLEAR** DIMENSIONS IN ACCORDANCE WITH THE LATEST VERSION OF THE ADA ACCESSIBILITY GUIDELINES (ADAAG).

5.

ALL GRAB BAR COMPONENTS SHALL BE ABLE TO WITHSTAND A LOAD OF 250 LBS AT ANY POINT.

6.

INSTALL BLOCKING BEHIND ALL SURFACE-APPLIED FIXTURES, TRIM, GRAB BARS, SHELVES, CHAIR RAILS, PICTURE RAILS, BASE MOLDINGS, TACK OR MARKER BOARDS, WINDOW TREATMENT, WALL OR BASE CABINETS OR COUNTERS, AND MISCELLANEOUS ACCESSORIES MOUNTED ON STUD WALLS.

7.

ALL EXPOSED WOOD NOT INDICATED TO BE PAINTED SHALL BE NATURAL FINISH (CLEAR).

8.

FLOORING AND FLOOR FINISHES BE INSTALLED TO A MAXIMUM DIFFERENTIAL OF 1/16" BETWEEN DISSIMILAR MATERIALS. PROVIDE TRANSITION STRIPS OR THRESHOLDS (1/2" MAXIMUM) OF SAME MATERIAL AS FLOORING AND/OR AS NOTED ON THE DRAWINGS, BETWEEN DISSIMILAR FLOORING MATERIALS.

9.

PATCH AND LEVEL EXISTING SUBFLOORS TO RECEIVE NEW FLOOR FINISHES AS INDICATED IN THE ROOM FINISH SCHEDULE.

10.

ALL EXPOSED PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT.

11.

INSTALL 2 COAT HOOKS CENTERED ON THE INSIDE OF SINGLE USER TOILET ROOM DOORS, MOUNTED AT 48" AFF AND 60" AFF.

COMcheck Software Version COMcheckWeb
Envelope Compliance Certificate

Project Information

Energy Code: 2015 ICC
Project Title: Tolland Fire Station
Location: Manchester, Connecticut
Climate Zone: 3A
Project Type: New Construction
Vertical Glazing / Wall Area: 2%

Construction Site: 247 Gehring Road
Tolland, Connecticut 06084

Owner/Agent:

Designer/Contractor:
CNA Architecture
49 Dartmouth Street
Portland, Maine 04101

Additional Efficiency PackageTolland, Connecticut

Credits: 1.0 Required 1.0 Proposed
On-site Renewable Energy: 1.0 credit

Building Area

Floor Area

1 Fire Station: Nonresidential

4800

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor
Roof: Insulation Entirely Above Deck, (Bldg. Use 1 - Fire Station)	4800	—	35.7	0.027	0.032
Floor: Uninsulated Slab-On-Grade, Vertical 4 ft., (Bldg. Use 1 - Fire Station) (d)	277	—	15.0	0.450	0.540
NORTH Ext. Wall: Other Metal Building Wall, (Bldg. Use 1 - Fire Station) (b)	1712	—	—	0.037	0.052
Door: Insulated Metal, Swinging, (Bldg. Use 1 - Fire Station)	70	—	—	0.360	0.370
EAST Ext. Wall: Other Metal Building Wall, (Bldg. Use 1 - Fire Station) (b)	457	—	—	0.037	0.052
Door: Insulated Metal, Swinging, (Bldg. Use 1 - Fire Station)	34	—	—	0.360	0.370
Window: Metal Frame with Thermal Break: Operable, Perf. Specs.: Product ID Pyro, SHGC 0.35, (Bldg. Use 1 - Fire Station) (c)	60	—	—	0.380	0.450
SOUTH Ext. Wall: Other Metal Building Wall, (Bldg. Use 1 - Fire Station) (b)	1203	—	—	0.037	0.052
Door: Insulated Metal, Swinging, (Bldg. Use 1 - Fire Station)	36	—	—	0.360	0.370
Door: Insulated Metal, Non-Swinging, (Bldg. Use 1 - Fire Station)	588	—	—	0.040	0.179
Window: Metal Frame with Thermal Break: Operable, Perf. Specs.: Product ID Pyro, SHGC 0.35, (Bldg. Use 1 - Fire Station) (c)	25	—	—	0.380	0.450
WEST Ext. Wall: Other Metal Building Wall, (Bldg. Use 1 - Fire Station) (b)	923	—	—	0.037	0.052

Project Title: Tolland Fire Station
Data filename:







Report date: 03/10/22
Page: 1 of 8

Project Title: Tolland Fire Station
Data filename:

Report date: 03/10/22
Page: 2 of 8

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor
Station (b) Door: Insulated Metal, Swinging, (Bldg. Use 1 - Fire Station)	24	—	—	0.360	0.370
(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements. (b) Other components require supporting documentation for proposed U-factors. (c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation. (d) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.					
Envelope PASSES: Design 23% better than code					

CODE LEGEND

AREA IN SF OCC. LOAD FACTOR		840 20	42	ROOM OCCUPANCY LOAD
ACTUAL EGRESS OCC. OF DOOR MAX. ALLOWABLE EGRESS OCC. OF DOOR		42 168	EXIT CAPACITY	
C216	ROOM NUMBER			
1227	DIRECTION OF TRAVEL W/ ACCUMULATED OCC. LOAD			
TD 145'	MAXIMUM TRAVEL DISTANCE FROM FURTHEST POINT			
198'	COMMON PATH OF TRAVEL			
		1 HOUR FIRE RATED WALL AND SMOKE BARRIER		
		2 HOUR FIRE WALL		
		2 HOUR FIRE RATED WALL AND SMOKE BARRIER		
		DENOTES ACCESSIBLE THRESHOLD 1/2" MAX STEP W/BEVELED THRESHOLD OR 1/2" STEP W/OUT BEVELED THRESHOLD		
FACP	FIRE ALARM CONTROL PANEL			
S	SMOKE DETECTOR			
C	CO DETECTOR			
H	HEAT DETECTOR			
F	MANUAL PULL STATION, MOUNT 48" AFF			
 F	HORN/STROBE, WALL MOUNTED CANDELA AS NOTED ON PLANS			
 F	STROBE ONLY, WALL MOUNTED, CANDELA AS NOTED ON PLANS			
B	BATTERY EMERGENCY LIGHTING			
FE	UL RATED 40-A-80-B-C 10 GAL IN SEMI-RECESSED CABINET			
RE	UL RATED 40-A-80-B-C 10 GAL ON BRACKET			
UL	UL RATED 2-A-1-B-C-K 2.5 GAL ON BRACKET			
P	PANIC DOOR HARDWARE & CLOSER			
X	EXIT SIGNAGE			

BUILDING CODE REVIEW SUMMARY

GOVERNING CODES: 2021 IBC/ 2022 CONNECTICUT STATE BUILDING CODE

BUILDING CODE	2021 INTERNATIONAL BUILDING CODE WITH 2022 CONNECTICUT AMENDMENTS
ACCESSIBILITY CODE	2017 ICC ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
ENERGY CONSERVATION CODE	2021 INTERNATIONAL ENERGY CONSERVATION CODE WITH 2022 CONNECTICUT AMENDMENTS
MECHANICAL	2021 INTERNATIONAL MECHANICAL CODE WITH 2022 CONNECTICUT AMENDMENTS
ELECTRICAL	2020 NATIONAL ELECTRICAL CODE (NFPA 70) WITH 2022 CONNECTICUT AMENDMENTS
PLUMBING	2021 INTERNATIONAL PLUMBING CODE WITH 2022 CONNECTICUT AMENDMENTS
FIRE PROTECTION	2021 IFC WITH 2022 CONNECTICUT STATE FIRE SAFETY CODE

BUILDING CODE ANALYSIS

CONSTRUCTION TYPE	TYPE IIB
USES	FIRE TRUCK STORAGE, ADMINISTRATIVE OFFICE SUITE, FIRE FIGHTER DAYROOM SUITE, MECHANICAL/ELECTRICAL ROOM, STORAGE ROOM, JANITORS ROOM
OCCUPANCY CLASSIFICATION	MIXED NON-SEPARATED PER 508.3
OCCUPANCIES	S2 STORAGE, B BUSINESS - WITH ACCESSORY STORAGE AND MECHELEC
AREA SQUARE FOOTAGE	PER 506.2 - B (NS) 23,000 (S-2 (NS) 26,000), ACTUAL BUILDING 4,600 GSF
AUTOMATIC SPRINKLER SYSTEM	NOT REQUIRED PER 903.2.10
FIRE ALARM SYSTEMS	MONITORED FIRE ALARM SYSTEM
OCCUPANT LOAD CALCULATION	IBC TABLE 1004.1.2
ILLUMINATED EXIT SIGNS	REQUIRED PER SECTION 1013
COMMON PATH OF TRAVEL	OL > 30 = 75 FEET
SPACES WITH ONE MEANS OF EGRESS	B = 49 OCCUPANTS, S = 29 OCCUPANTS. 29 OCCUPANTS GOVERNS
EXIT ACCESS TRAVEL DISTANCE	200 FEET PER TABLE 1017.2, PER B OCCUPANCY
MIN. EXIT SEPARATION (NON-SPRINKLERED)	1/2 LENGTH OF MAX. DIAGONAL BUILDING DISTANCE (99'-7 1/2"), SECTION 1007
MAXIMUM DEAD END	20' PER 1020.4
	3 ST/55 FT.

REQUIRED FIRE SEPARATIONS AND RATINGS

STRUCTURAL FRAME	0 HR	TABLE 601
BEARING WALLS - EXTERIOR	0 HR	TABLE 601
BEARING WALLS - INTERIOR	0 HR	TABLE 601
NON-BEARING WALLS - EXTERIOR	0 HR	ASSUME FSD>= 30FT PER TABLE 602
NON-BEARING WALLS - INTERIOR	0 HR	TABLE 601
FLOOR CONSTRUCTION	0 HR	TABLE 601
ROOF CONSTRUCTION	0 HR	TABLE 601
CORRIDOR PARTITIONS	0 HR	TABLE 1020.1 - OCCUPANCY B & S, OCCUPANT LOAD OF CORR IS < 30
MECH & JANITOR ROOMS	1 HR	NOT REQ'D BY CODE, BUT PROVIDED.

