



**BOARD
OF
COMMISSIONERS
MEETING
January 12, 2026**

CAPITAL CITY DEVELOPMENT CORPORATION

Board of Commissioners Meeting
Board Room, Fifth Floor, 121 N. 9th Street
January 12, 2026, at 12 p.m.

Live stream available at <https://ccdcb Boise.com/board-of-commissioners/>

A G E N D A

I. **CALL TO ORDER**.....Chair Haney Keith

II. **ACTION ITEM: AGENDA CHANGES OR ADDITIONS**.....Chair Haney Keith

III. **WORK SESSION**

A. 8306 W. State Street Request for Proposals.....Corrie Brending (15 minutes)

IV. **ACTION ITEM: CONSENT AGENDA**

A. Expenses

1. Approve Paid Invoice Report for December 2025

B. Minutes and Reports

1. Approve Meeting Minutes for December 8, 2025

C. Other

1. Approve Resolution 1955: First Amendment to the Financial Services Agreement with Piper Sandler & Co.

V. **ACTION ITEM**

A. CONSIDER Election of Board Officers: Chair, Vice-Chair, and Secretary/Treasurer

.....Chair Haney Keith (5 minutes)

B. CONSIDER Approve Executive Committee ChargeChair Haney Keith (5 minutes)

C. CONSIDER Resolution 1953: 1010 W. Jefferson Street Commercial Space and Public Parking Facility.

Construction Material Testing and Special Inspection Services RFQ Ranking.....Amy Fimbel (10 minutes)

D. CONSIDER Resolution 1954: 9th & Front ParkBOI Parking Garage, Stair Tower Enclosure and Elevator

Modernization. Amendment No. 1 to the CM/GC Contract with Andersen Construction Company of Idaho LLC

.....Kassi Brown (5 minutes)

VI. **ACTION ITEM: EXECUTIVE SESSION**

To consider records that are exempt from disclosure as provided in chapter 1, title 74, Idaho Code. [Idaho Code Section 74-206(1) (d)].

VII. **ADJOURN**

This meeting will be conducted in compliance with the Idaho Open Meetings Law and in a location accessible to those with physical disabilities. Participants may request reasonable accommodations, including but not limited to a language interpreter, from CCDC to facilitate their participation in the meeting. For assistance with accommodation, contact CCDC at 121 N 9th St, Suite 501, Boise, Idaho or (208) 384-4264 (TTY Relay 1-800-377-3529).

Viewing Remotely: Members of the public may view the meeting with a smartphone or computer by clicking the link provided at <https://ccdcb Boise.com/board-of-commissioners/>. CCDC strives to make its public Board Meetings available to view remotely but cannot guarantee access due to platform failure, internet disruptions, or other technology malfunctions.



II. AGENDA CHANGES OR ADDITIONS



III. WORK SESSION



IV. CONSENT AGENDA



Paid Invoice Report

For the Period: 12/1/2025 through 12/31/2025

Payee	Description	Payment Date	Amount
Debt Service:			
Total Debt Payments:			-
Payroll:			
PERSI/Empower	Retirement Payment	12/10/2025	32,647.69
CCDC Employees	Direct Deposits Net Pay	12/10/2025	61,559.73
EFTPS - IRS	Federal Payroll Taxes	12/10/2025	25,865.90
Idaho State Tax Commission	State Payroll Taxes	12/10/2025	3,747.00
457(b)	Retirement Payment	12/10/2025	2,278.48
PERSI/Empower	Retirement Payment	12/24/2025	27,556.13
CCDC Employees	Direct Deposits Net Pay	12/24/2025	50,149.51
EFTPS - IRS	Federal Payroll Taxes	12/24/2025	21,679.38
Idaho State Tax Commission	State Payroll Taxes	12/24/2025	3,181.00
457(b)	Retirement Payment	12/24/2025	1,868.44
Total Payroll Payments:			230,533.26
Checks and ACH			
Various Vendors	Check and ACH Payments (See Attached)	12/31/2025	1,878,471.36

Total Cash Disbursements: **\$ 2,109,004.62**

I have reviewed and approved all cash disbursements in the month listed above.

Joey Chen

Finance Director

1/7/2026

Date

John Brunelle

Executive Director

1/7/26

Date

Report Criteria:

Summary report type printed
Check.Voided = no

Name	Check Amount	Check Issue Date
Abbey Louie LLC	5,750.00	12/31/2025
Total Abbey Louie LLC:	5,750.00	
Absolute Fire Protection LLC	105.00	12/30/2025
	275.00	12/30/2025
	175.00	12/30/2025
Total Absolute Fire Protection LLC:	555.00	
Acme Fast Freight	2,460.66	12/30/2025
Total Acme Fast Freight:	2,460.66	
Blue Cross of Idaho	44,292.72	12/01/2025
Total Blue Cross of Idaho:	44,292.72	
Boise City Utility Billing	11.78	12/26/2025
	80.97	12/26/2025
Total Boise City Utility Billing:	92.75	
Boxcast Inc	54.86	12/30/2025
Total Boxcast Inc:	54.86	
Car Park	203,926.43	12/31/2025
Total Car Park:	203,926.43	
Caselle Inc.	1,058.00	12/01/2025
Total Caselle Inc.:	1,058.00	
CenturyLink	28,256.00	12/29/2025
Total CenturyLink:	28,256.00	
City of Boise	6,530.95	12/29/2025
	3,136.54	12/29/2025
Total City of Boise:	9,667.49	
CSHQA	10,266.23	12/31/2025
Total CSHQA:	10,266.23	
Cushing Terrell Architects	90.82	12/31/2025

Name	Check Amount	Check Issue Date
	2,756.46	12/31/2025
	11,963.22	12/31/2025
Total Cushing Terrell Architects:	14,810.50	
Elam & Burke P.A.	285.00	12/31/2025
	655.50	12/31/2025
	57.00	12/31/2025
	6,298.50	12/31/2025
	655.50	12/31/2025
Total Elam & Burke P.A.:	7,951.50	
Fimbel Amy	30.00	12/24/2025
Total Fimbel Amy:	30.00	
From Boise LLC	3,300.00	12/29/2025
Total From Boise LLC:	3,300.00	
Guho Corp.	27,609.37	12/31/2025
	342,434.66	12/31/2025
	146,681.18	12/31/2025
	248,487.03	12/31/2025
Total Guho Corp.:	765,212.24	
Hydro LLC	15,000.00	12/31/2025
Total Hydro LLC:	15,000.00	
Idaho Power	5.80	12/19/2025
Total Idaho Power:	5.80	
Idaho Records Management LLC	55.00	12/30/2025
Total Idaho Records Management LLC:	55.00	
Ideal Demolition Services LLC	19,000.00	12/31/2025
Total Ideal Demolition Services LLC:	19,000.00	
Jed Split Creative	18,225.00	12/29/2025
Total Jed Split Creative:	18,225.00	
Jensen Belts Associates	3,712.50	12/30/2025
Total Jensen Belts Associates:	3,712.50	
Kimley-Horn and Associates Inc	17,642.50	12/31/2025

Name	Check Amount	Check Issue Date
	5,570.00	12/31/2025
Total Kimley-Horn and Associates Inc:	23,212.50	
KPFF Consulting Engineers	137.80	12/31/2025
	193,631.25	12/31/2025
Total KPFF Consulting Engineers:	193,769.05	
Lunation Communications LLC	7,700.00	12/31/2025
Total Lunation Communications LLC:	7,700.00	
McAlvain Construction Inc.	240,067.32	12/31/2025
Total McAlvain Construction Inc.:	240,067.32	
McClatchy Company LLC	53.60	12/30/2025
Total McClatchy Company LLC:	53.60	
Okland Construction Company Inc	19,266.00	12/31/2025
Total Okland Construction Company Inc:	19,266.00	
Pro Care Landscape Management	65.00	12/31/2025
	365.00	12/31/2025
	3,035.91	12/31/2025
	2,231.23	12/31/2025
	922.61	12/31/2025
	1,517.44	12/31/2025
	878.18	12/31/2025
	265.00	12/31/2025
Total Pro Care Landscape Management:	9,280.37	
QRS Consulting LLC	800.00	12/29/2025
Total QRS Consulting LLC:	800.00	
Security LLC - Plaza 121	342.51	12/29/2025
	15,234.17	12/01/2025
Total Security LLC - Plaza 121:	15,576.68	
Stability Networks Inc.	4,900.00	12/31/2025
	713.62	12/31/2025
	359.90	12/31/2025
Total Stability Networks Inc.:	5,973.52	
Syringa Networks LLC	755.00	12/30/2025

Name	Check Amount	Check Issue Date
Total Syringa Networks LLC:	755.00	
Taft Stettinius & Hollister LLP	862.50	12/30/2025
Total Taft Stettinius & Hollister LLP:	862.50	
The Land Group Inc.	1,860.00	12/31/2025
	5,162.50	12/31/2025
Total The Land Group Inc.:	7,022.50	
The Potting Shed	65.00	12/29/2025
Total The Potting Shed:	65.00	
Treasure Valley Coffee Inc	120.95	12/30/2025
Total Treasure Valley Coffee Inc:	120.95	
United Heritage	1,929.51	12/01/2025
Total United Heritage:	1,929.51	
US Bank - Credit Cards	11,336.37	12/09/2025
Total US Bank - Credit Cards:	11,336.37	
Veolia (Suez Water Idaho)	66.47	12/01/2025
	8.61	12/11/2025
	36.88	12/01/2025
	92.32	12/01/2025
	75.20	12/01/2025
	9.22	12/11/2025
	191.26	12/01/2025
Total Veolia (Suez Water Idaho):	479.96	
Veritas Material Consulting	2,058.00	12/30/2025
Total Veritas Material Consulting:	2,058.00	
Wash Worx LLC	1,000.00	12/31/2025
	6,125.00	12/31/2025
Total Wash Worx LLC:	7,125.00	
Western Records Destruction	48.00	12/30/2025
Total Western Records Destruction:	48.00	
Wright Brothers	177,007.14	12/31/2025

Name	Check Amount	Check Issue Date
Total Wright Brothers:	177,007.14	
Xerox Corporation	279.71	12/30/2025
Total Xerox Corporation:	279.71	
Grand Totals:	1,878,471.36	

Report Criteria:

Summary report type printed
Check.Voided = no

MINUTES OF MEETING
BOARD OF COMMISSIONERS
CAPITAL CITY DEVELOPMENT CORPORATION
Board Room, Fifth Floor, 121 N. 9th Street
Boise, ID 83702
December 8, 2025

I. CALL TO ORDER:

Vice Chair John Stevens, convened the meeting with a quorum at 12:00 p.m.

Roll Call attendance taken:

Present: Commissioner Drew Alexander, Commissioner Jimmy Hallyburton, Commissioner Rob Perez, Commissioner Meredith Stead, Commissioner John Stevens, and Commissioner Alexis Townsend.

Absent: Commissioner Todd Cooper, Commissioner Haney Keith, and Commissioner Lauren McLean.

Agency staff members present: John Brunelle, Executive Director; Doug Woodruff, Development Director; Joey Chen, Finance & Administration Director; Lana Graybeal, Director of External Affairs; Zach Piepmeyer, Parking & Mobility Director; Alexandra Monjar, Senior Project Manager – Property Development; Amy Fimbel, Senior Project Manager – Capital Improvements; Sandy Lawrence, Office Manager; Mary Watson, General Counsel; and Agency legal counsel, Meghan Conrad.

Eric Selekof, The Car Park, attended the meeting.

II. ACTION ITEM: AGENDA CHANGES OR ADDITIONS

There were no changes or additions made to the agenda.

III. WORK SESSION

A. ParkBOI Annual Update

Zach Piepmeyer, Parking and Mobility Director and Eric Selekof, ParkBOI, gave a report.

B. 1010 W. Jefferson Street Commercial Space and Public Parking Facility. Real Property Disposition Request for Proposals

Alexandra Monjar, Senior Project Manager – Property Development, gave a report.

IV. ACTION ITEM: CONSENT AGENDA

A. Expenses

1. Approve Paid Invoice Report for October 2025
2. Approve Paid Invoice Report for November 2025

B. Minutes and Reports

1. Approve Meeting Minutes for November 3, 2025

C. Other

1. Approve Resolution 1952: Records Disposition

Commissioner Perez made a motion to approve the Consent Agenda.

Commissioner Stead seconded the motion.

Roll Call:

Commissioner Alexander - Aye
Commissioner Hallyburton - Aye
Commissioner Perez - Aye
Commissioner Stead - Aye
Commissioner Stevens - Aye
Commissioner Townsend - Aye

The motion carried 6 - 0.

V. ACTION ITEM

A. CONSIDER Resolution 1951: 1010 W. Jefferson Street Commercial Space and Public Parking Facility. Amendment No. 1 to the CM/GC Agreement with Okland Construction Company, Inc.

Amy Fimbel, Senior Project Manager – Capital Improvements, gave a report.

Commissioner Stead moved to adopt Resolution 1951 approving and authorizing the execution of Amendment No. 1 to the CM/GC Agreement with Okland Construction Company, Inc. for the 1010 W. Jefferson Street Commercial Space and Public Parking Facility project.

Commissioner Stevens seconded the motion.

Roll Call:

Commissioner Alexander - Aye
Commissioner Hallyburton - Aye
Commissioner Perez - Aye
Commissioner Stead - Aye
Commissioner Stevens - Aye
Commissioner Townsend - Aye

The motion carried 6 - 0.

VI. MEETING ADJOURNMENT

There being no further business to come before the Board, a motion was made by Commissioner Perez to adjourn the meeting. Commissioner Stevens seconded the motion and adjourned the meeting. All commissioners agreed.

The meeting adjourned at 1:04 p.m.

ADOPTED BY THE BOARD OF DIRECTORS OF THE CAPITAL CITY DEVELOPMENT CORPORATION ON THE 12TH DAY OF JANUARY 2026.

Latonia Haney Keith, Chair

Lauren McLean, Secretary



AGENDA BILL

Agenda Subject: Consider Resolution 1955: First Amendment to Financial Services Agreement with Piper Sandler & Co.		Date: January 12, 2026
Staff Contact: Joey Chen, Finance & Administration Director	Attachments: <div>1. Resolution 1955</div> <div>2. First Amendment to Financial Services Agreement</div>	
Action Requested: Adopt Resolution 1955 amending the financial advisory services agreement with Piper Sandler & Co. to include services of bond financing for the 1010 West Jefferson Street Commercial Space and Public Facility project.		

Background:

The 1010 West Jefferson Street Commercial Space and Public Parking Facility (the Project) is a planned 6.5-story mixed-use building with a commercial ground floor and public parking garage. The garage includes approximately 446 parking stalls and is expected to become the seventh garage in the Agency's ParkBOI public parking system.

The Project's financing strategies include issuance of a bond. This Resolution 1955 is the Agency's contract with financial advisor, Piper Sandler & Co., for this bond financing.

The Agency has contracted for financial advisory services from essentially the same firm for the past two decades. That firm was originally known as Regional Financial Advisors (a division of SNW Securities), then Seattle Northwest Securities, then Piper Jaffray & Co., and now, Piper Sandler & Co.

Fiscal Notes:

The proposed fee schedule is \$3.00 per \$1,000 of bonds, subject to a \$50,000 minimum and a \$87,500 maximum fee payable upon closing of the financing. The approved FY2026 budget has adequate funds available for this First Amendment.

Staff Recommendation: Adopt Resolution 1955.

Suggested Motion:

I move to adopt Resolution 1955 amending the financial advisory services agreement with Piper Sandler & Co. to include services of bond financing for the 1010 West Jefferson Street Commercial Space and Public Facility project.

RESOLUTION NO. 1955

BY THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO:

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO, APPROVING THE FIRST AMENDMENT TO THE FINANCIAL SERVICES AGREEMENT WITH PIPER SANDLER & CO.; AUTHORIZING THE AGENCY EXECUTIVE DIRECTOR TO EXECUTE THE FIRST AMENDMENT TO THE FINANCIAL SERVICES AGREEMENT AND ANY NECESSARY DOCUMENTS, SUBJECT TO CERTAIN CONTINGENCIES; AUTHORIZING ANY TECHNICAL CORRECTIONS TO THE AMENDMENT; AUTHORIZING THE EXPENDITURE OF FUNDS; AND PROVIDING AN EFFECTIVE DATE.

THIS RESOLUTION is made on the date hereinafter set forth by the Urban Renewal Agency of Boise City, Idaho, an independent public body, corporate and politic, authorized under the authority of the Idaho Urban Renewal Law of 1965, as amended, Chapter 20, Title 50, Idaho Code, and the Local Economic Development Act, as amended and supplemented, Chapter 29, Title 50, Idaho Code (collectively, the "Act"), as a duly created and functioning urban renewal agency for Boise City, Idaho (hereinafter referred to as the "Agency").

WHEREAS, the Agency owns and operates the ParkBOI public parking system which includes six (6) public parking garages with 3,154 spaces, which incentivizes economic growth in downtown Boise; and,

WHEREAS, the Agency has determined that additional parking is necessary for continued economic growth in downtown Boise; and

WHEREAS, the Agency is empowered by the Act to construct off-street parking facilities, to issue bonds, to finance the construction, operation, and maintenance of such facilities, and to enter into agreements necessary or convenient to the exercise of such powers; and,

WHEREAS, the Agency owns real property addressed as 1010 W. Jefferson Street, Boise, upon which the Agency intends to develop a mixed-use, multi-story, public parking and mobility facility ("the Project") to further incentivize economic growth in downtown Boise; and,

WHEREAS, the Agency entered into a Financial Services Agreement with the investment bank and financial services company Piper Sandler & Co., dated July 26, 2024, for financial advisory services and analysis (the "Agreement"); and,

WHEREAS, the Agency and Piper Sandler & Co. wish to enter into a First Amendment to the Financial Services Agreement, attached as Exhibit A, to allow Piper Sandler & Co. to provide financial advisory services for the Project; and,

WHEREAS, the Agency Board finds it in the best public interest to approve the First Amendment to the Financial Services Agreement and to authorize the Agency Executive Director to execute same.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO, AS FOLLOWS:

Section 1: That the above statements are true and correct.

Section 2: That the First Amendment to the Financial Services Agreement, attached hereto as EXHIBIT A and incorporated herein by reference, is hereby approved.

Section 3: That the Agency Executive Director is hereby authorized to sign and enter into the First Amendment to the Financial Services Agreement and to execute all necessary documents required to implement the actions contemplated by the First Amendment to the Financial Services Agreement, subject to representations by the Agency staff and the Agency legal counsel that all conditions precedent to such actions have been met; and further, any necessary technical corrections to the First Amendment to the Financial Services Agreement or other documents are acceptable, upon advice from the Agency's legal counsel that said changes are consistent with the provisions of the Agreement and the comments and discussions received at the January 12, 2026, Agency Board meeting.

Section 4: That the Agency Executive Director is authorized to expend any and all funds contemplated by the First Amendment to the Financial Services Agreement and to perform any and all other duties required pursuant to said Amendment.

Section 5: That this Resolution shall be in full force and effect immediately upon its adoption and approval.

PASSED AND ADOPTED by the Urban Renewal Agency of Boise City, Idaho, on January 12, 2026. Signed by the Chair of the Board of Commissioners and attested by the Secretary to the Board of Commissioners on January 12, 2026.

URBAN RENEWAL AGENCY OF BOISE CITY

ATTEST: By: _____
Latonia Haney Keith, Chair

By: _____
Lauren McLean, Secretary

FIRST AMENDMENT TO FINANCIAL SERVICES AGREEMENT

This amendment ("First Amendment") is entered into as of _____, 202__ (the "Effective Date") by and between Piper Sandler & Co. ("Piper Sandler" or "Piper") and the Capital City Development Corporation (the "Client") (together with Piper Sandler, the "Parties" and each a "Party"). The First Amendment is made to the Financial Services Agreement entered into July 26, 2024 by and between Piper Sandler and the Client (the "Agreement").

WHEREAS, the Client desires to engage Piper to render services contemplated by such amendment.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the Parties hereto agree as follows:

- 1) The Agreement is hereby amended to include the following Project in the scope of services to be provided under the Agreement:

Financial Advisory services related to the completion of approximately \$30 million Parking System Revenue Bonds to be issued in 2026 to finance a new public parking facility at 1010 West Jefferson in Boise, Idaho (the "2026 Financing Project").

Proposed Fee Schedule: \$3.00 per \$1,000 of bonds, subject to a minimum \$50,000 fee and a maximum \$87,500 fee. The proposed fee will be due and payable to the Financial Services Provider upon the completion and closing of the 2026 Financing Project.

This amendment forms part of, is subject to and incorporated into the above-referenced Agreement. All terms and conditions set forth within the Agreement (as defined above) that are not amended here remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this First Amendment to the Agreement, effective as of the Effective Date indicated above. By the signature of its representative below, each Party affirms that it has taken all necessary action to authorize said representative to execute this Agreement.

ACCEPTED AND AGREED:

CAPITAL CITY DEVELOPMENT CORPORATION

By: _____
 John Brunelle
 Title: Executive Director
 Date: _____

PIPER SANDLER & CO.

By:  _____
 Eric Heringer
 Title: Managing Director
 Date: 12/22/2025

FINANCIAL SERVICES AGREEMENT

This Financial Services Agreement, (the Agreement) is entered into on July 16, 2024 by and between Capital City Development Corporation, Idaho (the Client) and Piper Sandler & Co. (Piper Sandler or the Financial Services Provider). This Agreement will serve as our mutual agreement with respect to the terms and conditions of our engagement as your financial services provider, effective on the date this Agreement is executed (the Effective Date).

I. Scope of Services.

(A) **Services to be provided.** Piper Sandler is engaged by the Client to provide services with respect to the planned issuance of the Client's bonds to be issued from time to time during the term of this Agreement (the Issue(s)) and general advisory services related to financing capabilities of the Client's urban renewal districts and parking system.

(B) **Scope of Services.** The Scope of Services to be provided respecting the Issue(s) may consist of the following, if directed by the Client:

1. Evaluate financing capabilities of the Client's urban renewal districts and parking system,
2. Evaluate options or alternatives with respect to the proposed new Issue(s),
3. Consult with and/or advise the Client on actual or potential changes in marketplace practices, market conditions or other matters that may have an impact on the Issues or Products.
4. Assist the Client in establishing a plan of financing
5. Assist the Client in establishing the structure, timing, terms and other similar matters concerning the Issue
6. Prepare the financing schedule
7. Provide assistance as to scheduling, coordinating and meeting procedural requirements relating to any required bond referendum
8. Consult and meet with representatives of the Client and its agents or consultants with respect to the Issue
9. Attend meetings of the Client's governing body, as requested
10. Advise the Client on the manner of sale of the Issue
11. Make arrangements for printing, advertising and other vendor services necessary or appropriate in connection with the Issue
12. Advise the Client with regard to continuing disclosure matters, as requested
13. In a competitive bid sale, prepare the bid package, obtain CUSIP numbers, assist the Client in collecting and analyzing bids submitted by underwriters and in connection with the Client's selection of a winning bidder
14. At the time of sale, provide the Client with relevant data on comparable issues recently or currently being sold nationally and by comparable Clients
15. In a negotiated sale, coordinate pre-pricing discussions, supervise the sale process, advise the Client on matters relating to retail or other order periods and syndicate priorities, review the order book, and if directed by the Client, advise on the acceptability of the underwriter's pricing and offer to purchase
16. Assist the Client in identifying an underwriter in a negotiated sale or other deal participants such as an escrow agent, accountant, feasibility consultant, etc. to work on the Issue
17. Respond to questions from underwriters
18. Arrange and facilitate visits to, prepare materials for, and make recommendations to the Client in connection with credit ratings agencies, insurers and other credit or liquidity providers
19. Coordinate working group sessions, closing, delivery of the new Issue and transfer of funds
20. Prepare a closing memorandum or transaction summary

21. Advise Client on potential refunding or other refinancing opportunities of its outstanding Issue(s)
22. Consult with and/or advise Client on actual or potential changes in marketplace practices, market conditions or other matters that may have an impact on Client's outstanding Issue(s)
23. Assist Client in responding to inquiries from investors or other market participants in connection with Client's outstanding Issue(s)

For Services Respecting Official Statement.

Piper Sandler has not assumed responsibility for preparing or certifying as to the accuracy or completeness of any preliminary or final official statement, other than with respect to written information about Piper Sandler as the municipal advisor if provided by Piper Sandler in writing for inclusion in such documents.

II. Limitations on Scope of Services. In order to clarify the extent of our relationship, Piper Sandler is required under MSRB Rule G-42¹ to describe any limitations on the scope of the activities to be performed for you. Accordingly, the Scope of Services are subject to the following limitations:

The Scope of Services is limited solely to the services described herein and is subject to limitations set forth within the descriptions of the Scope of Services. Any duties created by this Agreement do not extend beyond the Scope of Services or to any other contract, agreement, relationship, or understanding, if any, of any nature between the Client and the Financial Services Provider.

Unless explicitly directed by you in writing, the Scope of Services does not include evaluating advice or recommendations received by you from third parties.

The Scope of Services does not include tax, legal, accounting or engineering advice with respect to any Issue or Product or in connection with any opinion or certificate rendered by counsel or any other person at closing and does not include review or advice on any feasibility study.

III. Amending Scope of Services. The Scope of Services may be changed only by written amendment or supplement. The parties agree to amend or supplement the Scope of Services promptly to reflect any material changes or additions to the Scope of Services.

IV. Compensation. Compensation for work not directly related to the issuance of bonds will be based on an hourly fee. Compensation is payable in immediately available funds at closing. Compensation for work directly related to the issuance of bonds will be outlined in an Amendment with specific scope of services and pricing that is deal specific. Hourly rates for general advisory work are as follows:

Hourly Rate for Key Individuals	
Personnel and Title	Base Hourly Rate
Managing Director (Eric Heringer)	\$375 per hour
Vice President/Assistant Vice President	\$320 per hour
Associate/Analyst (Roma Gadhiwala)	\$300 per hour
Administrative (Jason Miller, Briana Nelson)	\$240 per hour

V. IRMA Matters. If the Client has designated Piper Sandler as its independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption"), the extent of the IRMA exemption is limited to the Scope of Services and any limitations thereto. Any reference to Piper

¹ See MSRB Rule G-42(c)(v).

Sandler, its personnel and its role as IRMA in the written representation of the Client contemplated under SEC Rule 15Ba1-1(d)(3)(vi)(B) is subject to prior approval by Piper Sandler and Client agrees not to represent, publicly or to any specific person, that Piper Sandler is Client's IRMA with respect to any aspect of municipal financial products or the issuance of municipal securities, or with respect to any specific municipal financial product or any specific issuance of municipal securities, outside the Scope of Services without Piper Sandler's prior written consent.

VI. Piper Sandler's Regulatory Duties When Servicing the Client. MSRB Rule G-42 requires that Piper Sandler undertake certain inquiries or investigations of and relating to the Client in order for Piper Sandler to fulfill certain aspects of the fiduciary duty owed to the Client. Such inquiries generally are triggered: (a) by the requirement that Piper Sandler know the essential facts about the Client and the authority of each person acting on behalf of the Client so as to effectively service the relationship with the Client, to act in accordance with any special directions from the Client, to understand the authority of each person acting on behalf of the Client, and to comply with applicable laws, regulations and rules; (b) when Piper Sandler undertakes a determination of suitability of any recommendation made by Piper Sandler to the Client, if any or by others that Piper Sandler reviews for the Client, if any; (c) when making any representations, including with regard to matters pertaining to the Client or any Issue or Product; and (d) when providing any information in connection with the preparation of the preliminary or final official statement, including information about the Client, its financial condition, its operational status and its municipal securities or municipal financial products. Specifically, Client agrees to provide to Piper Sandler any documents on which the Client has relied in connection with any certification it may make with respect to the accuracy and completeness of any Official Statement for the Issue.

Client agrees to cooperate, and to cause its agents to cooperate, with Piper Sandler in carrying out these duties to inquire or investigate, including providing to Piper Sandler accurate and complete information and reasonable access to relevant documents, other information and personnel needed to fulfill such duties.

In addition, the Client agrees that, to the extent the Client seeks to have Piper Sandler provide advice with regard to any recommendation made by a third party, the Client will provide to Piper Sandler written direction to do so as well as any information it has received from such third party relating to its recommendation.

VII. Expenses. Piper Sandler will be responsible for all of Piper Sandler's out-of-pocket expenses unless otherwise agreed upon or if travel is directed by Client. If travel is directed by the Client, Client will reimburse Piper Sandler for their expenses. In the event a new issue of securities is contemplated by this Agreement, Client will be responsible for the payment of all fees and expenses commonly known as costs of issuance, including but not limited to: publication expenses, local legal counsel, bond counsel, ratings, credit enhancement, travel associated with securing any rating or credit enhancement, printing of bonds, printing and distribution of required disclosure documents, trustee fees, paying agent fees, CUSIP registration, and the like.

VIII. Term of Agreement. The term of this Agreement shall begin on the Effective Date and ends, unless earlier terminated as provided below, on June 30, 2027.

This Agreement may be terminated with or without cause by either party upon the giving of at least thirty (30) days prior written notice to the other party of its intention to terminate, specifying in such notice the effective date of such termination. All fees due to Piper Sandler shall be due and payable upon termination. Upon termination, the obligations of Piper Sandler under this Agreement, including any amendment shall terminate immediately and Piper Sandler shall thereafter have no continuing fiduciary or other duties to the Client. The provisions of Sections IV, VII, XII, XIV, XV and XVII shall survive termination of this Agreement.

IX. Independent Contractor. The Financial Services Provider is an independent contractor and nothing herein contained shall constitute or designate the Financial Services Provider or any of its employees or agents as employees or agents of the Client.

X. Entire Agreement/Amendments. This Agreement, including any amendments and Appendices hereto which are expressly incorporated herein, constitute the entire Agreement between the parties hereto and sets forth the rights, duties, and obligations of each to the other as of this date. Any prior agreements, promises, negotiations, or representations not expressly set forth in this Agreement are of no force and effect. This Agreement may not be modified except by a writing executed by both the Financial Services Provider and Client.

XI. Required Disclosures. MSRB Rule G-42 requires that Piper Sandler provide you with disclosures of material conflicts of interest and of information regarding certain legal events and disciplinary history. Such disclosures are provided in Piper Sandler's Disclosure Statement attached as Appendix A to this Agreement.

XII. Limitation of Liability. In the absence of willful misconduct, bad faith, gross negligence or reckless disregard of obligations or duties hereunder on the part of Piper Sandler or any of its associated persons, Piper Sandler and its associated persons shall have no liability to the Client for any act or omission in the course of, or connected with, rendering services hereunder, or for any error of judgment or mistake of law, or for any loss arising out of any issuance of municipal securities, any municipal financial product or any other investment, or for any financial or other damages resulting from the Client's election to act or not to act, as the case may be, contrary to any advice or recommendation provided by Piper Sandler to the Client. No recourse shall be had against Piper Sandler for loss, damage, liability, cost or expense (whether direct, indirect or consequential) of the Client arising out of or in defending, prosecuting, negotiating or responding to any inquiry, questionnaire, audit, suit, action, or other proceeding brought or received from the Internal Revenue Service in connection with any Issue or Product, if any or otherwise relating to the tax treatment of any Issue or Product if any, or in connection with any opinion or certificate rendered by counsel or any other party. Notwithstanding the foregoing, nothing contained in this paragraph or elsewhere in this Agreement shall constitute a waiver by Client of any of its legal rights under applicable U.S. federal securities laws or any other laws whose applicability is not permitted to be contractually waived, nor shall it constitute a waiver or diminution of Piper Sandler's fiduciary duty to Client under Section 15B(c)(1), if applicable, of the Securities Exchange Act of 1934, as amended, and the rules thereunder.

XIII. Indemnification. Unless prohibited by law, the Client hereby indemnifies and holds harmless the Financial Services Provider, each individual, corporation, partnership, trust, association or other entity controlling the Financial Services Provider, any affiliate of the Financial Services Provider or any such controlling entity and their respective directors, officers, employees, partners, incorporators, shareholders, trustees and agents (hereinafter the "Indemnitees") against any and all liabilities, penalties, suits, causes of action, losses, damages, claims, costs and expenses (including, without limitation, fees and disbursements of counsel) or judgments of whatever kind or nature (each a "Claim"), imposed upon, incurred by or asserted against the Indemnitees arising out of or based upon (i) any allegation that any information in the Preliminary Official Statement or Final Official Statement contained (as of any relevant time) an untrue statement of a material fact or omitted (as of any relevant time) or omits to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

XIV. Official Statement. The Client acknowledges and understands that state and federal laws relating to disclosure in connection with municipal securities, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the Client and that the failure of the Financial Services Provider to advise the Client respecting these laws shall not constitute a breach by the Financial Services Provider or any of its duties and responsibilities under this Agreement. The Client acknowledges that any Official Statement distributed in connection with an issuance of securities are statements of the Client and not of Piper Sandler.

XV. Notices. Any written notice or communications required or permitted by this Agreement or by law to be served on, given to, or delivered to either party hereto, by the other party shall be in writing and shall be deemed duly served, given, or delivered when personally delivered to the party to whom it is addressed or in lieu of such personal services, when deposited in the United States' mail, first-class postage prepaid, addressed to the Client at:

Capital City Development Corporation
121 North 9th Street, Suite 501
Boise, ID 83702

John Brunelle, Executive Director
208 384-4264
jbrunelle@ccdcb Boise.com

Or to the Financial Services Provider at:

Piper Sandler & Co.
101 South Capital Blvd. Suite 603
Boise, ID 83702

Eric Heringer, Managing Director
208 344-8561
eric.heringer@psc.com

With a copy to:

Piper Sandler & Co.
Legal Department
800 Nicollet Mall, Suite 900
Minneapolis, MN 55402

XVI. Consent to Jurisdiction; Service of Process. The parties each hereby (a) submits to the jurisdiction of any State or Federal court sitting in the state of Idaho for the resolution of any claim or dispute with respect to or arising out of or relating to this Agreement or the relationship between the parties (b) agrees that all claims with respect to such actions or proceedings may be heard and determined in such court, (c) waives the defense of an inconvenient forum, (d) agrees not to commence any action or proceeding relating to this Agreement other than in a State or Federal court sitting in the state of Idaho and (e) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

XVII. Choice of Law. This Agreement shall be construed and given effect in accordance with the laws of the state of Idaho.

XVIII. Counterparts; Severability. This Agreement may be executed in two or more separate counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any term or provision of this Agreement which is invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction.

XIX. Waiver of Jury Trial. THE PARTIES EACH HEREBY AGREES TO WAIVE ANY RIGHT TO A TRIAL BY JURY WITH RESPECT TO ANY CLAIM, COUNTERCLAIM OR ACTION ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THE RELATIONSHIP BETWEEN THE PARTIES. PARTIES AGREE TO WAIVE CONSEQUENTIAL AND PUNITIVE DAMAGES.

XX. No Third-Party Beneficiary. This Agreement is made solely for the benefit of the parties and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, is intended to confer on any person, other than the parties and their respective successors and permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

XXI. Certification of Compliance with Anti-Boycott Against Israel Act. Piper Sandler hereby certifies, pursuant to Idaho Code, Section 67-2346, that it, including any wholly owned subsidiaries,

majority-owned subsidiaries, parent companies or affiliates, is not currently engaged in, and will not for the duration of this Agreement, engage in, a boycott of goods or services from Israel or territories under its control except as otherwise permitted by applicable federal law.

XXII. Certification of Compliance with House Bill 294. Piper Sandler hereby certifies, pursuant to Section 67-2359, Idaho Code, that it, including any wholly owned subsidiaries, majority-owned subsidiaries, parent companies or affiliates, is not currently owned or operated by the Government of China and will not for the duration of this Agreement be owned or operated by the Government of China.

XXIII. Certification of Compliance with Idaho Code Section 67-2347A. PROHIBITION ON CONTRACTS WITH COMPANIES BOYCOTTING CERTAIN SECTORS. In accordance with Idaho Code Section 67-2347A, Piper Sandler, by entering into this Agreement, hereby certifies that it is not currently engaged in, and will not for the duration of the contract engage in, a boycott of any individual or company because the individual or company: (a) engages in or supports the exploration, production, utilization, transportation, sale, or manufacture of fossil fuel-based energy, timber, minerals, hydroelectric power, nuclear energy, or agriculture; or (b) Engages in or supports the manufacture, distribution, sale, or use of firearms, as defined in section 18-3302(2)(d), Idaho Code. This section applies only to a contract that is between a public entity and a company with ten (10) or more fulltime employees and has a value of one hundred thousand dollars (\$100,000) or more that is to be paid wholly or partly from public funds of the public entity.