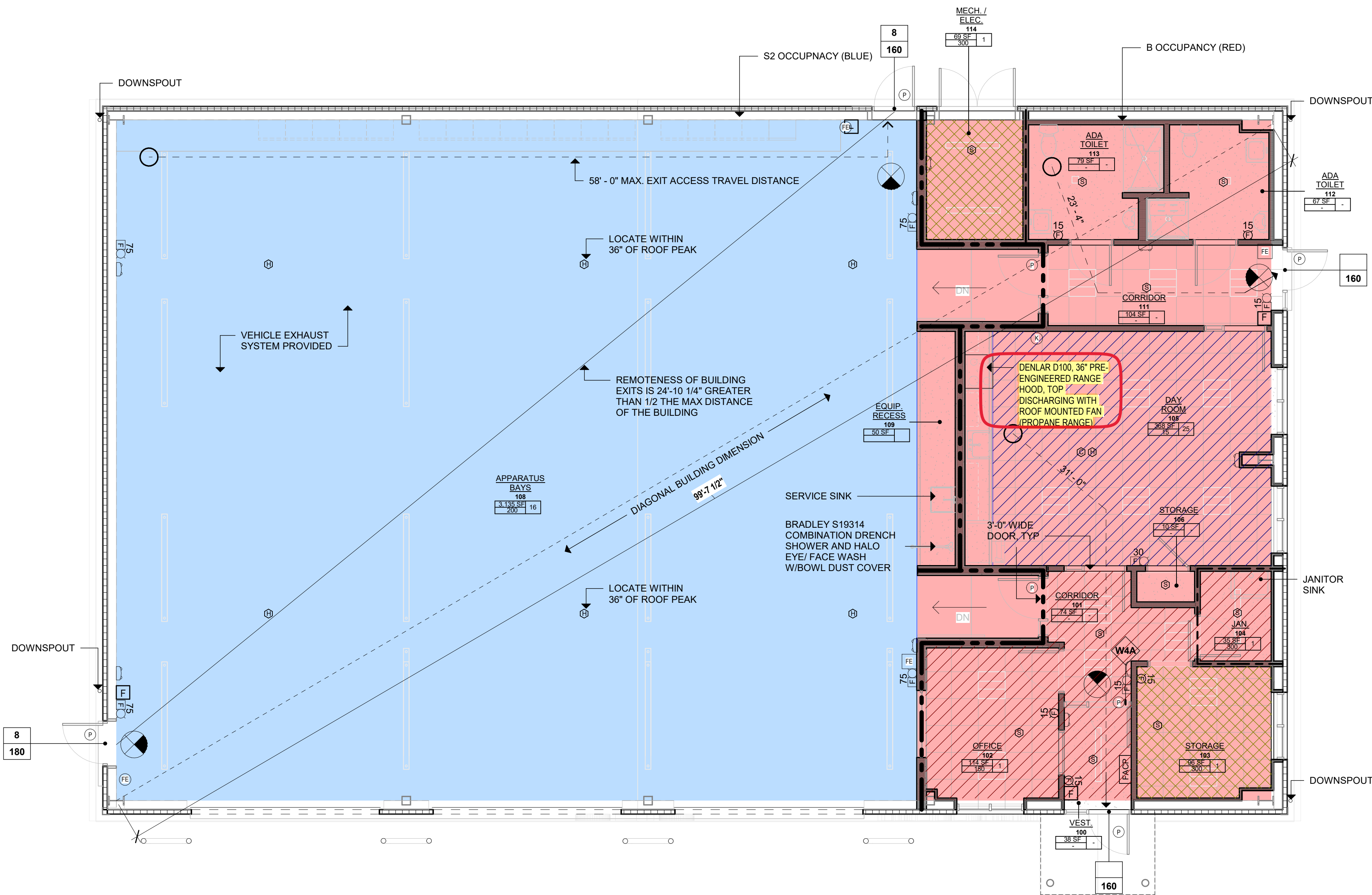
MEANS OF EGRESS

OCCUPANT LOAD	MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT - IBC TABLE 1004.1.2		
	USE	SQ FT PER OCCUPANT	GROSS
	BUSINESS	150	GROSS
	STORAGE/MECH	300	GROSS
	ASSEMBLY (UC)	15	NET
TRAVEL DISTANCE TO AN EXIT	FIRST FLOOR	45 OCCUPANTS	
	OCCUPANCY		TABLE 1017.2
	B	200 FT	
DEAD END LIMIT	S2	300 FT	
	OCCUPANCY		SECTION 1020.4
	B	20 FT	
	S2	20 FT	

MINIMUM NUMBER REQUIRED PLUMBING FIXTURES (2021 INTERNATIONAL PLUMBING CODE)

	USE GROUP	MALE	FEMALE	PROVIDED
WATER CLOSETS	B (S-2 USE REQ'D)	1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50	1 PER 50 FOR THE REMAINDER	2 TOTAL PROVIDED
URINALS	B (S-2 USE REQ'D)	URINALS SHALL NOT BE SUBSTITUTED FOR MORE THAN 50 PERCENT OF THE REQUIRED WATER CLOSETS	N/A	1 PROVIDED
LAVATORIES	B (S-2 USE REQ'D)	1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER EXCEEDING 80		2 TOTAL PROVIDED
DRINKING FOUNTAINS	B (S-2 USE REQ'D)	PER AMENDED SECTION 29: BOTTLED WATER IS PROVIDED FOR THE EMPLOYEES AND VISITORS IN LIEU OF DRINKING FOUNTAINS.		
OTHER	B (S-2 USE REQ'D)	1 SERVICE SINK		1 PROVIDED

FOR CODE
CONFORMANCE
REVIEW. NOT
CONSTRUCTION



1 CODE FLOOR PLAN
3/16" = 1'-0"

Project Title:
TOLLAND FIRE DEPARTMENT -
REPLACEMENT OF STATION 340
247 GEHRING RD
TOLLAND, CT 06084



SILVER PETRUCCELLI + ASSOCIATES
3190 WHITNEY AVENUE HAMDEN CT 06518
311 STATE STREET NEW LONDON CT 06320
203 230 9007 silverpetrucci.com

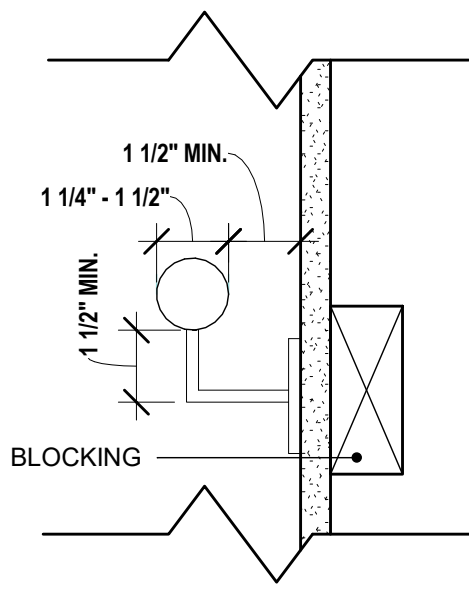
Revision:	Description:	Date:	Revised By:



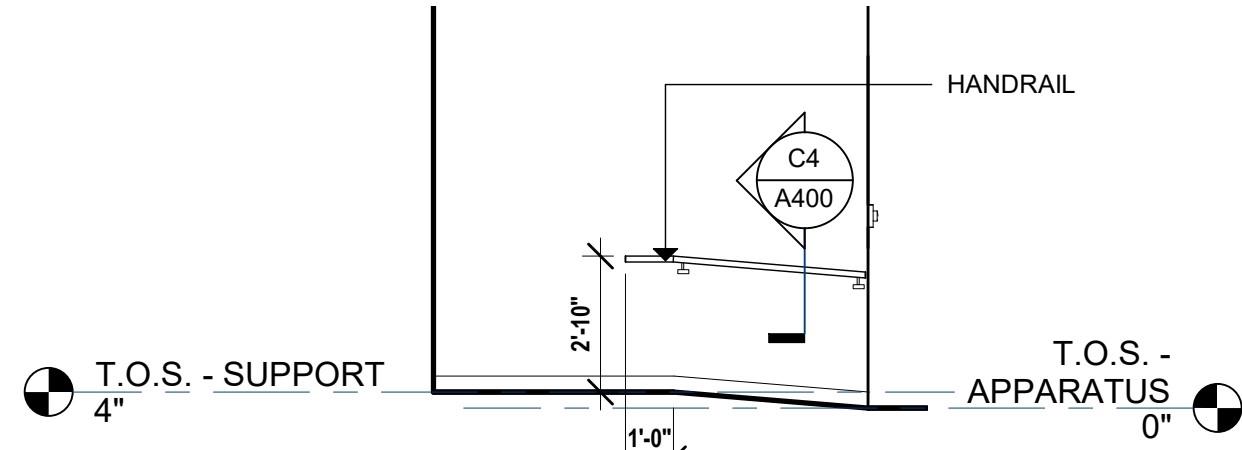
Drawing Title:
CODE PLAN

Date:
MARCH 17, 2023
Scale:
As indicated
Drawn By:
MLG
Project Number:
22-164

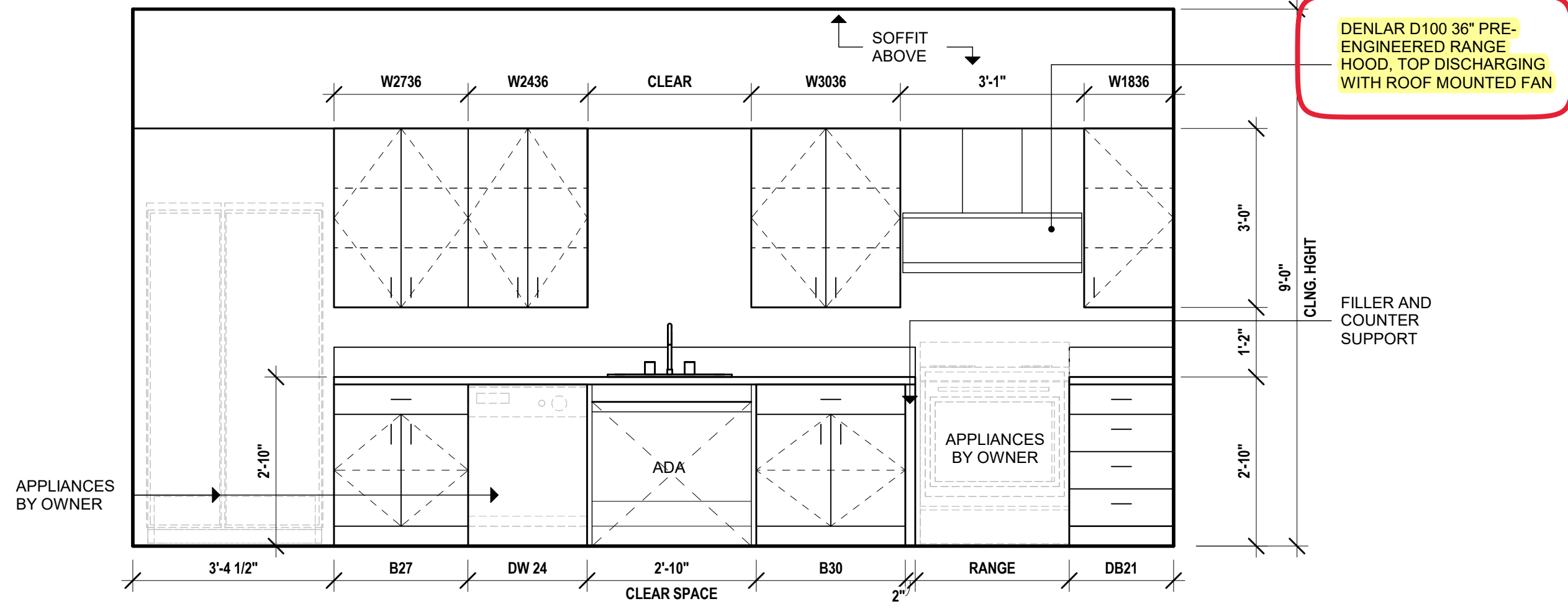
A002



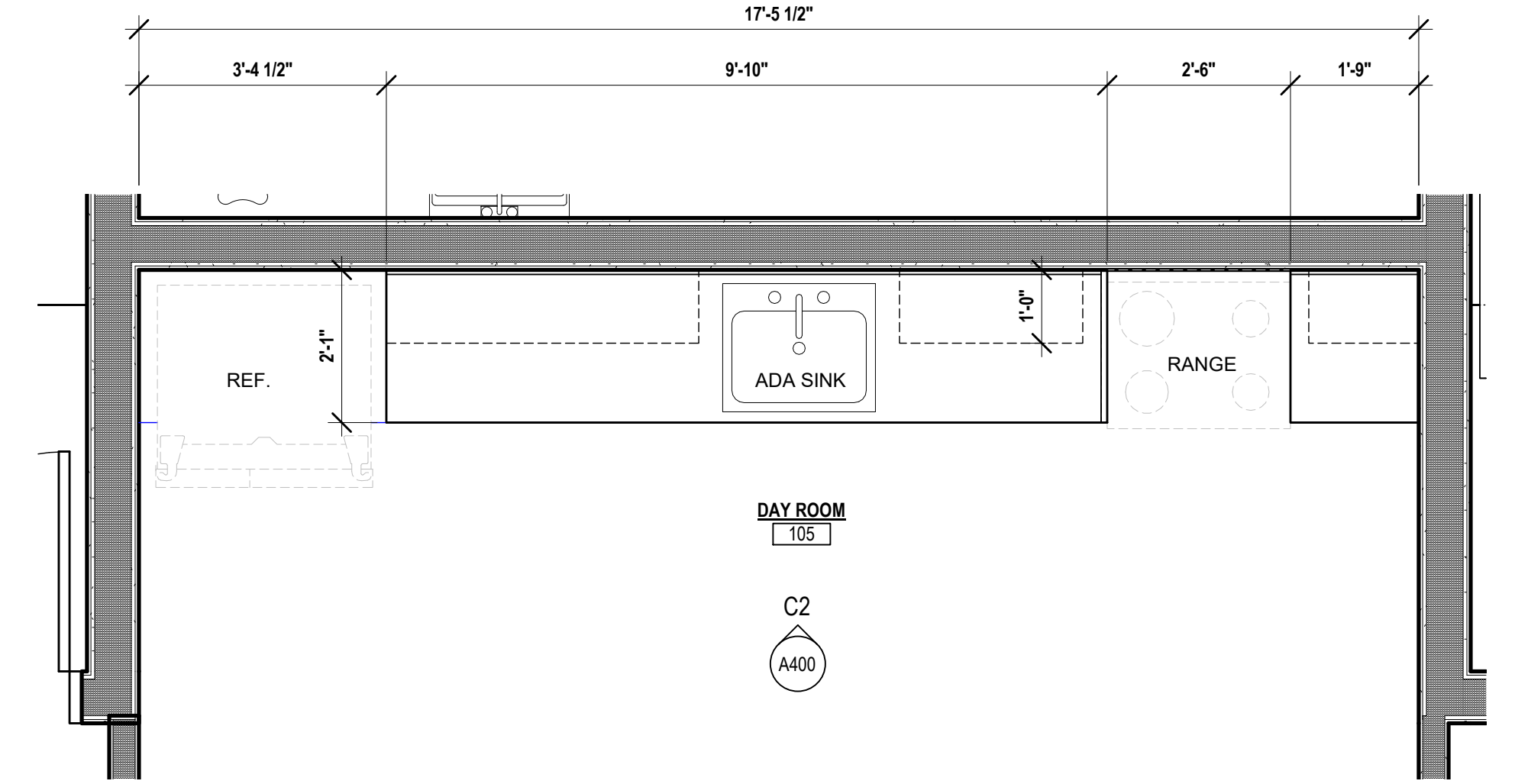
C4 HANDRAIL DETAIL
3" = 1'-0"



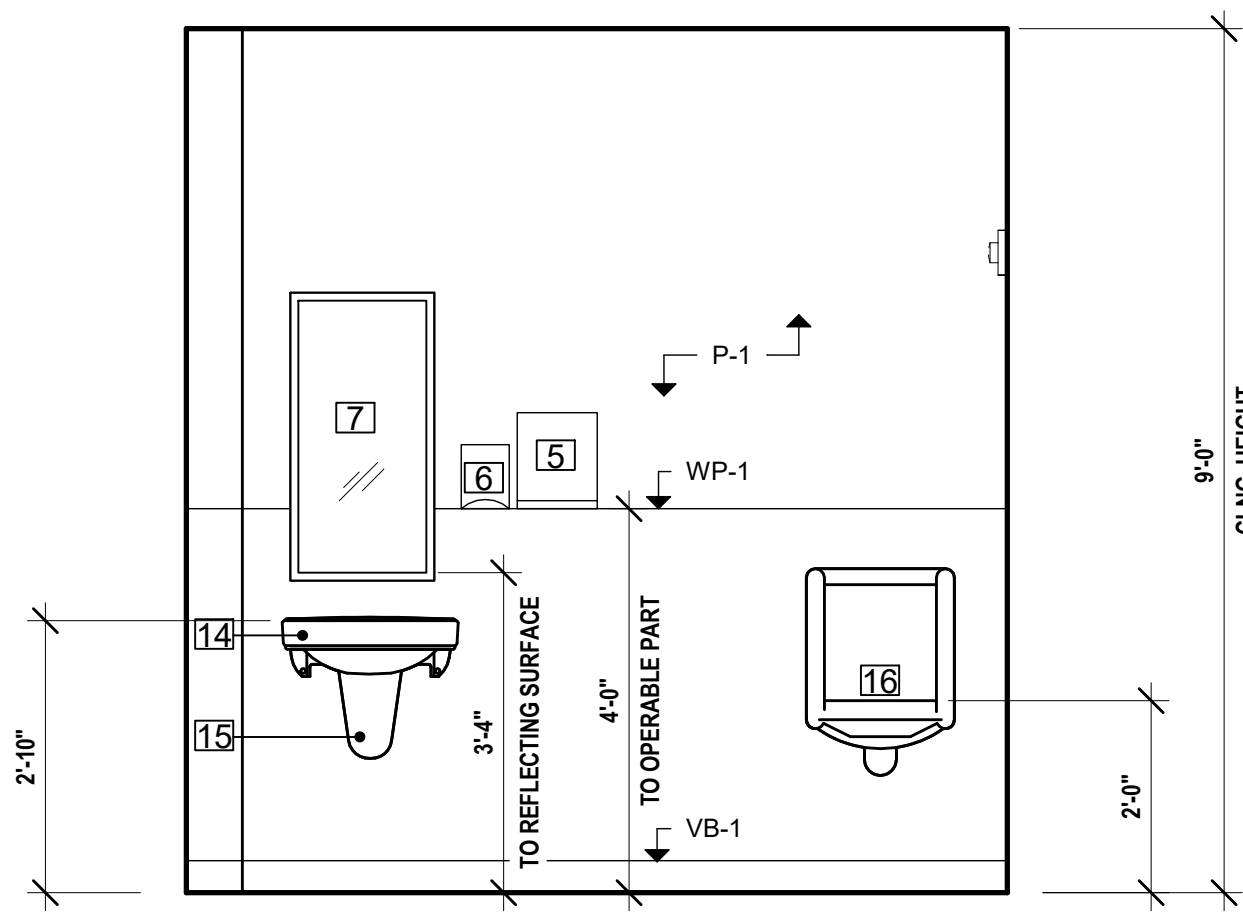
C5 RAMP ELEVATION
1/4" = 1'-0"



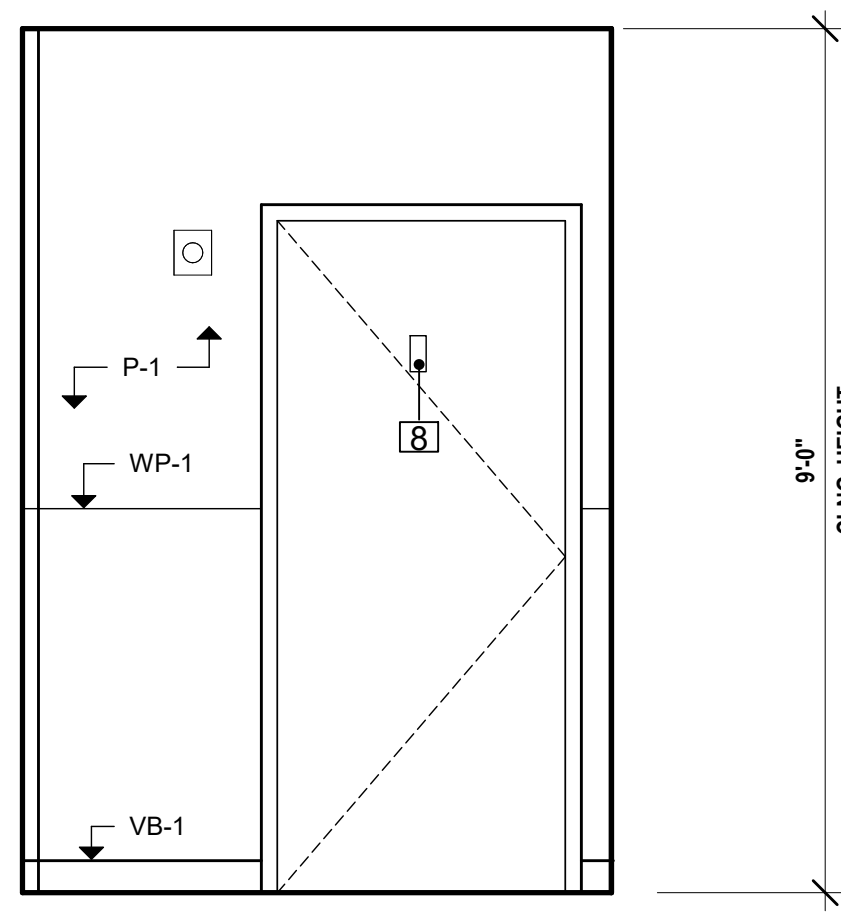
C2 KITCHEN ELEVATION
1/2" = 1'-0"



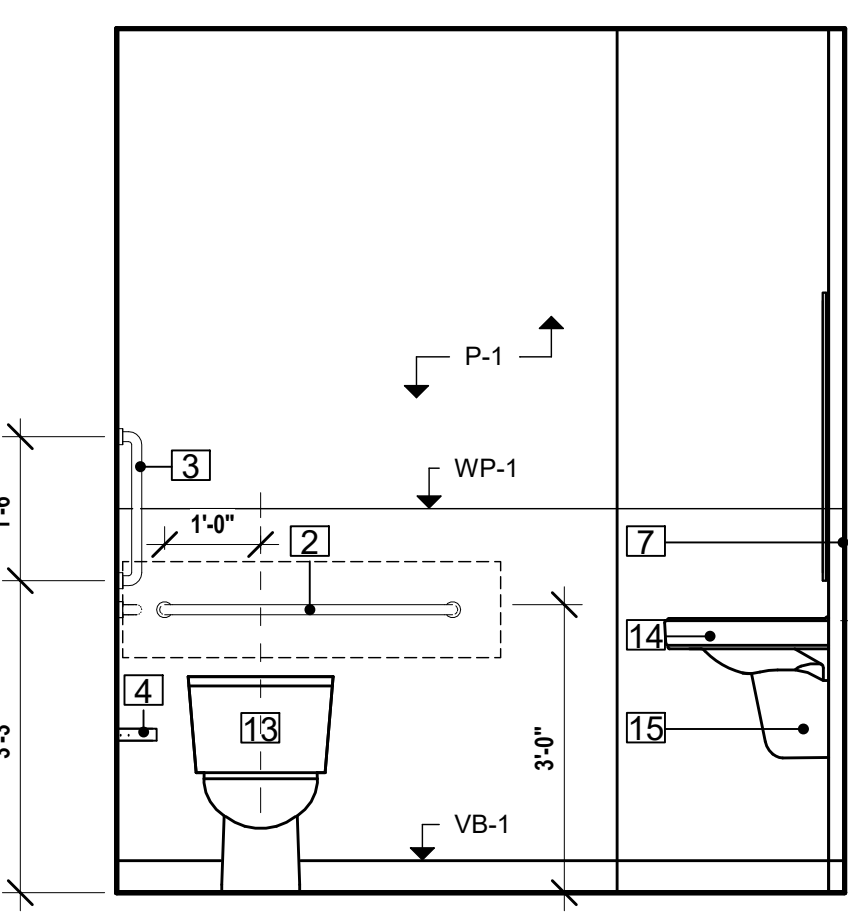
C1 ENLARGED KITCHEN PLAN
1/2" = 1'-0"