XXIV. Authority. The undersigned represents and warrants that they have full legal authority to execute this Agreement on behalf of the Client. The following individual(s) at the Client have the authority to direct Piper Sandler's performance of its activities under this Agreement:

John Brunelle, Executive Director
Joey Chen, Director of Finance & Administration

The following individuals at Piper Sandler have the authority to direct Piper Sandler's performance of its activities under this Agreement:

Eric Heringer, Managing Director


IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above written. By the signature of its representative below, each party affirms that it has taken all necessary action to authorize said representative to execute this Agreement.

PIPER SANDLER & CO.

By: 
Eric Heringer
Its: Managing Director
Date: 7/16/2024

ACCEPTED AND AGREED:

CAPITAL CITY DEVELOPMENT CORPORATION, ID

By: 
John Brunelle
Its: Executive Director
Date: JULY 26, 2024

Budget Info / For Office Use	
Fund/District	101
Account	5525
Activity Code	na
PO #	na
Contract Term	June 30, 2027

Piper Sandler & Co. is registered with the U.S. Securities and Exchange Commission and the Municipal Securities Rulemaking Board ("MSRB"). A brochure is posted on the website of the MSRB, at www.msrb.org that describes the protections that may be provided by MSRB rules and how to file a complaint with an appropriate regulatory authority.

APPENDIX A – DISCLOSURE STATEMENT

Municipal Securities Rulemaking Board Rule G-42 (the Rule) requires that Piper Sandler provide you with the following disclosures of material conflicts of interest and of information regarding certain legal events and disciplinary history. Accordingly, this Appendix A provides information regarding conflicts of interest and legal or disciplinary events of Piper Sandler required to be disclosed to pursuant to MSRB Rule G-42(b) and (c)(ii).

(A) ***Disclosures of Conflicts of Interest.*** The Rule requires that Piper Sandler provide to you disclosures relating to any actual or potential material conflicts of interest, including certain categories of potential conflicts of interest identified in the Rule, if applicable. If no such material conflicts of interest are known to exist based on the exercise of reasonable diligence by us, Piper Sandler is required to provide a written statement to that effect.

Accordingly, we make the following disclosures with respect to material conflicts of interest in connection with the Scope of Services under the Agreement, together with explanations of how we address or intend to manage or mitigate each conflict. To that end, with respect to all of the conflicts disclosed below, we mitigate such conflicts through our adherence to our fiduciary duty to you in connection with municipal advisory activities, which includes a duty of loyalty to you in performing all municipal advisory activities for the Client. This duty of loyalty obligates us to deal honestly and with the utmost good faith with you and to act in your best interests without regard to our financial or other interests. In addition, as a broker dealer with a client-oriented business, our success and profitability over time is based on assuring the foundations exist of integrity and quality of service. Furthermore, Piper Sandler's supervisory structure, utilizing our long-standing and comprehensive broker-dealer supervisory processes and practices, provides strong safeguards against individual representatives of Piper Sandler potentially departing from their regulatory duties due to personal interests. The disclosures below describe, as applicable, any additional mitigations that may be relevant with respect to any specific conflict disclosed below.

Compensation-Based Conflicts. The fees due under the Agreement are based on hourly fees of Piper Sandler's personnel, with the aggregate amount equaling the number of hours worked by such personnel times an agreed-upon hourly billing rate. This form of compensation presents the appearance of a conflict or a potential conflict of interest if the Client and Piper Sandler do not agree on a reasonable maximum amount at the outset of the engagement, because Piper Sandler does not have a financial incentive to recommend alternatives that would result in fewer hours worked. [In addition, contingent-based compensation, i.e. based upon the successful delivery of the Issue while customary in the municipal securities market, may present the appearance of a conflict or the potential for a conflict because it could create an incentive for Piper Sandler to recommend unnecessary financings or financings that are disadvantageous to the Client.] This conflict of interest is mitigated by our duty of care and fiduciary duty and general mitigations related to our duties to you, as described above.

Transactions in Client's Securities. As a municipal advisor, Piper Sandler cannot act as an underwriter in connection with the same issue of bonds for which Piper Sandler is acting as a municipal advisor. From time to time, Piper Sandler or its affiliates may submit orders for and acquire your securities issued in an Issue under the Agreement from members of the underwriting syndicate, either for its own trading account or for the accounts of its customers. Again, while we do not believe that this activity creates a material conflict of interest, we note that to mitigate any perception of conflict and to fulfill Piper Sandler's regulatory duties to the Client, Piper Sandler's activities are engaged in on customary terms through units of Piper Sandler that operate independently from Piper Sandler's municipal advisory business, thereby eliminating the likelihood that such investment activities would have an impact on the services provided by Piper Sandler to you under the Agreement.

(B) ***Disclosures of Information Regarding Legal Events and Disciplinary History.*** The Rule requires that all municipal advisors provide to their clients certain disclosures of legal or disciplinary events material to a client's evaluation of the municipal advisor or the integrity of the municipal advisor's management or advisory personnel. Accordingly, Piper Sandler sets out below required disclosures and related information in connection with such disclosures.

- I. **Material Legal or Disciplinary Event.** There are no legal or disciplinary events that are material to the Client's evaluation of Piper Sandler or the integrity of Piper Sandler's management or advisory personnel disclosed, or that should be disclosed, on any Form MA or Form MA-I filed with the SEC.
- II. **Most Recent Change in Legal or Disciplinary Event Disclosure.** Piper Sandler has not made any material legal or disciplinary event disclosures on Form MA or any Form MA-I filed with the SEC.

(C) **How to Access Form MA and Form MA-I Filings.** Piper Sandler's most recent Form MA and each most recent Form MA-I filed with the SEC are available on the SEC's EDGAR system at <http://www.sec.gov/edgar/searchedgar/companysearch.html>. The Form MA and the Form MA-I include information regarding legal events and disciplinary history about municipal advisor firms and their personnel, including information about any criminal actions, regulatory actions, investigations, terminations, judgments, liens, civil judicial actions, customer complaints, arbitrations and civil litigation. The SEC permits certain items of information required on Form MA or MA-I to be provided by reference to such required information already filed by Piper Sandler in its capacity as a broker-dealer on Form BD or Form U4 or as an investment adviser on Form ADV, as applicable. Information provided by Piper Sandler on Form BD or Form U4 is publicly accessible through reports generated by BrokerCheck at <http://brokercheck.finra.org>, and Piper Sandler's most recent Form ADV is publicly accessible at the Investment Adviser Public Disclosure website at <http://www.adviserinfo.sec.gov>. For purposes of accessing such BrokerCheck reports or Form ADV, Piper Sandler's CRD number is 665.

(D) **Future Supplemental Disclosures.** As required by the Rule, this Section 5 may be supplemented or amended, from time to time as needed, to reflect changed circumstances resulting in new conflicts of interest or changes in the conflicts of interest described above, or to provide updated information with regard to any legal or disciplinary events of Piper Sandler. Piper Sandler will provide you with any such supplement or amendment as it becomes available throughout the term of the Agreement.



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V. ACTION ITEMS



AGENDA BILL

Agenda Subject: Consider Resolution 1953: 1010 W. Jefferson Street Commercial Space and Public Parking Facility. Construction Material Testing and Special Inspection Services RFQ Ranking		Date: January 12, 2026
Staff Contacts: Amy Fimbel Senior Project Manager	Attachments: A: Resolution 1953 B. Request for Qualifications issued November 19, 2025 C: Proposal Scoring	
Action Requested: Adopt Resolution 1953 approving the ranking for the RFQ – Construction Material Testing and Special Inspection Services for the 1010 W. Jefferson Street Commercial Space and Public Parking Facility and authorizing the Executive Director to negotiate and execute a Professional Services Agreement.		

Background:

The 1010 W. Jefferson Street Commercial Space and Public Parking Facility (“1010 Project”) advances the goals of the Westside Urban Renewal District by developing a mixed-use public parking facility at 1010 W. Jefferson Street that will serve existing and future businesses as well as the surrounding community. Redevelopment of the site began in November 2024, with KPFF, Inc. selected for design services in January 2025, and Okland Construction approved as the Construction Manager in March 2025. The facility will become the seventh garage in the ParkBOI public parking system.

The design of the 1010 Project is progressing, with construction drawings now 50% complete. On December 8, 2025, CCDC’s Board of Commissioners approved GMP 1 for early site preparation, with work set to begin in January 2026. This early site preparation includes the removal of the existing building, placement of structural backfill, and the design and installation of a rammed aggregate pier foundation system. The approval of GMP 1 necessitates testing and inspection services for the structural backfill and the inspection of the rammed aggregate piers. These tasks will be completed ahead of the full garage construction, which is scheduled to begin in summer 2026.

The Agency is responsible for hiring a third-party firm to perform construction material testing and special inspections during construction of the 1010 Project. Special inspections and testing will include geotechnical inspection for compacted fill and rammed aggregate pier installation; hot mix asphalt inspection and testing; testing of fire-resistant assemblies and exterior insulation and finish systems (EIFS); and structural inspection and testing for concrete, CMU, masonry, anchors, steel, and steel decking. At the end of the project, the firm will be responsible for providing a final

acceptance letter confirming that the 1010 Project has met all required inspection and testing requirements.

Idaho Code § 67-2320 requires that public agencies initially engage engineering professionals based on their qualifications and demonstrated experience. Agency staff prepared a Scope of Services outlining the specific qualifications and experience desired for the 1010 W. Jefferson Street Commercial Space and Public Parking Facility. The information was formalized in a Request for Qualifications document, which also included the criteria used to evaluate firms (See *Attachment B*).

In accordance with statutory requirements, the Agency published the notice of the Request for Qualifications inviting construction material testing and special inspection firms to submit Statements of Qualifications ("SOQs") no later than December 10, 2025. The notice was published in the *Idaho Statesman* newspaper on November 19 and 26, 2025. Five (5) firms submitted SOQs by the deadline.

The SOQs received were evaluated first for compliance with the technical requirements as prescribed in the RFQ – four (4) firms met these requirements. One firm, CMT Technical Services, did not submit the required documents, and the submission lacked project-specific information. The four (4) responsive firms were then evaluated by a four-person evaluation panel consisting of Agency and consultant team members according to the pre-determined evaluation criteria specified in the RFQ. Upon completion of the evaluation process, the scoring revealed that Terracon Consultants, Inc. is the best qualified and highest-ranked proposer for this project. See *Attachment C* for the scoring details.

In accordance with Idaho Code § 67-2320(2), securing the services of the construction material testing and special inspection firm will involve negotiating with the highest-ranked firm for a contract to perform the services at a reasonable and fair price. If the Agency is unable to negotiate a satisfactory contract, negotiations may be pursued with the next highest-ranked firm for a contract at a reasonable and fair price. This statutory process ensures that the public receives a fair price for professional services.

Fiscal Notes:

The professional services agreement will define the terms of the contractual relationship between the Agency and the chosen firm, including the hourly rates charged for professional services. The FY2026 approved budget and future year forecasts include sufficient funds for these services.

Staff Recommendation:

Adopt Resolution 1953 approving the RFQ ranking for the building construction materials testing and special inspection services for the 1010 W. Jefferson Street Commercial Space and Public Parking Facility project and authorizing the Executive Director to negotiate and execute a Professional Services Agreement.

Suggested Motion:

I move to adopt Resolution 1953 approving the RFQ ranking for the building construction materials testing and special inspection services for the 1010 W. Jefferson Street Commercial Space and Public Parking Facility project and authorizing the Executive Director to negotiate and execute a Professional Services Agreement.

Attachment A

Resolution 1953

RESOLUTION NO. 1953

BY THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO:

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO, APPROVING THE RANKING FOR THE AGENCY'S REQUEST FOR QUALIFICATIONS - CONSTRUCTION MATERIAL TESTING AND SPECIAL INSPECTION SERVICES FOR THE 1010 W. JEFFERSON STREET COMMERCIAL SPACE AND PUBLIC PARKING FACILITY IN ACCORDANCE WITH IDAHO CODE SECTION 67-2320; AUTHORIZING THE AGENCY EXECUTIVE DIRECTOR TO NEGOTIATE THE PROFESSIONAL SERVICES AGREEMENT BASED ON THE RANKING AND TO EXECUTE THE AGREEMENT AND ANY OTHER NECESSARY DOCUMENTS OR AGREEMENTS, SUBJECT TO CERTAIN CONTINGENCIES; AND PROVIDING AN EFFECTIVE DATE.

THIS RESOLUTION is made on the date hereinafter set forth by the Urban Renewal Agency of Boise City, Idaho, an independent public body, corporate and politic, authorized under the authority of the Idaho Urban Renewal Law of 1965, as amended, Chapter 20, Title 50, Idaho Code, and the Local Economic Development Act, as amended and supplemented, Chapter 29, Title 50, Idaho Code (collectively, the "Act"), as a duly created and functioning urban renewal agency for Boise City, Idaho (hereinafter referred to as the "Agency").

WHEREAS, the City Council of the City of Boise City, Idaho (the "City"), after notice duly published, conducted a public hearing on the Westside Downtown Urban Renewal Plan (the "Westside Plan"), and following said public hearing, the City adopted its Ordinance No. 6108 on December 4, 2001, approving the Westside Plan and making certain findings; and,

WHEREAS, the City, after notice duly published, conducted a public hearing on the First Amendment to the Urban Renewal Plan Westside Downtown Urban Renewal Project ("First Amendment to the Westside Plan"); and,

WHEREAS, following said public hearing, the City adopted its Ordinance 45-20 on December 1, 2020, annexing two (2) geographical areas adjacent and contiguous to the northern boundary of the Westside Project Area into the existing revenue allocation area and making certain findings; and,

WHEREAS, the Agency is empowered by the Act to construct off-street parking facilities, to issue bonds, to finance the construction, operation, and maintenance of such facilities, and to enter into agreements necessary or convenient to the exercise of such powers; and,

WHEREAS, the Act and the Downtown Urban Renewal Plans provide for the Agency to retain and engage technical experts, professional services, and planning services; and,

WHEREAS, the Agency complies with various provisions of the Idaho Code as may be applicable to the Agency for the selection of services; and,

WHEREAS, as a matter of fairness and transparency, the Agency has, by policy, provided for certain competitive selection processes for professional consulting and planning services retained by the Agency; and,

WHEREAS, the Agency owns and operates the ParkBOI public parking system which includes six (6) public parking garages with 3,154 spaces, in part as a significant investment in implementing the Downtown Urban Renewal Plans and providing for economic growth in downtown Boise; and,

WHEREAS, using the real property it owns, addressed as 1010 W. Jefferson Street, Boise, the Agency intends to develop a multi-story, mixed-use public parking facility to further enhance economic vitality and advance the objectives of the Westside Plan; and,

WHEREAS, in January 2025, following a Request for Qualifications, KPFF, Inc. was selected as the design professional for the 1010 W. Jefferson St. Commercial Space and Public Parking Facility (the "Project"); and,

WHEREAS, on March 10, 2025, the Agency Board of Commissioners approved Resolution No. 1919 approving Okland Construction Company, Inc. as the Construction Manager/General Contractor for the Project; and,

WHEREAS, on December 8, 2025, the Agency Board of Commissioners adopted Resolution No. 1951 approving and authorizing the Executive Director to execute "Amendment No. 1 to the Standard Agreement and General Conditions Between Owner and Construction Manager" to establish a Guaranteed Maximum Price for the initial phase of construction services for the Project; and,

WHEREAS, the Agency now has the need for professional expertise related to construction material testing and special inspection services for the Project; and,

WHEREAS, the Agency issued a Request for Qualifications for the Construction Material Testing and Special Inspection Services ("RFQ") on November 19, 2025, and published requisite notice of the RFQ on November 19 and November 26, 2025, in the *Idaho Statesman* newspaper; and,

WHEREAS, as a result of the RFQ, the Agency received five (5) Statements of Qualifications ("SOQ") by the published deadline of 3:00 p.m. on December 10, 2025: ALLWEST Testing & Engineering, Inc., Atlas Technical Consultants LLC, Certerra Northwest, LLC, CMT Technical Services, and Terracon Consultants, Inc.; and,

WHEREAS, the Agency reviewed the five (5) Statements of Qualifications for compliance with the technical requirements prescribed in the SOQ and determined that ALLWEST Testing & Engineering, Inc., Atlas Technical Consultants LLC, Certerra Northwest, LLC, and Terracon Consultants, Inc. satisfied those requirements by submitting the required signed cover sheet, signed waiver and release, and a detailed, responsive proposal; and,

WHEREAS, upon review of the SOQ submitted by CMT Technical Services, the Agency determined the submission was non-responsive due to the omission of required documents, including the cover sheet and waiver and release, and the lack of project-specific information related to the Project; and,

WHEREAS, a four-person panel subsequently evaluated the four (4) SOQs that complied with the technical requirements on the basis of qualifications and demonstrated competence, with scoring based on a 100-point system outlined in the RFQ; and,

WHEREAS, the panel has recommended the selection of Terracon Consultants, Inc., as the top-ranked proposer, to conduct the consultant services included in the RFQ; and,

WHEREAS, the Agency Board of Commissioners finds it to be in the best public interest to approve the ranking for its RFQ – Construction Materials Testing and Special Inspection Services – 1010 West Jefferson Commercial Space and Public Parking Facility and to authorize the Agency Executive Director to negotiate and enter into a professional services agreement in accordance with that ranking and the requirements set forth in Idaho Code § 67-2320.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO, AS FOLLOWS:

Section 1: That the above statements are true and correct.

Section 2: That the Agency Board affirms Terracon Consultants, Inc. as the top-ranked consultant team to provide the Construction Material Testing and Special Inspection Services, based on the examination of the proposals by the Evaluation Panel and its recommendation to the Agency Board.

Section 3: That the Agency Executive Director is hereby authorized to negotiate and enter into a Professional Services Agreement with the top-ranked proposer, Terracon Consultants, Inc., for the 1010 W. Jefferson Street Commercial Space and Public Parking Facility, and in the event an agreement cannot be reached, that the Agency Executive Director is authorized to negotiate the agreement with the next ranked proposer, and so forth, in accordance with Idaho Code § 67-2320.

Section 4: That the Agency Board authorizes the Agency Executive Director, upon successful negotiations, to finalize, sign, and enter into the Professional Services Agreement consistent with the Board's stated instructions at the January 12, 2026, Agency Board Meeting and further authorizes the Agency Executive Director to execute all necessary documents required to implement the actions contemplated by the Agreement, subject to representations by Agency legal counsel that all necessary conditions have occurred; and further, the Agency Executive Director is authorized to perform any and all other duties required pursuant to the Professional Services Agreement, including the expenditure of funds.

Section 5: That this Resolution shall be in full force and effect immediately upon its adoption and approval.

PASSED AND ADOPTED by the Urban Renewal Agency of Boise City, Idaho, on January 12, 2026. Signed by the Chair of the Agency Board of Commissioners and attested by the Secretary to the Agency Board of Commissioners on January 12, 2026.

URBAN RENEWAL AGENCY OF BOISE CITY

By: _____
Latonia Haney Keith, Chair

ATTEST:

By: _____
Lauren McLean, Secretary

Attachment B

Request for Qualifications – issued November 19, 2025



REQUEST FOR QUALIFICATIONS

CONSTRUCTION MATERIAL TESTING AND SPECIAL INSPECTION SERVICES

1010 W. JEFFERSON STREET COMMERCIAL SPACE AND PUBLIC PARKING FACILITY

SUBMITTALS DUE: December 10, 2025 by 3 P.M. local time

November 19, 2025

Dear Respondent:

In accordance with the qualification-based selection process set forth in Idaho Code § 67-2320, Capital City Development Corporation (CCDC) seeks a qualified firm to provide construction material testing and special inspection services for the 1010 W. Jefferson Street Commercial Space and Public Parking Facility project in downtown Boise.

Written Statements of Qualifications (SOQs) must be delivered **electronically** prior to **3:00 p.m. local time, December 10, 2025** to bids@ccdcboise.com. A selection committee will evaluate the SOQs on the basis specified in this RFQ and may interview the top ranked firms.

CCDC reserves the right to reject any and all proposals, to waive any irregularities in the proposals received, and to accept the proposal that is in the best interest of CCDC and the public. The issuance of this RFQ and the receipt and evaluation of proposals does not obligate CCDC to award a contract. CCDC will pay no submission-related expenses incurred by Respondents. CCDC may cancel this process at any time prior to execution of a contract without liability.

CCDC appreciates your interest in meeting the needs of the agency and the citizens of Boise.



Kathy Wanner
Contracts Manager



121 N 9TH ST, SUITE 501 BOISE, ID 83702
208-384-4264 WWW.CCDCBOISE.COM

Request for Qualifications

Construction Material Testing and Special Inspection Services

Project Background

Capital City Development Corporation (CCDC) invests resources in public amenities including public parking to attract and lower barriers for private development in its districts. The high cost of consolidating parking into structures continues to stymie redevelopment and contribute to the increasing cost of downtown development. CCDC's system of public parking garages (ParkBOI) are examples of how structured parking can cultivate commerce, encourage high-quality land use, and contribute to a sense of place.

In November 2024, CCDC began its effort to redevelop 1010 W. Jefferson Street into a multi-story, mixed-use public parking facility. Following a Request for Qualifications (RFQ), KPFF, Inc. was selected in January 2025 to provide design services. In March 2025, the CCDC Board approved Okland Construction Company, Inc. as the Construction Manager/General Contractor (CM/GC), and on August 13, 2025, the project received Design Review approval from the City of Boise. The facility is expected to become the seventh garage in the ParkBOI public parking system and advances the goals of the Westside Urban Renewal District by developing a mixed-use public parking facility that will serve existing and future businesses and the surrounding community.

The six-story structure will provide approximately 446 parking stalls, 1% of which will be equipped with electric vehicle charging stations on completion, with utility capacity to install charging stations at up to 20% of stalls. The project will also include 22,000 +/- square feet of active ground floor commercial space which will be divided into condominiums for disposition. A 12,000 +/- square-foot condominium is intended to be used as an early education center by the Treasure Valley YMCA. Other owners and uses will be determined through a competitive disposition process. CCDC will also own and operate a 661 +/- square foot public, secure bicycle storage facility on the ground floor.

The project will be designed to meet the City of Boise's Green Building Code and will connect to the City of Boise's geothermal system. CCDC is investigating the potential to also include a rooftop photovoltaic system. The project is anchored by an 11th Street public plaza that includes retail patio space, family amenities and guides pedestrians inward toward the ground floor commercial spaces and public parking stair tower.

More project information is available on CCDC's website at <https://ccdcboise.com/ccdc-projects/1010-w-jefferson-st/>.

Scope of Services

CCDC is seeking a qualified firm to provide construction material testing and special inspection services for the **1010 W. Jefferson Street Commercial Space and Public Parking Facility** project in downtown Boise. Special inspections and testing may include, but are not limited to, geotechnical inspection for compacted fill and rammed aggregate pier installation; hot mix asphalt inspection and testing; testing of fire-resistance-rated assemblies and exterior insulation and finish systems (EIFS); and structural inspection and testing for concrete, CMU, masonry, anchors, steel, and steel decking.

The selected Respondent will also be responsible for providing a final acceptance letter confirming that the project has met all required inspection and testing requirements. The target

construction budget is \$33M. See the [100% Design Development Plans](#) linked here for the full project scope.

The selected Respondent will work closely with the design team, led by the prime consultant KPFF, Inc., and Okland Construction as the CM/GC.

Schedule

Work by the selected Respondent is expected to begin in early 2026 with inspection and testing of structural compacted fill once the existing building has been demolished. CCDC intends to begin construction of 1010 W. Jefferson Street in Summer 2026, with project completion anticipated in Fall 2027. Key project milestones are outlined in the following table.

Milestone	Date
Building Demolition and Structural Backfill of Void	January-March 2026
Construction Start	July 2026
Construction Completion	November 2027
Commissioning	December 2027

Request for Clarification or Questions

Any Respondent wishing to request clarification or ask a question related to the RFQ may submit a written inquiry to Kathy Wanner, Contracts Manager, at kwanner@ccdcboise.com. All requests must be received in writing no later than 3:00 p.m. local time on December 4, 2025.

Addenda

If it becomes necessary to revise any part of this RFQ, addenda will be issued. It is the Respondent's responsibility to check for addenda prior to submitting their Statement of Qualifications (SOQ). Failure to do so may result in the SOQ being declared non-responsive. Respondents shall acknowledge any addenda incorporated into their submittal within their cover letter.

Required Content

All responses to this RFQ shall include the following information in a clear and concise manner, organized according to the outline provided below. SOQs shall not exceed ten (10) pages in length, excluding front and back cover pages, exhibits A and B, and team member resumes. A minimum font size of 11 must be used.

A. RFQ Submittal Cover Sheet (Exhibit A) 0 points

B. RFQ Waiver & Release (Exhibit B) 0 points

C. Cover Letter 5 points

Provide a signed cover letter with introductory information. The letter should reference the RFQ by name and include a concise summary of the Respondent's organization, relevant experience, and ability to perform the anticipated services in a timely manner. Identify the key individual who will serve as the Project Manager for this project, including their phone number, physical address, email address, and a summary of qualifications. The cover letter should also acknowledge any addenda issued for the RFQ.

D. Firm Qualifications *20 points*

Provide a summary of the Respondent's organization and its capabilities. Include information on the firm's history, size, organization and management structure, resources, capabilities, special expertise, office location(s), and the number of staff at each location. As a minimum, the firm must meet the requirements of ASTM E329, be certified by AMRL/CCRL or A2LA or ICBO in soils, aggregate, concrete and asphalt, and have an AASHTO-accredited laboratory. Highlight the firm's competitive advantages that make it the best partner for this project.

E. Project Manager and Key Staff *20 points*

Describe the qualifications, certifications, experience, and expertise of the Project Manager and key staff members, including their length of time with the firm and their ability to respond promptly to the types of inspections anticipated for this project. Explain how the Respondent will interface with CCDC, with the design team led by the prime consultant KPFF, Inc., and Okland Construction as the CM/GC. Please also indicate the typical turnaround time from the completion of testing to the distribution of reports for the various testing and inspection services requested in this RFQ. Special inspectors must be certified in the applicable discipline requiring special inspection. At a minimum, the firm must demonstrate that at least two inspectors hold current ICC certifications in masonry, reinforced concrete, structural steel, and fire and life safety. Include an organizational chart showing the reporting structure. Resumes for all key personnel shall be included in an appendix. Each resume should not exceed two pages and will not count toward the page limit.

F. Quality Systems *20 points*

Respondents shall describe their quality system for inspections and testing, including how it is structured, documented, and maintained. The description should address quality policies and objectives; the relationship between management, technical operations, support services, and the quality system; procedures for document control; traceability of measurements; and handling of inspection or test items. Respondents should explain their audit and review processes, including internal audits by qualified, independent staff, management review, and documentation and resolution of findings. Respondents shall also describe procedures for ensuring quality of results, including internal quality control measures, such as proficiency testing, use of reference materials, replicate inspections or testing, re-inspection of retained items, and correlation of results.

G. Equipment Management *20 points*

Respondents shall describe their approach and identify the individual responsible for equipment management for inspections and testing. The description should address how the firm ensures that all necessary equipment and reference materials are available, properly maintained, current on calibrations, and suitable for use. Respondents should explain how they handle equipment that may be defective, produce suspect results, or require verification or recalibration. Include a description of procedures for maintaining records for each item of equipment, including name, manufacturer and model information, serial number or unique ID, date received and placed in service, condition, maintenance history, calibration status, and current location.

H. Relevant Experience *15 points*

Provide a brief description of up to three projects completed within the past five years where the Respondent provided testing and inspection services for projects of similar scope and scale to those requested in this RFQ. For each project, include a summary of the facility, the project completion date, and a description of the inspections provided by the Respondent. Additionally, include a client reference with contact information for each project.

Evaluation of SOQs

SOQs will be evaluated based on review of the Respondent's submittal by a selection committee that may include CCDC employees and consultants. Before a company is selected, CCDC may conduct reference investigations or contact Respondents to receive further information. CCDC may interview the top ranked companies to evaluate and determine the performance record and ability of the Respondents to perform the work anticipated and to determine the quality of the services being offered. By submitting a SOQ, the Respondent authorizes CCDC to conduct reference investigations as needed and to conduct interviews where the Respondents will be evaluated based on the information described in this RFQ.

Qualification-Based Selection

Selection will be based on the procurement rules set forth in Idaho Code § 67-2320. Final selection is made by the CCDC Board of Commissioners. CCDC has the right to waive or alter submission requirements or to reject any or all SOQs, consistent with Idaho law. It is the Respondent's responsibility to conform to all applicable federal, state, and local statutes or other applicable legal requirements. The information provided herein is intended to assist Respondents in meeting applicable requirements but is not exhaustive, and CCDC will not be responsible for any failure by any Respondent to meet applicable requirements.

Contract Form

The successful Respondent will provide CCDC with professional services and represent CCDC's best interests within set budgets and as contracted. A sample agreement is attached to this RFQ (Exhibit C).

General Conditions

Reserved Rights

CCDC reserves the right to act in the public best interest and in furtherance of the purposes of the Idaho Code Title 50, Chapter 20 (Idaho Urban Renewal Law) and Idaho Code Title 67, Chapter 28 (Purchasing by Political Subdivisions). CCDC reserves the right to waive any formalities or defects as to form, procedure, or content with respect to this RFQ and any irregularities in the SOQs received, to request additional data and information from any and all Respondents, to reject any submissions based on real or apparent conflict of interest, to reject any submissions containing inaccurate or misleading information, and to accept the SOQ that is in the best interest of CCDC and the public. The issuance of this RFQ and the receipt and evaluation of SOQs does not obligate CCDC to select a company nor award a contract. CCDC may in its discretion cancel, postpone, or amend this RFQ at any time without liability.

Public Records

CCDC is a public agency. All documents in its possession are public records subject to inspection and copying under the Idaho Public Records Act, Idaho Code § 74-101 through §74-126. The Public Records Act contains certain exemptions – including an exemption for trade secrets. Trade secrets include a formula, pattern, compilation, program, computer program, device, method, technique, or process that derives economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by other persons and is subject to the efforts that are reasonable under the circumstances to maintain its secrecy.

If any Respondent claims any part of a SOQ is exempt from disclosure under the Idaho Public Records Act, the Respondent must: 1.) Indicate by marking the pertinent document "CONFIDENTIAL"; and, 2.) Include the specific basis for the position that it be treated as exempt

from disclosure. Marking the entire SOQ as “Confidential” is not in accordance with Idaho Public Records Act and will not be honored.

CCDC, to the extent allowed by law and in accordance with these Instructions, will honor a nondisclosure designation. By claiming material to be exempt from disclosure under the Idaho Public Records Act, Respondent expressly agrees to defend, indemnify, and hold CCDC harmless from any claim or suit arising from CCDC’s refusal to disclose such materials pursuant to the Respondent’s designation. Any questions regarding the applicability of the Public Records Act should be addressed to your own legal counsel prior to submission.

Response Instructions

Please submit your SOQ to bids@ccdcboise.com no later than **3:00 p.m. (local time) on December 10, 2025**. Late submissions will not be considered.

Exhibits to this RFQ

- A: RFQ Submittal Cover Sheet
- B: RFQ Waiver and Release
- C: Sample Agreement

EXHIBIT A

**RFQ: CONSTRUCTION MATERIAL TESTING AND SPECIAL INSPECTION SERVICES
1010 W JEFFERSON ST COMMERCIAL SPACE AND PUBLIC PARKING FACILITY
SUBMITTAL COVER SHEET
(REQUIRED FOR SUBMISSION)**

TO: Capital City Development Corporation
Attn: Kathy Wanner, Contracts Manager
121 N. 9th Street, Suite 501
Boise, Idaho 83702

FROM:

Company Name: _____

Mailing Address: _____

Physical Address: _____

Telephone: _____ Fax: _____

E-mail Address: _____

Company officer responsible to CCDC for services contemplated by this RFQ:

SIGNATURE: X _____

Print Name and Title: _____

EXHIBIT B

RFQ: CONSTRUCTION MATERIAL TESTING & SPECIAL INSPECTION SERVICES 1010 W JEFFERSON ST COMMERCIAL SPACE AND PUBLIC PARKING FACILITY

REQUIRED WAIVER & RELEASE (REQUIRED FOR SUBMISSION)

The undersigned has read this waiver and release and fully accepts the Capital City Development Corporation's (CCDC) discretion and non-liability as stipulated herein, and expressly for, but not limited to, CCDC's decision to proceed with a qualification-based selection process in response to the Request for Qualifications (RFQ) to select a company to supply construction material testing and special inspection services to CCDC for the project.

- A. Discretion of CCDC: The Respondent submitting a response to this RFQ agrees that CCDC has the right to, unless contrary to applicable state law:
- a. Modify or suspend any and all aspects of the process seeking proposals and making any decisions concerning the services RFQ;
 - b. Obtain further information from any person, entity, or group regarding the Respondent, and to ascertain the depth of Respondent's capability and experience for supplying the services and in any and all other respects to meet with and consult with any Respondent or any other person, entity, or group;
 - c. Waive any formalities or defects as to form, procedure, or content with respect to CCDC's RFQ to select a construction material testing and special inspection services firm and any response by any Respondent thereto;
 - d. Accept or reject any sealed proposal received in response to the RFQ, including any sealed proposal submitted by the undersigned; or select any one proposal over another in accordance with the selection criteria; and
 - e. Accept or reject all or any part of any materials or statements, including, but not limited to, the nature and type of proposal.
- B. Non-Liability of CCDC:
- a. The undersigned agrees that CCDC shall have no liability whatsoever of any kind or character, directly or indirectly, by reason of all or any decision made at the discretion of CCDC as identified above.
 - b. The undersigned, including all team members, have carefully and thoroughly reviewed the RFQ and has found it to be complete and free from ambiguities and sufficient for their intended purpose.

Respondent's Signature: **X** _____

Print Name: _____

Print Title: _____

Name of Firm: _____

Date: _____



NAME OF FIRM

PROFESSIONAL SERVICES AGREEMENT
PROJECT NAME

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is entered into by and between the Urban Renewal Agency of the Boise City, also known as Capital City Development Corporation, an independent public body, corporate and politic, exercising governmental functions and powers and organized and existing under the Idaho Urban Renewal Law of the State of Idaho, title 50, chapter 20, Idaho Code, and the Local Economic Development Act, title 50, chapter 29, Idaho Code ("CCDC"), and **NAME OF FIRM, TYPE OF FIRM** ("CONSULTANT"). CCDC and CONSULTANT may hereinafter collectively be referred to as the "Parties" and individually as a "Party."

RECITALS

- A. CCDC has an ongoing need for nonexclusive consultant services related to the **[NATURE OF SERVICES]**.
- B. On [DATE], CCDC issued a Request for [qualifications / proposals] for [name of project]. On [DATE], The CCDC Board of Commissioners adopted Resolution # [number] approving the rankings of the RFQ and authorizing the Executive Director to negotiate and execute a professional services agreement with the top ranked firm, **CONSULTANT** to provide services for [name of project/type of work].
- C. CONSULTANT is specially trained, experienced, and competent to perform such services and has agreed to provide such services under the terms and conditions described herein.
- D. CCDC desires to retain CONSULTANT to provide non-exclusive professional services. As a public agency, CCDC reserves all rights to seek services from other consultants through any procedure deemed to be in the best interests of CCDC and in compliance with any applicable law, rule, or regulation.