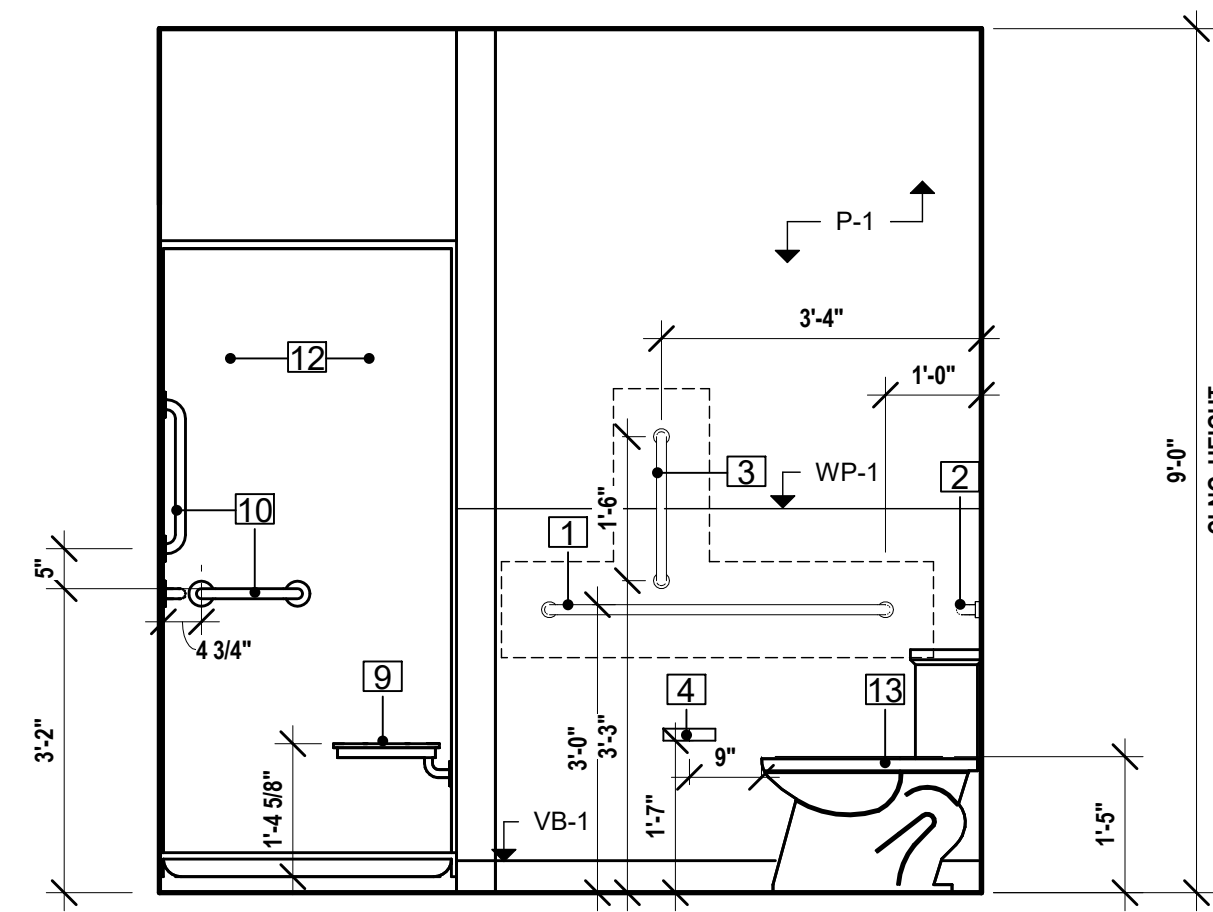
B5 ADA TOILET 112 - ELEV. 4
1/2" = 1'-0"



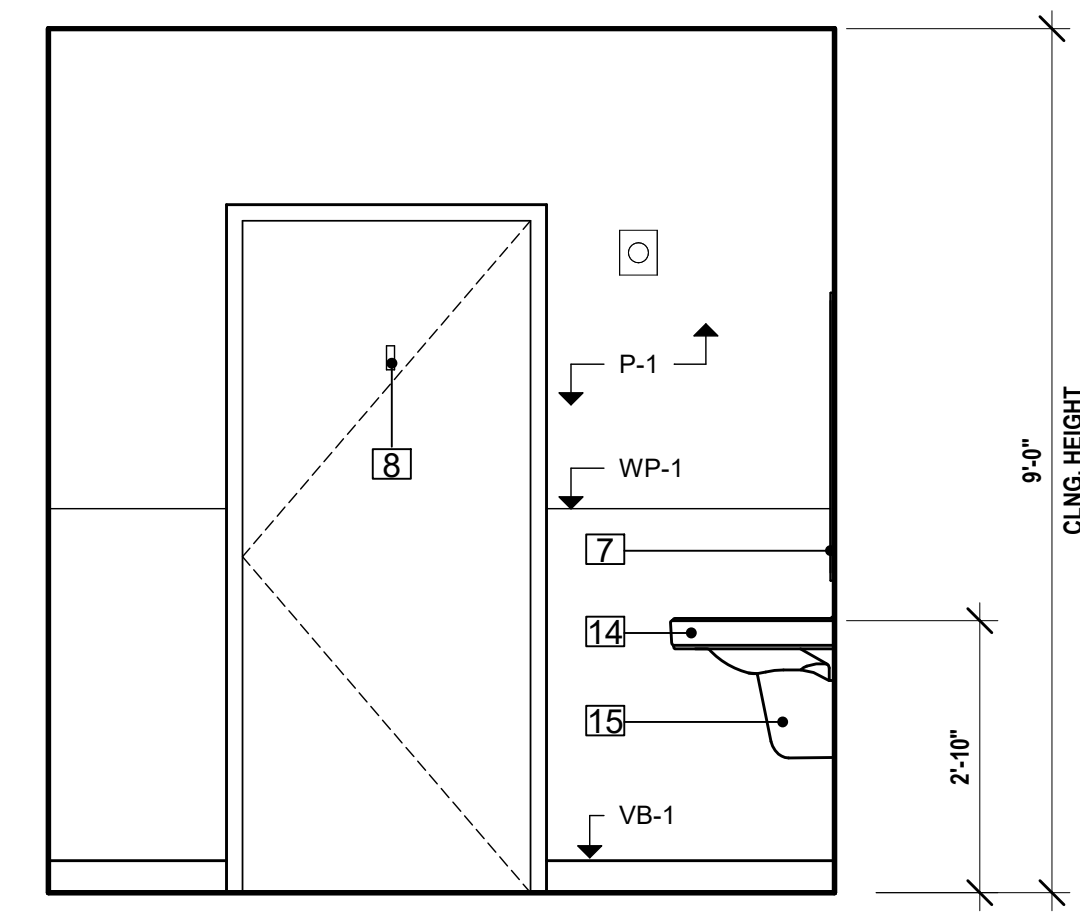
B4 ADA TOILET 112 - ELEV. 3
1/2" = 1'-0"



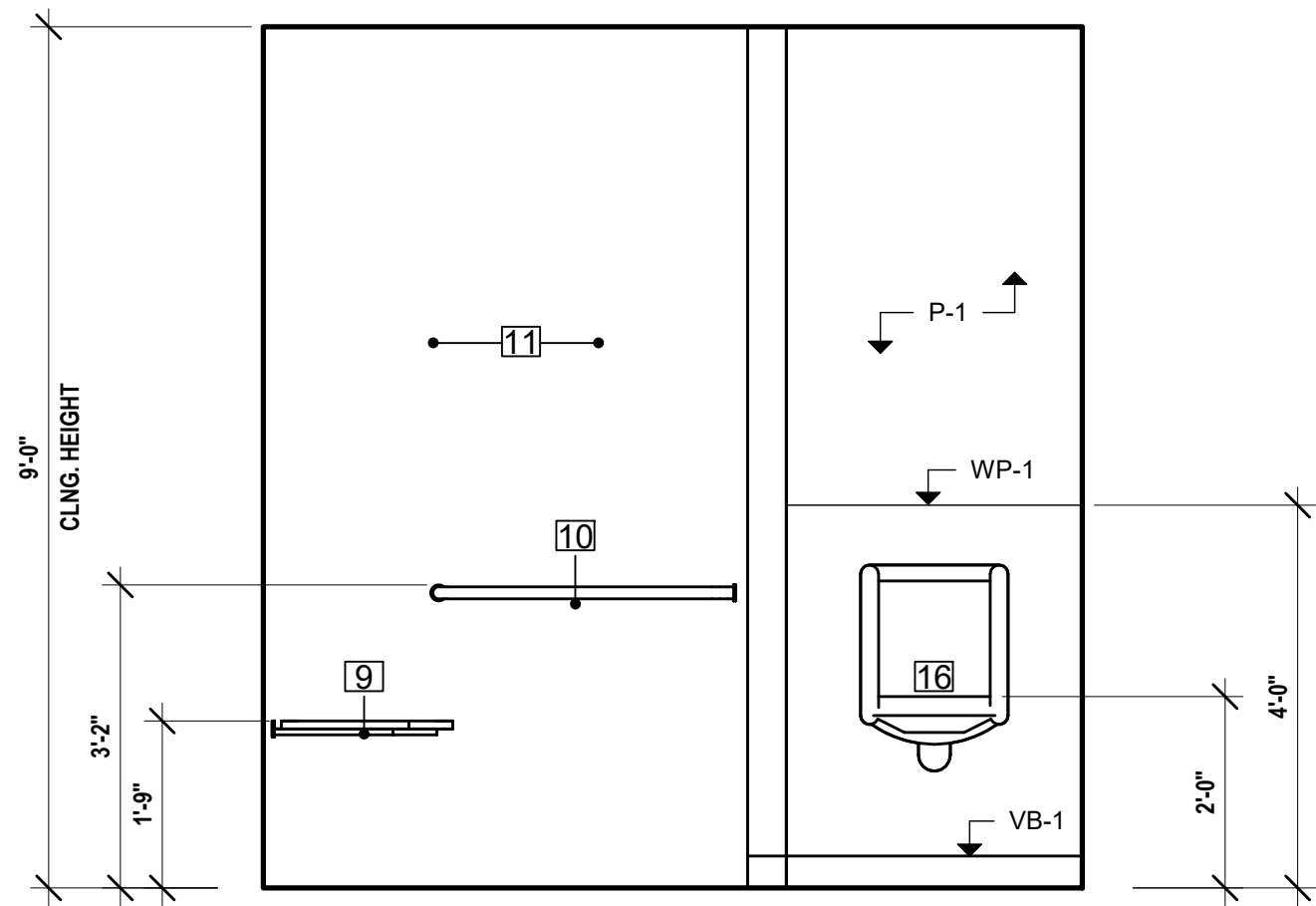
B3 ADA TOILET 112 - ELEV. 2
1/2" = 1'-0"



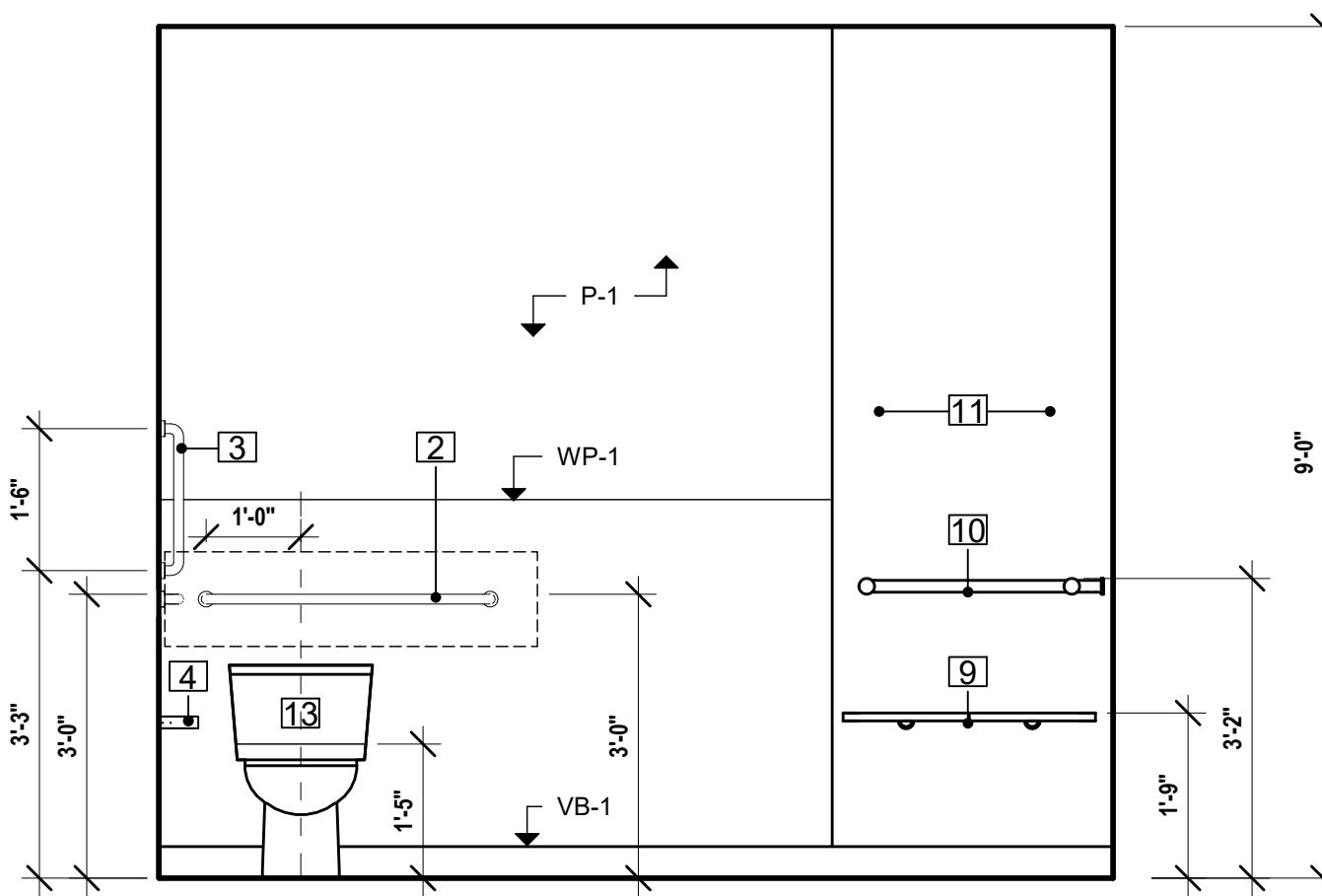
B2 ADA TOILET 112 - ELEV. 1
1/2" = 1'-0"



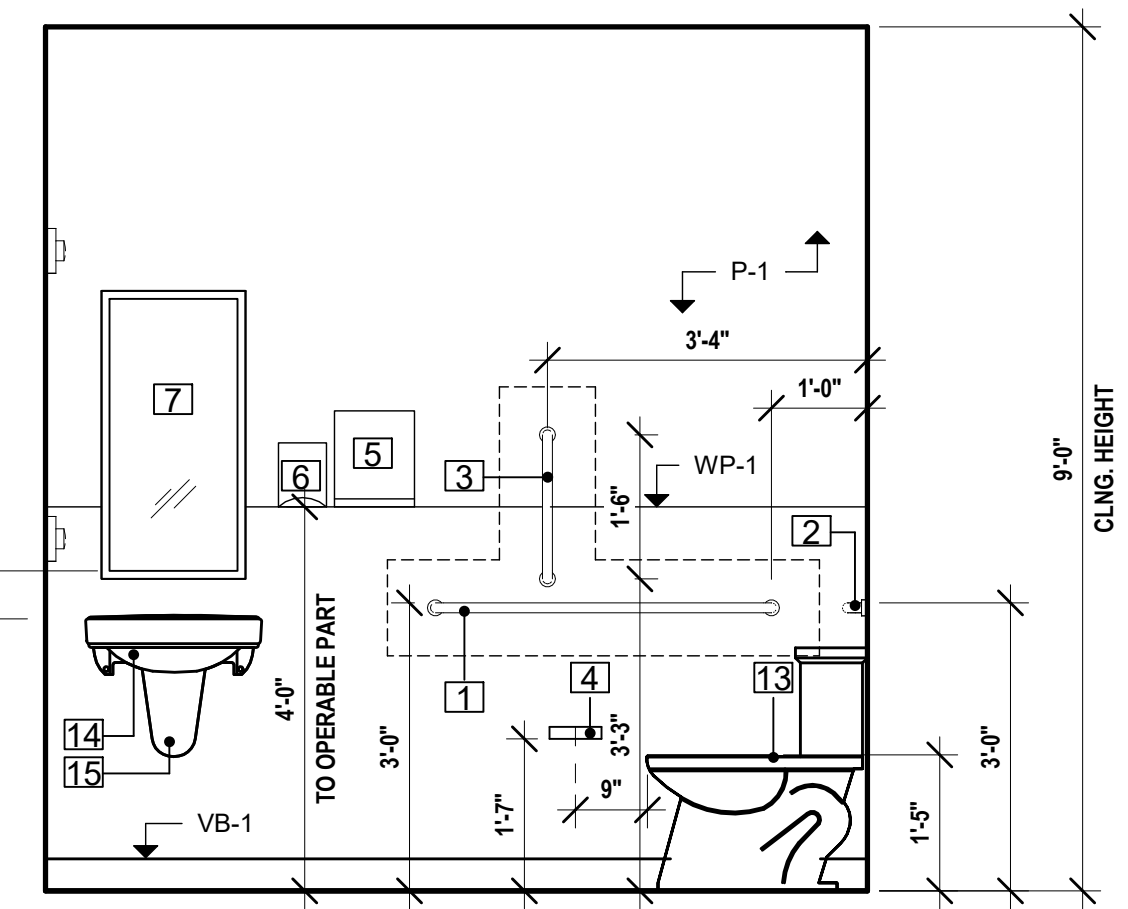
B1 ADA TOILET 113 - ELEV. 4
1/2" = 1'-0"



A4 ADA TOILET 113 - ELEV. 3
1/2" = 1'-0"

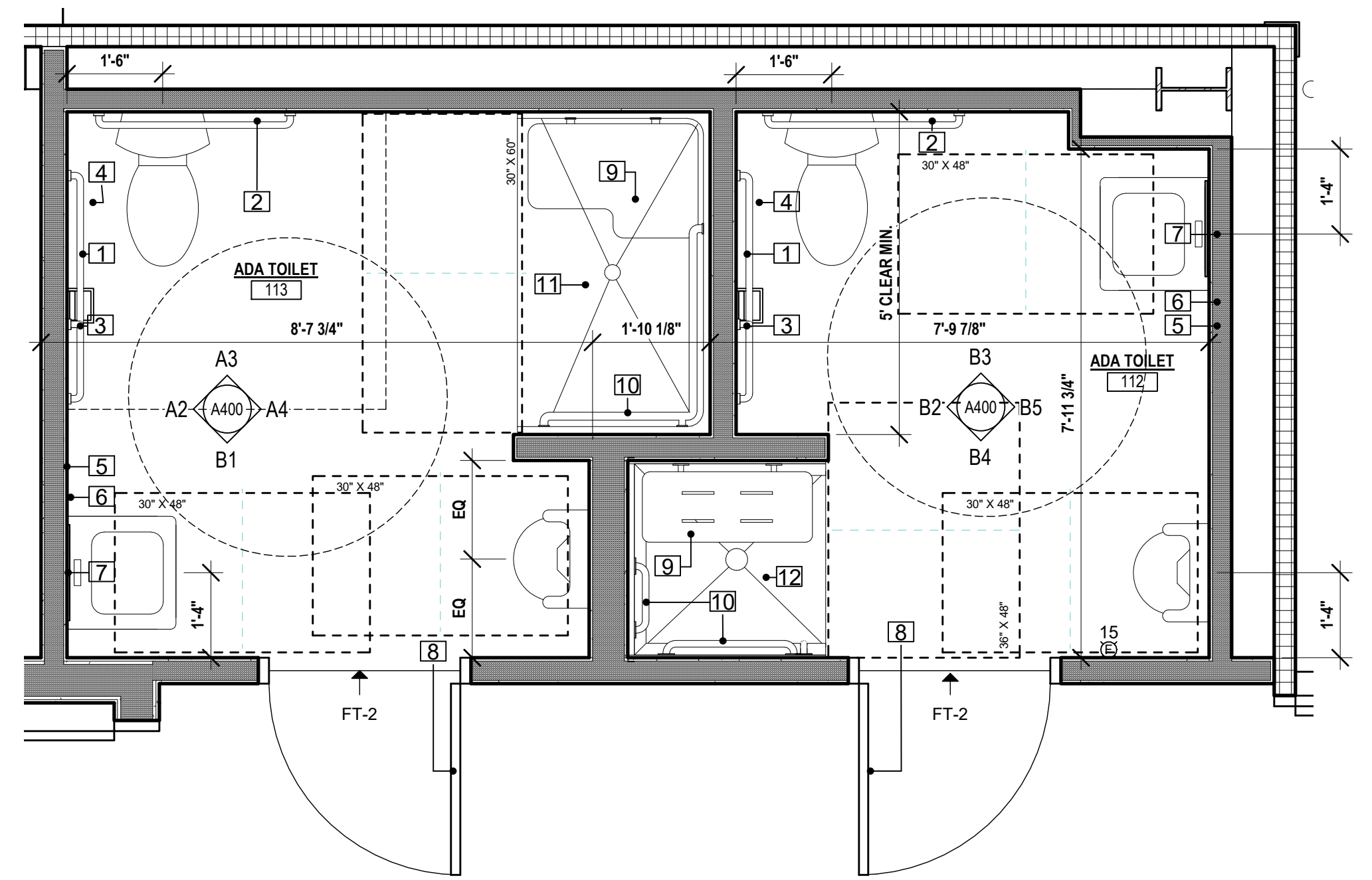


A3 ADA TOILET 113 - ELEV. 2
1/2" = 1'-0"