NOW, THEREFORE, in consideration of the above Recitals, which are incorporated into this Agreement; the mutual covenants contained herein; and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

AGREEMENT

- 1. SCOPE OF SERVICES.** Upon execution of this Agreement, CONSULTANT shall perform and furnish to CCDC all services as described in Exhibit A, ("Scope of Services" or "Scope"), incorporated herein by this reference, together with any amendments that may be agreed to in writing by the Parties.
- 2. EFFECTIVE DATE.** The effective date of this Agreement ("Effective Date") shall be the date on which this Agreement was signed by the last of the Parties to execute it.
- 3. TERM OF AGREEMENT.** This Agreement shall begin on the Effective Date and shall continue until: 1.) completion of services; or 2.) **DATE.** At CCDC's sole discretion an extension may be granted.
- 4. NOTICE TO PROCEED.** Services to be performed under this Agreement shall commence upon CCDC issuing a written notice to proceed. The written notice to proceed may be transmitted by U.S. Mail, courier, E-Mail or Fax. The receipt of the fully executed agreement is considered a written notice to proceed.
- 5. PAYMENT.**

 - (a) Method of Payment. CCDC agrees to pay CONSULTANT based on time and expenses an amount not to exceed [amount in words; caps] (amount in numbers; dollar sign) for the Scope based on the time expended by CONSULTANT.
 - (b) Hourly rates. CONSULTANT shall perform services at the hourly rates set forth in Exhibit [letter].
 - (c) Reimbursable Expenses. Reimbursable expenses may include general out-of-pocket expenses, such as long-distance telephone charges, copying expenses, overnight or standard mailing expenses, travel-related expenses and the like, and shall be billed to CCDC at the actual cost to CONSULTANT with no mark-up. Reimbursable expenses are included in the not-to-exceed limit stated in Section 3(a) above.
 - (d) NOTICE REQUIRED PRIOR TO OVERAGES. CONSULTANT must notify CCDC if CONSULTANT anticipates that costs for the Scope of Services will exceed the not-to-exceed limit set for this Agreement. CCDC will determine in its sole judgment if an amendment to the not-to-exceed limit is appropriate. Any amendment must be approved by CCDC in writing prior to the CONSULTANT incurring costs in excess of the not-to-exceed limit.
 - (e) Invoices. CONSULTANT shall submit monthly invoices for payment by mailing them to CCDC, 121 N 9th Street, Suite 501, Boise, Idaho 83702 or via email to accounting@ccdcoise.com. Monthly invoices shall be in a format acceptable to CCDC, and shall include the **PO# XXXXXX** on the invoice. Each invoice shall specify charges as they relate to the tasks in the Scope of Services. Each invoice

shall also specify current billing and previous payments, with a total of cost incurred and payments made to date.

- (f) Payment of Invoices. All invoices shall be paid by CCDC within thirty (30) days of receipt of invoice, subject to Correction of Deficiencies, herein set forth, and Termination provisions set forth below. Disputes of any invoiced amounts must be sent to CONSULTANT in writing within five (5) business days of billing.

6. CONSULTANT RESPONSIBILITIES. CONSULTANT assumes all responsibility for production and delivery of all materials and services detailed in this Agreement, whether or not the CONSULTANT is the manufacturer or producer of the materials or services. CONSULTANT shall supply, at CONSULTANT's sole expense, all equipment, tools, materials and/or supplies to accomplish the services specified in the Agreement. Further, CONSULTANT will be the sole point of contact on contractual matters, including payment of charges resulting from the use or purchase of items selected.

7. CONSULTANT WARRANTY. CONSULTANT represents that it possesses the requisite skill, knowledge, and experience necessary to perform the services under this Agreement. CONSULTANT warrants that its services under this Agreement shall be performed in a professional manner consistent with the professional skill and care ordinarily provided by [NATURE OF SERVICE] professionals practicing in the same or similar locality under the same or similar circumstances. In the event of nonconformity, to the extent the professional standard of care for professionals has not been met, and without limitation upon any other remedy, CCDC shall have no financial obligation in regard to the nonconforming goods or services. This right is not to the exclusion of any other right that CCDC has in law or equity. Without limiting the foregoing, CONSULTANT recognizes its obligation to work with CCDC to correct any errors resulting from its negligence.

8. CONSULTANT RELIANCE. CONSULTANT shall be entitled to rely on the accuracy and completeness of any information furnished by CCDC, except in such circumstances that CONSULTANT should, in the exercise of reasonable care, consistent with the professional skill and care ordinarily provided by consultants practicing under the same or similar circumstances, know the information to be incorrect, unreliable or incomplete. CONSULTANT shall provide prompt notice to CCDC if CONSULTANT becomes aware of any errors, omissions, or inconsistencies in such information.

9. CORRECTING DEFICIENCIES. If a service or work product subject to a specific invoice does not meet the requirements of this Agreement as CCDC may reasonably determine, CCDC shall notify CONSULTANT in writing and identify specific deficiencies in the service or work product that do not meet the requirements. CONSULTANT shall have ten (10) business days to correct or modify the service or work product to comply with the requirements of the Agreement as set forth in the CCDC's written notice. If CCDC again reasonably determines the services or work product fails to meet the requirements, CCDC may withhold payment until deficiencies have been corrected to CCDC's reasonable satisfaction or may terminate this Agreement for cause as set forth in this Agreement.

10. RIGHT OF CONTROL. CCDC agrees that it will have no right to control or direct the details, manner, or means by which CONSULTANT accomplishes the results of the services performed hereunder. CONSULTANT has no obligation to work any particular hours or days or any particular number of hours or days. CONSULTANT agrees, however, that its other contracts

and services shall not interfere with the performance of the services outlined by this Agreement. CCDC agrees to coordinate project schedules, respective commencements, and deadlines with CONSULTANT as needed.

11. PROPRIETARY RIGHTS. All documents, reports, and any other data developed by CONSULTANT for CCDC in the performance of this Agreement, whether finished or not finished, shall become the property of CCDC, shall be forwarded to CCDC at its request, and may be used by CCDC as it sees fit. CCDC agrees that if it uses products prepared by CONSULTANT for purposes other than those intended in this Agreement, it does so at its sole risk and it agrees to hold CONSULTANT harmless therefrom.

12. CONFIDENTIALITY. The Parties acknowledge that the existence and the terms of this Agreement and any oral or written information exchanged between the Parties in connection with the preparation and performance of this Agreement are regarded as confidential information. Each Party shall maintain confidentiality of all such confidential information and, without obtaining the written consent of the other Party, it shall not disclose any relevant confidential information to any third parties, except for the information that: a.) is or will be in the public domain (other than through the receiving Party's unauthorized disclosure); b.) is under the obligation to be disclosed pursuant to the applicable laws or regulations or orders of the court or other government authorities; or c.) is required to be disclosed by any Party to its own officers, board members, legal counsels, or financial advisors regarding the transaction contemplated hereunder, provided that such officers, board members, legal counsels, or financial advisors shall be bound by the confidentiality obligations similar to those set forth in this Section. Disclosure of any confidential information by the staff members or agencies hired by any Party shall be deemed disclosure of such confidential information by such Party, which Party shall be held liable for breach of this Agreement. This Section shall survive the termination of this Agreement for any reason.

13. RELATIONSHIP OF PARTIES. CONSULTANT is an independent contractor and is not an officer, employee, servant, or agent of CCDC. CCDC shall determine the services and work products to be done by CONSULTANT, but CONSULTANT shall determine the legal means by which it accomplishes the services and work projects specified by CCDC. This Agreement shall not be construed to create any employer-employee relationship between CCDC and CONSULTANT. CONSULTANT shall not be entitled to any benefits provided by CCDC to employees.

14. FEDERAL, STATE, AND LOCAL PAYROLL TAXES. Neither federal, state, or local income taxes nor payroll taxes of any kind shall be withheld and paid by CCDC on behalf of CONSULTANT or the employees of CONSULTANT. CONSULTANT shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes.

15. DISCRIMINATION PROHIBITED. In performing the services required by this Agreement, CONSULTANT shall not discriminate against any person on the basis of age, race or ancestry, color, national origin, disability or handicap, creed or religion, sex, sexual orientation, gender identity, gender expression, or marital status. Violation of this section shall constitute a material breach of this Agreement and be deemed grounds for cancellation, termination, or suspension of the Agreement by CCDC, in whole or in part, and may result in ineligibility to perform additional services for CCDC.

16. ACCESS TO RECORDS AND AUDITS. CONSULTANT shall maintain complete and accurate records with respect to costs incurred and manpower expended under this Agreement.

All such records shall be maintained according to generally accepted accounting principles, shall be clearly identified, and shall be readily accessible. Upon request, such records shall be available for review by CCDC representatives for three (3) years after final payment.

17. SUBCONSULTANTS. CONSULTANT may propose the use of subconsultants ("SUBCONSULTANTS") for performance of a particular aspect of the services. CCDC shall have the right to approve the use of SUBCONSULTANTS and the amount and method of SUBCONSULTANTS' compensation prior to commencement of any services by SUBCONSULTANTS, and such approval shall be in writing. CCDC shall also determine whether the selection of SUBCONSULTANTS should be made through any required selection process or through a selection process CCDC deems in its best interest. CCDC shall have the right to approve any change in the use of SUBCONSULTANTS. Such changes in SUBCONSULTANTS shall be approved by CCDC in writing and shall not affect the amount of payment stated in the Agreement unless specifically authorized by CCDC in writing. CCDC shall have no liability to SUBCONSULTANTS and CONSULTANT shall be responsible for services performed or work product produced by the SUBCONSULTANTS and payment to SUBCONSULTANTS.

18. COORDINATION WITH OTHER CONSULTANTS. CONSULTANT recognizes that CCDC has or may enter into agreements with other consultants. Upon request, CONSULTANT agrees to coordinate with and work in conjunction with other Consultants when the need arises.

19. INDEMNIFICATION. CONSULTANT agrees to indemnify, defend, and hold harmless CCDC and its officers, agents, and employees from and against all claims, losses, actions, or judgments for damages or injury to persons or property, including attorney fees, arising from any negligent or tortious acts or omissions of CONSULTANT, its employees, or subconsultants. In case any action or proceeding is brought against CCDC or its officers, agents, or employees by reason of negligent or tortious acts or omissions of CONSULTANT, its employees, or subconsultants, CONSULTANT, upon written notice from CCDC, shall resist or defend such action or proceeding at CONSULTANT's expense.

20. INSURANCE. Prior to commencing services under this Agreement, CONSULTANT shall obtain at its sole cost and expense, and thereafter maintain for the term of this Agreement, at least the minimum insurance coverages set forth below. All insurance coverage shall be written on an occurrence basis and provided by a company or companies which are authorized to do business in Idaho. CONSULTANT shall provide to CCDC proof of insurance coverage before commencing its performance as herein provided. CONSULTANT shall notify CCDC a minimum of ten (10) days prior to cancellation of said policy or policies.

- (a) Worker's compensation as required by applicable law or regulation. If worker's compensation insurance is not required under the circumstances, CONSULTANT shall provide proof to CCDC that such coverage is not required.
- (b) Employer's liability insurance in the minimum amount required by applicable law or regulation.
- (c) Commercial general liability insurance policy with minimum coverage of \$1,000,000 per occurrence, and a minimum aggregate policy limit of \$2,000,000. The commercial general liability insurance policy shall name CCDC as an Additional Insured and protect its officers, agents, and employees from and against any and all claims, losses, actions, and judgments for damages or injury to persons

or property arising out of or in connection with the CONSULTANT's negligence during the performance of this Agreement.

- (d) Professional liability insurance with minimum limits of liability of \$1,000,000 per claim and \$1,000,000 aggregate.
- (e) Cybersecurity liability insurance with limits not less than \$1,000,000 for all claims and includes third party. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by CONSULTANT in this Agreement and shall include, but not be limited to, claims involving security breach, system failure, data recovery, business interruption, cyber extortion, social engineering fraud, funds transfer fraud, infringement of intellectual property, including but not limited to infringement of copyright, trademark, trade dress, invasion of privacy violations, information theft, damage to or destruction of electronic information, release of private information, and alteration of electronic information. The policy shall provide coverage for breach response costs, regulatory fines and penalties as well as credit monitoring expenses.

21. DEFAULT AND TERMINATION.

- (a) FOR CAUSE. If through any cause CONSULTANT shall fail to perform any of the covenants or conditions of this Agreement or fails to fulfill its obligations in compliance with the schedule under this Agreement, and CONSULTANT does not cure such defects in performance within ten (10) days after receipt of written notice, CCDC shall thereupon have the right to terminate this Agreement. Upon termination for cause, CONSULTANT shall be paid an amount for the actual services satisfactorily performed in accordance with this Agreement through the default date. CONSULTANT shall provide CCDC all work products generated prior to date of termination.
- (b) TERMINATION FOR CONVENIENCE OF CCDC. CCDC may terminate this Agreement for its convenience at any time, for any reason, upon giving ten (10) business days written notice. If this Agreement is terminated by CCDC for convenience, CONSULTANT shall be paid an amount for the actual services satisfactorily performed to the date of termination. Consultant shall also provide CCDC all work products of consulting generated to date of termination. Notwithstanding any other provision in this Agreement, CCDC may terminate this Agreement immediately if CONSULTANT becomes insolvent or voluntarily or involuntarily bankrupt, or if a receiver or other liquidating officer is appointed for substantially all of the business of the CONSULTANT or if CONSULTANT makes an assignment for the benefit of creditors.

22. DISPUTES. In the event that a dispute arises between CCDC and the CONSULTANT regarding application or interpretation of any provision of this Agreement, the aggrieved Party shall promptly notify the other Party to this Agreement of the dispute within ten (10) days after such dispute arises. If the Parties shall have failed to resolve the dispute within thirty (30) days after delivery of such notice, the Parties may first endeavor to settle the dispute in an amicable manner by mediation. If the Parties elect to mediate their dispute, the Parties will select a mediator by mutual agreement and agree to each pay half of the mediator's costs and fees. The mediation will take place in Boise, Idaho, unless otherwise agreed by the Parties in writing.

Should the Parties be unable to resolve the dispute to their mutual satisfaction within thirty (30) days after such completion of mediation, each Party shall have the right to pursue any rights or remedies it may have at law or in equity. If the Parties do not mutually agree to mediate the dispute, either Party may pursue any rights or remedies it may have at law.

23. ATTORNEY FEES. Should any litigation be commenced between the Parties hereto concerning this Agreement, the prevailing Party shall be entitled, in addition to any other relief as may be granted, to costs and reasonable attorneys' fees as determined by a court of competent jurisdiction. This provision shall be deemed to be a separate contract between the Parties and shall survive any default, termination, or forfeiture of this Agreement.

24. NONWAIVER. Failure of either Party to exercise any of the rights under this Agreement, or breach thereof, shall not be deemed to be a waiver of such right or a waiver of any subsequent breach.

25. NOTICES. Any and all notices required to be given by either of the Parties hereto, unless otherwise stated in this Agreement shall be in writing and be deemed communicated when delivered in person, by courier, or mailed in the United States mail, certified, return receipt requested, addresses as follows:

To CCDC:

John Brunelle, Executive Director
Capital City Development Corporation
121 N. 9th Street, Suite 501
Boise, Idaho 83702
#208-384-4264
jbrunelle@ccdcboise.com

To CONSULTANT:

Name of Consultant, Title
Firm Name
Address
Address
#telephone
email

Telephone numbers and e-mail addresses are for convenience and not to be used for notices required to be in writing. Informal notices and communication may be delivered in person or by telephone, mail, courier, e-mail, or fax. Either Party may, by written notice, change the contact information listed above.

26. GENERAL ADMINISTRATION AND MANAGEMENT. The Executive Director of CCDC or his/her designee shall be CCDC's representative and shall oversee and approve all services to be performed, coordinate all communications, review and approve all invoices, and carry out any and all tasks as may be required of CCDC under this Agreement.

27. TIME IS OF THE ESSENCE. Time is of the essence for each and every provision of this Agreement and will be strictly followed by the Parties.

28. ENTIRE AGREEMENT. This Agreement, along with any and all Exhibits, attached hereto and incorporated herein by reference, contains the entire Agreement of the Parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith. This Agreement covers services or work products CONSULTANT has not completed, but does not cover services or work products that have been completed and CCDC has paid CONSULTANT'S fee.

29. AMENDMENTS. This Agreement may be amended only in writing, upon mutual agreement of both CCDC and CONSULTANT.

30. ASSIGNMENT. It is expressly agreed and understood by the Parties hereto that CONSULTANT shall not have the right to assign, transfer, hypothecate, or sell any of its rights under this Agreement except upon the prior express written consent of CCDC.

31. COUNTERPARTS. This Agreement may be executed in any number of counterparts. Such counterparts shall be deemed to be original instruments. Counterparts together shall constitute one (1) agreement.

32. GOVERNING LAW. Any dispute under this Agreement, or related to this Agreement, shall be decided in accordance with the laws of the State of Idaho.

33. SEVERABILITY. If any part of this Agreement is held unenforceable, the remaining portions of the Agreement will nevertheless remain in full force and effect.

34. SUCCESSORS IN INTEREST. The provisions of this Agreement shall be binding upon and shall inure to the benefit of the Parties hereby, and their respective successors and assigns.

35. THIRD PARTY BENEFICIARIES. CCDC and CONSULTANT are the only Parties to this Agreement. The Parties do not intend that any non-party or third party will have any rights whatsoever under this Agreement.

36. ANTI-BOYCOTT AGAINST ISRAEL. In accordance with Idaho Code Section 67-2346, effective July 1, 2021, CONSULTANT, by entering into this Agreement, hereby certifies that it is not currently engaged in, and for the duration of this Agreement will not engage in, a boycott of goods or services from the State of Israel or territories under its control. This provision does not apply to the following agreements: 1.) Those with a total potential dollar value of less than \$100,000; or 2.) Those with any CONSULTANT having fewer than 10 employees.

37. CERTIFICATION REGARDING GOVERNMENT OF CHINA. In accordance with Idaho Code Section 67-2359, effective July 1, 2023, CONSULTANT, by entering into this Agreement, hereby certifies that it is not currently owned or operated by the government of China and will not, for the duration of the Agreement, be owned or operated by the government of China.

38. PROHIBITION ON CONTRACTS WITH COMPANIES BOYCOTTING CERTAIN SECTORS. In accordance with Idaho Code Section 67-2347A, effective July 1, 2024, CONSULTANT by entering into this Agreement, hereby certifies that it is not currently engaged in, and will not for the duration of the contract engage in, a boycott of any individual or company because the individual or company: (a) engages in or supports the exploration, production, utilization, transportation, sale, or manufacture of fossil fuel-based energy, timber, minerals, hydroelectric power, nuclear energy, or agriculture; or (b) Engages in or supports the

manufacture, distribution, sale, or use of firearms, as defined in section 18-3302(2)(d), Idaho Code. This section applies only to a contract that is between a public entity and a company with ten (10) or more fulltime employees and has a value of one hundred thousand dollars (\$100,000) or more that is to be paid wholly or partly from public funds of the public entity.

END OF AGREEMENT | Signatures appear on the following page.

SAMPLE

IN WITNESS WHEREOF, CCDC and CONSULTANT have executed this Agreement with an effective date as of the last date written below.

CAPITAL CITY DEVELOPMENT CORP.

CONSULTANT: [ADD NAME]

John Brunelle, Executive Director

Name, Title

Date: _____

Date: _____

EXHIBITS

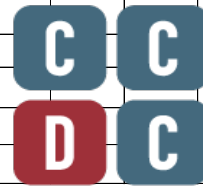
A. Consultant's Proposal Dated XXXXXXXXXX

Attachment C

Proposal Scoring

Capital City Development Corporation
RFQ: Construction Materials Testing & Special Inspections

1010 W. Jefferson St.

RFQ DUE: December 10, 2025 3pm

**CAPITAL CITY
DEVELOPMENT CORP**

FIRM	Possible Points	ALLWEST				ATLAS				CERTERRA				TERRACON			
Rater		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Criteria																	
RFQ Submittal Cover Sheet*	0																
RFQ Waiver & Release*	0																
Cover Letter	5	3	4	3	4	5	4.5	4	3	3	4	4	4	3	4	5	5
Firm Qualifications	20	16	15	14	16	19	16	15	18	8	16.5	15	15	19	17	18	19
Project Manager and Key Staff	20	16	14	15	17	13	15	16	18	6	14	16	16	20	16	18	19
Quality Systems	20	8	11	18	18	9	10	12	16	10	10	17	15	18	16	17	18
Equipment Management	20	16	10	15	17	0	0	5	0	16	17	16	19	20	18	18	19
Relevant Experience	15	14	8	10	11	14	12	14	14	12	11	12	11	14	13	15	14
Totals	100	73	62	75	83	60	57.5	66	69	55	72.5	80	80	94	84	91	94
		293				252.5				287.5				363			
		2	3	3	2	3	4	4	4	4	2	2	3	1	1	1	1
AVERAGE		73				63				72				91			
RANKING		2				4				3				1			

*All firms submitted required Submittal Cover Sheet and Waiver & Release



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AGENDA BILL

Agenda Subject: Consider Resolution 1954: 9th & Front ParkBOI Parking Garage, Stair Tower Enclosure and Elevator Modernization. Amendment No. 1 to the CM/GC Contract with Andersen Construction Company of Idaho LLC		Date: January 12, 2026
Staff Contact: Kassi Brown, Project Manager	Attachments: A. Resolution 1954 B. Amendment No. 1 to the CM/GC Contract with Andersen Construction Company of Idaho LLC	
Action Requested: Adopt Resolution 1954 authorizing the execution of Amendment No. 1 to the CM/GC Contract with Andersen Construction Company of Idaho LLC for the 9th & Front ParkBOI Parking Garage Stair Tower Enclosure and Elevator Modernization Project.		

Background:

CCDC owns and operates six parking garages located throughout downtown and routinely assesses and studies each garage for general maintenance, enhanced user experience and improved security.

The 9th & Front ParkBOI parking garage, located at 312 S 9th Street, Boise, ID 83702, was completed in 2000. The Garage operates 24/7, contains 574 parking stalls on 8 floors of parking, and services over 1,000 vehicles daily. The garage also exhibits two external stair towers with open-air designs, which has resulted in accelerated wear and tear on the elevators and structure itself. An elevator condition assessment completed by VDA, Inc. in early 2024 also determined that the three existing elevators are approaching the end of their service life and are in need of modernization. While CCDC has completed regular maintenance to preserve the structural integrity and safety of the towers, the Agency desires an effective solution which encloses the stair towers, protecting the structure and elevator system from weather elements. This two-part project aims to protect and extend the lifespan of CCDC's assets, while improving the functionality of the property and ensuring a safe environment for all users.

Construction Manager/General Contractor (CM/GC):

In March 2025, CCDC completed its RFQ process for a Construction Manager/General Contractor (CM/GC). An evaluation panel reviewed proposals received from the on-call roster of prequalified CM/GC's and selected Andersen Construction Company of Idaho, LLC ("Andersen") as the CM/GC for the project. The Agency entered into Agreement with Andersen in May 2025 for preconstruction services. Since then, Andersen has been collaborating closely with the project's Design Professional of Record, Cushing Terrell, by providing valuable cost estimating and constructability guidance for both the elevator modernization and the stair tower enclosure scopes of work.

Amendment 1:

On October 7, 2025, Andersen issued an invitation to bid to qualified contractors for the elevator modernization and heating ventilation and air-conditioning ("HVAC") early procurement and installation packages. Public procurement procedures were followed throughout the bid process in accordance with Idaho Code 54-4511 and Agency staff were present at the bid opening. This early procurement package allows the Agency to order the elevator equipment, utilize the expertise of the selected elevator company to inform additional electrical modifications that may be required and perform the modernization work. The elevator equipment is anticipated to be delivered within 22 weeks from the time of approved submittals, with modernization work starting in summer 2026.

Amendment No. 1 to the CM/GC agreement with Andersen approves GMP 1 in the amount of \$943,525 for the procurement and installation of elevator equipment and HVAC materials. Interim maintenance and the guaranteed one-year warranty maintenance are also included.

GMP 1 excludes specific scope items as noted in Section 2 of Exhibit A. Andersen will coordinate and negotiate these scope items with the selected elevator company, and the Agency will seek Board approval to execute a subsequent amendment for the remaining construction costs and project requirements necessary to support execution of the elevator modernization. The Agency will also seek Board approval for a future amendment associated with the stair tower enclosure scope of work.

Fiscal Notes:

The FY2026 approved budget has adequate funds available for Amendment No 1.

Staff Recommendation:

Adopt Resolution 1954 authorizing the execution of Amendment No. 1 to the CM/GC Contract with Andersen Construction Company of Idaho, LLC for the 9th & Front ParkBOI Parking Garage Stair Tower Enclosure and Elevator Modernization Project.

Suggested Motion:

I move to adopt Resolution 1954 authorizing the execution of Amendment No. 1 to the CM/GC Contract with Andersen Construction Company of Idaho, LLC for the 9th & Front ParkBOI Parking Garage Stair Tower Enclosure and Elevator Modernization Project.

RESOLUTION NO. 1954

BY THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO:

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO, APPROVING AMENDMENT NO. 1 TO THE CONSTRUCTION MANAGER / GENERAL CONTRACTOR (CM/GC) AGREEMENT BETWEEN THE AGENCY AND ANDERSEN CONSTRUCTION COMPANY OF IDAHO LLC FOR THE 9TH & FRONT STAIR TOWER ENCLOSURE AND ELEVATOR MODERNIZATION PROJECT; AUTHORIZING THE AGENCY'S EXECUTIVE DIRECTOR TO EXECUTE AMENDMENT NO. 1 TO THE AGREEMENT; AUTHORIZING THE EXPENDITURE OF FUNDS INCLUDING A CONTINGENCY FOR UNFORSEEN CIRCUMSTANCES; AND PROVIDING AN EFFECTIVE DATE.

THIS RESOLUTION is made on the date hereinafter set forth by the Urban Renewal Agency of Boise City, Idaho, an independent public body, corporate and politic, authorized under the authority of the Idaho Urban Renewal Law of 1965, as amended, Chapter 20, Title 50, Idaho Code, and the Local Economic Development Act, as amended and supplemented, Chapter 29, Title 50, Idaho Code (collectively the "Act"), as a duly created and functioning urban renewal agency for Boise City, Idaho (hereinafter referred to as the "Agency").

WHEREAS, the Agency is empowered by the Act, among other things, to construct off-street parking facilities, to finance the construction, operation, and maintenance of such facilities, and to enter into agreements necessary or convenient to the exercise of such powers; and,

WHEREAS, the Act and the Downtown Urban Renewal Plans provide for the Agency to retain and engage technical experts, professional services, and planning services; and,

WHEREAS, the Agency complies with various provisions of the Idaho Code as may be applicable to the Agency for the selection of services; and,

WHEREAS, as a matter of fairness and transparency, the Agency has, by policy, provided for certain competitive selection processes for professional consulting and planning services retained by the Agency; and,

WHEREAS, the Agency owns, maintains, and operates the ParkBOI public parking system which includes six (6) public parking garages, in part as a significant investment in implementing the Downtown Urban Renewal Plans and providing for economic growth in downtown Boise; and,

WHEREAS, the Agency intends to make improvements to its 9th & Front Garage including the modernization of three (3) elevators and enclosure of each stair tower; and,

WHEREAS, in order to ensure the parking structure remains fully operational during construction of the improvements, the Agency determined that the best approach for construction of the improvements was to hire a Construction Manager/General Contractor ("CM/GC"); and,

WHEREAS, on July 16, 2024, following a Request for Qualifications process in accordance with Idaho Code § 67-2320 and upon approval of Resolution 1886 by its Board of Commissioners, the Agency established a roster of prequalified Construction Manager/General Contractors ("CM/GC"); and,

WHEREAS, in February 2025 the Agency issued a Request for Qualifications ("RFQ") for CM/GC services for the 9th & Front Elevator Modernization and Stair Tower Enclosure Project (the "Project") to each of its five (5) prequalified CM/GC firms, in accordance with Idaho Code § 67-2320(2); and,

WHEREAS, the Agency received proposals from each of the prequalified CM/GC firms and thereafter reviewed and ranked the proposals in accordance with the criteria and procedures set forth in the RFQ; and,

WHEREAS, the Agency selected Andersen Construction of Idaho LLC as the best qualified and highest ranked proposer to provide the necessary CM/GC services for the Project; and,

WHEREAS, on May 13, 2025, the Agency entered into a CM/GC Agreement with Andersen Construction Company of Idaho LLC for the Project; and,

WHEREAS, the CM/GC construction delivery method contemplates that the construction agreement should be amended from time to time as the construction project moves forward so that the parties to the agreement can best address construction complexities and pertinent financial details including procurement of long lead-time materials and buy-out of subcontracts; and,

WHEREAS, the Agency and Andersen Construction Company of Idaho LLC desire to amend the CM/GC Agreement at this time with the execution of Amendment No. 1, attached hereto as Exhibit A, in order to allow for early procurement of elevator and heating, ventilation, and air conditioning (HVAC) equipment and materials as long lead-time materials for the project, and installation costs in the amount of \$943,525; and,

WHEREAS, the Agency Board of Commissioners finds it to be in the best public interest to approve Amendment No. 1 and to authorize the Agency's Executive Director to execute same.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE BOARD OF COMMISSIONERS OF THE URBAN RENEWAL AGENCY OF BOISE CITY, IDAHO, AS FOLLOWS:

Section 1: That the above statements are true and correct.

Section 2: That Amendment No. 1 to the Construction Manager / General Contractor construction agreement between the Agency and Andersen Construction Company of Idaho LLC, attached hereto as Exhibit A and incorporated herein by reference, is approved as to both form and content.

Section 3: That the Agency Executive Director is hereby authorized to execute Amendment No. 1 to the Construction Manager / General Contractor construction agreement with

Andersen Construction Company of Idaho LLC, for procurement of elevator and HVAC equipment, materials, and installation costs, in the amount of NINE HUNDRED FORTY-THREE THOUSAND FIVE HUNDRED TWENTY-FIVE DOLLARS (\$943,525).

Section 4: That this Resolution shall be in full force and effect immediately upon its adoption and approval.

PASSED AND ADOPTED by the Urban Renewal Agency of Boise City, Idaho, on January 12, 2026. Signed by the Chair of the Agency Board of Commissioners and attested by the Secretary to the Agency Board of Commissioners on January 12, 2026.

URBAN RENEWAL AGENCY OF BOISE CITY

By: _____
Latonia Haney Keith, Chair

ATTEST:

By: _____
Lauren McLean, Secretary

**AMENDMENT NO. 1 TO THE
STANDARD AGREEMENT AND GENERAL CONDITIONS
BETWEEN OWNER AND CONSTRUCTION MANAGER
(WHERE THE CM IS AT-RISK)**

DATED _____, 2026

Pursuant to Section 3.4 of the Agreement dated May 13, 2025, between the Owner, Capital City Development Corporation, and the Construction Manager, Andersen Construction Company of Idaho, LLC for the 9th & Front Stair Tower Enclosure and Elevator Modernization Project located in downtown Boise, the Owner and the Contractor desire to establish a Guaranteed Maximum Price (the "GMP") for the portion of Work to include elevator modernization and heating, ventilation, and air conditioning ("HVAC") equipment and installation. The Owner and the Contractor hereby agree as follows:

ARTICLE 1 GUARANTEED MAXIMUM PRICE

The Contractor's GMP for the Work, including the Cost of the Work as defined in Article 8 and the Contractor's Fee as set forth in Section 7.3 is NINE HUNDRED FORTY-THREE THOUSAND FIVE HUNDRED TWENTY-FIVE DOLLARS (\$943,525).

The GMP is for the performance of the portion of Work in accordance with the exhibits listed below, which are a part of this Agreement.

- EXHIBIT A: Assumptions and Clarifications; Schedule; and Scope of Work (Division 14 and Division 23) (4 pages)
- EXHIBIT B: GMP Summary (1 page)
- EXHIBIT C: Project Manual by Cushing Terrell dated 10-6-2025 (200 pages)
- EXHIBIT D: Drawings by Cushing Terrell dated 10-25-2025 (13 pages)

ARTICLE 2 DATE OF SUBSTANTIAL COMPLETION

Anticipated delivery of Division 14 elevator modernization equipment is twenty-two (22) weeks from approved submittals.

Anticipated delivery of Division 23 HVAC equipment is ten (10) weeks from approved submittals.

ARTICLE 3 DATE OF FINAL COMPLETION

The Date of Final Completion of the Work will be defined in a future GMP amendment.

[End of Amendment No. 1 | *Signatures appear on the following page.*]

IN WITNESS WHEREOF, OWNER AND CONSTRUCTION MANAGER have executed this Agreement with an effective date as first written above.

OWNER: Capital City Development Corporation

BY: _____
John Brunelle, Executive Director

Date: _____

Approved as to Form:

Mary Watson, General Counsel

CONSTRUCTION MANAGER: Andersen Construction Company of Idaho LLC

BY: **Matt Blandford** _____
Matt Blandford, President

Digitally signed by Matt Blandford
DN: cn=US, email=m.blandford@andersen-const.com,
c=Andersen Construction, ou=Andersen
Construction of Idaho, cn=Matt Blandford
Date: 2026.01.07 08:02:25-0700

Date: _____

END OF DOCUMENT

Budget Info / For Office Use	
Fund/District	401
Account	6250
Activity Code	25016
PO #	250061
GMP 1 Completion	February 2027

EXHIBIT A

ASSUMPTIONS AND CLARIFICATIONS; SCHEDULE; AND SCOPE OF WORK
(Division 14 and Division 23)
(3 pages)



EXHIBIT A Amendment 1

12/23/2025

Assumptions and Clarifications

Division 14 Elevators and Division 23 HVAC

- 1) Documents** The following documents define the scope of work exclusively as they apply to Division 14 Elevators and Division 23 HVAC, all other scopes shown in these documents are excluded in this GMP:
 - i. 9th and Front ParkBOI Parking Garage Elevator Modernization drawings by Cushing Terrell dated 25.10.06
 - ii. 9th and Front ParkBOI Parking Garage Elevator Modernization Project Manual by Cushing Terrell dated 25.10.06
 - iii. Addendum No 1 issued 25.10.15
 - iv. Addendum No 2 issued 25.11.03
- 2) Excluded** from this GMP amendment and subject to future amendment are:
 - i. All general conditions and general requirements (e.g. supervision, project management, trailers, utilities, sanitation, safety, except as required to review submittals, and otherwise contract for specified scopes.
 - ii. All items not shown on the documents list.
 - iii. All hoisting, rigging, lifting, or material handling (temporary elevators, cranes, forklifts, etc.),
 - iv. All scaffolding, swing stages, personnel lifts, or access equipment
 - v. All temporary protection, barricades, dust partitions, or temporary enclosures
 - vi. All permits, other than trade related,
 - vii. All testing, balancing, commissioning, or start-up performed by parties other than the subcontractor's own forces
 - viii. All patching, firestopping, core drilling, or infill performed by others
 - ix. All cutting, coring, or demolition performed by others
 - x. All temporary heat, temporary power, or temporary lighting
 - xi. All overtime or acceleration costs unless separately authorized in writing
 - xii. All "work by others" as noted in Project Manual and drawings.
 - xiii. Project schedule (except as noted below) date of substantial completion subject to future amendment.
 - xiv. Long-term elevator maintenance services following expiration of the Contractors 1-year warranty period.
 - xv. Builder's Risk is excluded at owner's request for GMP 1.

BUILDER OF CHOICE



EXHIBIT A Amendment 1

12/23/2025

- a. Construction Manager will carry necessary insurance to cover equipment/supplies store on-site prior to full GMP.

3) Schedule

- i. Schedule dates listed are estimated at time of Amendment 1. No substantial completion date, turn-over dates, or final completion dates are forecasted by this amendment.
- ii. Baseline schedule by Div 14 subcontractor is as follows:
 - a. 6-8 weeks From Contract Execution for survey and submittals
 - b. 20-22 weeks from approved submittals to delivery
 - c. 10-11 weeks per unit for installation
 - d. Summarized as between 56 and 63 weeks of construction from date of contract execution.
- iii. Baseline schedule for delivery of DIV 23 equipment is 10 weeks from approved submittals

4) Scope of Work Division 14 Elevators

- i. Per specifications and drawings designated above unless otherwise noted, summarized as:
 - a. "Turnkey" modernization of three (3) 3,000 lbs. capacity traction passenger elevators operating at 350fpm.
 - b. Replacement refurbishment of existing machinery, gear and controls as noted in specifications
 - c. Rust remediation and painting of associated parts typical to elevator subcontractors
 - d. Survey and advise on existing conditions to determine applicability and detailed scope for related scopes of work.
 - e. Interim maintenance on existing units
 - i. DIV 14 subcontractor will begin maintenance of all existing units and their operating equipment 60 days before scheduled start of refurbishment of the first unit under this agreement.
 - ii. Interim maintenance will continue for each unit remaining in service until the Guarantee maintenance period begins on each unit as noted below.
 - iii. Interim maintenance is \$350 per unit per month anticipated duration of service:
 - 1. 3 Units 60 days before renovation start unit 1 – 3units X \$350 X 2 months = \$2,100
 - 2. 2 Units X \$350 X 3 months =\$2,100
 - 3. Summarized as \$4,200.
- f. Guarantee maintenance on units upon certification for operation by the State of Idaho

BUILDER OF CHOICE



EXHIBIT A Amendment 1

12/23/2025

- i. Phased certification to allow completed units to be put in use by the public while others are installed.
- ii. Units 1&2 will carry the same certification date,
- iii. Unit 3 will carry its own certification date
- g. Future Scope of Work for Maintenance of Elevators – Full Coverage Contract and Specifications. Cost is not included in GMP 1 and may be contracted between Elevator Contractor and Owner upon conclusion of one-year warranty period.