A2 ADA TOILET 113 - ELEV. 1
1/2" = 1'-0"

#	DESCRIPTION
1.	42" HORIZONTAL GRAB BAR
2.	36" HORIZONTAL GRAB BAR
3.	18" VERTICAL GRAB BAR
4.	TOILET TISSUE DISPENSER
5.	PAPER TOWEL DISPENSER
6.	SOAP DISPENSER
7.	16"x36" MIRROR
8.	COAT HOOK
9.	FOLDING SHOWER SEAT
10.	SHOWER GRAB BAR
11.	ROLL-IN TYPE SHOWER
12.	TRANSFER TYPE SHOWER
13.	WATER CLOSET
14.	LAVATORY
15.	LAV. GUARD
16.	URINAL



A1 ENLARGED BATHROOM PLANS
1/2" = 1'-0"

GENERAL

1. WHEN A CONFLICT BETWEEN THE DRAWINGS, NOTES AND/OR SPECIFICATIONS OCCUR, THE MORE STRINGENT, AND/OR LARGER QUANTITY AND/OR MORE EXPENSIVE SHALL APPLY. THE REQUIREMENTS LISTED WITHIN NOTES OR SPECIFICATIONS SHALL BE REQUIRED, PROVIDED AND INSTALLED WHETHER SPECIFICALLY INDICATED ON THE DRAWINGS OR NOT.

2. ALL WORK AND ACTION DEPICTED AND DESCRIBED SHALL BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.

3. REPAIR AND/OR REPLACE AT NO COST TO OWNER ALL EQUIPMENT AND MATERIALS DAMAGED DURING CONSTRUCTION.

4. ALL EQUIPMENT SHALL BE LOCATED IN ACCESSIBLE LOCATIONS. WHEN A PIECE OF EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING OR WALL, THEN THE APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. THESE SHALL BE COORDINATED WITH THE ARCHITECT.

5. ANY COP REQUEST FOR ELECTRICAL WORK AFTER AWARD MUST BE BASED ON NORMAL NECA COMMERCIAL LABOR UNITS & NATIONAL AVERAGE MATERIAL AMP MATERIAL COST PRICES. NATIONAL AVERAGE AMP DATA BASE FOR MATERIAL AND NECA LABOR RATES MUST BE SUBMITTED TO THE ENGINEER OF RECORD AT THE TIME OF AWARD.

WIRING & RACEWAY:

1. THE DRAWINGS SHOW THE GENERAL LAYOUT AND TYPICAL DETAILS. PROVIDE COMPLETE SYSTEMS. DRAWINGS ARE BASED ON THE SPECIFIED EQUIPMENT, RACEWAY LAYOUTS, BOXES, AND WIRING OF THE SYSTEMS ARE SUBJECT TO APPROVED SHOP DRAWINGS.

2. ENSURE THAT ITEMS TO BE FURNISHED FIT THE SPACE AVAILABLE. MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS, AND PROVIDE SUCH SIZES AND SHAPES OF EQUIPMENT THAT FINAL INSTALLATION SHALL SATISFY THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.

3. LOCATIONS OF OUTLETS, SWITCHES, APPLIANCES, ETC. AS SHOWN ON ELECTRICAL PLANS ARE APPROXIMATE; COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS AND DETAILS, AND WITH JOB CONDITIONS. INSTALL SWITCHES WITH "OFF" POSITION DOWN. INSTALL RECEPTACLES WITH GROUNDING POLE IN THE UP POSITION FOR VERTICAL MOUNTING AND AT RIGHT FOR HORIZONTAL MOUNTING.

4. LOCATE AND INSTALL ELECTRICAL EQUIPMENT, JUNCTION AND PULL BOXES, PANELBOARDS, SWITCHES, CONTROLS, AND OTHER APPARATUS REQUIRING MAINTENANCE, INSPECTION, AND OPERATION SO AS TO BE READILY ACCESSIBLE.

RACEWAY INSTALLATION:

1. IN ALL ARCHITECTURALLY FINISHED SPACES, CONDUITS AND CABLES SHALL BE RUN CONCEALED IN HUNG OR FURRED CEILINGS, SLABS, MASONRY, AND PARTITIONS UNLESS OTHERWISE INDICATED. SAW CUTTING AND FINISHED PATCHING SHALL BE REQUIRED IN EXISTING SLABS AND MASONRY WALLS. IN UNFINISHED SPACES, RACEWAYS MAY BE RUN EXPOSED.

2. UNLESS OTHERWISE INDICATED, EXACT ROUTING OF RACEWAYS SHALL BE DETERMINED BY THE CONTRACTOR TO SUIT PROJECT REQUIREMENTS AND FIELD CONDITIONS.

3. PROVIDE SEPARATE RACEWAYS, JUNCTION BOXES, PULL BOXES AND WIREWAYS FOR ALL EMERGENCY SYSTEM WIRING.

4. CONTRACTORS SHALL PROVIDE ALL REQUIRED SLEEVES AND SEALS FOR PIPES OR CONDUIT PENETRATING WALLS OR FLOOR SLABS WITH UL LISTED FIRE STOPPING SEALANT WHERE REQUIRED.

5. ELECTRICAL CONDUITS AND BOXES TO BE CONCEALED IN WALLS OR ABOVE CEILING WHEREVER POSSIBLE. WHERE SURFACE CONDUIT IS REQUIRED IT MUST MATCH THE WALL COLOR THAT IT IS BEING ATTACHED TO; REFER TO RACEWAY & BOX SPECIFICATION FOR FURTHER DETAILS.

WIRING INSTALLATION:

1. DO NOT USE WIRE SMALLER THAN NO. 12 AWG FOR ANY POWER OR LIGHTING CIRCUIT. USE LARGER SIZES WHERE INDICATED, AS REQUIRED BY CODES, AND AS FOLLOWS:

30 AMPERE CIRCUIT: NO. 10

40 AMPERE CIRCUIT: NO. 8

50 AMPERE CIRCUIT: NO. 6

60 AMPERE CIRCUIT: NO. 6

A. MINIMUM HOMERUN AND BRANCH CIRCUIT WIRING SIZES AND MAXIMUM HOMERUN CONDUIT FILL FOR 120 VOLT, 20 AMPERE CIRCUITS SHALL BE AS FOLLOWS:

CIRCUIT LENGTH	HOME RUN WIRE SIZE	WIRE SIZE	CONDUIT SIZE (WIRE(S)/CONDUIT)
0' TO 50'	#12	#12	3/4"
51' TO 100'	#12	#10	3/4"
101' TO 200'	#10	#8	1"

GREATER THAN 200' - REQUEST DIRECTION FROM ARCHITECT.

NOTE-PROVIDE DERATING PER CODE WHEN INSTALLING MORE THAN 3 CURRENT CARRYING CONDUCTORS IN CONDUIT.

2. DO NOT USE WIRE SMALLER THAN NO. 14 AWG FOR CONTROL CIRCUITS UNLESS OTHERWISE RECOMMENDED BY THE EQUIPMENT OR SYSTEM MANUFACTURER ON WIRING SHOP DRAWINGS, AND SO APPROVED BY THE ARCHITECT.

3. WHERE GREATER THAN THREE (3) CURRENT-CARRYING CONDUCTORS ARE INSTALLED IN ANY ONE CONDUIT OR CABLE, CONDUCTORS MUST BE DERATED AND SIZES INCREASED, IF NEEDED, TO ACCOMMODATE CONDUCTOR DERATING AS REQUIRED BY NEC ARTICLE 310.

4. CONDUCTORS SHALL BE COMPLETELY INSTALLED AND CONNECTED. PROVIDE ALL TERMINALS, LUGS, AND CONNECTORS TO SUIT THE APPLICATION, AND IN COMPLIANCE WITH EQUIPMENT MANUFACTURERS' RECOMMENDATIONS.

5. UNDER NO CIRCUMSTANCES SHALL ANY SWITCH OR CIRCUIT BREAKER BREAK A NEUTRAL CONDUCTOR.

6. THE CIRCUIT NUMBERS INDICATED ON THE DRAWINGS ARE INTENDED AS A GUIDE FOR PROPER CONNECTION OF CIRCUITS AT PANELS. HOWEVER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE FINAL CIRCUITING WORK FULFILLS THE FOLLOWING CONDITIONS:

A. LOADS ON PANEL BUSES SHALL BE PHASE-BALANCED AS EVENLY AS POSSIBLE.

GROUNDING INSTALLATION:

1. EQUIPMENT GROUNDING

A. INSTALL AN INSULATED GROUND CONDUCTOR, RUN IN THE RACEWAY WITH THE PHASE CONDUCTORS, FOR EACH FEEDER SERVING PANELBOARDS, LIGHTING DIMMER BOARDS, MOTOR CONTROL CENTERS, MOTORS, EQUIPMENT AND APPLIANCES UNLESS OTHERWISE NOTED.

B. INCLUDE AN INSULATED GROUND CONDUCTOR IN ALL CONDUIT RUNS CONTAINING SECTIONS OF FLEXIBLE CONDUIT UNLESS OTHERWISE NOTED.

C. INCLUDE AN INSULATED GROUND CONDUCTOR IN ALL BRANCH CIRCUIT RACEWAYS OR CABLES UNLESS OTHERWISE NOTED.

RACEWAYS FOR TELECOMMUNICATION SYSTEMS:

1. PROVIDE EMPTY CONDUIT SYSTEMS FOR TELECOMMUNICATION WORK, REFER TO "T" SERIES DRAWINGS FOR SIZE OF CONDUIT AND BACK BOXES REQUIRED.

2. PROVIDE MINIMUM INSIDE BENDING RADIUS OF 10 TIMES CONDUIT INSIDE DIAMETER FOR TELECOMMUNICATIONS RACEWAYS.

3. WHEN COMPLETED THE CONDUIT SYSTEMS SHALL BE READY FOR THE INSTALLATION OF WIRING AND EQUIPMENT.

4. FROM EACH OUTLET PROVIDE AN EMPTY EMT CONDUIT ROUTED INTO THE CEILING CAVITY OR TO THE CLOSEST TELECOMMUNICATIONS CLOSET. PROVIDE A DRAG LINE IN EACH RUN AND TERMINATE IN A BUSHED ELBOW.

MECHANICAL EQUIPMENT WIRING:

1. UNLESS OTHERWISE INDICATED OR SPECIFIED HEREIN, ALL MOTORS, MOTOR STARTERS, MOTOR CONTROLLERS, VARIABLE SPEED/FREQUENCY DRIVES, AND ASSOCIATED CONTROL DEVICES ARE FURNISHED AND INSTALLED UNDER THIS DIVISION. COORDINATE INSTALLATION AND LOCATIONS WITH OTHER DIVISION CONTRACTORS.

2. POWER WIRING FROM THE INDICATED SOURCE TO THE STARTER/CONTROLLER/DRIVE UNIT, AND FROM THE STARTER/CONTROLLER/DRIVE UNIT TO THE MOTOR, INCLUDING ANY LOCAL DISCONNECT SWITCHES PROVIDED AND INSTALLED BY THIS DIVISION, AND ALL ASSOCIATED LUGS, TERMINALS, AND CONNECTIONS, IS THE WORK OF THIS DIVISION.

3. CONTROL CIRCUIT WIRING IS GENERALLY FURNISHED AND INSTALLED UNDER OTHER DIVISIONS, EXCEPT THAT ANY SUCH WIRING SHOWN ON ELECTRICAL DRAWINGS IS WORK OF THIS DIVISION.

4. PROVIDE 120 VOLT POWER TO ALL TEMPERATURE CONTROL PANELS (TCPs) SUPPLIED AND INSTALLED BY DIVISION 23. USE EMERGENCY POWER SOURCES WHEN AVAILABLE. COORDINATE ALL POWER REQUIREMENTS AND PANEL LOCATIONS WITH DIVISION 23 TEMPERATURE CONTROLS CONTRACTOR.

5. COOPERATE AND COORDINATE WITH THE OTHER TRADES IN THE INSTALLATION, CONNECTION, AND TESTING OF MECHANICAL EQUIPMENT. PERFORM WORK OF THIS SECTION IN ACCORDANCE WITH EQUIPMENT MANUFACTURERS' INSTRUCTIONS.

COORDINATION DRAWINGS:

1. DEVELOP AND SUBMIT COORDINATION DRAWINGS AS OUTLINED.

A. SHEET METAL, PLUMBING AND FIRE PROTECTION SHOP DRAWINGS THAT HAVE BEEN COORDINATED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW. DRAWINGS MUST BE RETURNED FROM ENGINEER EITHER "REVIEWED" OR "FURNISH AS CORRECTED" PRIOR TO BEING USED AS BASIS FOR COORDINATION DRAWINGS.

B. AFTER SHEET METAL AND PIPING DRAWINGS HAVE BEEN REVISED PER ENGINEERS COMMENTS, REPRODUCIBLE COPIES SHALL BE SENT TO THE TRADES IN THE FOLLOWING SEQUENCE FOR THE INCLUSION OF THEIR WORK:

-MECHANICAL SHEET METAL

-PLUMBING PIPING

-MECHANICAL PIPING

-SPRINKLER PIPING

-ELECTRICAL WORK

2. AFTER ALL TRADES HAVE INCLUDED THEIR WORK ON THE COORDINATION DRAWING AND NOTED CONFLICTS, ALL TRADES SHALL MEET TO RESOLVE CONFLICTS AND AGREE TO ACCEPTABLE SOLUTIONS. EACH TRADE SHALL SIGN COORDINATION DRAWINGS. ITEMS NOT SHOWN ON COORDINATION DRAWING IS RESPONSIBILITY OF OMITTING CONTRACTOR AND CONTRACTOR IS SUBJECT TO ADDITIONAL COSTS INCURRED BY OTHER TRADES.

3. THE ARCHITECT AND ENGINEER ARE NOT PART OF THE COORDINATION DRAWING PROCESS. THE ENGINEER WILL PROVIDE ASSISTANCE FOR NOTED CONFLICTS ONLY. COORDINATION DRAWINGS ARE NOT TO BE CONSIDERED PIPING OR DUCT SHOP DRAWINGS. THE CONTRACTOR IS REQUIRED TO SUBMIT INDIVIDUAL PIPING AND DUCTWORK SHOP DRAWINGS FOR REVIEW BY THE ENGINEER. PIPING AND DUCTWORK SHOP DRAWINGS SHALL FOLLOW THE DESIGN INTENT OF THE CONTRACT DOCUMENTS.

4. SUBMIT FINAL SIGNED COORDINATION DRAWING TO ENGINEER FOR REVIEW. ENGINEER WILL REVIEW COORDINATION DRAWINGS FOR GENERAL ARRANGEMENT AND FOR NOTED CONFLICTS ONLY. SPECIFIC INSTALLATION REQUIREMENTS WILL BE REVIEWED ONLY IN INDIVIDUAL TRADE SHOP DRAWINGS.

5. ANY WORK FABRICATED OR INSTALLED PRIOR TO SIGN OFF BY ALL TRADES WHICH IS DEEMED TO BE IN CONFLICT WITH COORDINATION DRAWINGS SHALL BE REMOVED AND RE-INSTALLED IN CONFORMANCE WITH COORDINATION DRAWINGS.

6. EACH CONTRACTOR (MENTIONED ABOVE) IS RESPONSIBLE FOR THE COORDINATION OF HIS SUB-CONTRACTORS.

7. THE OVERALL COORDINATION OF THE COORDINATION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER IS NOT RESPONSIBLE FOR THE COORDINATION PROCESS. THE ENGINEER WILL RESPOND TO QUESTIONS THAT ARISE FROM THE COORDINATION PROCESS. DRAWINGS SUBMITTED WILL BE REVIEWED FOR CLEARLY IDENTIFIED CONFLICTS ONLY. SOLUTIONS TO CONFLICTS WILL NOT BEAR ADDITIONAL COST.

AS BUILT DRAWINGS

1. PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS REFLECTING AS INSTALLED CONDITIONS. AS-BUILT DRAWINGS SHALL INDICATE ALL INSTALLED CONDITIONS OF SYSTEMS WITHIN THIS DISCIPLINE. DRAWINGS SHALL BE OF SIMILAR SCALE AS THE CONSTRUCTION DOCUMENTS AND INCLUDE DETAILS AS NECESSARY TO CLEARLY REFLECT THE INSTALLED CONDITION. DRAWINGS SHALL BE BOUND IN A COMPLETE AND CONSECUTIVE SET. SUPPLEMENTAL SKETCHES AND LOOSE PAPERWORK WILL NOT BE ACCEPTABLE AND WILL BE RETURNED FOR REVISION. THE CONTRACTOR SHALL COMPLY WITH THE ENGINEERS COMMENTS TO PRODUCE A CLEAR AND CONCISE SET OF DRAWINGS. DRAWINGS SHALL BE SUBMITTED IN BOTH HARD COPY AND ELECTRONIC (AUTO-CAD VERSION AS REQUIRED BY THE OWNER) VERSION. NUMBER OF COPIES OF EACH AS REQUESTED BY THE OWNER.

2. PROVIDE "AS-BUILT DRAWINGS" INDICATING IN A NEAT AND ACCURATE MANNER A COMPLETE RECORD OF ALL REVISIONS OF THE ORIGINAL DESIGN OF THE WORK. INDICATE THE FOLLOWING INSTALLED CONDITIONS:

A. INCLUDE ALL CHANGES AND AN ACCURATE RECORD, ON REPRODUCTIONS OF THE CONTRACT DRAWINGS OR APPROPRIATE SHOP

B. DRAWINGS, OF ALL DEVIATIONS, BETWEEN THE WORK SHOWN AND WORK INSTALLED.

C. EQUIPMENT LOCATIONS (EXPOSED AND CONCEALED), DIMENSIONED FROM PROMINENT BUILDING LINES.

D. EQUIPMENT SUBSTITUTIONS, CONTRACT MODIFICATIONS, AND ACTUAL EQUIPMENT AND MATERIALS INSTALLED.

E. CONTRACT MODIFICATIONS, ACTUAL EQUIPMENT AND MATERIALS INSTALLED.

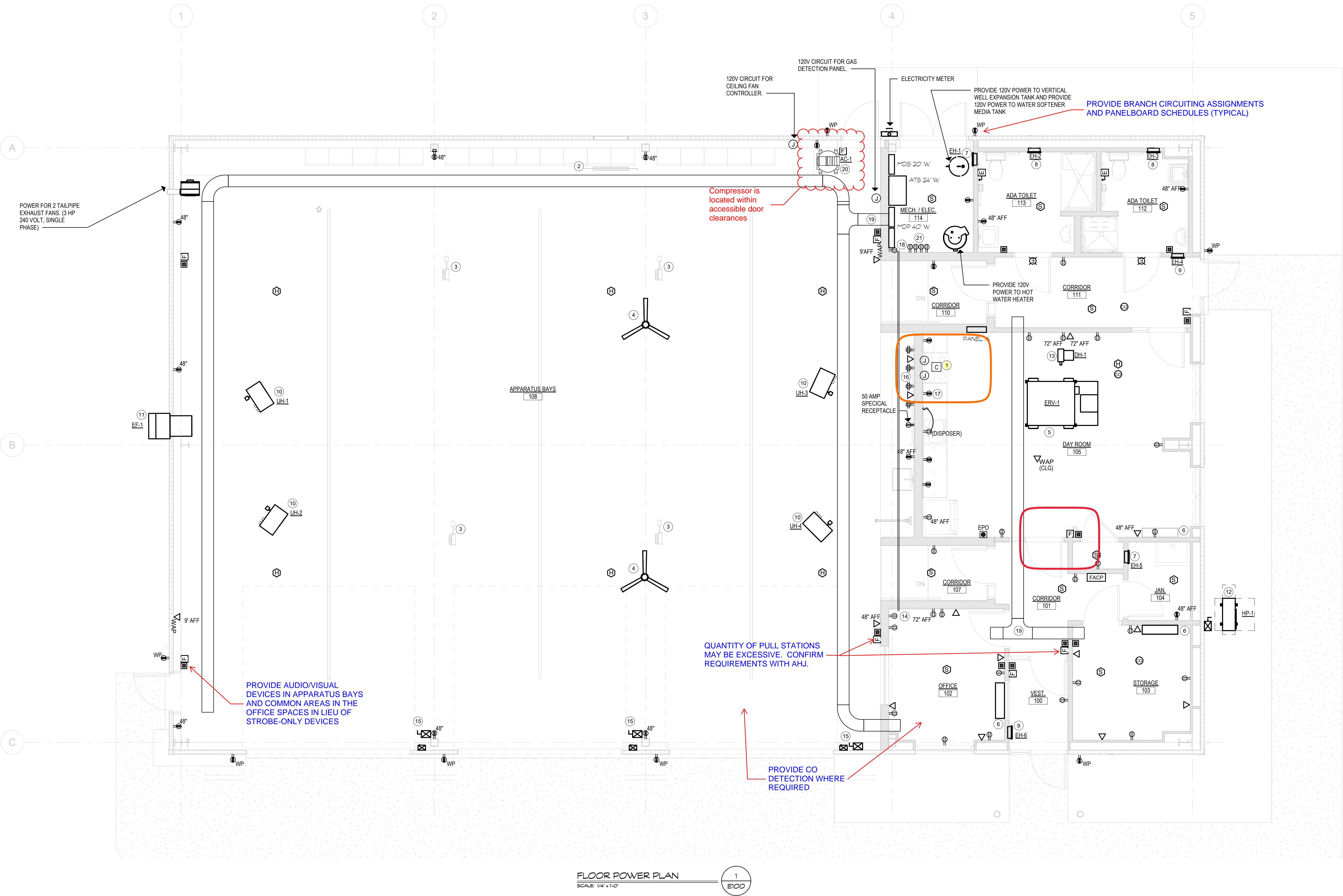
F. SUBMIT FOR REVIEW BOUND SETS OF THE REQUIRED DRAWINGS, MANUALS AND OPERATING INSTRUCTIONS.