5) Scope of Work Division 23 HVAC

- i. Per specifications and drawings designated above unless otherwise noted and summarized as:
 - a. Provide and install HVAC equipment.
 - b. Coordinate work with other trades

BUILDER OF CHOICE

12552 W EXECUTIVE DR. ■ BOISE, ID 83713 P (208) 275-8905 F (208) 275-8907
STATE LICENSES: ID RCE-46190 ■ OR 218301 ■ WA ANDERCC822WW
ANDERSEN-CONST.COM

EXHIBIT B
GMP SUMMARY
(1 page)



9th & Front Stair Tower Enclosure and Elevator
Modernization

Date EXHIBIT B GMP SUMMARY

Description			Total
Subcost	Elevator Contract: Metro Elevator to provide and install Div 14 per drawings and specifications, and as noted Exhibit A	\$	789,200
Subcost	HVAC Contract: American Chiller Services to provide and install Div 23 per drawings and specifications, and as noted in Exhibit A	\$	31,572
GCs/GRs	GC's/GRs excluded in this amendment subject to future amendment	\$	-
COW			820,772
Liability Insurance 1.1% on COW			9,028
Contingency 5% on COW			41,039
Fee 8% of COW			65,662
Subtotal			936,501
Payment & Performance Bond .75% on total cost			7,024
Total GMP 1			\$ 943,525

EXHIBIT C

PROJECT MANUAL BY CUSHING TERRELL DATED OCTOBER 6, 2025

(200 pages)



Cushing
Terrell®

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10.06.2025

Capital City Development Corp. (CCDC)
9th and Front ParkBOI Parking Garage
ELEVATOR MODERNIZATION

Volume **1** of 1 | Divisions 1-23

OWNER:



Capital City Development Corp. (CCDC)
121 North 9th Street, Suite 501
Boise, ID 83702
208.384.4264
Contact: Kassi Brown

GARAGE OPERATOR:



ParkBOI
702 W Idaho St.
Suite 400
Boise, ID 83702
208.368.7944

ARCHITECT / ENGINEER:

Cushing Terrell
800 Main Street, Suite 800
Boise, ID 83702
208.577.5674
Contact: Joshua Gregoire

ELEVATOR CONSULTANT:

VDA, Inc.
50 West Broadway, Suite 300
Salt Lake City, UT 8401
702.449.4351
Contact: Jeffrey Sanders

CM / CONTRACTOR:

Andersen Construction
12552 Executive Drive
Boise, ID 83713
208.275.8905
Contact: Travis Sanford

SECTION 01 10 00 – SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Definitions.
 - 4. Access to site.
 - 5. Coordination with occupants & other parties affected by construction.
 - 6. Work restrictions.
 - 7. Construction Schedule.
 - 8. Specification & Drawing Conventions.
- C. Related Requirements:
 - 1. Section 01 50 00 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

- A. Project Identification: 9th and Front ParkBOI Parking Garage – Elevator Modernization ("Project")
 - 1. Project Location:

9th and Front ParkBOI Garage, 312 S. 9th Street, Boise Idaho. 83702
- B. Owner: Capital City Development Corporation (CCDC).
 - 1. Kassi Brown, Project Manager
Telephone: 208-391-7289 kbrown@ccdcb Boise.com
- C. Project Architect: Cushing Terrell
 - 1. Joshua Gregoire, AIA joshuagregoire@cushingterrell.com
Telephone: 208-577-5674
- D. Elevator Design Consultant: VDA, Inc
 - 1. Jeffrey Sanders, Associate
Telephone: 702-449-4351 jsanders@vdassoc.com

- E. Construction Manager / General Contractor: Andersen Construction
 - 1. Travis Sanford, Project Manager tsanford@andersen-const.com
Telephone: 208-871-3595
- F. Parking Operator: ParkBOI.
 - 1. Contact: Eric Selekof, General Manager.
Telephone: 208-368-7944, Ext 419,

1.3 WORK COVERED BY CONTRACT DOCUMENTS (PROJECT SCOPE OR WORK)

- A. The Project Scope or Work is defined by the Contract Documents and is summarized below:

This project involves the modernization of the (3) elevators in the East and West Stairway Tower of the 9th and Front Parking Garage Stairway towers. The East Stair Tower is a duplex elevator system. The West Stairway Tower is a simplex system. Each Tower has 8 stops. Scope includes replacing call buttons, control panels, notification devices, sensors, door tracks, door operators, interiors of each elevator cab, replacing elevator control systems, replacing all elevator lift equipment (motors, governors, etc) in the Elevator Equipment room and all associated electrical equipment. Scope also includes HVAC equipment in each Elevator Equipment Room. All as outlined on plans and in project specifications. The existing Freight Elevator in the West Tower is an independent system and not part of this project.

- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.4 DEFINITIONS

- A. Substantial Completion: Point in execution of Contract in which the Contractor believes scope of work is complete and Project Architect has reviewed the Work and provided written approval to the Contractor. Refer to Division 01 Section 01 77 00 "Closeout Procedures" for Substantial Completion procedures.
 - 1. The Contractor shall substantially complete the Work within Four Hundred and Seventeen Days (417) days from the Date of Commencement.

1.5 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated by the following requirements.

B. Use of Site: Limit use of Project site to work in areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Limits: Confine construction operations to Work Areas as shown on Drawings.

2. Driveways, Entrances and Adjacent Sidewalks: Keep Garage driveways, entrances, stairwells, landings, doorways, parking areas, parking drives, and adjacent sidewalks serving premises clear and available to access at all times. Do not use these areas for parking or storage of materials.

a. Schedule deliveries to minimize use of driveways and entrances by construction operations.

b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

3. Storage outside Work Area: May be permitted in available areas in coordination with and approval by the Parking Operator. Storage area shall not interfere with Owner's operations. Limits of storage area shall be marked by fencing, barricades or similar method. Contractor accepts responsibility for the security of any materials or equipment kept in Contractor's storage areas as part of Contract.

C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.6 COORDINATION WITH OCCUPANTS & OTHER PARTIES AFFECTED BY CONSTRUCTION

A. Partial Owner Occupancy: Owner will occupy the premises during the entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.

1. Garage Operations

a. Garage is open 24 hours per day, 7 days per week.

b. The Garage is integrated with the Aspen Condos and utilized by residents and visitors.

2. Temporary Closures:

a. At all times, the Garage shall be open to vehicular and pedestrian traffic, parking customers, and the general public on all levels of the Garage, except as otherwise provided in this Section.

b. Institute temporary closures to protect safety of parking customers, motorists, pedestrians the general public from construction activity and to

- protect the Work from damage in coordination with the Parking Operator approval.
 - c. Partial Closures: Maintain one-way traffic route through all levels at all times so vehicular traffic can travel from street level entrances/exits to all levels and vice versa.
 - d. Notice of Closures: Submit list of proposed closures and method of implementing closures to Parking Operator and Owner's Representative one week prior to Contractor's need for closures. Parking Operator shall indicate its approval or request revisions within two (2) business days of receipt of list.
 - e. Provide contact information for the point person which can be given to the general public.
 - f. Attend meetings with the Owner, Project Architect, Parking Operator and Other Parties Affected by Construction to address community relations issues as needed.
3. Traffic Management Plan:
- a. Initial Plan: Submit a plan to Owner and Parking Operator for how traffic will be managed during construction operations prior to or at the preconstruction meeting. Obtain approval from Owner and Parking Operator for the traffic management plan prior to commencement of the Work.
 - b. Weekly Updates: Provide Parking Operator with a schedule of work to be performed in each upcoming week no later than Wednesday of the preceding week. Include in the schedule any requests for the following items in the upcoming week.
 - 1) Temporary closures of parking stalls. Maximum of (2) vehicle stalls for contractor parking & (2) maximum for storage of materials.
 - c. Coordinate with and obtain approval from CCDC and Parking Operator prior to implementing any temporary closures and/or re-routing of drive aisles.
4. Traffic Safety: Provide directional and warning signage, cones or other markers delineating drive aisle locations and widths, and/or flaggers as needed to assure safe movement of vehicles through the Work Areas. Contractor shall assume responsibility for traffic safety of motorists and pedestrians within Work Areas and in any location where the Contractor implements changes to the normal vehicular flow in the Garage. Owner and Parking Operator reserve the right to evaluate if Contractor's traffic control measures are adequate once these measures are in operation and to request additional or alternative traffic controls to maintain public safety in the Garage.
5. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
6. Provide no fewer than three (3) business days' notice to Owner of activities that will affect Owner's operations.

B. Contractor Responsibilities for Community Relations:

1. Prior to commencement of construction, participate with Owner in development of a communication and community relations plan and problem-solving approach for resolving day-to-day issues, concerns and complaints raised by parking customers, nearby businesses and their customers, Aspen Condos personnel, condominium residents, and the general public who may be affected by construction activities during the construction period ("Other Parties Affected by Construction"). Contractor shall:
 - a. Assume responsibility for communicating the importance of maintaining good community relations during the Project to employees, subcontractors, and other construction personnel.
 - b. Enlist employees, subcontractors and other construction personnel in implementing the community relations plan.
 - c. Identify a point person employed by the Contractor who will represent the Contractor in taking calls from and meeting with Other Parties Affected by Construction.
 - d. Provide contact information for the point person which can be given to the general public.
 - e. Attend meetings with the Owner, Project Architect, Parking Operator and Other Parties Affected by Construction to address community relations issues as needed.

- C. Owner and Parking Operator as Liaison: Owner and Parking Operator will act as liaison between Contractor, condominium owners, Aspen Lofts, and monthly parkers regarding temporary closures of the stairwell.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and sidewalks and with other requirements of authorities having jurisdiction.

- B. On-Site Work Hours:

1. Work such as saw-cutting which creates noticeable noise levels for Other Parties Affected by Construction shall be limited to the hours between 7:00 am and 8:00 pm Monday-Friday. Contractor will coordinate with Owner and Parking Operator prior to commencement.
2. All other work on unrestricted days shall be limited to the hours between 7:00 am and 8:00 pm. Unless prior approved by Owner and Parking Operator

- C. Restricted Days: Special events may arise during the construction period that will create work restrictions. Owner and Contractor will coordinate any work restrictions at that time.

- D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others.

- E. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruptions to Owner's operations. Notify Project Architect and the appropriate parties not fewer than two (2) business days in advance of proposed disruptive operations.
- F. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air intakes.
- G. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.8 CONSTRUCTION SCHEDULE

- A. Contractor shall submit a tentative Construction Schedule including all activities, locations, and dates to Project Architect at or before the Preconstruction Meeting. Submit a detailed Construction Schedule for Project Architect's review and approval prior to commencement of Work.
- B. Contractor shall not begin any work until receipt of a written Notice to Proceed. Contractor shall diligently maintain progress and complete the work by the required Substantial and Final Completion dates.
- C. Construction Schedule shall provide for a minimum of disruption to adjacent residents and businesses.
- D. Contractor shall update the Construction Schedule as the Work progresses and provide a copy of schedule revisions to the Project Architect as they occur. At a minimum, Contractor shall provide an updated schedule no later than the first business day of each month. Schedule revisions which would affect Contractor's ability to complete the Work by the established Substantial Completion or Final Completion date require Project Architect and Owner approval through issuance of an approved Change Order.

1.9 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: Specifications in this Project Manual use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements shall be performed by the Contractor unless specifically stated otherwise.
- B. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail on the Drawings. One or more of the following are used on the Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
- C. Division 01: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 10 00

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Related Requirements:
 - 1. Section 01 60 00 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling requests for substitutions made after award of the Contract.

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions:
 - 1. Substitutions requested during the bidding period, and accepted by Addendum prior to award of the Contract, are included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.
 - 2. Revisions to the Contract Documents requested by the Owner or Project Architect.
 - 3. Specified options of products and construction methods included in the Contract Documents.
 - 4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

1.4 ACTION SUBMITTALS

- A. Substitution Requests: The Owner and/or the Project Architect will consider requests for substitution if received within fifteen (15) days after commencement of the Work. Requests received more than fifteen (15) days after commencement of the Work may be considered or rejected at the discretion of the Owner and/or Project Architect.

1. Submit 3 copies of each request for substitution for consideration. Submit requests according to procedures required for change-order proposals.
2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
 - a. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate contractors, that will be necessary to accommodate the proposed substitution.
 - b. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include elements, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - c. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - d. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
 - g. Cost information, including a proposal of the net change, if any in the Contract Sum.
 - h. The Contractor's certification that the proposed substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
 - i. The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
4. The Owner and/or Project Architect's Action: If necessary, the Owner and/or Project Architect will request additional information or documentation for evaluation within one week of receipt of a request for substitution. The Owner and/or Project Architect will notify the Contractor of acceptance or rejection of the substitution within 15 days of receipt of the request, or within seven days of receipt of additional information or documentation, whichever is later.
 - a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 SUBSTITUTIONS

- A. Conditions: The Owner and/or Project Architect will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Owner and/or Project Architect. If the following conditions are not satisfied, the Owner and/or Project Architect will return the requests without action except to record noncompliance with these requirements.
1. Extensive revisions to the Contract Documents are not required.
 2. Proposed changes are in keeping with the general intent of the Contract Documents.
 3. The request is timely, fully documented, and properly submitted.
 4. The request is directly related to an "or-equal" clause or similar language in the Contract Documents.
 5. The requested substitution offers the Owner a substantial advantage, in cost, time, energy conservation, or other considerations, after deducting additional responsibilities the Owner must assume. The Owner's additional responsibilities may include compensation to the Project Architect for redesign and evaluation services, increased cost of other construction by the Owner, and similar considerations.
 6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
 7. The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.
 8. The specified product or method of construction cannot be coordinated with other materials and where the Contractor certifies that the proposed substitution can be coordinated.
 9. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.
- B. The Contractor's submittal and the Owner and/or Project Architect's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 25 00

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.

1.3 MINOR CHANGES IN THE WORK

- A. Owner or Project Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710.

1.4 CHANGE ORDER PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Owner or Project Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal requests issued by Owner or Project Architect are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.
 - 2. Within five (5) days of receipt of a proposal request, submit an estimate of cost necessary to execute the change to the Owner or Project Architect for the Owner's review.
 - a. Include a list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change on the Contract Time, including, but not limited to,

changes in activity duration, start and finish times, and activity relationship.
Use available total float before requesting an extension of the Contract Time.

- B. Contractor-Initiated Proposals: When latent or unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Owner.
 - 1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time. Include subcontractor quotes and other line item costs provided by CM/GC.
 - 2. Include costs of labor and supervision directly attributable to the change.
 - 3. Include an updated Contractor's construction schedule that indicates the effect of the change on the Contract Time, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 4. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Work Change Directive: When the Owner and the Contractor disagree on the terms of a Proposal Request, the Owner and Project Architect may issue a Work Change Directive. A Work Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Work Change Directive contains a complete description of change in the Work. It also designates the method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.6 CHANGE ORDER PROCEDURES

- A. Upon the Owner's approval of a Proposal Request, the Owner or Project Architect will issue a Change Order for signatures.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. General Coordination Procedures
 - 2. Requests for Information (RFI's)
 - 3. Project Meetings

1.3 DEFINITIONS

- A. RFI: Request from Owner, Project Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract list: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.5 GENERAL COORDINATION PROCEDURES.

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation, connection and operation of each part of the Work.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.

2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to:
1. Preparation of Contractor's Construction Schedule.
 2. Preparation of the Schedule of Values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress Meetings
 6. Project closeout activities.

1.6 REQUESTS FOR INFORMATION (RFIs).

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI to the Project Architect in the format specified.
1. Use the RFI Form provided in the Project Manual or an alternative form acceptable to the Project Architect; follow the format and submit complete information as indicated on the provided form.
 2. Project Architect will return RFIs submitted to Project Architect by other entities controlled by Contractor with no response.
 3. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.
- B. Project Architect's Action: Project Architect will review each RFI, determine action required, and respond. Allow 48 hours (weekends and federal holidays omitted) for Project Architect's response for each RFI.
1. Project Architect's action may include a request for additional information, in which case Project Architect's time for response will date from time of receipt of additional information.
 2. Project Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Contract Modification Procedures.
 - a. If Contractor believes the Project Architect's RFI response warrants a change in the Contract Time or the Contract Sum, notify Project Architect in writing within 48 hours (weekends and federal holidays omitted) of receipt of the RFI response.

1.7 PROJECT MEETINGS

A. General: Conduct progress meetings at regular intervals.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Project Architect of scheduled meeting dates and times.
2. Agenda: Prepare the meeting agenda; distribute to all invited attendees.
3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Project Architect, within three (3) business days of the meeting.

B. Preconstruction Meeting: Architect shall coordinate with Owner and schedule and conduct a Preconstruction Meeting to review responsibilities and personnel assignments at a time convenient to Contractor and Project Architect, but no later than seven (7) Days after execution of the Agreement and prior to start of construction.

1. Attendees: Authorized representatives of Owner, Project Architect, Parking Operator, Contractor, and Contractor's Project Manager; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to make decisions related to the Work.
2. Agenda: Discuss items of significance that could affect progress, including:
 - a. Responsibilities and personnel assignments
 - b. Tentative Construction Schedule
 - c. Construction phasing.
 - d. Critical work sequencing and long lead items.
 - e. Designation of key personnel and their duties.
 - f. Lines of communications.
 - g. Use of web-based Project software.
 - h. Distribution of the Contract Documents.
 - i. Access & Security Plan.
 - j. Communication and community relations strategy.
 - k. Procedures for RFIs.
 - l. Submittal procedures.
 - m. Procedures for processing field decisions and Change Orders.
 - n. Procedures for testing and inspecting.
 - o. Procedures for processing Applications for Payment.
 - p. Use of premises and existing building.
 - q. Owner's occupancy requirements.
 - r. Work restrictions (days and hours); events that may create restrictions.
 - s. Limits on use of elevators and stairwells.
 - t. Traffic controls and temporary closures (includes Procedures).
 - u. Parking availability.
 - v. Work and storage areas.
 - w. Equipment deliveries and priorities.
 - x. First aid.

- y. Progress cleaning.
- 3. Minutes: Contractor will record and distribute meeting minutes.
- C. Progress Meetings: Contractor shall conduct a weekly Progress Meeting with Project Architect and Owner's Representative each week during the construction period in order to coordinate construction activities and to identify and resolve issues arising during construction.
 - 1. Location: Progress Meetings are typically held in the field but may be held at Owner's offices if an office location is needed.
 - 2. Attendees: Contractor, Project Architect, Owner's Representative, and any subcontractors or subconsultants needed in attendance to better coordinate the work. Contractor shall be responsible for notifying subcontractors, and Project Architect shall be responsible for notifying subconsultants needed in attendance.
 - 3. Agenda: Items to be discussed not limited to the following:
 - a. Project Schedule.
 - b. Status of Work, including any specific field issues or questions.
 - c. Review present and future needs of Attendees, including:
 - 1) Interface requirements.
 - 2) Status of submittals.
 - 3) Deliveries.
 - 4) Site utilization and access.
 - 5) Quality and work standards.
 - 6) Status of correction of deficient items.
 - 7) Field observations.
 - 8) Testing results.
 - 9) Status of RFIs.
 - 10) Pending changes.
 - 4. Minutes: Contractor shall be responsible for preparing and distributing meeting minutes to Owner, Architect, and any subcontractors or subconsultants that have work assignments resulting from the meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Construction Schedule.
 - 2. Site condition reports.

1.3 INFORMATIONAL SUBMITTALS

- A. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period. After receipt of Contractor's initial schedule, Project Manager may approve the format or may request reasonable modifications to the format. Contractor shall revise the Construction Schedule format consistent with Project Manager's requested modifications and provide a revised Construction Schedule to Project Manager.
- B. Site Condition Reports: Submit at time of discovery of differing conditions.

1.4 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.
 - 2. Coordinate each construction activity in the Construction Schedule with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Time Frame: Extend schedule from date established for the Notice of Award to date of Final Completion. Submit Construction Schedule to Project Manager prior to or on the date established for the Preconstruction Meeting.
- B. Preparation and Level of Detail:
 - 1. Show process Contractor anticipates following for the duration of the Project such that Owner and Project Manager will have a general understanding of the sequence of construction, in order to facilitate communication with the parking customers, condominium residents, adjacent property owners (including hotel and its customers), businesses, tenants and other affected by construction.
 - 2. Utilize a Gantt-style chart or alternate format acceptable to the Project Manager to illustrate the sequencing and relationship between construction activities. Indicate each phase of construction and each significant construction activity within each phase separately. Identify first workday of each week with a continuous vertical line.
 - 3. Show anticipated dates for temporary closures if allowed by Section 01 10 00 "Summary".
 - 4. Include timing of required submittals and allow for time required to review and respond to submittals.
 - 5. Include timing of testing and inspections, and when the manufacturer's representative is required to be present.
 - 6. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Project Manager's administrative procedures necessary for Certificate of Substantial Completion.
 - 7. Punch List and Final Completion: Include time for the punch list process and not more than five (5) business days for completion of punch list items and final completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents, and show how the sequence of the Work is affected.
 - 1. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Owner occupancy of premises throughout entire construction period except Work Areas under construction.
 - e. Use of premises restrictions (see Section 01 10 00 "Summary").
 - f. Seasonal variations.
 - g. Environmental control.
 - 2. Work Stages: Indicate important stages of construction for each major portion of the Work.

2.2 REPORTS

- A. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information Form to Project Manager. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating:
 - 1. Update the Construction Schedule on a periodic basis to assure it is a fair representation of actual and projected construction progress, and whenever there is a change in the Construction Schedule due approval of a Construction Change Directive or Change Order.
 - 2. Revise Construction Schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated Construction Schedule concurrently with the report of each such meeting.
- B. Distribution: Distribute copies of approved Construction Schedule to Owner, Project Architect, subcontractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1. When revisions are made, distribute updated Construction Schedule to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including: Shop Drawings, Product Data, Samples, and other submittals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Project Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals." Submittals may be rejected for not complying with requirements.
- B. Informational Submittals: Written and graphic information and physical samples that do not require Project Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.

3. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Project Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Project Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 1. Initial Review: Allow forty-eight (48) hours for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required.
 2. Resubmittal Review: Allow forty-eight (48) hours for review of each resubmittal.
 3. No extension of Contract Time will be authorized because of failure to transmit submittals to the Project Architect sufficiently in advance of the Work to permit processing.
- D. Electronic Submittals: Owner and Project Architect require electronic submittals. Identify and incorporate information in each electronic submittal file as follows:
 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01).
 - b. Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Project Architect.
 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Contractor's Project Manager.
 - d. Name of firm or entity that prepared submittal.
 - e. Names of subcontractor, manufacturer, and supplier.
 - f. Category and type of submittal.
 - g. Submittal purpose and description.
 - h. Transmittal number.

- i. Transmittal index and navigation links to each specification section or drawing number for which a submittal is being made.
 - j. Location(s) where product is to be installed, as appropriate.
 - k. Related physical samples submitted directly.
 - l. Indication of full or partial submittal.
 - m. Other necessary identification.
 - n. Remarks.
- E. Options: Identify options requiring selection by Project Architect.
- F. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Project Architect's action stamp.
- G. Distribution: Furnish copies of final submittals to manufacturers' representatives, subcontractors, suppliers, fabricators, Installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- H. Use for Construction: Use only final action submittals that are marked with approval notation from Project Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Submit electronic submittals via email as PDF electronic files.
 - a. Each submittal shall have a shop drawing or Contractor's document stamp on the submittal prior to submittal to Project Architect. Contractor's document stamp shall indicate that Contractor reviewed the submittal and determined, to the best of Contractor's ability, the submittal is in general conformance with the Drawings and Specifications. Contractor's document stamp shall be signed and dated.
 - b. Project Architect will return annotated electronic file. Annotate and retain one copy of file as an electronic Project record document file.

2. Action Submittals: Submit via email as PDF electronic files. Project Architect will return annotated electronic file.
 3. Informational Submittals: Submit via email as PDF electronic files. Project Architect will not respond to informational submittals.
 4. Certificates and Certifications Submittals: Provide a digital signature on electronically submitted certificates and certifications where allowed. Provide a notarized statement on original paper copy certificates and certifications where indicated or where required by Project Architect or Owner.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Each submittal and/or product data shall have a shop drawing or Contractor's document stamp on the submittal prior to submittal to Project Architect. Contractor's document stamp shall indicate that Contractor reviewed the submittal and determined, to the best of Contractor's ability, the submittal is in general conformance with the Drawings and Specifications. Contractor's document stamp shall be signed and dated.
 4. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 5. Submit Product Data before or concurrent with Samples.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Specification Section number and reference.
 - b. Generic description of Sample.
 - c. Sample source.
 - d. Product name or name of manufacturer.

- e. Compliance with recognized standards.
 - f. Availability and delivery time.
- 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
- 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
- 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Project Architect will return submittal with options selected.
- 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit one set of Samples. Project Architect will retain Sample set.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three (3) sets of paired units that show approximate limits of variations.
- D. Application for Payment and Schedule of Values: Comply with requirements specified in Section 01 29 00 "Payment Procedures."
- E. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 77 00 "Closeout Procedures."

- F. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of Architects and owners, and other information specified.
- G. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- H. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- I. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- J. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- K. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- L. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- M. Schedule of Tests and Inspections: Comply with requirements specified in Section 014000 "Quality Requirements".
- N. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work under the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Project Architect.
- B. Project Closeout and Maintenance Material Submittals: Follow the requirements in Section 01 77 00 "Closeout Procedures."

- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 PROJECT ARCHITECT'S ACTION

- A. General: Project Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from the Project Architect.
- B. Action Submittals: Project Architect will review each submittal, make marks to indicate corrections or revisions required, and return promptly. Project Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate the action taken.
- C. Informational Submittals: Project Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Project Architect will forward each submittal which complies with requirements to appropriate party.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may be returned by the Project Architect without action.

END OF SECTION 01 33 00

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections, and related actions do not limit Contractor's other quality- assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner or authorities having jurisdiction are not limited by provisions of this Section.

1.2 DEFINITIONS

- A. Experienced: When used with an entity or individual, "experienced" unless otherwise further described means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- B. Field Quality-Control Tests: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- C. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- E. Product Tests: Tests and inspections that are performed by a nationally recognized testing laboratory (NRTL) according to 29 CFR 1910.7, by a testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program (NVLAP), or by a testing agency qualified to conduct product testing and acceptable

to authorities having jurisdiction, to establish product performance and compliance with specified requirements.

- F. Source Quality-Control Tests: Tests and inspections that are performed at the source; for example, plant, mill, factory, or shop.
- G. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- H. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- I. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by Architect.

1.3 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1.4 CONFLICTING REQUIREMENTS

- A. Conflicting Standards and Other Requirements: If compliance with two or more standards or requirements are specified and the standards or requirements establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for direction before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.5 ACTION SUBMITTALS

- A. Delegated-Design Services Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.

1.6 INFORMATIONAL SUBMITTALS

- A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility submitted to authorities having jurisdiction before starting work on the following systems:
 - 1. Seismic-force-resisting system, designated seismic system, or component listed in the Statement of Special Inspections.
 - 2. Main wind-force-resisting system or a wind-resisting component listed in the Statement of Special Inspections.
- B. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- C. Permits, Licenses, and Certificates: For Owner's record, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

1.7 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, telephone number, and email address of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspection.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and re-inspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
 - 1. Statement on condition of substrates and their acceptability for installation of product.

2. Statement that products at Project site comply with requirements.
 3. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 4. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 5. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
1. Statement that equipment complies with requirements.
 2. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 3. Other required items indicated in individual Specification Sections.

1.8 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, applying, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Project Architect: Licensed individual retained by Owner to provide and deliver the necessary landscape architecture, civil, structural, and electrical engineering design and surveying, prepare bidding and construction documents, submit plans and obtain plan approval from agencies having jurisdiction, perform construction administration and the responsibilities assigned to the Project Architect in the Contract Documents and act as Owner's Project Manager for the Project.

- G. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- H. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspection indicated, as documented according to ASTM E329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
- I. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- K. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

1.9 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspection they are engaged to perform.
 - 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.

1. Engage a qualified testing agency to perform quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 2. Notify testing agencies at least **24** hours in advance of time when Work that requires testing or inspection will be performed.
 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 4. Testing and inspection requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Determine the locations from which test samples will be taken and in which in-situ tests are conducted.
 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 6. Do not perform duties of Contractor.
- E. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 "Submittal Procedures."
- F. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- G. Associated Contractor Services: Cooperate with agencies and representatives

performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspection. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 6. Security and protection for samples and for testing and inspection equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.10 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner and as follows:
1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 6. Retesting and re-inspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.
 - 1. Submit log at Project closeout as part of Project Record Documents.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspection, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

SECTION 014200 – REFERENCES

PART 1 - GENERAL

~~1.1 RELATED DOCUMENTS~~

- ~~A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.~~

1.1 DEFINITIONS~~1.2 DEFINITIONS~~

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 ~~1.3~~ INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
 - B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
 - C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
- 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ~~1.4~~ ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities.
- C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities.
- D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities.
- E. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities.

PART 2 - PRODUCTS – Not Used

PART 3 - EXECUTION – Not Used

END OF SECTION 014200

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

1.3 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated in this Section.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Contractor shall be responsible to select appropriate materials and methods for the following temporary installations and for advising the Parking Operator of the materials and methods to be used prior to installation:
 - 1. Securing each Work Area such that the general public does not enter a Work Area during the duration of construction in that Work Area. Contractor is responsible for the safety of each Work Area and protection of the Work from damage.
 - 2. Delineating and securing temporary storage areas.
 - 3. Delineating drive aisles that have been relocated through Work Areas or otherwise in the Garage in a manner that assures safe movement of vehicles.
 - 4. Establishing temporary closures.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. Water Service: Contractor can connect to Owner's existing water service facilities. Water supply is available on the ground level of Owner's facility.
- B. Wastewater: Dispose of any wastewater from construction operations at an approved off-site location. Do not dispose of wastewater into Owner's sanitary sewer system, public storm drains, or tree wells. Disposal of wastewater into any storm sewer is strictly prohibited under Title 10, Chapter 6 of the Boise City Code. Contractor is responsible for proper off-site disposal in a legal manner of all wastewater generated by the Work and for any associated disposal fees.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Temporary toilets shall be secured when construction personnel are not present in the adjacent Work Area. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- D. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
 - 1. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
- E. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
 - 1. Provide dehumidification systems when required to reduce substrate moisture levels to level required to allow installation or application of finishes.

2. Provide ventilation of elevator vestibule and stairwells as required for installation of coating systems. Ventilation shall be adequate to confine vapors resulting from coating system application to Work Areas and prevent intrusion into occupied spaces and adjacent properties.
 3. Use dust partitions as necessary to prevent windblown debris from entering workspace and noxious fumes from entering public areas or occupied areas.
- F. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low or high temperatures. Select equipment that will not have a harmful effect on completed installations or elements being installed.
- G. Electric Power Service: Electric power from Owner's existing system may be used if outlets are readily available to Work Area without payment of use charges. Provide connections and extensions of services as required for construction operations. Maintain equipment in a condition acceptable to Owner. Electric extensions crossing pedestrian and vehicular traffic areas shall be protected and taped securely to avoid creating hazards. Parking Operator reserves the right to disallow the use of electrical extensions if deemed a safety hazard.
- H. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.3 SUPPORT FACILITIES INSTALLATION

- A. Parking: Owner will provide (2) parking spaces max for contractor parking and (2) spaces max for storage. (4) total spaces. at no charge to the Contractor. Contractor shall submit list of personnel working on the Project that will be authorized to use designated parking areas. Authorized construction personnel will be issued parking passes. Contractor shall coordinate with the Parking Operator on location of parking spaces and parking logistics. Contractor will return parking passes to the Parking Operator when construction is complete.
- B. Traffic Management: See Section 01 10 00 for requirements related to traffic management planning in the Garages when Work is being performed.
- C. Parking: Contractor shall coordinate with the Parking Operator on parking logistics.
- D. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
1. Identification Signs: Provide Project identification signs as indicated on Drawings.
 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.

3. Maintain and touch up signs so they are legible at all times.
4. Contractor must furnish all signage necessary to communicate with the public about closures, detours, etc. Signage must be created by a professional sign shop on durable, weather-resistant materials. Paper and hand-drawn signs are not permitted.

E. Waste Disposal Facilities:

1. Provide waste collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress and final cleaning requirements in Section 01 73 00.
2. Care shall be taken not to damage the building components outside the scope of this project during waste removal operations.
3. Remove trash, waste and construction debris from Project site and legally dispose of them in a legal and lawful manner. Comply with the requirements of authorities having jurisdiction. Owner advises that dumpsters located in Garage are not available for Contractor's use.

F. Existing Elevator: Elevator is not available.

G. Existing Stair Usage: Use of Owner's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore stairs to condition existing before initial use. If stairs become damaged from use by construction personnel, restore damaged areas so no evidence remains of correction work.

1. Do not damage handrails guardrails walls, ceiling, stair tread, landing surfaces, or other fixtures and surfaces in the stairwells.
2. Maintain normal stairwell operation and public access to stairs and stair landings in the Garage at all times.

H. Smoke Alarms: Protect existing smoke alarms from damage. A smoke alarm in an elevator lobby or on an elevator landing shall remain in operation when the elevator lobby is open for public use. A smoke alarm in an elevator lobby may be disabled when work is being performed in the lobby and/or the lobby is closed to public use. Coordinate disabling of smoke alarms with the Parking Operator.

I. Contractor shall be responsible for coordinating with stair tower enclosure work.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that

minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

- C. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Secure Work Areas to protect public safety and to prevent unauthorized entrance, vandalism, theft, and damage to the Work whenever construction personnel are absent from the Work Area. This includes providing temporary enclosure(s) around project storage areas within the parking garage. No storage of project materials is permitted in the garage without secured enclosures.
- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- E. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- F. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.
 - 1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
- G. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner and tenants from fumes and noise.
 - 1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
 - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 - 3. Provide walk-off mats at each entrance through temporary partition.
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
 - 1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Maintenance: Maintain facilities in good operating condition until removal.
- B. Termination and Removal: Remove each temporary facility when needed for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 1. Materials and facilities that constitute temporary facilities are property of Contractor.
 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 01 50 0

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 012500 "Substitution Procedures" for requests for substitutions.

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved by Architect through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Comparable Product Request Submittal: Submit request for consideration of each comparable product. Identify basis-of-design product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.

2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within **15** days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

- a. Form of Architect's Approval of Submittal: As specified in Section 013300 "Submittal Procedures."
- b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.

- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
 1. Store products to allow for inspection and measurement of quantity or counting of units.
 2. Store materials in a manner that will not endanger Project structure.
 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.

5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
6. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.

- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
3. See other Sections for specific content requirements and particular requirements for submitting special warranties.

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," Architect will make selection.
5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.

- B. Product Selection Procedures:

1. Sole Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.

- a. Sole manufacturer/source may be indicated by the phrase: "Subject to compliance with requirements, provide products by the following: ..."
2. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, which complies with requirements.
 - a. Non-limited list of products is indicated by the phrase: "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following: ..."
3. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, which complies with requirements.
 - a. Non-limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following: ..."
4. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - a. For approval of products by unnamed manufacturers, comply with requirements in Section 012500 "Substitution Procedures" for substitutions for convenience.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration of Comparable Products: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant product qualities include attributes such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
 2. Evidence that proposed product provides specified warranty.
 3. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 4. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 01 73 00 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction Layout
 - 2. Installation of the Work
 - 3. Cutting and patching
 - 4. Progress cleaning
 - 5. Protection of installed construction
- B. Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work

1.4 SUBMITTALS

- A. Cutting and Patching Proposal: Where approval of procedures for cutting and patching is required before proceeding, submit a proposal describing procedures well in advance of the time cutting and patching will be performed and request approval to proceed. Include the following information, as applicable, in the proposal:
 - 1. Describe the extent of cutting and patching required and how it is to be performed; indicate why it cannot be avoided.

2. Describe anticipated results in terms of changes to existing construction; include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
3. List products to be used and firms or entities that will perform Work.
4. Indicate dates when cutting and patching is to be performed.
5. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
6. Where cutting and patching involves addition of reinforcement to structural elements, submit details and engineering calculations to show how reinforcement is integrated with the original structure.
7. Approval by the Architect to proceed with cutting and patching does not waive the Architect's right to later require complete removal and replacement of a part of the Work found to be unsatisfactory.

1.5 QUALITY ASSURANCE

- A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.
1. Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements:
 - a. Foundation construction.
 - b. Bearing and retaining walls.
 - c. Structural concrete.
 - d. Structural steel.
 - e. Lintels.
 - f. Timber and primary wood framing
 - g. Structural decking.
 - h. Stair systems.
 - i. Miscellaneous structural metals.
 - j. Exterior curtain wall construction.
 - k. Equipment supports.
 - l. Piping, ductwork, vessels and equipment.
- B. Operational and Safety Limitations: Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance, or decreased operational life or safety.
1. Obtain approval of the cutting and patching proposal before cutting and patching the following operating elements or safety related systems:

- a. Shoring, bracing, and sheeting.
 - b. Primary operational systems and equipment.
 - c. Air or smoke barriers.
 - d. Water, moisture, or vapor barriers.
 - e. Membranes and flashings.
 - f. Fire protection systems.
 - g. Noise and vibration control elements and systems.
 - h. Control systems.
 - i. Communication systems.
 - j. Conveying systems.
 - k. Electrical wiring systems.
- C. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.
1. If possible retain the original installer or fabricator to cut and patch the following categories of exposed Work, or if it is not possible to engage the original installer or fabricator, engage another recognized experienced and specialized firm:
- a. Processed concrete finishes.
 - b. Stonework and stone masonry.
 - c. Ornamental metal.
 - d. Matched veneer woodwork.
 - e. Preformed metal panels.
 - f. Window wall system.
 - g. Stucco and ornamental plaster
 - h. Acoustical ceilings.
 - i. Terrazzo.
 - j. Finished wood flooring.
 - k. Fluid-applied flooring.
 - l. Carpeting.
 - m. Aggregate wall coating.
 - n. Wall covering.
 - o. Swimming pool finishes.
 - p. HVAC enclosures, cabinets, or covers.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirement specified in other Sections.
- B. In-Place Materials: Use materials that are identical to existing materials. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard

to visual effect. Use materials whose installed performance will equal or surpass that of existing materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before cutting existing surfaces, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.
 - 1. Before proceeding, meet at the site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine floors for suitable conditions where products and systems are to be installed.
 - 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - 1. Description of the Work.
 - 2. List of detrimental conditions, including substrates.
 - 3. List of unacceptable installation tolerances.
 - 4. Recommended corrections.
- D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information (RFI) to Project Architect. Temporary Support: Provide temporary support of Work to be cut.
- D. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.
- E. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- F. Take all precautions necessary to avoid cutting existing pipe, conduit or ductwork serving the building, but scheduled to be removed or relocated until provisions have been made to bypass them.

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Project Architect promptly.

3.4 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produces harmful noise levels.
- G. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

3.5 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 011000 "Summary."
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- G. Cutting: Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. Where possible review proposed procedures with the original installer; comply with the original installer's recommendations.
 - 1. In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill.
 - 4. Comply with requirements of applicable Sections of Division-2 where cutting and patching requires excavating and backfilling.
 - 5. By-pass utility services such as pipe or conduit, before cutting, where services are shown or required to be removed, relocated or abandoned. Cut-off pipe or conduit in walls or partitions to be removed. Cap, valve or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.
- H. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.

1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
2. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
3. Where removal of walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary to achieve uniform color and appearance.
 - a. Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken containing the patch, after the patched area has received primer and second coat.
4. Patch, repair or rehang existing ceilings as necessary to provide an even plane surface of uniform appearance.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and Work Areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
 4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 1. Remove liquid spills promptly.
 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire Work Area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not

recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

- E. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sanitary or storm sewers, tree wells, or into waterways.
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- H. Limiting Exposures: Supervise construction operations to assure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.8 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

END OF SECTION 01 73 00

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Composting, recycling, or reusing land clearing debris, rocks and excavated soils.
 - 2. Resue or Salvage nonhazardous demolition and construction waste.
 - 3. Recycling nonhazardous demolition and construction waste.
 - 4. Disposing of nonhazardous demolition and construction waste.

1.2 DEFINITIONS

- A. Construction Waste: Building, structure, and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building, structure, and site improvement materials resulting from demolition operations.
- C. Disposal: Removal of demolition or construction waste and subsequent salvage, sale, recycling, or deposit in landfill, incinerator acceptable to authorities having jurisdiction, or designated spoil areas on Owner's property.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition and construction waste becomes property of Contractor.

1.4 ACTION SUBMITTALS

- A. Building Site Waste Management Plan: Submit plan for review and approval prior 14 days of date established for the first inspection of the construction site. for the Notice to Proceed.
- B. Construction Material and Waste Management Plan: Submit plan for review and approval 14 days prior to date established for the first inspection of the construction site. for the Notice to Proceed.

1.5 INFORMATIONAL SUBMITTALS

- A. Building Site Waste Management Plan:
- B. Construction Material and Waste Management Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Use Form CWM-7 for construction waste and Form CWM-8 for demolition waste. Include the following information:
 - 1. Material category.
 - 2. Generation point of waste.
 - 3. Total quantity of waste in tons
 - 4. Quantity of waste salvaged, both estimated and actual in tons.
 - 5. Quantity of waste recycled, both estimated and actual in tons.
 - 6. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- C. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them.

1.6 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, or individual employed and assigned by General Contractor, with a record of successful waste management coordination of projects with similar requirements.
- B. Waste Management Conference(s): Conduct conference(s) at Project site to comply with requirements in Section 013100 "Project Management and Coordination." Review methods and procedures related to waste management including, but not limited to, the following:
 - 1. Review and discuss Building Site Waste Management Plan including responsibilities of each contractor and waste management coordinator.
 - 2. Review Construction Material and Waste Management Plan including responsibilities of each contractor and waste management coordinator.

1.7 CONSTRUCTION MATERIAL AND WASTE MANAGEMENT PLAN

- A. General: Develop and implement a Construction Material and Waste Management Plan according to requirements in this Section.
 - 1. The Construction Material and Waste Management Plan shall be developed and implemented to reuse, recycle, or salvage construction materials and waste.
 - 2. Demolition materials and waste shall include materials and waste from existing buildings or portions of existing buildings.
 - 3. Construction materials and waste shall include all materials delivered to the site and intended for installation prior to the issuance of the certificate of occupancy, including related packaging and delivery materials.
- B. The Construction Material and Waste Management Plan shall include the following:
 - 1. Identify the construction and demolition waste materials expected to be diverted from disposal in landfill by reuse, recycling, manufacturer's reclamation, or salvage for future use, donation, or sale.

PART 2 - EXECUTION

2.1 PLAN IMPLEMENTATION

- A. General: Implement approved Building Site Waste Management Plan and Construction Material and Waste Management Plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plans during the entire duration of the Contract.
 - 1. Comply with operation, termination, and removal requirements in Section 015000 "Temporary Facilities and Controls."
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of Building Site Waste Management Plan and Construction Material and Waste Management Plan. Coordinator shall be present at Project site full time for duration of Project.
- C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be composted, reused, salvaged, recycled, and disposed.
 - 2. Comply with Section 015000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

2.2 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:
 - 1. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
 - 2. Store items in a secure area until installation.
 - 3. Protect items from damage during transport and storage.
 - 4. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
- B. Salvaged Items for Sale and Donation: Not permitted on Project site.
- C. Salvaged Items for Owner's Use: Salvage items for Owner's use and handle as follows:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's storage area designated by Owner.
 - 5. Protect items from damage during transport and storage.
- D. Equipment: Protect equipment from exposure to weather.

2.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris.

2.4 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged or recycled, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

- B. Burning: Do not burn waste materials.

END OF SECTION 017419

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at final completion.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

1.4 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor shall comply with the procedures for Substantial and final completion set forth in this section, which apply when the contractor requests substantial completion and final completion inspections at the conclusion of the work on the project as a whole, unless the contractor exercises the option to request substantial and final completion occur by work phase, as described below.
 - 1. Contractor shall have the option to request the project Architect to inspect and certify attainment of substantial completion and final completion as work is concluded for each work phase identified in the contractor's phasing plan prior

to conclusion of the work on the project as a whole.

- B. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- C. Submittals Prior to Substantial Completion: Complete the following a minimum of **48 hours** prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
 - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.
 - 5. Submit testing, adjusting, and balancing records.
 - 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- D. Procedures Prior to Substantial Completion: Complete the following a minimum of **10** days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 3. Complete startup and testing of systems and equipment.
 - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. If applicable, submit demonstration and training video recordings specified in other Sections.
 - 6. Advise Owner of changeover in utility services.
 - 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 - 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 9. Complete final cleaning requirements.
 - 10. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- E. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of **48 hours** prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1.5 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Section 012900 "Payment Procedures."
 - 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
- C. Acknowledgement of Final Payment: Contractor shall execute an Acknowledgment of Final Payment form provided by Owner in Exchange for Final Payment.

1.6 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize list of spaces in sequential order, proceeding from lowest floor to highest floor.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

1.7 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated

portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.

- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
 - 1. Submit on digital media acceptable to Architect.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean elevators and stair treads, and elevator vestibule and stair towers to remove construction residue and debris, and foreign substances.
 - b. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - c. Remove labels that are not permanent

- d. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations, before requesting inspection for determination of Substantial Completion.
- B. Repair, or remove and replace, defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 - 4. Repair and restore existing building surfaces if damaged and/or defaced by construction activity whether inside or outside Project Site to match existing condition prior to commencement of construction.

END OF SECTION 01 77 00

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Emergency manuals.
 - 3. Operation manuals for systems, subsystems, and equipment.
 - 4. Product maintenance manuals.
 - 5. Systems and equipment maintenance manuals.
- B. Related Requirements:
 - 1. Section 013300 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.

1.2 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.3 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect will comment on whether content of operations and maintenance submittals are acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.

- a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
- b. Enable inserted reviewer comments on draft submittals.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
 1. List of documents.
 2. List of systems.
 3. List of equipment with equipment ID numbers.
 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized by specification sections. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents.

2.2 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 1. Title page.
 2. Table of contents.
 3. Manual contents.
- B. Title Page: Include the following information:
 1. Subject matter included in manual.
 2. Name and address of Project.
 3. Name and address of Owner.

4. Date of submittal.
 5. Name and contact information for Contractor.
 6. Name and contact information for Construction Manager.
 7. Name and contact information for Architect.
 8. Name and contact information for Commissioning Authority.
 9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
 10. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

2.3 OPERATION MANUALS

- A. Include the manufacturer's manual and the following:

1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
2. Wiring diagrams
3. Control diagrams.
4. Precautions against improper use.
5. License requirements including inspection and renewal dates.

B. Descriptions: Include the following:

1. Product name and model number. Use designations for products indicated on Contract Documents.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.

C. Operating Procedures: Include the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

2.5 PRODUCT MAINTENANCE MANUALS

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Product Information: Include the manufacturer's manual and the following information:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's manual and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Warranties and Bonds: Include copies of warranties and bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

- C. **Manufacturers' Maintenance Documentation:** Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.
- D. **Maintenance Procedures:** Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.
- E. **Maintenance and Service Schedules:** Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. **Scheduled Maintenance and Service:** Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. **Maintenance and Service Record:** Include manufacturers' forms for recording maintenance.
- F. **Spare Parts List and Source Information:** Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. **Maintenance Service Contracts:** Include copies of maintenance agreements with name and telephone number of service agent.

- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
1. Do not use original project record documents as part of operation and maintenance manuals.

2. Comply with requirements of newly prepared record Drawings in Section 017839
"Project Record Documents."

- G. Comply with Section 017700 "Closeout Procedures" for schedule for submitting
operation and maintenance documentation.

END OF SECTION 017823

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
 - 4. Miscellaneous record submittals
- B. Related Requirements
 - 1. Section 017300 "Execution" for final property survey.
 - 2. Section 017700 "Closeout Procedures" for general closeout procedures.
 - 3. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1. Submit PDF electronic files showing changes, clarifications, etc.
 - 2. Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1. Submit PDF electronic files of record drawings.
 - 2. Include each drawing, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit annotated PDF electronic files and directories of each submittal.
- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities.

- E. Submit PDF electronic files of all Occupancy Permits and building and utility inspection cards.
- F. Submit PDF electronic files of all training materials and attendee lists of Owner demonstration and training sessions.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations below first floor.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order or Construction Change Directive.
 - k. Changes made following Architect's written orders.
 - l. Details not on the original Contract Drawings.
 - m. Field records for variable and concealed conditions.
 - n. Record information on the Work that is shown only schematically.
 - 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.

5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Format: Annotated PDF electronic file.
 2. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
 3. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
 5. Note related Change Orders, record Product Data and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic file.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
3. Note related Change Orders, record Specifications, and record Drawings where applicable.

B. Format: Submit record Product Data as annotated PDF electronic file

1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

2.4 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

B. Format: Submit miscellaneous record submittals as annotated PDF electronic file .

1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.**
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal business hours.**

END OF SECTION 017839

SECTION 01 79 00 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.

1.2 INFORMATIONAL SUBMITTALS

- A. Attendance Record: For each training module, submit list of participants and length of instruction time. Include lists with Project Record Documents submittal.
- B. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

1.3 CLOSEOUT SUBMITTALS

- 1. At completion of training, submit complete training manual(s) for Owner's use prepared and bound in format matching operation and maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.

1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

- C. Schedule training with Owner at least 14 days' advance notice.
- D. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
 - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Operations manuals.
 - c. Maintenance manuals.
 - d. Project record documents.
 - e. Identification systems.
 - f. Warranties and bonds.
 - g. Maintenance service agreements and similar continuing commitments.
 - 3. Emergencies: Include the following, as applicable:
 - a. Instructions on meaning of warnings, trouble indications, and error messages.
 - b. Instructions on stopping.
 - c. Shutdown instructions for each type of emergency.
 - d. Operating instructions for conditions outside of normal operating limits.
 - e. Sequences for electric or electronic systems.
 - f. Special operating instructions and procedures.

4. Operations: Include the following, as applicable:
 - a. Startup procedures.
 - b. Equipment or system break-in procedures.
 - c. Routine and normal operating instructions.
 - d. Regulation and control procedures.
 - e. Control sequences.
 - f. Safety procedures.
 - g. Instructions on stopping.
 - h. Normal shutdown instructions.
 - i. Operating procedures for emergencies.
 - j. Operating procedures for system, subsystem, or equipment failure.
 - k. Seasonal and weekend operating instructions.
 - l. Required sequences for electric or electronic systems.
 - m. Special operating instructions and procedures.
5. Adjustments: Include the following:
 - a. Alignments.
 - b. Checking adjustments.
 - c. Noise and vibration adjustments.
 - d. Economy and efficiency adjustments.
6. Troubleshooting: Include the following:
 - a. Diagnostic instructions.
 - b. Test and inspection procedures.
7. Maintenance: Include the following:
 - a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.
8. Repairs: Include the following:
 - a. Diagnosis instructions.
 - b. Repair instructions.
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - d. Instructions for identifying parts and components.
 - e. Review of spare parts needed for operation and maintenance.
 - f.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Do not schedule or begin Demonstration and Training sessions until equipment and systems are fully cleaned, adjusted, tested and operational.
- B. Assemble educational materials necessary for instruction, including training outline, time requirements, documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."
- C. Submit training manual for review by Commissioning Agent and Owner. Training manual must be approved before scheduling training sessions.

3.2 INSTRUCTION

- A. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Owner with at least 14 days' advance notice.
- B. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- C. If at any time during Demonstration and Training sessions the equipment or system fails to operate correctly, discontinue session. Contractor to adjust, repair, restore, re-clean and re-test system prior to re-scheduling session. Demonstration and Training sessions are not a substitute for system startup, testing, commissioning, or adjustment.
- D. Restore systems and equipment to condition existing before initial training use.

END OF SECTION 017900

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. The Work of this Section Includes:

1. Removal and salvage of existing items for delivery to Owner and removal of existing items for reinstallation.

B. Related Requirements:

1. Section 011000 "Summary" for restrictions on use of the premises, Owner-occupancy requirements, and phasing requirements.
2. Section 017300 "Execution" for cutting and patching procedures.
3. Section 013516 "Alteration Project Procedures" for general protection and work procedures for alteration projects.

1.2 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.**

1.3 COORDINATION

- A. Arrange selective demolition schedule so as not to interfere with Owner's operations.**

1.4 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site.

1. Inspect and discuss condition of construction to be selectively demolished.
2. Review structural load limitations of existing structure.
3. Review and finalize selective demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
5. Review areas where existing construction is to remain and requires protection.
6. Review and finalize protection requirements.
7. Review procedures for noise control.
8. Review storage, protection, and accounting for items to be removed for salvage or reinstallation.

1.5 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials:
 - 1. It is not expected that hazardous materials will be encountered in the Work.
 - a. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. On-site sale of removed items or materials is not permitted.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Verify that hazardous materials have been remediated before proceeding with building demolition operations.

3.2 PREPARATION

- A. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
 - 1. Strengthen or add new supports when required during progress of selective demolition.
- B. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
 - 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location and cleaned and reinstalled in their original locations after selective demolition operations are complete.
- D. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment in accordance with 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.

4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
5. Maintain fire watch during and for at least 1 hour after flame-cutting operations.
6. Maintain adequate ventilation when using cutting torches.
7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
8. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.

3.4 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 05 50 00 - METAL FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. Products furnished, but not installed, under this Section include the following:
 - 1. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.
 - 2. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.

1.2 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written instructions to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of metal fabrications that are anchored to or that receive other work. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.3 ACTION SUBMITTALS

- A. Product Data:
 - 1. Fasteners.

1.4 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel in accordance with the following welding codes:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
 - 2. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."
 - 3. AWS D1.6/D1.6M, "Structural Welding Code - Stainless Steel."

1.5 FIELD CONDITIONS

- A. Field Measurements: Verify actual locations of walls, floor slabs, decks, and other construction contiguous with metal fabrications by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance of Aluminum Ladders: Ladders, including landings, are to withstand the effects of loads and stresses within limits and under conditions specified in ANSI/ASC A14.3.
- B. Structural Performance of Alternating Tread Devices: Alternating tread devices are to withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. Uniform Load: 100 lbf/sq. ft..
 - 2. Concentrated Load: 300 lbf applied on an area of 4 sq. in..
 - 3. Uniform and concentrated loads need not be assumed to act concurrently.
 - 4. Alternating Tread Device Framing: Capable of withstanding stresses resulting from railing loads in addition to loads specified above.
 - 5. Comply with applicable railing loadings in Section 055213 "Pipe and Tube Railings."
- C. Vehicular Barrier Cable Systems: Design vehicular barrier cable systems to resist a single 6000-lbf Insert value service load and 10,000-lbf Insert load ultimate load applied horizontally in any direction to the cable system, with anchorages or attachments capable of transferring this load to the structure. Limit deflection to 18 inches. Design is to assume loads are applied at a height of 18 inches above the floor or ramp surface on an area not to exceed 1 sq. ft..
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces Insert temperature change.

2.2 METALS

- A. Steel Plates, Shapes, and Bars: ASTM A36/A36M.

2.3 FASTENERS

- A. General: Unless otherwise indicated, provide stainless steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B633 or ASTM F1941/F1941M, Class Fe/Zn 5, at exterior walls. Select fasteners for type, grade, and class required.
 - 1. Provide stainless steel fasteners for fastening .
 - 2. Provide bronze fasteners for fastening bronze.
- B. Post-Installed Anchors: Torque-controlled expansion anchors.
 - 1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B633 or ASTM F1941/F1941M, Class Fe/Zn 5, unless otherwise indicated.

2.4 MISCELLANEOUS MATERIALS

- A. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.
 - 1. Use primer that contains pigments that make it easily distinguishable from zinc-rich primer.

2.5 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- C. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- D. Form exposed work with accurate angles and surfaces and straight edges.
- E. Weld corners and seams continuously to comply with the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.

- 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- F. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Where exposed fasteners are required, use Phillips flat-head (countersunk) fasteners unless otherwise indicated. Locate joints where least conspicuous.
- G. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- H. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- I. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
- J. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors, 1/8 by 1-1/2 inches, with a minimum 6-inch embedment and 2-inch hook, not less than 8 inches from ends and corners of units and 24 inches o.c., unless otherwise indicated.

2.6 GENERAL FINISH REQUIREMENTS

- A. Finish metal fabrications after assembly.
- B. Finish exposed surfaces to remove tool and die marks and stretch lines, and to blend into surrounding surface.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. Field Welding: Comply with the following requirements:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag screws, wood screws, and other connectors.

E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

F. Corrosion Protection: Coat concealed surfaces of aluminum that come into contact with grout, concrete, masonry, wood, or dissimilar metals with the following:

1. Cast Aluminum: Heavy coat of bituminous paint.
2. Extruded Aluminum: Two coats of clear lacquer.

3.2 REPAIRS

A. Touchup Painting:

1. Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
 - a. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.

END OF SECTION 055000

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Urethane joint sealants.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Urethane joint sealants.

1.3 CLOSEOUT SUBMITTALS

A. Manufacturers' special warranties.

B. Installer's special warranties.

1.4 FIELD CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
2. When joint substrates are wet.
3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.5 WARRANTY

A. Special Installer's Warranty: Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

- B. Special Manufacturer's Warranty: Manufacturer agrees to furnish joint sealants to repair or replace those joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.
- C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
 - 1. Movement of the structure caused by stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
 - 2. Disintegration of joint substrates from causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or other outside agents.
 - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain joint sealants from single manufacturer.

2.2 JOINT SEALANTS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.3 URETHANE JOINT SEALANTS

- A. Urethane, S, NS, 25, NT: Single-component, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, urethane joint sealant; ASTM C920, Type S, Grade NS, Class 25, Use NT.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Sika Corporation.
 - b. Tremco Incorporated.

PART 3 - EXECUTION

3.1 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture, or tear sealant backings.
 - 3. Remove absorbent sealant backings that have become wet before sealant application, and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 1. Place sealants so they directly contact and fully wet joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants in accordance with requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
 - 1. Remove excess sealant from surfaces adjacent to joints.
 - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 3. Provide concave joint profile in accordance with Figure 8A in ASTM C1193 unless otherwise indicated.
 - 4. Provide flush joint profile at locations indicated on Drawings in accordance with Figure 8B in ASTM C1193.
 - 5. Provide recessed joint configuration of recess depth and at locations indicated on Drawings in accordance with Figure 8C in ASTM C1193.
 - a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

3.2 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

END OF SECTION 079200

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Surface preparation of exterior substrates and application of the following:
 - 1. Primers.
 - 2. Water-based finish coatings.
- B. Related Requirements:
 - 1. Section 055000 "Metal Fabrications" for shop priming metal fabrications.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include preparation requirements and application instructions.
 - 2. Indicate VOC content.
- B. Samples for Initial Selection: For each type of topcoat product.
- C. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in applicable exterior painting schedule articles to cross-reference paint systems specified in this Section. Include color designations.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.4 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain each paint product from single source from single manufacturer.

2.2 EXTERIOR PAINTS, GENERAL

- A. Exterior Paints: Subject to compliance with requirements, provide one of the products listed in product types below and applicable exterior painting schedule articles for the paint category indicated.
- B. Material Compatibility:
 - 1. Materials for use within each paint system must be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturer for use in paint system and on substrate indicated.
- C. Colors: Match Existing Adjacent Surface
 - 1. 0 percent of surface area will be painted with deep tones.

2.3 PRIMERS

- A. Alkyd Metal Primer: Corrosion-resistant, solvent-based, alkyd primer formulated for use on prepared ferrous metal substrates subject to industrial and light marine environments.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Benjamin Moore & Co.
 - b. PPG Paints; PPG Industries, Inc.
 - c. Sherwin-Williams Company (The).

2.4 WATER-BASED FINISH COATINGS

- A. Exterior, Water-Based Alkyd Paint: Water-based, pigmented, low-VOC alkyd paint formulated for flash rust and water resistance and for use on exterior substrates.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Benjamin Moore & Co.
 - b. PPG Paints; PPG Industries, Inc.
 - c. Sherwin-Williams Company (The).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Cementitious Composition Board: 12 percent.
 - 3. Masonry (Clay and CMU): 12 percent.
 - 4. Wood: 15 percent.
 - 5. Portland Cement Plaster (Stucco): 12 percent. Verify that plaster is fully cured.
- C. Verify suitability of substrates, including surface conditions and compatibility, with finishes and primers. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of substrates and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.

- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems specified in this Section.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove loose rust, loose mill scale, loose shop primer, and other loose foreign matter. Clean using methods recommended in writing by paint manufacturer but not less than the following:
 - 1. SSPC-SP 2.
 - 2. SSPC-SP 3.
 - 3. SSPC-SP 7/NACE No. 4.
 - 4. SSPC-SP 11.
- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed substrates.
- H. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- I. Aluminum Substrates: Remove loose surface oxidation.
- J. Wood Substrates:
 - 1. Scrape and clean knots. Before applying primer, apply coat of knot sealer recommended in writing by topcoat manufacturer for exterior use in paint system indicated.
 - 2. Sand surfaces that will be exposed to view and remove sanding dust.
 - 3. Prime edges, ends, faces, undersides, and backsides of wood.
 - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- K. Canvas and Cotton Insulation Covering Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.
- L. Plastic Trim Fabrication Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.

3.3 APPLICATION OF EXTERIOR PAINT PRODUCTS

- A. Apply paints in accordance with manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
 - 3. Paint exterior side and edges of exterior doors and entire exposed surface of exterior door frames.
 - 4. Paint entire exposed surface of window frames and sashes.
 - 5. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 6. Primers specified in applicable exterior painting schedule articles may be omitted on items that are factory primed or factory finished if compatible with intermediate and topcoat coatings and acceptable to intermediate and topcoat paint manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
 - 1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
 - 2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
 - 3. Allow empty paint cans to dry before disposal.
 - 4. Collect waste paint by type and deliver to recycling or collection facility.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 EXTERIOR PAINTING SCHEDULE, METAL SUBSTRATES

- A. Steel and Iron Substrates:

- 1. Alkyd System:

- a. Prime Coat: Alkyd metal primer.
- b. Intermediate Coat: Matching topcoat.
- c. Topcoat: Exterior alkyd paint, flat.

END OF SECTION 099113

- B. The Contractor shall remove daily from the building, all garbage, debris, and other waste materials (whether solid or liquid) arising out of or in connection with its operations hereunder, and any such garbage, debris and other waste materials not immediately removed shall be temporarily stored in a clean and sanitary condition, approved by the Owners Representative, in suitable garbage and waste receptacles, also approved by the Owners Representative and shall be kept covered except when filling or emptying them. The Contractor shall exercise care in removing such garbage, debris, and other waste materials from the Building. The manner of such storage and removal shall always be subject in all respects to the continual approval of the Owner. No equipment or facilities of the Owner shall be used in such removal unless with its prior consent in writing. No such garbage, debris or other waste materials shall be or be permitted to be thrown, discharged, or disposed into or upon the streets bounding the Site of Work.

1.10 GRATUITIES/LOST AND FOUND

- A. No personnel employed in performing the Work shall solicit or accept gratuities, for any reason whatsoever, from passenger, tenants, customers, or other persons at the Site of the Work. Any articles found by such employees at the Site of the Work shall be immediately turned over to the office of the Property Manager. The Contractor shall instruct their employees (and shall cause any Subcontractor's to instruct their employees) in the provision of this numbered clause.

1.11 NOT USED

1.12 USE OF PATENTED MATERIALS

- A. The right to use all patented material, composition of matter, manufacturers, apparatus, or appliances required in connection with this Contract shall be obtained by the Contractor without separate or additional compensation.
- B. The Contractor shall indemnify the Owner and their agents against and save them harmless from all loss and expense incurred in the defense, settlement or satisfaction of any claims in the nature of patent infringement arising out of or in connection with the Owner's use, in accordance with the preceding paragraph of this numbered clause, of such patentable subject matter or patented material, composition of matter, manufacturers, apparatus or appliances. If requested by the Owner, and if notified promptly in writing of any such claim, the Contractor shall conduct all negotiations with respect to and defend such claims without expense to the Owner.

14 01 20 – Maintenance of Elevators – Full Coverage Contract and Specifications

Note: Section 14 01 20 is for the Maintenance Contract. Its cost shall be included in the Contractor bid and shall last (3) years in duration from the date of occupancy. The terms outlined in this section is for the maintenance agreement only and not the construction contract.

The Elevator Contractor shall furnish services to Capital City Development Corp. (CCDC), 121 North Ninth Street, Boise, ID 83702 (hereinafter called the Owner) c/o ParkBOI, 702 W Idaho St, Suite 400, Boise Idaho, 83702 (hereinafter called the Operator on the following vertical transportation systems and related equipment located at 9th & Front ParkBOI Parking Garage, 9th and Front Street, Boise, ID 83702:

- Unit ID PE1, PE2 & PE3: Three (3) 3,000 lbs. capacity traction elevators operating at 350 fpm.

PART 1 - GENERAL CONDITIONS

1.1 CONTRACT INTENT

- A. The purpose of this agreement is to state and define the terms and conditions under which the Contractor shall provide full comprehensive maintenance and repair services for vertical transportation systems identified, and the terms and conditions under which the Owner shall compensate the Contractor for such services rendered.
- B. It is the intent of this Contract to ensure all requirements, procedures, tests, inspections, service practices, component repairs, equipment renewals, system adjustments, filing procedures and recording documentation as referenced, mandated or otherwise implied herein are all inclusive, and to guarantee the Owner the absence or omission of a particular item of work, service or procedure shall not alleviate the Contractor of the sole responsibility to provide such labor, expertise, materials, equipment, services or other procedures applicable to the agreement and practical requirements unless same is specifically excluded; or prorated herein.
- C. Minimum standards and requirements for services to be rendered shall be performed in accordance with the O.E.M specifications and relative time periods. Where there is no specific requirement for a preventive maintenance procedure, the original equipment manufacturer (O.E.M.) standard shall be employed unless there is no relative documentation available. The absence of both a contract requirement herein and the O.E.M. design standard shall cause the contractor to engage the services of a qualified engineer to formulate the relative standards and incorporate same as an addendum to this agreement with the Professionals' Seal and Stamp.

1.2 DEFINITIONS OF TERMS

- A. The term "Owner," as used herein, refers to the person, organization, corporation or other entity representing building ownership and the relative responsibilities under this contract.
- B. The term Owner's "Agent," "Designee," "Representative" or references of similar import, as used herein, refers to any outside agent hired or retained by the Owner(s) for the purpose of providing management services that has been deemed a legal representative of the Owner(s) or any person designated by the Owner(s) as the legal representative of the Owner(s) for the purpose of coordinating and purchasing this contract.
- C. The term "Authority," "Governing Authority (GA)", "Authority Having Jurisdiction (AHJ)," or references of similar import, as used herein, shall mean the local government agency responsible for enforcement of vertical transportation safety codes and local laws or their designated representative, private inspection agency, consultant or other licensed designee.
- D. The term "Contractor," "Elevator Contractor" or "Vendor" as used herein, refers to any persons, partners, firm, corporation or officer(s) of such companies having an agreement with the "Owner" to furnish qualified labor and materials for the execution of the services and maintenance work described herein.
- E. The term "Subcontractor," as used herein, refers to any persons, partners, firm or corporation having materials and/or labor for the execution of the work herein described.
- F. The term "Consultant," as used herein, refers to VDA, Inc.
- G. The term "Agreement," "Contract" or "Contract Documents," as used herein, consists of this specific document, pages 1 to 31; and any alternates, addenda, or substitutions as may be referenced under exhibits or riders approved by the parties for the final execution of the Agreement.

1.3 ABBREVIATIONS AND SYMBOLS

- A. Abbreviations for associations, institutions, societies, reference documents and/or governing agencies, which may appear in the Contract Document, shall mean the following:

ADA	Americans with Disabilities Act
AIA	American Institute of Architects
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
BOCA	Building Officials and Code Administrators International, Inc. (Basic National Building Code)
A.H.J.	Authority Having Jurisdiction
G.A.	Governing Agency
NEC	National Electrical Code
OSHA	Occupational Safety and Health Administration

1.4 AGREEMENT COVERAGE

- A. The entire vertical transportation system(s) shall be maintained as hereinafter described, in accordance with the following detailed terms. Trained employees of the Contractor will use all reasonable care to keep the systems in proper adjustment and in safe operating condition, in accordance with all applicable codes, ordinances and regulations. The requirements are specified in the singular with the understanding that all provisions shall be applicable to all units indicated unless otherwise specified.
- B. The specifications are written in the singular with the understanding identical work, materials and equipment shall be provided for all vertical transportation units identified unless otherwise specified.
- C. With the exception of only those items specifically identified as being performed by others, the contract specifications are intended to include all engineering, material, labor, testing, and inspections needed to achieve work specified by the contract. Inasmuch as it is understood that any incidental work necessary to execute the agreement is also covered by the contract specifications, the contractor is cautioned to familiarize himself with the existing equipment and job site conditions. Additional charges for material or labor shall not be permitted subsequent to execution of the Contractual Agreement for work, services or procedures covered herein.
- D. Maintenance coverage shall include, but is not limited to, preventive services, call-back services, inspection and testing services, repair and/or direct replacement component renewal procedures.

1.5 HOURS OF WORK

- A. All scheduled work shall be performed during regular working hours of the regular working days of the elevator trade, 8:00 A.M. to 4:30 P.M., Monday through Friday, except union designated holidays. Contractor to provide a list of union designated holidays.
- B. Scheduled repairs and/or other major adjustment procedures necessitating removal of an elevator for an extended period of time must be scheduled through the Owner or Owner Designee.
 - 1. Owner retains the right to have such work completed during overtime hours with the understanding the Contractor shall pay for the regular labor portion and the Owner's extraordinary obligation is extra premium labor costs only.
 - 2. Callback services shall be provided twenty-four (24) hours per day, seven (7) days per week including weekends and holidays as further specified herein.
- C. Travel time for all billable callback services shall be capped at 1.0 hours (roundtrip) per callback.

1.6 SOLE RESPONSIBILITY

- A. The maintenance work shall be performed only by Qualified Technicians and Mechanics directly employed and supervised by the Contractor, who are experienced and skilled in maintaining vertical transportation units similar to those to be maintained under this Contract and shall not be assigned or transferred to any agent or subcontractor without the express consent of the Owner's Designee or Owner.
- B. It is mutually agreed that the Contractor shall not be under any obligation hereunder to make any repairs or replacements except those incidental to the normal operation of the machinery, and that the Contractor is not required under this Contract to make repairs or replacements necessitated by reason of malicious damage, fire, including non-elevator component electrical fire, which are the result of causes beyond Contractor's control. All repairs, if necessitated by this paragraph, will be performed at a fee not to exceed the standard rate in effect at the time service is performed.
 - 1. It is mutually agreed that the Contractor shall make any and all repairs or replacements damaged by Contractor's improper repair, negligent or willful acts or omissions at contractor's expense.

1.7 COMPENSATION

- A. Payment for services rendered shall be made on a monthly basis, within thirty (30) days of the end of each billing period. In addition, Owner shall pay any tax imposed upon the contractor by existing or future law, as due in conjunction with the services rendered or purchase of materials used to provide the services. No additional travel and/or sundries fees will be permitted.
 - 1. Payment for Callback services shall be included in the fixed monthly lump sum price for services rendered twenty-four (24) hours per day, seven (7) days per week, without extra charge to the Owner.

1.8 BREAKDOWN, MALFUNCTION OR DAMAGE

- A. Immediately upon the Contractor's discovery of any damage or signs of disrepair, mechanical breakdown or malfunction of, or cracks or breaks in any item to be repaired hereunder, they shall advise the Owners Representative and the Contractor shall place such "Out of Order" or warning signs as are appropriate with necessary barricades or other required protection as directed by the Owners Representative. Such signs will be furnished by the Contractor upon request of the Owner and shall remain in place until necessary repairs are completed.