G. SUBMIT A COMPLETE MAINTENANCE MANUAL OF ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT.

ELECTRICAL LEGEND	
(NOT ALL SYMBOLS ARE USED)	
	DISTRIBUTION PANEL, 480/277 VOLT OR 120/208 VOLT
	ELECTRICAL PANEL, 480/277 VOLT
	ELECTRICAL PANEL, 120/208 VOLT
	PANELBOARD FLUSH MOUNTED
	PANELBOARD SURFACE MOUNTED
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MOTOR STARTER, COORDINATE EXACT REQUIREMENTS WITH MOTOR FURNISHED
	WALL MOUNTED JUNCTION BOX, ACCORDING TO NEC REQUIREMENTS
	CEILING MOUNTED JUNCTION BOX, ACCORDING TO NEC REQUIREMENTS
	FLOOR MOUNTED JUNCTION BOX, ACCORDING TO NEC REQUIREMENTS
	TYPICAL RECESSED/SURFACE MOUNTED LIGHT FIXTURE; LETTER INDICATES FIXTURE TYPE
	RECESSED/SURFACE MOUNTED LIGHT FIXTURE WITH EMERGENCY BATTERY UNIT
	SURFACE MOUNTED LIGHT FIXTURE; LETTER INDICATES FIXTURE TYPE
	RECESSED DOWN LIGHT FIXTURE WITH EMERGENCY BATTERY UNIT
	WALL MOUNTED LIGHT FIXTURE; LETTER INDICATES FIXTURE TYPE
	WALL MOUNTED LIGHT FIXTURE WITH EMERGENCY BATTERY UNIT
	CEILING/WALL-END MOUNTED EXIT SIGN, SHADING INDICATES DIRECTION OF FIXTURE FACE, ARROW INDICATES DIRECTION OF CHEVRON, PROVIDE UNSWITCHED POWER FROM AREA LIGHTING CIRCUIT
	DOUBLE FACE EXIT SIGN
	TWIN HEAD EMERGENCY LIGHT WITH INTEGRAL BATTERY FOR 90 MINUTE EMERGENCY LIGHTING
	SINGLE POLE SWITCH; MOUNT AT 48" AFF
	3-WAY SWITCH; MOUNT AT 48" AFF
	4-WAY SWITCH; MOUNT AT 48" AFF
	DUAL TECHNOLOGY, MOTION SENSOR SWITCH; MOUNT AT 48" AFF
	DIMMER SWITCH
	TIME DELAY SWITCH
	DUPLEX RECEPTACLE; MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
	SINGLE RECEPTACLE; MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
	QUAD RECEPTACLE; MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
	SPLIT-WIRED DUPLEX RECEPTACLE (HALF SWITCHED AND HALF CONSTANT "ON"); MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
	QUAD RECEPTACLE MOUNTED 6" ABOVE COUNTER TO BOTTOM OF DEVICE, OR 48" TO CENTER OF OUTLET NOT LOCATED ABOVE A COUNTER UNLESS OTHERWISE SPECIFIED
	RECEPTACLE WITH OUTDOOR RATED "IN-USE" COVER PLATE, PROVIDE FLUSH MOUNTED BOX
	GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE
	DUPLEX RECEPTACLE WITH TWO INTEGRAL POWERED USB OUTLETS
	TAMPER RESISTANT DUPLEX RECEPTACLE
	SPECIAL OUTLET CONFIGURATION, SEE NEMA #
	FLOOR MOUNTED DUPLEX RECEPTACLE, "PT" INDICATES POKE THROUGH TYPE RECEPTACLE; SEE SPECIFICATION FOR DETAILS
	FLOOR MOUNTED SINGLE RECEPTACLE; SEE SPECIFICATION FOR DETAILS
	FLOOR MOUNTED DOUBLE DUPLEX RECEPTACLE, "BT" INDICATES BENCH TOP MOUNTED; SEE SPECIFICATION FOR DETAILS
	BRANCH CIRCUIT HOMERUN (VOLTAGE, BRANCH CIRCUIT POLES)
	FIRE ALARM MANUAL PULL STATION - 48" AFF U.O.N.
	FIRE ALARM AUDIO/VISUAL DEVICE - 80" AFF U.O.N.; "SG" INDICATES SECURITY GRADE WIRE GUARD
	FIRE ALARM STROBE LIGHT - 80" AFF U.O.N.; "SG" INDICATES SECURITY GRADE WIRE GUARD
	SMOKE DETECTOR (PROVIDE LOW FREQUENCY SOUNDER BASE ONLY IN APARTMENTS)
	COMBINATION SMOKE/CARBON MONOXIDE DETECTOR WITH LOW FREQUENCY SOUNDER BASE
	HEAT DETECTOR
	HIGH TEMPERATURE HEAT DETECTOR
	FIRE ALARM CONTROL PANEL
	FIRE ALARM REMOTE ANNUNCIATOR PANEL
	CARBON MONOXIDE DETECTOR
	DOOR BELL CHIME UNIT
	DOOR BELL PUSH BUTTTON
	120VAC CONNECTION TO KITCHEN RANGE HOOD (LIGHT & FAN)
	NETWORK OUTLET (TELEPHONE/DATA). PROVIDE BOX & CONDUIT PER SPECS.
	WALL MOUNTED TELEPHONE OUTLET (APPROX. 48" AFF)
	CABLE TV OUTLET, WITH COAX CABLE TO HEAD-END UNIT IN BASEMENT, ACTIVATION BY TENANT
	INTERCOM ENTRY STATION WITH INTERFACE WITH ELECTRIC DOOR LOCK ON FRONT ENTRY DOOR
	INTERCOM REMOTE STATION (TENANT APT.) WITH INTERFACE WITH FRONT ENTRY DOOR LOCK RELEASE
	FURNACE EMERGENCY OFF SWITCH
	120VAC CONNECTION TO GENERATOR BLOCK HEATER (FURNISHED BY GENERATOR MANUFACTURER)
	120VAC CONNECTION TO GENERATOR BATTERY CHARGER (FURNISHED BY GENERATOR MANUFACTURER)
	120VAC CONNECTION TO ELECTRIC DOOR LOCK (FURNISHED BY DOOR HARDWARE MANUFACTURER, WIRED AND INSTALLED BY E.C., COORDINATE WITH INTERCOM SYSTEM)
	WIRELESS ACCESS POINT - CEILING MTD WITH 4" SQUARE BOX, CAT 6 PLENUM RATED CABLE, RJ45 JACK - CAT 6 HUBBELL A582820P PORT, 20 FT. SERVICE LOOP FOR EXTERIOR MTD APT.; SEE INDOOR/OUTDOOR RATED CABLE, 1" WEATHERPROOF SLEEVE & WEATHERPROOF COVER PLATE), PROVIDE QUANTITY OF (2) CAT 6 CABLES WHERE NOTED
	IP VIDEO SURVEILLANCE CAMERA WITH CAT 6A CABLE TO NETWORK RACK.
	MOTORIZED DAMPER CEILING OUTLET
	CALL FOR AID SWITCH & DOME LIGHT/BUZZER.
	EMERGENCY PUSHBUTTON.

ABBREVIATIONS	
A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
C	CONDUIT
C/B	CIRCUIT BREAKER
CKT	CIRCUIT
EC	ELECTRICAL CONTRACTOR
ELTR	EXISTING LIGHTING TO REMAIN
ETBR	EXISTING TO BE REMOVED & RELOCATED
EWC	ELECTRIC WATER COOLER
EWB	ELECTRIC WATER HEATER
EX	EXISTING TO REMAIN
EXP	EXPLOSION-PROOF
REM	EXISTING TO BE REMOVED
HT	HEAT TRACE
JB	JUNCTION BOX
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
MTD	MOUNTED
OHD	OVER HEAD DOOR
PNL	PANELBOARD
RELOC	RELOCATED EXISTING DEVICE/FIXTURE
U.O.N.	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF

ELECTRICAL DRAWING LIST	
DRAWING NUMBER	DRAWING DESCRIPTION
E001	ELECTRICAL GENERAL NOTES AND LEGEND
E100	ELECTRICAL POWER PLAN
E101	ELECTRICAL LIGHTING PLAN
E200	ELECTRICAL SITE PLAN
E300	ELECTRICAL ONE LINE DIAGRAM
E400	ELECTRICAL DETAILS



ELECTRICAL KEYNOTES

- 1) PROVIDE CONNECTION TO RANGE/OVEN ANSUL SYSTEM. (120V + FIRE ALARM INITIATION)
- 2) CONNECT MOTORIZED DAMPERS TO LOCAL RECEPTACLE CIRCUIT. INTERLOCK WITH EF-1.
- 3) PROVIDE CORD REEL WITH DUPLEX RECEPTACLE END.
- 4) PROVIDE POWER TO CEILING FANS. 120V, 20A, 2 FANS/ CIRCUIT.
- 5) PROVIDE 208/230 VOLTS WITH MOCOP OF 15 AMPS FOR ERV-1.
- 6) PROVIDE 208/230 VOLTS, SINGLE PHASE WITH A MCA OF 1.0 FOR WALL MOUNTED INDOOR UNIT.
- 7) PROVIDED POWER FOR EH-1 & EH-5 (120, 1PH, 12.5 AMPS, 1500 WATTS).
- 8) PROVIDED POWER FOR EH-2 & EH-3 (120, 1PH, 500 WATTS).
- 9) PROVIDE POWER FOR EH-6 & EH-4 (1000W, 120V, 1PH).
- 10) PROVIDE POWER FOR UH-1, UH-2, UH-3 & UH-4 (120V, 1PH, 1/12 HP, 3.3 AMPS) - TWO CIRCUITS.
- 11) PROVIDE POWER FOR EF-1 (115V, 1PH).
- 12) PROVIDE POWER FOR HP-1 (208/230V, 1PH, 30 AMP MCA) & NEMA 3R DISCONNECT.
- 13) PROVIDE POWER TO DH-1 (8KW 240V/1PH).
- 14) PROVIDE (2) DEDICATED 120V, 20A CIRCUITS FOR IT & RADIO EQUIPMENT. COORDINATE LOCATION WITH OWNER.
- 15) PROVIDE DEDICATED 120V, 20A CIRCUIT FOR EACH OVERHEAD DOOR. PROVIDE DISCONNECT FOR MOTOR & CONDUIT BOX FOR A CONTROLLER. WIRE LIGHT COMMUNICATION SYSTEM FOR DOOR.
- 16) PROVIDE DUAL-CHANNEL RACEWAY ABOVE WORKBENCH WITH DEVICES SHOWN. PROVIDE GFI PROTECTION FOR 120V CIRCUITS.
- 17) COUNTER TOP RECEPTACLE + RANGE SHALL BE CIRCUITED TO PANEL 'A'. PANEL CONTACTOR SHALL BE WIRED TO ANSUL ALARM CONTACTS AND EPO SWITCH IN ROOM.
- 18) PROVIDE (2) 2\"/>

ELECTRICAL GENERAL NOTES:

1. TELE/COMM COVERPLATES, JACKS, WIRING, RACKS, AND INSTRUMENTS TO BE PROVIDED BY THE OWNER.
2. PROVIDE DEVICE BRANCH CIRCUITS PER SPECS.

Project Title:
**TOLLAND FIRE DEPARTMENT -
REPLACEMENT OF STATION 340**
247 GEHRING RD
TOLLAND, CT 06084



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Revision:	Description:	Date:	Revised By:



Drawing Title:
ELECTRICAL POWER PLAN

Date:
03/10/2023
Scale:
1/4\"/>

Drawing Number:

E100