1.9 TRASH REMOVAL

- A. The Contractor shall arrange to dispose of all liquid and solid refuse produced under this agreement in a lawful, safe, and efficient and anti-pollutant manner subject to the prior approval of the Manager at no cost to the owner.

- B. The Contractor shall remove daily from the building, all garbage, debris, and other waste materials (whether solid or liquid) arising out of or in connection with its operations hereunder, and any such garbage, debris and other waste materials not immediately removed shall be temporarily stored in a clean and sanitary condition, approved by the Owners Representative, in suitable garbage and waste receptacles, also approved by the Owners Representative and shall be kept covered except when filling or emptying them. The Contractor shall exercise care in removing such garbage, debris, and other waste materials from the Building. The manner of such storage and removal shall always be subject in all respects to the continual approval of the Owner. No equipment or facilities of the Owner shall be used in such removal unless with its prior consent in writing. No such garbage, debris or other waste materials shall be or be permitted to be thrown, discharged, or disposed into or upon the streets bounding the Site of Work.

1.10 GRATUITIES/LOST AND FOUND

- A. No personnel employed in performing the Work shall solicit or accept gratuities, for any reason whatsoever, from passenger, tenants, customers, or other persons at the Site of the Work. Any articles found by such employees at the Site of the Work shall be immediately turned over to the office of the Property Manager. The Contractor shall instruct their employees (and shall cause any Subcontractor's to instruct their employees) in the provision of this numbered clause.

1.11 NOT USED

1.12 USE OF PATENTED MATERIALS

- A. The right to use all patented material, composition of matter, manufacturers, apparatus, or appliances required in connection with this Contract shall be obtained by the Contractor without separate or additional compensation.
- B. The Contractor shall indemnify the Owner and their agents against and save them harmless from all loss and expense incurred in the defense, settlement or satisfaction of any claims in the nature of patent infringement arising out of or in connection with the Owner's use, in accordance with the preceding paragraph of this numbered clause, of such patentable subject matter or patented material, composition of matter, manufacturers, apparatus or appliances. If requested by the Owner, and if notified promptly in writing of any such claim, the Contractor shall conduct all negotiations with respect to and defend such claims without expense to the Owner.

1.13 GENERAL OBLIGATIONS

- A. Except with the prior written approval of the Owner, or as specifically authorized or required elsewhere herein, the Contractor shall not erect, maintain, or display any signs, posters, or advertising at the Site of the Work. Interior signs affecting public safety and security shall be in accordance with guidelines established by the Owner and shall be subject to the approval of the Property Manager.
- B. In order to effectuate the policy of the Owner, the Contractor shall comply with all provisions of federal, state, municipal, local and departmental laws, ordinances, rules, regulations and orders which affect the Contract and the performance thereof, except where stricter requirements are contained in these Specifications, in which event the latter requirements shall apply. The Contractor shall apply for any permits, licenses, or variances in the name of or on behalf of the Owner, where required by law or by the immediately preceding sentence shall obtain express written approval from the Governing Authority.
- C. The Contractor shall provide qualified labor or other assistance on behalf of the Owner for work performed by other trades, professionals, inspectors, and Property Manager's personnel when conditions warrant or upon request of the Owner. The Property Manager shall approve all requests for the Contractor's labor assistance and, when applicable, shall approve requests for additional compensation by the Contractor under "Extra Work" provisions included herein.

1.14 COMMUNICATION

- A. CUSTOMER REPRESENTATIVE: A representative of the Contractor will be available to discuss with Manager the elevator needs in the areas of modernization, traffic handling ability, recommendations and requirements of code authorities, proper use, and care of the Units.

1.15 SUBSEQUENT EQUIPMENT MODERNIZATIONS/ALTERATIONS/UPGRADINGS

- A. Full comprehensive service and repair coverage shall be included under the terms of this agreement when equipment and/or component systems represented herein are modified or upgraded.
- B. Such changes in equipment necessitating continuing full maintenance coverage may be initiated by the Owner under a separate voluntary extra cost upgrading agreement with or without this Contractor's permission or direct authorization and involvement before the work is performed.
- C. All non-elective changes or modifications necessitated due to obsolescence, parts unavailability or the Contractor's inability to maintain these systems in accordance with the contract specifications shall be fully covered under this agreement regardless of application, method or cost assignment for the life of the contract.
- D. Modernized or otherwise upgraded systems and parts thereof shall automatically be included under the terms of this full comprehensive agreement whether such components are specifically identified or not without extra cost to the Owner.

1.16 NOTICE BY AUTHORITY OR COMPANY TO REPAIR OR REPLACE

- A. The Contractor shall comply with all written recommendations of the governing authority or independent inspectors, consultants and insurance carriers employed by the Owner. However, Contractor is not required under this Contract to install new attachments or parts other and different from those now constituting the equipment, as recommended or directed by insurance companies, Government Authorities, or otherwise.

1.17 RECORD KEEPING

- A. A complete permanent record of inspections, maintenance, lubrication and callback service, including a Maintenance Control Program (MCP) shall be kept in the machine room or other designated location at the site of work , per the requirements of the local AHJ. These records are to be available to Owner's Designee at all times. The records shall indicate the reason the mechanic was in the building, arrival and departure time, the work performed, etc., and these records will be property of the Owner. Record keeping requirements shall include Contractor assigned maintenance personnel and scheduled preventive maintenance procedures, inspections, tests and third party assisted examinations. Records shall be kept on site for the life of the contract. Upon request at the termination, a copy of the records shall be provided to the owner. The contractor will interface and utilize the owners web-based maintenance software and shall maintain up to date records of all activities related to the elevators. The owner will provide all necessary system training.

1.18 RECORD DRAWINGS

- A. Contractor shall provide and maintain two (2) complete sets of updated electrical wiring diagrams and control schematic drawings on file with the building and they are to become the property of the Owner for each group and/or individual system.

1.19 REPORTS BY CONTRACTOR

- A. The Contractor shall, at any time during the term of this Contract, upon written request of the Owner, render a report of inspections, repairs or replacements made by the Contractor at the premises herein, itemized as to parts installed or services performed and supply samples of lubricants, compounds, or other materials employed.
 - 1. Contractor shall prepare and issue all required forms and/or reports relative to examinations, tests and inspections as specified herein.

1.20 PRICE ADJUSTMENT

A. Labor Contracts and Overtime:

1. It is further understood and agreed that the Contractor shall furnish to the Owner in duplicate a copy of their current labor contract and any subsequent labor contracts effective during the term of this Contract pertaining to his elevator maintenance personnel, and the Contractor further agrees to furnish any additional information concerning overtime charges to the Owner at any time upon request.

B. The Contractor shall be entitled to a review of their labor and material costs for the purpose of adjusting the maintenance fee thirty (30) days prior to the annual renewal date of this agreement each year.

C. Upon submission of proof, satisfactory to the Owner, that the Contractor's actual labor and/or material costs for performance of service have changed, the monthly price for service coverage shall be adjusted in an amount equal to the established variance based on the following formula:

1. Eighty percent (80%) of the current fee shall be used to represent the labor portion of the contract.
2. Twenty percent (20%) of the current fee shall be used to represent the material portion of the contract.

D. The current labor portion of the contract shall be increased or decreased by the percentage of increase or decrease of the current straight-time hourly rate for a mechanic, compared with same rate used for the previous year's labor portion of the agreement.

E. The current materials portion of the contract shall be adjusted based on the established monthly difference in the "Producer Commodity Prices for Wholesale Metals and Metal Products Index" as published by the United States Department of Labor, Bureau of Labor Statistics during the month within such adjustment occurs for comparison.

1. Using March 2025 as the base month, the material factor is 321.31.

F. Annual adjustments shall be effective the first day of the new contract and shall remain unchanged for the next twelve (12) months.

G. Notwithstanding anything to the contrary, the maximum annual increase shall not be more than three percent (3%) of the total contracted payment for the preceding contract year.

1.21 INSURANCE COVERAGE- See Owner's Insurance Requirements

1.22 CANCELLATION

- A. The Owner shall have the right to cancel this Contract upon at least thirty (30) days prior written notice to the Contractor of its election to do so without penalty for the following:
1. Elective upgrading of apparatus awarded to another vendor.
 2. Substandard services and/or poor maintenance practices as confirmed by the Consultant or other qualified professional.
 3. Failure to comply with governing authority directives and/or citations.
 4. Cost analysis completed prior to expiration date.
- B. For the purposes of this maintenance agreement if the owner finds fault in the contractor's performance. The Owner shall notify the contractor citing the examples of default and this communication will be presented via certified mail. The Owner will then allow the contractor thirty (30) days from the date of receipt of the certified letter for the contractor to reasonably cure said defaults.
- C. In addition to the rights provided in paragraph "A" hereunder, the Owner shall have the right to cancel this Contract immediately, upon the occurrence of any of the following contingencies: bankruptcy of the Owner or Contractor, mortgage foreclosure, condemnation, destruction, or transfer or conveyance of Title to the premises in which the subject equipment is located or the premises in which the subject equipment is located is rendered unusable in the opinion of the Owner.
- D. Cancellation of this agreement prior to the expiration date shall entitle the contractor to payment for services rendered up to and including the date of cancellation; and, the Owner shall not be responsible for any expenses or subsequent costs that may be incurred by the contractor as a result of an early cancellation or standard contract agreement expiration.

1.23 NOTICES

- A. All notices to be given under the contract shall be in writing and addressed to the party to be notified, postage prepaid, by registered or certified mail, return receipt requested, or by delivering the same in person to such party. All notices shall be deemed to have been given as of the date of delivery indicated on the return receipt or date of failure to deliver by reason of changed address of which no notice was given or refusal to accept delivery, or when personally delivered. Any party or person to whom notices are to be sent or given pursuant to the Contract may, by notice to all such other parties or persons mentioned herein, change its address for the giving of notices, provided, however, that a notice of change of address shall be deemed effective only when received by the addressee. Notices to be given hereunder shall be sent or delivered to:

Operator:

ParkBOI
702 W Idaho St.
Suite 400
Boise, ID 83702
(208) 368-7944

Capital City Development Corp
9th and Front ParkBOI Garage
Elevator Modernization



Owner:

CAPITAL CITY DEVELOPMENT CORP. (CCDC)
121 North 9th Street
Suite 501
Boise, ID 83702
(208) 384-4264

1.24 PAYMENT/TERMS

- A. This service will be furnished for the period of three (3) years. All replacement parts, repairs, adjustments and associated services, as specified herein, shall be supplied, installed, performed and conducted at the Contractor's sole cost and expense unless otherwise specified herein.

1. Automatic Renewal:

- a. The Owner shall have the right to renew this agreement on a year-to-year basis upon expiration of the initial Contract period. All terms, conditions and provisions shall remain intact.
- b. There will be NO automatic Renewal unless Owner authorizes or as outlined below to prevent lapse in service coverage.

2. The Owner agrees to pay the Contractor on a monthly basis during the term of this agreement, subject to price adjustments as specified herein.

- a. Monthly invoices shall indicate the base monthly portions of the contract amount due under the agreement for maintenance services.
- b. Any state or local tax charges, which may be applicable, are not included in the monthly fee indicated and shall be itemized on the monthly billing invoice statement accordingly.
- c. Extraordinary work and/or other work, as approved by the Owner, shall be invoiced separately upon completion and acceptance of the work or other services performed.

3. In order to prevent any lapse in service coverage, this agreement shall automatically renew on a month-to-month basis upon expiration of the Initial Contract period. All terms, conditions and provisions shall remain intact. Either party may provide 30-day written notice to cancel the contract during the month to month period.

1.25 NON-PAYMENT

- A. The Owner may have the Contractor's work and systems' performance operations checked monthly to ensure the Contractor is performing in accordance with this Contract. If the work requirements are not maintained, the Owner will retain the monthly payment to the Contractor until the Consultant verifies that the work and/or operating performance is back to standard. If three (3) consecutive months of substandard maintenance is noted, the Owner has the right to immediately cancel the Contract without notice to the Contractor.

- B. The Consultant, Owner and/or Owner's Designee may withhold approval for payment on any request to such extent as may be necessary to protect the Owner from loss on account of:
1. Negligence on the part of the Contractor to execute the work properly or failure to perform any provisions of the contract. The Owner, after three (3) days written notice and/or email to the Contractor, may, without prejudice to any other remedy, make good such deficiencies and may deduct the cost of the contract.
 2. Claims filed or reasonable evidence indicating probable filing of claims due to the Contractor's failure to perform.
 3. Failure of Contractor to make payments properly to subcontractors for material and labor used to fulfill contractual requirements.
 4. Damage to the building and / or equipment as a result of work performed or another subcontractor's failure to perform.

1.26 ERRORS AND OMISSIONS

- A. Contractor shall notify the Owner and Consultant in writing regarding any necessary services, coverage or items which may have been omitted from the maintenance contract specifications and any irregularities, discrepancies or duplications that could affect the full comprehensive intent of the agreement.
1. Any duplication of work or coverage is specified as a means of demonstrating the contract requirements, but such duplication if any, is not intended to expand coverage or increase requirements for such work or services and such duplication shall not increase costs or provide justification for extra or additional charge to the Owner.

1.27 LABOR LAWS

- A. The Contractor performing work under this contract shall comply with applicable provisions of all federal, state and local labor laws.

1.28 BACKGROUND CHECKS

- A. The Contractor agrees to submit to background checks, as required by the Owner, for any of their employees who are assigned to work on this project, or in the building, at any time at the owner's expense

1.29 ASSIGNMENTS

- A. Neither party to the contract shall assign the contract or sublet it as a whole without the written consent of the other, nor shall the Elevator Contractor assign any payment due them or to become due to them hereunder without the previous written consent of the Owner.

1.30 FORCE MAJEURE

- A. Neither party shall be liable by reason of any failure or delay in the performance of its obligations due to strikes, lockouts, riots, fires, explosions, acts of God, war, governmental action or any other cause which is beyond the reasonable control of such parties. The performance of such party shall be excused for such reasonable time as may be required to resume performance following cessation of such cause.

1.31 CONTRACTOR'S LICENSE

- A. If required by law, Contractor certifies that it is licensed in the state, municipality and/or local jurisdiction where the property is located to perform the elevator maintenance services pursuant to this Agreement, and that the license will be maintained current and valid for the Initial Term and any renewal term of this Agreement.

1.32 WAIVER

- A. A waiver by either party of any term or condition of this Agreement in any instance shall not be deemed or construed as a waiver of such term or condition for the future, or of any subsequent breach thereof. All remedies and rights of the parties contained in this Agreement shall be cumulative.

1.33 ATTORNEYS' FEES

- A. In the event litigation be commenced by either party hereto against the other in connection with the enforcement of any provision of this Agreement, the losing party shall pay all court costs and shall pay to the prevailing party all expenses incurred by the prevailing party in litigation, including attorneys' fees in a reasonable amount to be determined by the court. The amount so allowed as attorneys' fees shall be taxed to the losing party as costs of the suit, unless prohibited by law.

1.34 LIMITATION OF LIABILITY

- A. It is expressly understood and agreed by the Parties that Owner, its parent, subsidiaries and/or affiliates shall not be liable or responsible in any way for any loss of or damage or injury to any equipment as referred to in this Agreement or other personal property belonging to Contractor or any personnel of Contractor while in any area of the building; nor shall Owner, its parent, subsidiaries and/or affiliates be liable for any injury suffered by any personnel of Contractor while on or in the Owner's property. Personnel of Contractor shall make all necessary arrangements for the safety and security of such equipment and other personal property at all times.

1.35 AGREEMENT DESIGN

- A. It is agreed that this Agreement and any attachment and/or exhibits are contractual in nature and voluntarily entered into by both Parties as their free act and deed, acting in their individual judgment without reliance upon any statement or representation of the other party. This Agreement, any attachments and exhibits constitute the entire understanding, oral or written, between the Parties, and supersedes any and all prior discussions and/or agreement between the Parties. The parties agree that any alteration to any exhibits, attachments or addenda noted therein or herein, and attached hereto shall be null and void, unless made in writing by mutual agreement or Customer and Contractor. The Parties agree to execute whatever additional documents are deemed reasonably necessary to effectuate this transaction.
- B. Both parties have participated in the preparation of this Agreement, and have been afforded the opportunity to have this Agreement reviewed by legal counsel and/or other consultants of their choice. It is agreed that the normal rule of construction against the drafter shall not apply to the provisions of this Agreement.

1.36 SEVERABILITY AND REFORMATION

- A. This Agreement is binding upon the Parties, their respective successors, assigns and legal representatives. If a Court, having competent jurisdiction, determines that one or more of the provisions is invalid or unenforceable, the Court will have the right to modify same to the minimum extent necessary to make it valid and enforceable, with the rest of this Agreement remaining unaffected by such conclusion or reformation.

1.37 SURVIVABILITY

- A. The parties agree that it would cause an undetermined amount of damages to the other party if either fails to comply with any terms and conditions governing the handling of each other's confidential and proprietary information, or the representations, warranties and indemnifications agreed to under this Agreement and/or hereunder, all of which shall survive any early termination or expiration of this Agreement, and shall remain in full force and effect for the later of a period of one (1) year from the date of termination or expiration of this Agreement, or the date the Information is returned to whoever disclosed such information, after the date of termination or expiration of this Agreement.

PART 2 - PRODUCTS AND SERVICES

2.1 SCHEDULED PREVENTIVE MAINTENANCE LABOR

- A. Contractor shall provide scheduled systematic examinations, adjustments, cleaning and lubrication of all machinery, machinery spaces, hoistways and pits. The Contractor shall include a minimum of two (2) hours per month per unit that is to be dedicated to routine preventive maintenance.

2.2 MAINTENANCE OF ELEVATORS EQUIPMENT COVERAGE

- A. At no additional cost to Owner, Contractor shall provide full comprehensive repair, replacement, adjustment, and related service coverage for all component systems including spare or replacement parts unless specifically excluded herein. Failure to provide a particular component, service or other procedure does not limit Contractor's obligation or liability to provide the necessary work or service.
 - 1. Contractor shall perform complete maintenance of the elevators to ensure they may be operated safely in accordance with performance standards and other criteria specified in this agreement twenty-four (24) hours per day, seven (7) days per week except for scheduled preventative maintenance and safety test procedures approved by Owner.
- B. Contractor shall furnish all materials, labor, supplies, parts, equipment barricades, warning signs, semi-permanent structures, or other apparatus necessary or proper for and incidental to maintenance procedures.
- C. Contractor shall be responsible for clearing and paying for any violations and fines related to the Equipment.
- D. Contractor shall be responsible for keeping the exterior of the machinery and any other parts of the equipment free from rust.
- E. The following list of equipment is provided as a means to establish the full comprehensive intent of this agreement. Coverage shall include all associated parts, apparatus and procedures whether specifically defined or not and shall include the necessary hoisting, rigging or other procedures required for execution of the repair, replacement, adjustment, and service of equipment covered under this agreement.
 - 1. Automatic door systems, power operated door systems and manual door/gate systems complete
 - a. Power operator and engagement linkages
 - b. Car door top track and hanger roller assemblies.
 - c. Car doors and gate, eccentrics, stops, bumpers and related operating mechanisms for multiple speed or multiple panel doors and gates.
 - d. Car gates, bottom guides, retainers, fire stops, gibs, entrance sills and threshold plates, gate handles and protection guards.
 - e. Electrical safety switches and activation mechanisms, door protective and/or retracting devices, and power door operators.
 - f. Electromechanical safety interlock assemblies, related operating mechanisms, clutch, or other master system engaging devices, linkages, zoned locking devices, and self-closing devices.
 - 2. Car frame, platform and car safety devices complete
 - a. Crosshead, stiles, hitch plates, anti-spin devices, tie rods, supports and related structures.
 - b. Car guides, car rollers, shoes, stands, spindles, gibs, rollers and tensioning devices.

- c. Sub-platform, under car platform fireproofing, car sills with support cradles, load weighing devices, top/side exit access operating/safety hardware and electrical switches.
 - d. Car fans, blowers, and cab ventilation systems.
- 3. Hoisting machinery, and rotating power drives with mounting supports and beams, raised platforms and weighted foundations and structures complete
 - a. Geared traction and winding drum units, gearless traction, and related systems complete.
 - b. Worms, gears, shafts, couplings, drive sheaves, deflector sheaves, 2:1 sheaves, bearings, support/mounting apparatus, brake assembly, rotating elements and all associated castings, guards, retainers, and hardware.
 - c. Integral and free-standing brake units, drums, discs, pulleys, shoes, linings, pads, pins, sleeves, plungers, coils, caps, adjustment devices and hardware complete.
 - d. AC and DC motors, motor generators, rotating regulators and exciters; armatures, field coils, pole pieces, interpoles, commutators, brush riggings, brush holders, carbon brushes, stator windings, fan or other ventilation mechanisms, bearings, bushings, shafts, caps, packings, seals, junction boxes, leads, connectors and related wiring.
- 4. Controls, selectors, solid state power drives, encoding devices, transformers with related wiring, conduit, and circuitry complete
 - a. Relays, contactors, switches, capacitors, resistors, fuses, circuit breakers, overloads, power supplies, regulators, tach generators, arc shields, shunts, holders, and hardware.
 - b. Circuit boards, transmitters, encoders, transformers, rectifiers, transistors, solid state switching devices, insulators, timing devices, suppressors, and computer apparatus.
 - c. Filters, fans, blowers, control cabinet air conditioning, wiring, studs, terminal blocks, plug connectors, CRTs or other diagnostic devices, keyboards, and printers.
 - d. Cabinets, frames, isolation pads, isolation transformers, chokes, diagnostic tools, status indicators, solid state, and hard wire circuitry.
 - e. Verify operation of Emergency Evacuation Systems annually and/or Battery Lowering and replace batteries, if required.
- 5. Car and counterweight safety systems
 - a. Overspeed governors and electromechanical safety devices, wire ropes and tensioning devices with related hitch and connection apparatus complete.
 - b. Car and counterweight safety devices, drums, rods, linkages, clamps, and hardware.
 - c. Rope grippers and similar apparatus used for compliance with ASME A17.1 Rule 2.19
- 6. Hoistway and pit equipment
 - a. Guide rails, fishplates, brackets, inserts and related hardware to include jack bolts or other special mechanisms for mounting and alignment.
 - b. Wire ropes, chains and cables with guards used for suspension, compensation, safety, and selector encoding with related hitch and connection hardware complete.
 - c. Corridor entrance top track and hanger rollers, toe guards, fascias, dust covers, sills, stops, bumpers, eccentrics, retainers, and bottom guides.

- d. Overhead machine room, secondary and 2:1 wire rope sheaves, shafts, bearings, bushings, seals, mounting supports, lubrication devices, guards, and hardware complete.
 - e. Electrical wiring and conduit, electrical traveling cables, electrical limits, slow-downs, activating cams, switches, vanes, inductors, tapes, readers, leveling and encoding systems complete with all related hardware and wiring.
 - f. Compensation sheaves, shafts, frames, guides, switches, rollers, cams, guards, "S" hooks, guidance systems and all related hardware.
 - g. Counterweight assemblies, guides, rollers, stands, strike plates, safeties, and hitch devices.
 - h. Car and counterweight buffers, stands, strikes, blocking, platforms, extension devices, mounting hardware and appurtenances.
 - i. Pit safety switches, cable tensioning devices, access ladders, light switches, lighting assemblies, bulbs, and guards.
7. Operating and signal fixtures with electrical wiring
- a. Car operating panels, push buttons, stop switches, audible signals, keyed or other control switches, visual signals, jewels, and indicators with electrical wiring.
 - b. Car position indicators, riding lanterns, signal annunciators, visual and audible signals complete.
 - c. Corridor push button stations, hall lanterns, hall position indicators, keyed switches, access controls, electrical wiring and traveling cables complete.
 - d. Emergency lighting systems, emergency communication devices, and signal systems complete including batteries.
 - e. Corridor and lobby fixtures with remote controls and operational monitoring devices, starter panels, emergency power selectors, telltale panels, location indicators, security controls and monitors.
 - f. Remote monitoring systems, controls, monitors, printers, and related apparatus.
8. Inspect all lighting associated with the vertical transportation systems, including, but not limited to pit lights, equipment room lights, shaftway lights, floor indication lights, car and hall station push button lights, interior and exterior direction lights, arrow lights, signal lantern lights, underfloor lights, cab, entrance and roof lights. Relamp as needed.
9. Component Exclusions:
- a. The following vertical transportation system components are excluded for normal wear and tear repairs or replacements:
 - b. Car enclosures (including removable panels, suspended ceilings, lighting fixtures (lamps are included), light diffusers, floor coverings, entrance thresholds, trim and car panel doors). Hoistway enclosures, entrance frames and door panels.
 - c. Below grade hydraulic cylinders and buried piping.

- d. Machine room power disconnect switches together with fuses, power wiring located before the means of primary disconnect, power fuses or circuit breakers located in the primary means of disconnect, elevator machine room general lighting and ventilation. Cab, Pit and shaftway lighting fixtures and wiring (lamps are included). Support structures for machine beams or other apparatus normally provided by others and not subject to preventative maintenance procedures by the Elevator Contractor, machine room or other equipment access doors with associated locks, closers, and labeling.

NOTE: Any items not specifically excluded will be covered under this agreement.

2.3 CLEANING

- A. The Contractor shall during the course of all examinations remove and discard immediately all accumulated dirt and debris from the car top(s) and pit area(s). Prior to each annual anniversary date of this Agreement, Contractor shall thoroughly clean down the entire hoistway of all accumulated dirt, grease, dust and debris each year.

2.4 PAINTING

- A. The Contractor shall keep the exterior of the machinery and any other parts of the equipment subject to rust properly painted, identified and presentable at all times. Motor windings and controller coils shall be periodically treated with proper insulating compound per O.E.M. recommendations or otherwise as needed. Painting of the machine room floor will be painted when both parties determine that the floor is in poor condition. The machine room floor shall be painted annually, when required with a good quality deck enamel.

2.5 INSPECTIONS / TESTS

- A. The Contractor shall conduct Safety, Efficiency and Maintained Conditions surveys, inspections and tests as follows:
 - 1. Semi-Annual quality control evaluations by a qualified supervisor to ensure and confirm the services and procedures as specified herein are properly executed relative to maintenance and performance standards for the systems serviced.
 - 2. Mandated inspections and testing in accordance with the latest ASME A17.1 standards applicable per local law and/or as required by the AHJ.
 - 3. Payment of all relative fees per the AHJ shall be by the Owner.
 - 4. As required, the Contractor shall correct noted deficiencies in addition to preparation and filing of appropriate Affirmation of Correction(s) within the stipulated timeframe as required by the AHJ. Applicable fees associated with this filing shall be covered under the terms of the agreement.
 - 5. Where required work necessary to resolve aforementioned deficiencies is not covered under the terms of this agreement, Contractor shall submit proposals in a timely fashion in an effort to meet applicable correction deadlines within five (5) business days on critical items otherwise, within fourteen (14) business days in an effort to meet applicable correction deadlines.

- a. Proposals shall indicate the material and labor costs in addition to anticipated time of completion from approval of proposal(s) by Owner.
 6. If applicable, independent testing of Fire Emergency Operating Systems and/or Emergency Power System tests in accordance with local law requirements and ASME standards.
 7. Contractor shall maintain ASME code-required safety tests, fireman's service tests, telephone/intercom tests and emergency power tests on site.
 8. Contractor shall maintain monthly oil consumption records on site in accordance with ASME A17.1 Safety Code and/or as required by the AHJ.
 - B. The Contractor shall conduct testing procedures in accordance with the applicable ASME A17.1 standards at intervals specified and/or local code requirements in place at commencement of contract, complete and execute all governing authority filing procedures including payment of all associated fees or other charges where mandated by local authorities, and forward confirmation of all authority required filings to the Manager within ten (10) working days of the date the test procedure was completed. Any fines incurred for failure to complete required testing or for filing irregularities will be paid by the Contractor.
 1. Annual Electric Traction Elevator Safety Test
 - a. Contractor shall perform an Annual Electric Traction Elevator Safety Test conforming to the requirements contained in ASME A17.1 Category 1, Inspection and Test Requirements on all Traction Elevators covered by this Contract, and/or as required by the AHJ.
 2. Five Year Full Load Safety Test
 - a. Contractor shall perform a Five-Year Safety Test conforming to the requirements contained in ASME A17.1 Category 5, Inspection and Test Requirements on all Traction Elevators covered by this contract.
 - C. The Owner may engage the services of a third-party qualified and certified agency for the sole purpose of mandated inspections of the equipment per local code authority requirements. The Contractor shall conform to the third-party agency schedule and provide qualified labor to assist in these inspections (including assistance in gaining access to hoistways, pits and machine rooms) at no additional charge to Owner.
- 2.6 CALLBACK SERVICE (24 HOURS, 7 DAYS PER WEEK)
- A. Provide callback service which consists of promptly dispatching qualified employees in response to requests from the Owner or designated representative, by telephone or otherwise, for adjustment or minor repairs on any day of the week, at any hour, day or night. If repairs cannot be made immediately, the mechanic shall notify the Owner's Representative as to the reason why and provide supplemental information regarding the restoration of services.
 1. Callback service in response to passenger entrapments shall be provided within one-half (½) hour during regular working hours and within one (1) hour during overtime periods.

2. Callback services for out-of-service units that have been secured by the Owner's Representative shall be provided within one (1) hour during regular working hours and within two (2) hours between 6:00 a.m. and 8:00 a.m. and 4:30 p.m. and 6:30 p.m. Monday through Friday, except holidays.
3. Callback services for out-of-service units that have been secured by the Owner's Representative shall be provided within three (3) hours at all other times not specified above in "1" or "2."
4. Callback services for non-essential system malfunctions that do not constitute an operational or other safety condition shall be provided during normal working hours of regular working days within four (4) hours of the request for service.

2.7 OWNER'S RIGHT TO MONITOR CONTRACTOR SERVICE AND PERSONNEL

- A. In addition to the Contractor's management and supervision of services specified herein, the Owner shall retain the right to monitor the actions of the Contractor and services rendered.
- B. The Owner may employ direct labor for management supervision or indirect outside consultants, inspectors, engineers or other qualified personnel to monitor the maintenance services provided by the Contractor with the understanding that such actions do not limit the Contractor's responsibilities for management of services or supervision of personnel.
- C. When conditions warrant, in the opinion of the Owner, the Contractor shall provide the necessary labor and/or materials, at no additional cost, to assist the Owner or his representatives to evaluate the services rendered, work performed and equipment conditions.
- D. There shall be no extra charge to the Owner for normal coordination of services, scheduling procedures, reporting requirements, or other service management and supervision mandated under the terms of this Contract to include assistance labor as specified above when assigned personnel are removed from normal duties without replacement by additional personnel for such assistance to the Owner.
- E. In the event the Contractor changes assigned management or supervisory personnel, the Owner shall retain the right to interview and evaluate all new personnel assigned for direct or indirect management and supervision of this Contract work.
- F. In the event the Contractor union affiliated personnel fail to perform their duties satisfactory to the Owner or display an attitude that is not conducive to good relationships or proper servicing of the elevator systems, the Owner may request a position reassignment based on submission of substantial evidence that such Contractor employee is not serving the best interests of the building and/or the Contractor in performing services specified herein. The Contractor shall honor said request within twenty-four (24) hours of notification and provide labor satisfactory to the Owner.
- G. The Owner reserves the right to purchase related vertical transportation system services, attachments or other appurtenances not covered under the terms of this Contract from other than the Maintenance Contractor. The Contractor shall cooperate and assist the Owner in coordination of such projects or acts to insure safe and adequate transportation is provided. When conditions warrant, in the opinion of the Owner, the Contractor shall provide technical assistance to the Owner upon request.

2.8 CONFIDENTIALITY

- A. The Owner may provide information to enable Contractor to render services hereunder, or Contractor may learn information about property or develop such information from Owner. Contractors agrees:
 - 1. To treat, and to obligate Contractor's employees, subcontractors, and suppliers to treat as confidential all such information whether or not identified by Owner as confidential.
 - 2. Not to disclose and such information or make available any reports, recommendations and/or conclusions which Contractor may make on behalf of Owner to any person, form or corporation or use the same in any manner, whatsoever, without first obtaining Owner's written approval, except to the extent necessary in connection with performing services or when required by law.
 - 3. Contractor shall no, in the course of performance of this Agreement, or thereafter, use of permit the use of Owner's name or the name of any affiliate of Owner, or the name , address or any picture or likeness of or reference to the property in any advertising, promotional or other materials prepared by or on behalf of Contractor without the prior written approval of Owner.

2.9 SECURITY

- A. Contractor and Contractor's personnel shall comply with all security regulations and requirements of Owner and Owner's tenants.
- B. Contractor and Contractor's personnel shall submit to security background checks as required.

2.10 OBSOLESCENCE

- A. For the purpose of this contractual contingency, Component Obsolescence shall be defined as the inability to purchase and/or otherwise repair, rebuild or refurbish parts of the system no longer produced by the original equipment manufacturer or a third-party after-market supplier in the same form, fit and/or function. Claims of component obsolescence shall not be allowed when replacement parts, components or assemblies of equivalent design and functionality are available in the market.
 - 1. The exception to the above shall be the full warranty and replacement of any controller drive(s), proprietary or non-proprietary which shall be replaced at no cost to the owner, if for any reason the drive(s) is no longer manufactured, but can still be obtained or repaired, either through the original manufacturing company or a third party provider. If the drive(s) are no longer manufactured and no longer available through the original manufacturing company or a third party provider and cannot be repaired, the drive(s) will then be considered obsolete and the owner shall be responsible for 30% of the cost of the drive(s) but shall not be charged any labor costs.
- B. In the event of component obsolescence as defined in paragraph A above, the condition shall be reported to the Owner with the following information:
 - 1. Alternative equipment or component parts renewal options for restoration of the system due to obsolescence.

2. Procurement and installation time for restoration of system service.
 3. Any local law or safety code requirements that will be triggered by the alternative equipment or component renewal (i.e., including filing, tests and approvals).
 4. Certification by the manufacturer of the replacement parts that the parts meet or exceed the original equipment design intent including, but not limited to, durability, reliability, maintainability, longevity and safety.
- C. Payment for obsolescence work shall be based on the extra cost to the contractor only.
1. Labor cost over and above the time necessary for standard equipment and component renewal or repair procedures.
 - a. Contractual hourly rate schedule as provided under Exhibit "A" shall be used to compute the extraordinary labor charge if applicable.
 - b. 30% of the actual material cost deemed obsolete (with no mark-up) will be paid to the contractor by the Owner.
 - c. If the part is custom makeable, in the same form, fit and function, the Owner will pay up to 40% of the cost of that part. The Owner shall not be responsible for labor cost associated with this repair or fabrication.
 - d. At Owner's option, a lump sum extra cost price may be employed in lieu of time and material as indicated above.
 2. Subsequent to the Owners authorization to proceed with an alternative obsolescence repair and approval of the relative extra cost, if any, the contractor shall immediately perform such work and restore operating services.
- D. The Owner shall retain the right to competitively bid obsolescence repairs and replacements; and, such work as performed by another qualified contractor shall not diminish or otherwise alter the coverage provided under this agreement subject to the following:
1. The maintenance contractor has the right to inspect work performed by others; and, when conditions warrant, reject obsolescence procedures that increase their contractual liability. The maintenance contractor shall provide written notification of acceptance or rejection.
 2. Should the contractor reject an obsolescence repair made by others, the Owner may have a qualified third party professional engineer evaluate the work and render a decision regarding the acceptability of the prevailing conditions or the Owner may terminate the maintenance contract and award the maintenance work to another Contractor at the Owner's sole discretion.

NOTE: No other claim for obsolescence of any kind will be considered by the Customer during the course of this agreement.

2.11 SCHEDULED SERVICE PROCEDURES

- A. Maintenance requirements, in addition to scheduled and emergency repairs, renewals and testing, shall include but are not limited to:
 - 1. Examination of wire ropes and/or suspension belts to maintain proper tensioning and legal bottom clearances on a monthly basis for shortening and adjusting ropes as required and performance of all reshackling procedures per ASME A17.1 and/or ASME A17.6 standards and local laws in conjunction with maintenance of related slack cable devices, machine limits or other safety equipment.
 - 2. Examination, repair and replacement of all electrical wiring, traveling cables, conduits, connections and related apparatus extending from the main line power supply switch in the machine or other power supplies in hoistways.
 - 3. Maintenance of pit, hoistway and machine room lighting to include relamping, wiring and switch controls.
 - 4. Mandated inspections and relative labor requirements for third party examinations and/or test procedures as approved by the Owner.
- B. Monthly Firemen's Recall Service
 - 1. Monthly Firemen's Recall Service Tests following the ASME Code A17.1/A17.2 requirements must be performed monthly and Test Logs kept current and stored in an accessible location in the Elevator Machine Room / Space, and/or per the requirements of the Local AHJ.

PART 3 - EXECUTION AND SUPPLEMENTAL REQUIREMENTS

3.1 PERFORMANCE TIMES, LEVELING AND CONTRACT SPEED

- A. The control system shall be maintained to provide smooth acceleration and retardation. Contractor must maintain elevators in accordance with the original equipment manufacturer (O.E.M.) design performance specifications (including floor-to-floor times, door timing, rated speed, group supervisory system, etc.). The door close pressure must never exceed thirty (30) pounds. The following performance schedule shall be adhered to:
 - 1. Contract Speed: The contract speed shall be provided for up direction travel with full-capacity load in the elevator car. The speed in either direction under any loading condition shall not vary more than 5% of the contract speed.
 - 2. In accordance with the ASME A17.1 Code, the elevators shall be maintained and adjusted to safely lower, stop and hold the car with a load of 125% of the rated capacity.
 - 3. Leveling Accuracy: The elevator shall be adjusted to provide accurate leveling within 1/4" \pm of the floor level without releveling regardless of load.

5. Door Operating Times:

<u>DOOR TYPE</u>	<u>OPENING</u>	<u>CLOSE</u>
42" center opening	1.5 – 2.0 sec.	2.5 – 3.0 sec.
Door dwell time for hall calls:	4.0 sec with Advance lantern signals	
Door dwell time for hall calls:	5.0 sec without Advance lantern signals	
Door dwell time for car calls:	3.0 seconds	
Reduced non-interference dwell time:	1.0 seconds.	

6. Floor to Floor Time (Flight Time): 10.0 – 11.0 sec. Passenger Elevators

B. Maintain the following ride quality requirements for the passenger elevators:

1. Vertical accelerations shall not exceed 14 milli-g and horizontal accelerations shall not exceed 25 milli-g.
 - a. The accelerometer used for this testing shall be capable of measuring and recording acceleration to nearest 0.01 m/s² (1 milli-g) in the range of 0-2 m/s² over a frequency range from 0-80 Hz with ISO 8041 filter weights applied. Accelerometer should provide contact with the floor similar to foot pressure, 60 kPA (8.7psi).
2. Amplitude of acceleration and deceleration shall not exceed 4.0 ft/sec².
3. A sustained jerk shall not be more than twice the acceleration.
4. The rate of change in the acceleration/deceleration rate shall not be greater than 8.0 ft/sec³.

3.2 PARTS INVENTORY AND WIRING DIAGRAMS

- A. The Contractor shall maintain an inventory of spare parts at the site of the work for scheduled preventive maintenance procedures and common callback service repairs. Such parts shall include but are not limited to contacts, coils, solid-state boards, relays, resistors, timing devices, computer devices, interlock safety switch and linkage parts, bottom guides, door closers, fuses, bulbs, car guides and an assortment of hardware.
- B. The Contractor shall maintain and continually update wiring diagrams and control schematics to ensure "as built" documents remain on site and the property of the Owner per the maintenance agreement.

3.3 MATERIALS AND WORKMANSHIP

- A. All materials and parts are to be new and of the best quality of the kind specified. Installation of such materials shall be accomplished in a neat workmanlike manner. In case the Contractor should receive written notification from the Owner stating the presence of inferior, improper, or unsound materials or workmanship, the Contractor shall, within twenty-four (24) hours proceed to remove such work or materials and make good all other work or materials damaged thereby. If the Owner permits said work or materials to remain, the Owner shall be allowed the difference in value or shall, at its election, have the right to have said work or materials repaired or replaced as well as the damage caused thereby, at the expense of the Contractor, at any time during the Contract term; and neither payments made to the Contractor, nor any other acts of the Owner shall be construed as evidence of acceptance and waiver.

3.4 EQUAL OPPORTUNITY

- A. The Contractor shall maintain policies of employment as follows:
1. The Contractor and all Subcontractors shall not discriminate against any employee or applicant for employment because of actual or perceived race, creed, color, religion, national origin, ancestry, alienage or citizenship status, age, disability or handicap, sex marital status, familial status, veteran status, sexual orientation, arrest record or any other characteristic protected by applicable federal, state and local laws. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their actual or perceived race, creed, color, religion, national origin, ancestry, alienage or citizenship status, age, disability or handicap, sex marital status, familial status, veteran status, sexual orientation, arrest record or any other characteristic protected by applicable federal, state and local laws. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.
 2. The Contractor and all Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to actual or perceived race, creed, color, religion, national origin, ancestry, alienage or citizenship status, age, disability or handicap, sex marital status, familial status, veteran status, sexual orientation, arrest record or any other characteristic protected by applicable federal, state and local laws.

B. EEO EMPLOYMENT PRACTICES AND COMPLIANCE

1. The parties hereto agree to voluntarily comply with the basic tenants of the Equal Employment Opportunity Requirements of Executive Order 11246, as amended by Executive Order 11375, Title VII of the Civil Rights Restoration Act of 1964, as amended, applicable state Fair Employment Practices Acts, and any other federal or state laws pertaining to equal employment opportunity, and that they will not discriminate against any employee or applicant for employment on the basis of actual or perceived race, creed, color, religion, national origin, ancestry, alienage or citizenship status, age, disability or handicap, sex marital status, familial status, veteran status, sexual orientation, arrest record or any other characteristic protected by applicable federal, state and local laws in matters pertaining to recruitment, hiring, training, upgrading, transfer, compensation or termination. In addition, Contractor agrees to indemnify and hold harmless Owner, its parent, affiliates, employees, agents, representatives, and any of its or their officers, directors, employees, agents, successors, or assigns, harmless from all loss, cost or expense, including reasonable attorneys' fees for any violation by Contractor, its employees, agents, representatives, or assigns of the rules and regulations set forth and enforced by the Immigration and Naturalization Services pursuant to the Immigration and Nationality Act, as well as the Illegal Immigration Reform and Immigrant Responsibility Act which obligation to indemnify shall survive the expiration or termination of this Agreement.
2. Contractor agrees to maintain comprehensive records of all services performed under this Agreement. These records will be available for inspection by Owner at any time during regular business hours and upon forty-eight (48) hours written notice.

3.5 PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall continuously maintain adequate protection of all their work from damage and shall protect the Owner's property from injury or loss arising out of this contract. The Contractor shall make good any such damages, injury or loss, except such as may be directly caused by agents or employees of the Owner. The Contractor shall provide all barricades required to protect open hoistways or shafts per OSHA regulations. Such protection shall include any necessary guards or other barricades for employee protections during and after the maintenance procedure.

3.6 REPRESENTATION

- A. Contractor represents that it will (i) perform elevator maintenance services under this Agreement in accordance with acceptable industry professional and ethical standards, (ii) not proceed with performance of various aspects of the Services, unless pre-authorized ("Pre-approved Services") by the Owner's or Owner's Designee at the property, (iii) conduct any handling of Owner's Confidential Information in accordance with acceptable industry professional and ethical standards, (iv) not represent to any third party that it has authority to sign, endorse or represent a contractual relationship with or in Owner's name, or enter into any agreement on behalf of Owner in connection herewith (unless expressly pre-authorized in writing by Owner), (v) safeguard the physical security of Owner's Confidential Information if it has access to or possession of such information, (vi) ensure that only "Authorized Representatives" of this Agreement, will have access to any of Owner's Confidential Information while rendering the Services, and that it will not be copied, or disseminated to anyone other than the Authorized Representative, and (vii) ensure that all of its employees, representatives, agents or assigns will not solicit any of Owner's employees for any purpose. The Parties agree that any alteration to any of the Addenda or Exhibits hereto shall be null and void, unless made in writing by mutual consent of the Parties. The obligations of Contractor set forth herein shall remain in full force and effect for the later of a period of one (1) year from the date of termination or expiration of this Agreement, or the date the Confidential Information is returned to whomever disclosed such information, after the date of termination or expiration of this Agreement.

3.7 VIOLATIONS

- A. In the event that a summons or notification of violation or other process is issued to Owner by or on behalf of a governmental authority or its agents having jurisdiction over the building for violation of any law, code, ordinance, rule or regulation pertaining to the maintenance, repair or replacements of the Owner's vertical transportation system and/or its component parts or conditions pertaining thereto, which are the responsibility of the contractor to maintain, repair or replace under the Contract, the contractor agrees to indemnify and hold Owner, its officers, agents, servants and employees harmless from and against Owner, and contractor agrees that it will, at its own cost and expense, answer such process and defend Owner before any administrative tribunal or court having jurisdiction over the matter and shall comply with and pay any judgment, award or fines imposed, and contractor shall timely correct and cure any violation condition and certify correction/cure of such condition(s) to the adjudicating body and/or issuing governmental authority, as may be required, and shall timely prepare and file the necessary certification, affidavit and supporting proof necessary to obtain removal, correction, discharge, or dismissal of the violation on the agent records.

3.8 CHANGES IN SCOPE

- A. The Owner's Representative may at any time, by written order, make changes within the general scope of this Contract in the work and service to be performed. If any such cases cause an increase or decrease in the Contractor's cost of, or the time required for, the performance of this Agreement, an equitable adjustment shall be made, and the Contract modified in writing accordingly. If the Owner/Owner's Representative and Contractor fail to agree upon the adjustment to be made, the Owner/Owner's Representative reserves the right to solicit bids from other vendors for the performance of the additional work.
- B. When the Owner/Owner's Representative removes one or more elevators named in this Contract from service in order to perform work on such elevators that is outside the scope of this Contract, the monthly payments due the Contractor and the minimum maintenance hours required to be provided by the Contractor will be reduced accordingly. The Contractor shall be notified, in writing, by letter or Contract change order, at least three (3) full working days in advance of the elevator(s) being removed from, or returned to, service. If the elevator(s) is to be removed from service for thirty (30) consecutive calendar days or less, the Owner may negotiate an equitable adjustment with the Contractor and make the necessary adjustments on the monthly invoice authorizing payment. If the elevator(s) is to be removed from service for more than 30 consecutive calendar days, the Owner may issue a modification to the Contract and negotiate an equitable adjustment in the Contract price in accordance with this Section. The period for reducing payments will begin on the effective date specified in the notice and will continue through the day before the elevator(s) is returned to covered service.

14 21 23 – Electric Traction Passenger Elevators

PART 1 - GENERAL

1.1 SUMMARY AND DEFINITIONS

A. Related Documents

1. Division 01 - Supplementary General Conditions
2. 14 01 20 - Elevator Maintenance - Full Coverage Contract / Specifications
3. Invitation to Bid

B. Intent

1. This section includes electric traction passenger elevators.
2. The following outlines the scope of work covered in this Section:
 - a. Comprehensive "Turnkey" modernization of three (3) 3,000 lbs. capacity traction passenger elevators operating at 350 fpm. Unit ID PE1, PE2 & PE3.
 - b. Completion of associated related building work identified herein Item 1.5.A.
 - c. Rust remediation & painting of hoistway, guide rails, top of car, pit and landing door equipment: Surface rust shall be removed from the top of cars, top of car crosshead, guide rails, guides rail brackets, landing door fascia, headers, toe guards, spreader beams, top of counterweight frame, car & counterweight buffers, buffers stands and pit channels. A coating of rust inhibiting paint shall be applied to each of these surfaces.
 - d. This is a "TURN-KEY" project with the Elevator Contractor designated the "PRIME CONTRACTOR" for all related and non-related work specified and required unless specifically excluded or referenced to be done by others.
 - e. As this is a "Turn-Key" project, with the Elevator Contractor being the "Prime" Contractor, it is the Elevator Contractor's responsibility to perform a detailed survey of the existing jobsite conditions to determine applicability and detailed scope for related work completion.

It is the intent of this specification that the Elevator Contractor include in their Base Bid the cost to complete all elevator and related work that will be required to return each of the units to public use with no Code violations or punch-list items identified by the local Authority Having Jurisdiction (AHJ) as remaining to be completed. As such, the items identified in Section 1.5.A of the Technical Specifications are intended to be as accurate a listing as can be compiled at the time of preparation of these documents.

However, should other related building work items be necessary to be completed to meet the requirements of the AHJ for issuance of permanent elevator operating certificates / permits, it will be the responsibility of the Elevator Contractor to complete the additional items under the scope of their Base Bid amount, with no additional costs to the Owner.

3. Related equipment shall be designed, constructed, installed and adjusted to produce the highest results with respect to smooth, quiet, convenient and efficient operation, durability, economy of maintenance, and the highest standard of safety.
4. It is not the intent of these specifications to detail the construction and design of all parts of the equipment, but it is expected that the type, materials, design, quality of work and construction of each part shall be adequate for the service required, durable, properly coordinated with all other parts, and in accordance with the best commercial standards applicable and of the highest commercial efficiency possible.
5. Electric and magnetic circuits and related parts shall be of proper size, design and material to avoid heating and arcing, and all other objectionable effects which may reduce the efficiency of operation, economy of maintenance and/or net-useful life of the apparatus.
6. Minimum requirements for design, materials, etc., are for certain parts of the equipment. Equivalent requirements approved by the Consultant shall apply to such parts as are of special design, construction or material and to which the specified requirements are not directly applicable. These minimum requirements as a whole shall be considered as establishing proportionate general minimum standards for all parts of the equipment.

7. The Consultant may permit variations from the requirement of these specifications to permit use of the Contractor's standard equipment, provided such standard equipment is in every way adequate for the intended use and meets the full intent of these specifications. All such variations proposed by the manufacturer shall be called to the attention of the Consultant and shall only be made if approved in writing prior to the award of the contract.
8. General requirements for design, materials and construction are intended primarily to apply to the heavy-duty and important parts of the equipment specifically mentioned and to other parts of similar duty and importance. Less important and light-duty parts may be of the standard design, materials and construction provided that, in the opinion of the Consultant, such standards are in accordance with the best commercial practice and are fully adequate for the purpose of use. All such variations shall be made only on the Consultant's written approval.
9. All equipment and component parts installed, supplied or provided under this contract shall be manufactured and distributed by a third-party, non-installer company servicing the vertical transportation industry.
 - a. Apparatus shall conform to the design and construction standards referenced herein and shall be rated the best commercial grade suitable for this application.
 - b. Equipment and component systems shall not employ any experimental devices or proprietary designs that could hamper and/or otherwise prohibit subsequent maintenance repairs or adjustments by all qualified contractors.
 - c. Manufacturers of the apparatus shall provide technical support and parts replacements for their equipment and component systems for a minimum of twenty (20) years and issue such guarantee of support to the purchaser with written certification naming the final Owner of their product(s) to ensure the apparatus or systems remain maintainable regardless of who may be selected for future service.
10. All equipment provided shall be factory and field tested with a history of design reliability and net-useful life established.
 - a. Contractor must be able to demonstrate the apparatus to be installed has been used successfully in a substantially similar manner under comparable conditions.
 - b. If the apparatus proposed differs substantially in construction, material composition, design, size, capacity, duty or other such rating from the equipment previously used for the same purpose by the manufacturer, the Consultant may reject the apparatus or require the vendor test and demonstrate the adequacy and suitability for this particular situation. Any necessary tests shall be performed at the sole expense of the Contractor with no prior guarantee of acceptance after the testing procedure.
11. The Contractor shall not use as part of the permanent equipment any experimental devices, proprietary design, components, construction of materials which have not been fully tried out in at least substantially similar or under comparable service, except as may be especially approved by the Consultant. If any important equipment or devices to be used on this installation differ substantially in construction, materials, design, size, capacity or duty from corresponding items previously used for the same purpose by the manufacturer, they shall pass such tests as the Consultant may require to fully show their adequacy and suitability. These tests shall be in addition to tests herein specified and shall be made at the expense of the Contractor.

12. Certain design limitations, tests, etc., are herein specified as a partial check of the adequacy of design, construction and materials used. These requirements do not cover all features necessary to ensure satisfactory and approved operation, etc., of the equipment.
13. It is understood, the entire system shall be designed, fabricated, modified and/or upgraded in full compliance with applicable local laws and code standards. The absence of a particular item or requirement shall not relieve the Contractor of the full and sole responsibility for such equipment, features and/or procedures.
14. With the exception of only those items specifically identified as being performed by others, the Specifications are intended to include all engineering, material, labor, testing, and inspections needed to achieve work specified by the Contract Documents. Inasmuch as it is understood that any incidental work necessary to complete the project is also covered by the Specifications, bidders are cautioned to familiarize themselves with the existing job site conditions. Additional charges for material or labor shall not be permitted subsequent to execution of the Contract.
15. Bidders must report discrepancies or ambiguities occurring in the Specifications to the Consultant for resolution prior to the bidding deadline, otherwise the Specifications shall be deemed acceptable in their existing form.

C. Termination of Existing Agreement(s)

1. As described by Division 0 and Division 1.

D. Abbreviations and Symbols

1. The following abbreviations, Associations, Institutions, and Societies may appear in the Project Manual or Contract Documents:

AHJ	Authority Having Jurisdiction
AIA	American Institute of Architects
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWS	American Welding Society
IBC	International Building Code
IEEE	Institute of Electrical and Electronics Engineers
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Agency
OSHA	Occupational Safety and Health Act

E. Codes and Ordinances / Regulatory Agencies

1. Work specified by the Contract Documents shall be performed in compliance with applicable Federal, State, and municipal codes and ordinances in effect at the time of Contract execution. Regulations of the Authority Having Jurisdiction shall be fulfilled by the Contractor and Subcontractors. The entire installation, when completed, shall conform with all applicable regulations set forth in the latest editions of:
 - a. Local and/or State laws applicable for logistical area of project work.
 - b. Building Code applicable to the AHJ.
 - c. Elevator Code applicable to the AHJ.
 - d. Safety Code for Elevators and Escalators, ASME A17.1 and all supplements as modified and adopted by the AHJ.
 - e. Safety Code for Elevators and Escalators, A17.1S supplement to A17.1 as modified and adopted by the AHJ for Machine Room Less installations (MRL).
 - f. Guide for Inspection of Elevators, Escalators, and Moving Walks, ASME A17.2.
 - g. Safety Code for Existing Elevators and Escalators, ASME A17.3 as modified and adopted by the AHJ.
 - h. Guide for emergency evacuation of passengers from elevators, ASME A17.4.
 - i. National Electrical Code (ANSI/NFPA 70).
 - j. American with Disabilities Act - Accessibility Guidelines for Building and Facilities and/or A117.1 Accessibility as may be applicable to the AHJ.
 - k. ASME A17.5/CSA-B44.1 - Elevator and escalator electrical equipment.
 - l. ECC (Energy Conservation Code) as may be applicable to the AHJ.
2. The Contractor shall advise the Owner's Representative of pending code changes that could be applicable to this project and provide quotations for compliance with related costs.

F. Definitions

1. Defective Work: Operation or control system failure, including excessive malfunctions; performances below specified ratings; excessive wear; unusual deterioration or aging of materials or finishes; unsafe conditions; need for excessive maintenance; abnormal noise or vibration; and similar unusual, unexpected, and unsatisfactory conditions.
2. Provide: Where used in this document, provide shall mean to install new device, apparatus, system, equipment or feature as specified in this document.
3. Definitions in ASME A17.1 as amended or modified by the AHJ apply to work of this Section.

1.2 PERMITS AND SUBMITTALS

A. Permits

1. Comply with the requirements of Division 01.

2. Prior to commencing work specified by the Contract Documents, the Contractor shall, at its own expense, obtain all permits or variances as may be required by the AHJ and provide satisfactory evidence of having obtained said permits and variances to both the Owner's Representative and Consultant.
3. File necessary drawings for approval of all Authorities Having Jurisdiction.
4. The Elevator Contractor shall undertake the necessary review and search procedure to identify open applications and/or outstanding violations for this property; and, close-out such applications and/or expunge such violations relative to the project scope as required for final acceptance by the AHJ.
 - a. Outstanding applications and violations must be indicated on the request for permit filing for this procedure to ensure such applications and/or violations are dismissed accordingly.
 - b. All relative costs shall be included in the base bid proposal with the understanding that corrective actions are covered under the specified scope of work.

B. Submittals

1. Prior to beginning the work, the Contractor shall submit and have approved copies of layout drawings, shop drawings and standard cuts. These items shall include:
 - a. A plan view of the hoistway and machine room
 - b. Elevation of the pit
 - c. All accessories.
2. The Consultant and the Owner's Representative shall pass on the submittals with reasonable promptness and the Contractor shall be responsible to ensure that there will be no delay in their work or that of any other trade involved.
3. Approved filing and submittal requirements must be completed before equipment and related materials are ordered.
4. Copies of Department of Buildings' permits and/or governing authority's documents will be posted at the job site with copies issued to the Owner's Agent, Owner's Representative and Consultant.
5. Samples of wood, metal, plastic, paint or other architectural finish material applicable to this project shall be submitted for approval by the Owner's designee.
6. It shall be understood that approval of the drawings and cuts by Owner's designee, Architect and/or Consultant shall be for general arrangement only and does not include measurements which are the Contractor's responsibility or approval of variations from the contract documents required by the AHJ.
7. The Contractor shall prepare a record log and maintain all submittals, shop drawings, catalog cuts and samples.

C. Measurements and Drawings

1. Drawings or measurements included with the bidding material shall be for the convenience of the bidders only and full responsibility for detailed dimensions lies with the Contractor.
2. In the execution of the work on the job, the Contractor shall verify all dimensions with the actual conditions.

3. Where the work of the Elevator Contractor is to join other trades, the shop drawings shall show the actual dimensions and the method of joining the work of the various trades.

D. Changes in Scope and Extra Work

1. Changes in Scope and Extra Work shall be per Division 1.

E. Keys

1. Upon the initial acceptance of work specified by the Contract Documents on each unit, the Contractor shall deliver to the Owner, six (6) keys for each general key-operated device that is provided under these specifications in accordance with ASME A17.1, Part 8 standards as may be adopted and modified by the AHJ.
2. All other keying of access or operation of equipment shall be provided in accordance with ASME A17.1 Part 8 as may be adopted and modified by the AHJ.

F. Diagnostic Tools

1. Prior to seeking final acceptance of the project, the Contractor shall deliver to the Owner any specialized tools required to perform diagnostic evaluations, adjustments, and/or programming changes on any microprocessor-based control equipment installed by the Contractor. All such tools shall become the property of the Owner.
 - a. Owner's diagnostic tools shall be configured to perform all levels of diagnostics, systems adjustment and software program changes which are available to the Contractor.
 - b. Owner's diagnostic tools that require periodic re-calibration and/or re-initiation shall be performed by the Contractor at no additional cost to the Owner for a period equal to the term of the maintenance agreement from the date of final acceptance of the project.
 - c. The Contractor shall provide a temporary replacement, at no additional cost to the Owner, during those intervals in which the Owner might find it necessary to surrender a diagnostic tool for re-calibration, re-initiation or repair.
2. Contractor shall deliver to the Owner, printed instructions, access codes, passwords or other proprietary information necessary to interface with the microprocessor-control equipment.

G. Service Support Requirements

1. Software / Firmware Updates

- a. During the life of the equipment and subject to the term of the maintenance agreement, where revisions to firmware and/or software are issued by the control manufacturer or manufacturer of solid state and microprocessor-based subsystems subsequent to the beneficial use of the equipment, updates shall be provided so that the installation and spare circuit boards are current with respect to software and firmware versions.

H. Wiring Diagrams, Operating Manuals and Maintenance Data

1. Comply with the requirements of Division 01.
2. Deliver to the Owner, four (4) identical volumes of printed information organized into neatly bound manuals prior to seeking final acceptance of the project.
3. The manuals shall also be submitted in electronic format on non-volatile media, incorporating raw 'CAD' and/or Acrobat 'PDF' file formats.
4. Manuals, as well as electronic copies, shall contain the following:
 - a. Step-by-step adjusting, programming and troubleshooting procedures that pertain to the solid-state microprocessor-control and motor drive equipment.
 - b. Passwords or identification codes required to gain access to each software program in order to perform diagnostics or program changes.
 - c. A composite listing of the individual settings chosen for variable software parameters stored in the software programs of both the motion and dispatch controllers.
 - d. Method of control and operation.
5. Provide four (4) sets of "AS INSTALLED" straight-line wiring diagrams in both hard and electronic format in accordance with the following requirements:
 - a. Displaying name and symbol of each relay, switch or other electrical component utilized including identification of each wiring terminal.
 - b. Electrical circuits depicted shall include all those which are hard wired in both the machine room and hoistway.
 - c. Supplemental wiring changes performed in the field shall be incorporated into the diagrams in order to accurately replicate the completed installation.
6. Furnish four (4) bound instructions and recommendations for maintenance, with special reference to lubrication and lubricants.
7. Manuals or photographs showing controller repair parts with part numbers listed.

I. Training

1. Prior to seeking final acceptance of the project, the Contractor shall conduct a training program on-site with building personnel selected by the Owner.
2. The focus of the session shall include:
 - a. Instructions on proper safety procedures and who to contact for the purpose of assisting passengers that may become entrapped inside an elevator car.
 - b. Explain each control feature and its correct sequence of operation.

3. Control features covered shall include but, not be limited to:

- a. Independent Service Operation.
- b. Emergency Fire Recall Operation - Phase I
- c. Emergency In-car Operation - Phase II.
- d. Emergency Power Operation.
- e. Emergency Communications Equipment.
- f. Security Operating Features.

J. Patents

- 1. Patent licenses which may be required to perform work specified by the Contract Documents shall be obtained by the Contractor at its own expense.
- 2. The Contractor agrees to defend and save harmless the Owner, Consultant and agents, servants, and employees thereof from any liability resulting from the manufacture or use of any patented invention, process or article of appliance in performing work specified in the Contract Documents.

K. Advertising

- 1. Advertising privileges shall be retained by the Owner.
- 2. It shall be the responsibility of the Contractor to keep the job site free of posters, signs, and/or decorations.
- 3. Contractor's logo shall not appear on faceplates or entrance sills without the approval of the Owner.

1.3 QUALITY ASSURANCE

A. Materials and Quality of Work

- 1. All materials are to be new and of the best quality of the kind specified.
- 2. Installation of such materials shall be accomplished in a neat manner and be of the highest quality.
 - a. Should the Contractor receive written notification from the Owner stating the presence of inferior, improper, or unsound materials or quality of installation, the Contractor shall, within twenty-four (24) hours, remove such work or materials and make good all other work or materials damaged.
 - b. Should the Owner permit said work or materials to remain, the Owner shall be allowed the difference in value or shall, at its election, have the right to have said work or materials repaired or replaced as well as the damage caused thereby, at the expense of the Contractor, at any time within one (1) year after the completion of the work; and neither payment made to the Contractor, nor any other acts of the Owner shall be construed as evidence of acceptance and waiver.

B. Electrical Design Requirements (General)

1. The following typical requirements shall apply to all parts of the work and are supplementary to other requirements noted under the respective headings.
 - a. The design and construction of the motors shall conform to the requirements of these specifications and to the ASME Standards for Rotating Electrical Machinery with revisions issued to the first day when the work of this Contract was advertised.
 - 1) Motors shall operate successfully under all loads and speeds and during acceleration and deceleration.
 - 2) Motors shall be designed for quiet operation without excessive heat.
 - 3) Insulation on motor coils and windings and on all insulated switch, relay, brake and other coils shall conform to the requirements of minimum Class "F" insulation, as defined in ANSI Standards for Rotating Electrical Machinery. All motors shall be impregnated twice.
 - 4) Switches, relays, etc., on controller, starter and signal panels and similar items on other parts of the equipment shall be the latest improved type for the condition of use. They shall function properly in full accordance with the requirements of the machines controlled and with the specified operating requirements of the elevator. Any of these parts showing wear or other injurious effects during the guarantee period to the extent that abnormal maintenance is required or indicated shall be replaced with proper and adequate parts by the Contractor.
 - 5) Contacts in elevator motor circuits which are intended to be opened by governors or other safety devices shall be copper to carbon or other approved non-fusing type.
 - 6) Where required, controllers and other component parts of the installation shall be labeled in accordance with the latest codes and standards as adopted and/or otherwise modified by the AHJ.
 - 7) Electrical equipment, motors, controllers, etc., installed under this contract shall have necessary CSA/US or UL/US listing as may be required by the AHJ. Equipment shall be labeled or tagged accordingly.

C. Materials, Painting and Finishes

1. Two (2) coats of rust inhibiting machinery enamel shall be applied to exposed ferrous metal surfaces in the pit that do not have a galvanized, anodized, baked enamel, or special architectural finishes.
2. Two (2) coats of rust inhibiting enamel paint to the machinery located within the machine room and secondary level (where applicable) as well as to the machine room floors.
3. Rust remediation & painting of hoistway, top of car, pit and landing door equipment: Surface rust shall be removed from the top of cars, top of car crosshead, landing door fascia, headers, toe guards, spreader beams, top of counterweight frame, car & counterweight buffers, buffers stands and pit channels. A coating of rust inhibiting paint shall be applied to each of these surfaces.

4. Architectural metal surfaces of bronze or similar non-ferrous materials which are specified to be refinished, re clad and/or provided new, shall be sufficiently clear coated so as to resist tarnishing during normal usage for a period of not less than twelve (12) months after final acceptance by the Owner.
5. Identify all equipment including buffers, crosshead, safety plank, machine, controller, drive, governor, disconnect switch, etc., by 4" high numerals which shall contrast with the background to which it is applied. The identification shall be either decalcomania or stencil type.
6. Paint or provide decal-type floor designation not less than 6" high on hoistway doors (hoistway side), fascias and/or walls as required by Code at intervals not exceeding 7'-0". The color of paint used shall contrast with the color of the surface to which it is applied.

D. Accessibility Requirements

1. Locate the alarm button and emergency stop switch at 35", and floor and control buttons not more than 48" above the finished floor. The alarm button shall illuminate when pressed for visual acknowledgement to user.
2. Provide raised markings in the panel to the left of the car call and other control buttons. Letters and numbers shall be a minimum of 5/8" and raised .03" and shall be in contrasting color to the call buttons and cover plate.
3. The centerline of new hall pushbutton shall be 42" above the finished floor.
4. The hall arrival lanterns or cab direction lantern provided shall sound once for the "up" direction and twice for the "down" direction. Design and locate fixtures per Federal standards.
5. Provide floor designations at each entrance on both sides of jamb at a height of 60" above the floor.
 - a. Use cast metal plates and polished numbers secured with tamper-proof hardware.
 - b. Designations shall be 2" high, raised .03" on a contrasting color background as selected by the Owner.
6. Provide an audible signal within the elevator to tell passenger that the car is stopping or passing a floor served by the elevator.
7. Where elevators operate at a speed greater than 200 fpm, provide a verbal annunciator to announce the floor at which the elevator is stopping where required by the AHJ.
8. Provide signal control timing for passenger entry/exit transitions per Federal and/or Local standards.
9. Ensure sill-to-sill running clearances do not exceed 1-1/4" at all landings served.
10. Provide visual call acknowledgment signal for car emergency intercommunication device.

1.4 DELIVERY / STORAGE / HANDLING / COORDINATION

A. Delivery and Storage of Material and Tools

1. Comply with the requirements of Division 01.

2. Delivery, Storage and Handling:
 - a. Deliver materials to the site ready for use in the accepted manufacturer's original and unopened containers and packaging, bearing labels as to type of material, brand name and manufacturer's name. Delivered materials shall be identical to accepted samples.
 - b. Store materials under cover in a dry and clean location, off the ground.
 - c. Remove delivered materials which are damaged or otherwise not suitable for installation from the job site and replace with acceptable materials.
 3. The Owner shall bear no responsibility for the materials, equipment or tools of the Contractor and shall not be liable for any loss thereof or damage thereto.
 4. The Contractor shall confine storage of materials on the job site to the limits and locations designated by the Owner and shall not unnecessarily encumber the premises or overload any portion with materials to a greater extent than the structural design load of the Facility.
 5. The contractor as an option can include a separate storage container housed on site for all material if contractor opposes where owner allocates the onsite storage of all materials shall be. This cost shall be broken out as an alternate in the RFP.
- B. Work with Other Trades / Coordination
1. Coordinate installation of sleeves, block outs, equipment with integral anchors, and other items that are embedded in concrete or masonry for the applicable equipment. Furnish templates, sleeves, equipment with integral anchors, and installation instructions and deliver to Project site in time for installation.
 2. Coordinate sequence of installation with other work to avoid delaying the Work.
 3. Coordinate locations and dimensions of other work relating to the equipment scheduled for installation including pit ladders, sumps, and floor drains in pits; entrance subsills; machine beams; and electrical service, electrical outlets, lights, and switches in pits and machine rooms, secondary levels, overhead sheave rooms and hoistways as it relates to the specific equipment.
- C. Removal of Rubbish and Existing Equipment
1. On a scheduled basis, the Contractor shall remove all rubbish generated in performing work specified in the Contract Documents from the job site.
 2. Any component of the existing elevator plant that is not reused under the scope of work specified in the Contract Documents shall become property of the Contractor and, as such, shall be removed from the premises at the Contractor's sole expense.
 3. The Contractor agrees to dispose of the aforementioned equipment and rubbish in accordance with any and all applicable Federal, State, and municipal environmental regulations, and further accepts all liability that may result from handling and/or disposing of said material.
- D. Protection of Work and Property
1. The Contractor shall continuously maintain adequate protection of all their work from damage and shall protect the Owner's property from injury or loss arising out of this contract.
 2. The Contractor shall make good any such damages, injury or loss, except such as may be directly caused by agents or employees of the Owner.

3. The Contractor shall provide all barricades required to protect open hoistways or shafts per OSHA regulations. Such protection shall include any necessary guards or other barricades for employee protections during and after the modernization procedure.
4. The Contractor shall provide barricades where necessary in order to maintain adequate protection of areas in which work specified by the contract documents is being performed, including open hoistway entrances. Terminal landing enclosures to be 8'-0" tall with a lockable access door. Fabrication and erection of all barricades shall be in compliance with applicable OSHA Regulations.

1.5 RELATED WORK

A. Work by Elevator Contractor Included in the Base Bid

- a. Rust remediation & painting of hoistway, top of car, pit and landing door equipment: Surface rust shall be removed from the top of cars, top of car crosshead, landing door fascia, headers, toe guards, spreader beams, top of counterweight frame, car & counterweight buffers, buffers stands and pit channels. A coating of rust inhibiting paint shall be applied to each of these surfaces.
- b. Installation of new fully enclosed, externally operated, fused main line and/or auxiliary disconnect switch, with 4th wire ground, properly located in accordance with local law that can be locked in the open (off) position.
- c. Installation of new electrical conduit and power feeders between the load side of new main line disconnect switches and new elevator control equipment.
- d. Where there is an increase in HP of the elevator hoist motor, Contractor shall conduct an investigation to determine if existing feeder wires and conduit / piping to the elevator machine room are adequate in size to supply the new hoist motor. Where they are not adequate in size, or where power supply from the building distribution panel is not large enough for feeder size / motor HP rating, Contractor shall include in their Base Bid proposal the cost to provide new building distribution electrical distribution supply connections, feeder wires and conduit / piping to elevator machine room.
- e. Where sprinkler fire protective systems are provided inside any elevator hoistway, machine room or associated machinery space, provisions shall be made for the disconnecting of the main line power supply from the affected elevator prior to activation. This means of disconnect shall be manually reset in accordance with code.
- f. Provide remote/auxiliary disconnects where new (either by the Elevator Contractor or by others) or existing disconnect switches are not in line-of-sight of the controller.
- g. Provide auxiliary power feeds with required distribution load center (circuit breaker panel) for intercommunication, CCTV systems, cab lighting or other specialty devices existing or to be provided by the Elevator Contractor.
 - 1) Voltage shall be 110 VAC with one 15 Amp circuit breaker or fuse for lighting of each individual elevator car enclosure.

- 2) Circuit breakers and/or fused disconnects shall be lockable in the "OFF" position in accordance with applicable code.
- h. Provide hoist rope guards at the car and counterweight drop side of the hoisting machine sheave to prevent accidental contact with the hoisting ropes. The guard shall extend from the point where the hoisting ropes penetrate the machine room floor slab to a point beyond where the ropes contact the traction and deflector sheaves. The guards shall be constructed so as to conceal pinch-points between ropes and sheave grooves.
- i. The top surface of any setback or projection in the hoistway that measures 2" or more in width shall be beveled at an angle of not less than 75 degrees from horizontal. Each bevel plate shall be constructed from prime painted 14 gauge cold-rolled steel and installed so as to conform with ASME A17.1 elevator safety code as modified by, and/or in addition to codes and standards accepted by the AHJ.
- j. Installation of new permanent dual lamp LED lighting LED fixtures with protective guards and 110-volt duplex (three [3] minimum) GFCI receptacles inside the machine room. Illumination shall be no less than 30 foot-candles at floor level. A light control switch shall be provided immediately adjacent to the machine room entrance door. Provide necessary receptacles as required to supply power to auxiliary elevator equipment and/or remotely located monitors.
- k. Provide each elevator pit with a 110-volt GFCI duplex receptacle and a permanent dual lamp LED lighting fixture equipped with protective guard. Illumination shall be no less than 10 foot-candles at pit floor level. A light control switch must be provided and so positioned as to be readily accessible from the pit entrance door or ladder.
- l. Provide the following signage, plates and tags:
 - 1) Provide access doors to each electrical control room or machinery space with signs that read "ELEVATOR MACHINE ROOM". Letters shall be not less than 2" high.
 - 2) Provide all required manufacturer data plates and installation-specific tags and signs of the types and styles containing information as required by applicable Codes and Standards as adopted and/or modified by the AHJ.
- m. Where the pit extends more than 3' below the sill of the pit access door, provide a permanent fixed metal ladder.
 - 1) Ladder shall extend no less than 48" above the sill of the access door. Handgrips shall extend from the ladder to a point no less than 48" above the sill of the access door where the ladder does not comply.
 - 2) The rungs shall be a minimum of 16" wide. Where prevailing conditions prevent a 16" wide rung, the rung may be reduced to no less than 9".
 - 3) The rungs shall be spaced 12" on center.
 - 4) A clear distance of no less than 4 ½" from the centerline of the rungs and handgrips to the nearest permanent object in back of the ladder shall be provided.
 - a) Where prevailing conditions prohibit the installation of the required ladder as specified above, the Elevator Contractor shall coordinate requirements necessary for compliance with the Authority Having Jurisdiction.

- n. Provide a standard railing conforming to Code on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12") horizontal clearance or as otherwise required by the Authority Having Jurisdiction.
- o. Provide necessary patching, repairing and installation of masonry and/or dry wall for smooth and legal elevator hoistways.
- p. Provide any required repair of smoke holes with subway grating covers in the machine rooms and/or secondary levels where applicable. All smoke ventilation provisions, including duct work, dampers, fans, fire control interfaces, in accordance with local codes, shall be reviewed for proper operation.
- q. Installation of new or modification of existing fire emergency control interface provisions for automatic recall of the elevator(s) through operation of the fire detection system. Provisions shall be made for primary, alternate and third-zone (Fire-Hat) designated fire recall landing with connection contingent on Codes recognized by the local governing authority. The interfacing contacts shall be wired to an electrical junction box located inside each elevator machine room for connection to the elevator control systems by the Elevator Contractor. Each wire shall be clearly labeled with its control function. Coordinate the type of interface required for the specific elevator control apparatus with the Elevator Contractor.
 - 1) Installation of fire / smoke detecting devices in the elevator machine room, elevator lobbies, top of shaft and / or pit as required for elevator fire recall operation to meet current requirements of A17.1 and/or the local Governing Authority. Connection and programming of these new devices to existing building fire alarm control panel.
 - 2) Modification of existing fire alarm control panel and interface / wiring to panel as required to accommodate new heat / smoke detecting devices or new elevator fire recall zones, including installation of expansion panel and new power supply(s) (if required) to existing FACP.
 - 3) Software modifications as required to the existing fire alarm control panel as required to accommodate new smoke / heat detecting devices, new elevator fire recall zones, or expansion panel (if required).
 - 4) All wiring, piping, coring, cutting, patching, as required for new ducts / conduits to connect new or modified components of the fire alarm control system to operate elevator fire recall to meet current requirements of ASME A.17.1 and/or the local Governing Authority.
- r. Where there are existing roof drain lines in the elevator machine room, contractor shall furnish and install aluminum drip pans underneath the drain lines to prevent water from leaking on to the elevator equipment.
- s. If new elevator cab flooring is needed, labor and material will be provided by others, Elevator contractor is to assist flooring contractor as needed.
- t. Subsequent to the contract execution, the Contractor shall perform the following procedures and engineering tasks relative to balance loading of system and cab work included under base specification requirements and alternative/optional upgrades:

- 1) Perform balance load testing to determine existing conditions and requirements applicable to new/modified equipment.
 - 2) Provide data for Purchaser and/or their agents to evaluate any limitations that may be placed on design/finish options due to prevailing conditions or total suspended loading.
- u. Subsequent to the contract execution, the Contractor shall perform a Violation search and review of all open Applications in conjunction with the filing procedure. Subsequently, any and all outstanding Violations and/or open Applications shall be indicated on the Request for Permit; and such outstanding Violations shall be expunged and open Applications closed out as part of this filing procedure.
- 1) If requirements and/or work necessary to satisfy outstanding Violation or Applications are not included in the contracted scope of work, the Elevator Contractor shall prepare an itemized listing with relative extra costs to cure the condition(s) and expunge and/or close out the Violation or Application for the Owners' and Consultants' review/approval prior to executing such work procedures.

B. Work by Others

1. Provide a class "ABC" fire extinguisher in electrical machinery and control spaces. Locate the extinguisher in close proximity to the access door.
 - a. If new elevator flooring is needed, labor and material will be provided by others, Elevator contractor is to assist flooring contractor as needed.
 - b. Provide necessary telephone / internet wiring with connection to local telephone / internet service for remote elevator monitoring and/or two-way voice emergency communications systems.
 - 1) Terminate the telephone wiring in junction boxes or standard phone jack terminals in the machine room.
 - 2) Coordinate the quantity and termination method of individual phone connections with the Elevator Contractor.
 - 3) Identify each phone line for connection by the Elevator Contractor to the appropriate elevator device(s).
 - 4) Telephone wiring, where required by applicable codes, shall be installed in conduit.
 - c. Sumps in pits where provided shall be covered. The cover shall be level with the pit floor so as not to produce a tripping hazard.

1.6 WARRANTY / MAINTENANCE SERVICES

A. Contract Close-Out, Guarantee and Warranties

1. The Contractor agrees to certify that work performed in accordance with the Contract Documents shall remain free of defects in materials and quality of work for a period of one (1) year after final acceptance of the completed project, or acceptance thereof by beneficial use on a unit by unit basis, whichever occurs first.
2. The sole duty of the Contractor under this warranty is to correct any non-conformance or defect and all damages caused by such defect without any additional cost to the Owner and within fifteen (15) days of notification.
3. The express warranty contained herein is in lieu of all other warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose.
4. In the event the Contractor fails to fulfill its obligations defined herein, the Owner shall have the express right to perform the Contractor's obligations and to charge the Contractor the cost of such performance or deduct an equal amount from any monies due the Contractor.

B. Maintenance Coverage

1. The following maintenance coverage apply:

a. Interim Maintenance

- 1) Provide full protective maintenance services and equipment coverage for two (2) months prior to the commencement (actual modernization start date) of work, and during the work implementation procedure, until final acceptance of the finished project.
- 2) Interim full comprehensive maintenance services shall be provided in accordance with Division 14 01 20, Owner's Form of Maintenance Agreement.
- 3) Costs related to interim maintenance shall be included in the base bid quotation.

b. Guarantee Maintenance

- 1) Provide full comprehensive preventative maintenance services for a period of twelve (12) months after the final completion and acceptance of the project.
- 2) Guarantee maintenance and related services shall be provided in accordance with Division 14 01 20, Owner's Master Form of Maintenance Agreement.
- 3) Costs related to guarantee maintenance shall be included in the base bid quotation.

c. Long-Term Maintenance

- 1) Provide full comprehensive preventative maintenance services for a period of thirty-six (36) months after expiration of Guarantee Maintenance.
- 2) Long-Term maintenance and related services shall be provided in accordance with Division 14 01 20, Owner's Master Form of Maintenance Agreement.
- 3) Costs related to guarantee maintenance shall be indicated on the bid form.

1.7 ALLOWANCES

A. Allowances

1. Carry the following allowances for each elevator:
 - a. Cab Interior Remodel (new side & rear wall panels, ceiling, lighting, handrails):
 - \$25,000 material per cab
2. The above allowances are exclusive of any handling charge, applicable sales and/or use taxes. Wiring, installation and coordination of allowance items shall be included in the base contract.
3. Installation of new stainless steel car fronts / transoms, new stainless steel car door panels and nickel-silver thresholds (car sills) is to be included in the cost of the base bid, not in the allowance.

C. Top of Car and Hoistway Water Resistant Requirements

1. Top of Car

- a. The car tops, and equipment located on the top of car, shall be protected as best as possible to prevent infiltration of water into the cab, in electrical conduits and junction boxes, and boxes containing electronic components. The recommended work would include, but not be limited to:
 - 1) Electrical junction boxes that do not require ventilation, shall be NEMA 4 type.
 - 2) Rigid conduit shall be terminated with liquid-tight connectors.
 - 3) Flexible conduit shall be by "Sealtite" or approved equal with liquid-tight connectors.
 - 4) Electrical boxes containing electronic components requiring ventilation shall be positioned to prevent water from entering the box around the cover or provided with gasketing where the cover meets the box on all sides.
 - 5) Wire troughing and ducts shall be so positioned as to deflect water. Covers shall be gasketed where necessary to minimize water contamination.
 - 6) Where wiring passes through penetrations in the car shell dome, caulking shall be applied around the wiring to seal the hole.

- 7) Exhaust fans shall be installed on a continuous extension flange no less than 2" in height. The flange shall be caulked where attached to the car top shell to prevent water seepage.
- 8) Joints or seams in the shell ceiling shall be covered with light-gauge galvanized steel with caulking applied between the steel and dome. Caulking of shell joints without the use of covering steel shall be acceptable.
- 9) The removable top of car hatch, or hinged door, shall be gasketed for a tight seal when in the closed position. The gasket shall not hinder operation of the top of car hatch.
- 10) Lighting fixtures penetrating the dome shall be guarded with a curb made of continuous galvanized steel with caulking applied between the curb and the dome to provide a water-tight barrier.
- 11) The electrical control box for the master door operator shall be arranged to prevent water infiltration and, where necessary, covers shall be gasketed.
 - a) In lieu of the above, where allowed by the AHJ, the master door operator shall be the "MOVFRW-II" water resistant as manufactured by GAL/Vantage or approved equal.
- 12) Where allowed by the AHJ, the car door gate switch shall be type "GW" water resistant as manufactured by GAL/Vantage or approved equal.
- 13) Top of car positioning systems shall be water resistant, constructed of stainless steel or aluminum with a splash guard that will fully cover the unit.
- 14) Top of Car Inspection Station to be installed in waterproof/resistant enclosure, utilizing waterproof/resistant connectors and moisture tight seals.
- 15) Infrared or electronic door protection systems (safety edges) shall be protected at the top from water entry, using water-tight connectors, etc.
- 16) Door edge controllers mounted on the top of the car shall be protected from water infiltration by sealing covers and utilizing water tight connectors and conduit.

2. Hoistway

- a. Hoistway devices shall be protected as best as possible from damage by water. The following shall apply:
 - 1) Installation of water-resistant Hoistway Door Interlocks, to be type GAL "MOW" or "WP" (as applicable) water resistant as manufactured by GAL/Vantage or approved equal.
 - a) Devices shall be wired with water-tight connectors.
 - 2) Hoistway Limit Switches to be of the waterproof/resistant type with water-tight connectors.
 - 3) NTS/ETS devices shall be of the waterproof/resistant type with water-tight connectors.
 - 4) Half-way junction boxes shall be sealed to prevent water infiltration from above. Connectors shall be water-tight and the cover shall be gasketed.

PART 2 - PRODUCTS

2.1 ELEVATORS

A. Elevators – PE1

- | | | |
|-----|-----------------------------|---|
| 1. | Quantity | One (1) |
| 2. | Type | Traction Passenger |
| 3. | Capacity (lbs.) | 3,000 |
| 4. | Speed (fpm) | 350 |
| 5. | Travel in Feet | Existing |
| 6. | Number of Landings | Eight (8) @ 1 through 8 |
| 7. | Number of Openings | Eight (8) @ 1 through 8 |
| 8. | Front Opening | All |
| 9. | Rear Opening | None |
| 10. | Operation | Simplex Selective / Collective |
| 11. | Control | Variable Voltage Variable Frequency |
| 12. | Fireman's Control | Phase I and II |
| 13. | Number of Pushbutton Risers | One (1) |
| 14. | Platform Size | Existing |
| 15. | Guide Rails | Steel tees – Reuse |
| 16. | Buffers | Oil – Recondition |
| 17. | Cab Interior | Remodel with new stainless steel swing fronts & transom, car doors and sills (within the base cost) & a \$25,000 material allowance per car for new side & rear wall panels, ceiling, lighting and handrails. |
| 18. | Entrance Size | 42" wide x 84" high |
| 19. | Door Operation | Single Speed Center Opening |
| 20. | Machine Type | Base Bid - Geared traction – New |

21.	Machine Location	<u>Alt. No. 2</u> – AC Gearless Traction - New Overhead
22.	Counterweight Safety	Not Required
23.	Power Supply	480 – 3 – 60 (Contractor to Verify)

B. Elevator – PE2 & PE3

1.	Quantity	Two (2)
2.	Type	Traction Passenger
3.	Capacity (lbs.)	3,000
4.	Speed (fpm)	350
5.	Travel in Feet	Existing
6.	Number of Landings	Eight (8) @ 1 through 8
7.	Number of Openings	Nine (9)
8.	Front Opening	Eight (8) @ 1 through 8
9.	Rear Opening	One (1) @ 3
10.	Operation	Duplex Automatic
11.	Control	Variable Voltage Variable Frequency
12.	Fireman's Control	Phase I and II
13.	Number of Pushbutton Risers	Two (2)
14.	Platform Size	Existing
15.	Guide Rails	Steel tees – Reuse
16.	Buffers	Oil – Recondition
17.	Cab Interior	Remodel with new stainless steel swing fronts & transom, car doors and sills (within the base cost) & \$25,000 material allowance per car for new side & rear wall panels, ceiling, lighting and handrails.
18.	Entrance Size	42" wide x 84" high
19.	Door Operation	Single Speed Center Opening
20.	Machine Type	Base Bid - Geared traction – New <u>Alt. No. 2</u> – AC Gearless Traction - New
21.	Machine Location	Overhead
22.	Counterweight Safety	Not Required
23.	Power Supply	480 – 3 – 60 (Contractor to Verify)

2.2 MANUFACTURERS

A. Pre-Approved Equipment Manufacturers

1. The following manufacturers' equipment and materials have been pre-approved for use on this project.
2. Other equipment not specifically mentioned shall be considered for approval on an individual basis.

- a. Controller - GAL (GALaxy), Motion Control Engineering, Smartrise.
 - b. Tracks, Hangers, Interlocks and Door Operators - G.A.L., Wittur.
 - c. Fixtures - Adams, EPCO, Monitor, E-Motive USA, C.E. Electronics, Innovation, PTL, MAD, National.
 - d. Door Protective Device - Janus, Adams, G.A.L., T.L. Jones, Tri-Tronics.
 - e. Cabs and Entrances/Entrance Door Panels - Accurate Elevator Door Corp, CEC Elevator Cab, EDI/ECI, Elite Elevator Cab, National Cab & Door, Tyler, Velis, Gunderlin, Premier, Prestige, Regency, Columbia Elevator Products, United Cabs, Eklund.
 - f. Machines - Hollister-Whitney.
 - g. Motors - Imperial Electric, General Electric, Baldor, Reuland Electric.
 - h. VVVF Power Drives - Mitsubishi, MagneTek, Yaskawa, TorqMax.
 - i. Electrical Traveling Cables - Draka, James Monroe.
 - j. Guide Shoes/Rollers - ELSCO, G.A.L., Wittur.
 - k. Wire Ropes - Paulsen, Bethlehem, Wayland, Draka.
 - l. Intercommunications/Telephones - Webb Electronics, K-Tec, Ring, Wurtec, Janus, approved equal.
 - m. Compensation Chains - Draka or approved equal.
 - n. Compensation Chain Guides - Draka super sway-less or approved equal.
3. Original Equipment Manufacturers may substitute their own branded equipment subject to the following:
- a. All requirements of the specifications are met regarding performance, appearance, serviceability and support.
 - b. A full stock of all regular and critical replacement parts required for this project are maintained at a facility within fifty (50) miles of the project site.
 - 1) Any parts not stocked at the above referenced facility shall be identified with the location of the nearest source and shall be available for next-day delivery upon demand.
 - c. All parts and software shall be made available for purchase to a qualified elevator maintenance firm with one-business day delivery without direct Owner involvement.
 - 1) Provide details of parts supply facility and a list of current parts pricing for all major components required for the installation.
 - d. All specialized tools, equipment, software, and passwords, required to maintain, repair, adjust the operation, and perform code mandated inspections are provided to the Owner as part of the base installation.
 - 1) Updates to these items shall be available via the parts supply facility referenced above.
 - e. Technical support of the product(s) shall be available to the Owner's elevator service provider.

2.3 CONTROL FEATURES / OPERATION

A. Motion Control

1. Smooth stepless acceleration and deceleration of the elevator car shall be provided in either direction of travel during both single and multiple floor runs.
2. Use digital logic to calculate optimum acceleration and deceleration patterns during each run.
3. Acceleration, deceleration, jerk, maximum velocity, leveling accuracy and elapsed flight time, for a typical elevator one floor run, shall not exceed values as further specified.

B. Simplex Selective Collective Operation – PE1

1. Provide simplex selective collective operation from a riser of hall pushbutton stations.
2. The registration of one or more car calls shall dispatch the car to the selected floors.
 - a. The car shall also respond to registered hall calls in the same direction of travel.
 - b. Car and hall calls shall be canceled when answered.
3. Stops in response to calls that are registered in either the car or hall pushbutton stations shall occur in the natural order of progression in which the floors are encountered, depending on the direction of car travel, and irrespective of the order in which calls are registered.
4. When the car has responded to the highest or lowest call, and calls are registered for the opposite direction, the car shall reverse direction automatically and respond to those registered calls.
5. When the car arrives at its last stop and reverses direction of travel, all previously registered car calls shall be automatically cancelled.
6. When the car arrives at a landing where both up and down hall calls are registered, it will answer the call in the direction of travel.
 - a. After a pre-determined delay, if no car call is registered, the car shall respond to calls registered for the opposite direction. Car doors shall close immediately, re-open and respond to the call for the opposite direction.
 - b. Hall lantern operation shall always correspond to direction of service.
7. When an empty car reverses direction at a landing with no hall calls, the doors shall not open and the hall lantern shall not operate.
8. If the car has no car calls registered and arrives at a floor where both up and down hall calls have been registered, the car shall respond to the hall call corresponding to the last direction of car travel. If, after making its stop, a car call is not registered and no other hall calls exist ahead of the car corresponding to its original direction of travel, the doors shall close and immediately reopen in response to the hall call for the opposite direction.
9. The car shall maintain its original direction at each stop until the doors are fully closed to permit a passenger to register a car call before the car reverses its direction of travel.

C. Automatic Group Duplex / Selective Collective Operation – PE2 & PE3

1. Provide duplex selective collective operation with the two cars arranged to operate from a single riser of hall pushbuttons.

2. When there is no demand for elevator service, park one car at the Lobby Floor and the other shall be a "free car", parking at the floor last served.
 - a. Park both cars with doors closed.
 - b. The "free car" shall normally respond to any registered hall call except:
 - 1) A hall call registered at the Lobby Floor shall be answered by the car parked at the Lobby Floor.
 - 2) A hall call registered below the Lobby Floor shall be answered by the car parked at the Lobby Floor.
3. When the car parked at the Lobby Floor responds to a registered call for a floor above the Lobby Floor, the "free car" shall be dispatched automatically to the Lobby Floor, and shall become the assigned Lobby Floor parking car.
4. When the "free car" is responding to registered calls, the Lobby Floor parking car shall automatically dispatch from the Lobby Floor under any of the following conditions:
 - a. Registration of hall call below the "free car" while it is traveling in the up direction.
 - b. Registration of hall call above the "free car" while it is traveling in the down direction.
 - c. Inability of the "free car" to move in response to a registered hall call within a predetermined time.
5. When both cars are responding to registered car and hall calls, the first car to complete its calls shall become the assigned Lobby Floor parking car and shall be dispatched automatically to the Lobby Floor.
6. If either car is removed from service, the other car shall respond to all registered hall calls and its own car calls.
7. When a car arrives at its last stop and reverses direction of travel, all previously registered car calls shall be automatically cancelled.
8. When a car has responded to the highest or lowest call, and hall calls are registered for the opposite direction, the car shall reverse direction automatically and respond to those registered calls.
9. When a car arrives at a landing where both up and down hall calls are registered, it will answer the call in the direction of travel.
 - a. If no car call is registered, the car shall be assigned to respond to call registered for the opposite direction. The car doors shall immediately close and re-open to respond to the call in the opposite direction.
 - b. Hall lantern operation shall always correspond to direction of service.
10. When an empty car reverses direction at a landing with no hall calls, the doors shall not open and the hall lantern shall not operate.
11. If a car has no car calls registered and arrives at a floor where both up and down hall calls have been registered, the car shall respond to the hall call corresponding to the direction of car travel.
12. If, after making its stop, a car call is not registered and no other hall calls exist ahead of the car corresponding to its original direction of travel, the doors shall close and immediately reopen in response to the hall call for the opposite direction.

13. The car shall maintain its original direction at each stop until the doors are fully closed to permit a passenger to register a car call before the car reverses its direction of travel.
14. In the event that any car is delayed for more than a predetermined time interval after it received a start signal, the system shall automatically permit the remaining car in the two car group to respond to signals and be dispatched in the specified manner.
15. Coincident calls: The dispatching system shall be designed with a twenty (20) second parameter whereby an elevator with a car call will receive priority to answer a corresponding corridor call if it can do so within twenty (20) seconds. If it cannot answer the call within the prescribed time, the first available car shall be assigned. A continuous reassessment of calls shall be made, with the processor having the capability of reassessing five (5) times per second.
16. In the event the supervisory control system should malfunction so that neither elevator is assigned calls within a predetermined interval and in accordance with the conditions of the operating strategy in effect, the system shall automatically assume a back-up mode of operation whereby the elevators shall be arranged to provide continuous service to each landing in a predetermined pattern without regard to actual corridor call demands.

D. Independent Service Operation

1. The car operating station shall be equipped with a key-operated switch labeled "IND SER".
2. Locate the switch in the locked access compartment.
3. When placed in the "on" position the following shall occur:
 - a. Group elevator - the elevator shall bypass corridor calls and travel directly to any floor chosen by registration of a car call. Hall calls shall remain registered for service by another elevator in the group.
 - b. Simplex elevator - existing hall call registrations shall extinguish and hall buttons shall remain inoperative as an indication to passengers that there is no elevator service.
4. During Independent Service Operation, the elevator doors shall remain open at any landing until the door close or a car call pushbutton is pressed and maintained until the doors are fully closed.
5. If more than one (1) car call is registered, all registered car calls shall extinguish when the elevator stops in response to the first call.
6. Fire Emergency Recall shall automatically override Independent Service Operation and engage Phase I - Fire Emergency Recall Operation following a period of approximately forty-five (45) seconds.

E. Inspection Service Operation

1. Provide a key operated switch in the main car operating panel that, when turned to the 'ON' position, shall cause the elevator to be removed from service and placed in Inspection Service Operation.
2. Limited operation of the car shall be provided through pressing the Attendant Service up and down pushbuttons (if provided) or the highest or lowest car call pushbuttons (if up and down buttons are not provided) in the main car operating panel only.
3. The car shall move at a speed not to exceed 150 feet per minute (0.75 meters per second) as per code with both the hall and car door panels in the closed and locked position.

4. The Inspection Service switch shall be keyed differently than other typical keys used in the operation of the elevator. Keying shall be in accordance with Security Group Classifications as required by applicable code.
5. The top of the elevator car shall be equipped with a control for limited operation of the car during repairs, maintenance and inspection conducted in the hoistway. The transfer of control to the top of car operating device shall cause that device to be the sole means of control for the elevator.
 - a. Visual and audible indication shall be provided on the top of the car when Firefighters' Emergency Operation is initiated.
6. Power door operating equipment shall be rendered inoperative while the car is being operated in the Inspection Service mode with the exception of power closing of the door. The control system shall maintain closing power on the door while the elevator is moving under Inspection Service Operation.
7. The in-car Inspection Service switch shall be rendered ineffective when the top of car inspection control is activated.
8. Machine Room Inspection Operation and Inspection Operation with open door circuits shall be provided in accordance with A17.1 Safety Code, as modified and adopted, where required or allowed by the AHJ.

F. Hoistway Access Operation

1. Provisions shall be made to allow access to the hoistway through the use of hoistway access switches.
2. Operating the access switch shall permit the car to move at a speed not to exceed 150 feet per minute (0.75 meters per second) as per code with the hall and car doors in the open position to obtain access to the top of the car or climb-in pit.
3. The car shall automatically stop motion when the car top is level with the hoistway door sill for access to top of car.
4. The access key switch(es) shall be keyed differently than other typical keys used in the operation of the elevator. Keying shall be in accordance with Security Group Classifications as required by applicable code.
5. Access operation shall be disabled when top of car inspection operation is in effect.

G. Load Weighing Operation

1. A positive means shall be provided to continuously monitor the amount of load being transported by the elevator car.
2. The system shall be used to:
 - a. Preload static motor drives
 - b. Activate control features that include:
 - 1) anti-nuisance operation
 - 2) load dispatch operation
 - 3) load dependent non-stop operation where applicable.

3. The anti-nuisance feature shall operate at loads not exceeding 200 lbs., whereas load dispatch and load non-stop shall be set to function at 65% of the rated loading capacity for the initial set up and adjustment procedure.

H. Anti-Nuisance Operation

1. In the event car loading is not commensurate with the number of car calls registered, all car calls shall be canceled.
 - a. The system shall monitor the door protection device to determine if passenger transfer has occurred.
 - b. If after the third stop a passenger transfer has not occurred, the system shall cancel all remaining registered car calls and respond to assigned hall call demand.
 - c. The number of calls registered with no passenger transfer that will trigger anti-nuisance shall be adjustable and initially set to 3 calls.

I. Firefighters' Emergency Operation

1. Firefighters Service Operation and devices shall meet applicable code requirements of the AHJ.
2. Contractor shall be responsible for compliance in all aspects of Firefighters Service including, but not limited to the mode of operation, initiation of operation, operating control and signaling devices as well as fixture engraving including operating instructions applicable to and where required by the AHJ.

J. Floor Lockout Feature / Keyless - Card Reader Control / Wiring Provisions

1. Wiring: Provide six (6) pair of 20 gauge two (2) flexible conductor low voltage cables with an overall braided shield in the traveling cable of all elevators for card reader interface.
 - a. The cables shall extend from the security interface terminal cabinet in the elevator machine room to behind the elevator return panel above the space allotted for the card reader.
 - b. Terminate the cable to dual screw barrier terminal strips on each end.
2. Card Reader Space: Allocate card reader space in each main car station as directed by the Consultant. Provide a flush Lexan lens and mounting provisions for the card reader unit which is provided by others.
3. Interface: For floor programmable card access control in all elevators, provide a pair of terminals for all floors such that application of a momentary dry (no voltage present) contact closure across those terminals by the security system shall enable the selection of the corresponding floor from the floor selector button in the elevator cab.
 - a. Locate the terminals inside an interface terminal cabinet in the elevator machine room.
 - b. Provide all relays required to interface the elevator control system to the momentary dry contact closures provided for under another section of these specifications.
 - c. If applicable, the card reader shall be operable and compatible with the issued card keys used building wide.
 - d. Coordinate system requirements with the manufacturer of the issued card key system.

4. Card Reader "Secure/Bypass" Switch: Provide separate card reader control bypass key switches for each elevator.
 - a. The bypass key switches shall be located in the Lobby Control Panel.
 - b. The bypass key switches shall be a maintained contact type key switch with the key removable in the secure or bypass position.
 - 1) When the key switch is in the secure position, the card reader control mode shall be initiated.
 - 2) When in the bypass position, the card reader control mode shall be bypassed and the elevator shall return to normal operation, permitting free access to any floor.
 5. The card reader operation shall bypass floor cut-out switches.
 6. Firefighters' Service Operation shall override Floor Lockout Feature.
 7. Card Reader wiring shall be properly labeled inside the card operating panel "Card Reader Wiring". The same designated wiring shall be brought outside the controller and stored in an electrical pull box with the cover labeled "Card Reader Wiring".
- K. Car to Lobby Operation
1. Provide a key-operated Car-to-Lobby feature.
 - a. A new lobby control panel shall be furnished and installed and it shall incorporate a separate key-operated switch for each elevator to activate the Car-to-Lobby operating feature.
 2. When engaged, this feature shall:
 - a. Cause the affected elevator to return non-stop to the lobby after it has discharged all registered car calls.
 - b. Open the door upon arriving at the lobby for approximately ten (10) seconds, after which the elevator shall park out of service with the door closed.
 - c. Maintain door open button function during the interval in which the car is out of service.
 3. Returning the key-operated switch in the lobby panel to the "on" position shall restore the car to normal operation.
 4. Override the Priority Service feature with Firefighters' Service in accordance with code and local law.
- L. Flood Zone Requirements / Flood Operation
1. Elevators shall be provided with additional flood resistance measures in compliance with the Building Code.
 - a. Provide a water sensor located below the lowest electronic protective device within the pit which shall transmit a signal to the elevator control to initiate "flood operation".
 - b. Upon activation of "flood operation":

- 1) All cars shall be parked at the first stop above flood level, or at alternate location as directed by the AHJ.
- 2) Emergency power or auto lowering devices shall not lower the car below the flood level when "flood operation" is active.
- c. Provide a visual signal at the lobby hall station and in the car operating panel to notify passengers and emergency responders that the car is on "Flood Operation".
- d. All electrical devices below the base flood elevation and devices in the elevator pit shall be NEMA 4 compliant.
- e. Provide additional control measures as required by local codes.
- f. Provide applicable signage per local building code.
- g. "Flood Operation" functions and designs are subject to approval and / or revision by the AHJ. The Elevator Contractor shall verify "Flood Operation" functions with the AHJ prior to equipment installation.

M. Door Operation

1. Car and hoistway doors shall be arranged to operate in unison without excessive noise or slamming in either direction of travel.
 - a. Door opening speeds of 2.0 feet per second shall be provided in conjunction with closing speeds of 1.0 feet per second in accordance with governing code.
 - b. Door operation shall be arranged to commence as the car enters its final leveling approach to a landing. In no case shall the door opening cycle conclude before the car comes to a complete stop at floor level.
2. Where the hoistway door and the car door are mechanically coupled, the kinetic energy of the closing door system shall be based upon the sum of the hoistway and the car door weights, as well as all parts rigidly connected thereto, including the rotational inertia effects of the door operator and the connecting transmission to the door panels.
3. The force necessary to prevent closing of the car and hoistway door from rest shall not exceed 30 lbf. This force shall be measured on the leading edge of the door with the door at any point between one third and two thirds of its travel.
4. Door open and door close time shall be measured between the moment car door operation in either direction begins and the instant at which that cycle is completed.
5. When responding to either a car or corridor call, the amount of time that the elevator door remains stationary in the open position shall be adjustable up to sixty (60) seconds.
 - a. Door open dwell time for a corridor call shall be separate of that for a car call, and in both cases, dwell time shall be canceled whenever the car door protection device is momentarily interrupted by passenger transfers, followed by a reduced door open dwell time of approximately one (1) second (adjustable) after the door protection device is cleared of obstructions.
6. The operation of the door protective device by physical contact (mechanical safety-edge) or the interruption of one or more infrared light beams (dual or multi-beam non-contact) during the close cycle shall cause the immediate reversing of the doors to the full open position.

7. The door closing cycle shall be arranged so that, in the event the door protective devices become continually obstructed after the normal door open dwell time has expired and following a time interval of approximately thirty (30) seconds (adjustable), a warning tone shall sound and the door closing cycle shall commence at reduced speed and torque per applicable Code requirements.
8. Each car operating station shall be provided with a "door open" and "door close" pushbutton.
 - a. Pressure on the "door open" button shall cause doors in the full open position to remain so and doors engaged in the close cycle to reverse direction and assume the full open position so long as pressure remains applied to the button.
 - b. The "door open" buttons shall also control the open cycle during Phase II - Emergency In-car Operation.
 - c. The "door close" pushbutton shall function on Independent Service, Attendant Service and Phase II - Emergency In-car Operation as well as during normal automatic operations.
9. Repeated attempts by the power door operator to open or close the door at any landing shall be monitored by the control system.
 - a. In the event the door fails to cycle properly after a preset (adjustable) number of attempts, the car shall either travel to the next stop or remove itself from service, depending upon whether the malfunction is in the open or close cycle.
10. Each hoistway door shall be provided with an automatic self-closing mechanism arranged so that the door shall close and lock if the car should leave the landing while the hoistway door is unlocked.
11. Car doors shall be arranged to prevent their being manually opened from inside the car unless the elevator is positioned within a floor landing zone.

2.4 MACHINE ROOM EQUIPMENT

A. Controller / Dispatcher

1. The elevators shall have microprocessor-based controller/dispatchers.
2. Digital logic shall calculate optimum acceleration, deceleration and velocity patterns for the car to follow during each run.
3. Closed-loop distance and velocity feedback shall monitor the actual performance of the elevator car with the desired speed profile.
4. System operating software shall be stored in non-volatile memory.
5. Elevator control relays, contactors, switches, capacitors, resistors, fuses, circuit breakers, overload relays, power supplies, electronic circuit boards, microprocessors, static motor drive units, wiring terminal blocks and related components shall be totally enclosed inside a free-standing metal cabinet with hinged access doors.
 - a. Provide natural or mechanical ventilation for the controller cabinets.
 - b. Equip the vent openings and exhaust fans with filters.
6. Mount equipment to moisture-resistant, noncombustible panels supported from the steel frame.

7. Provide "noise filter" between hoistway wiring and controller/dispatchers to eliminate interference.
8. Optically isolate communication cables between components.
9. Wiring: Wiring on the units, whether factory or field wiring, shall be done in neat order, and all connections shall be made to studs and/or terminals by means of grommets, solderless lugs or similar connections. All wiring shall be copper.
10. Terminal Blocks: Provide terminal blocks with identifying studs on units for connection of board wiring and external wiring.
11. Marking: Identifying symbols or letters shall be permanently marked on or adjacent to each device on the unit, and the marking shall be identical with marking used on the wiring diagrams. In addition to the identifying marks, the ampere rating shall be marked adjacent to all fuse holders.
12. The manufacturer's standard on-board "LCD" display shall be incorporated on the main processor board and/or otherwise incorporated in the controller cabinet. The "LCD" shall be capable of providing alpha-numeric characters to view the operational status of the elevator and/or group functions depending on the application. The display shall provide the user with necessary information for troubleshooting and reprogramming of the basic system parameters.
 - a. Where the "LCD" is not an integral part of the controller and troubleshooting/reprogramming requires the use of a separate tool, the tool shall be maintained in the machine room and accessible to service personnel. This tool, along with all technical documentation for the correct use of the tool, shall remain the property of the Owner.
 - b. Password protection of critical programming features is required to prevent accidental changes to life-safety and other non-typical control settings.
 - c. Where a separate dispatch or group control panel is provided, a separate "LCD" display shall be provided to view group functions.
13. In the event diagnostics and monitoring is accomplished via Field Service Tools, provide the required Field Service Tools with related control system appurtenances for diagnostic evaluations, system monitoring and field adjustments.
 - a. Provide instructions for proper use of such diagnostic tools and/or equipment with all coding and other operational requirements.
 - b. Maintain and calibrate the diagnostic tools and update the associated instructions and other related documents under the service agreement.
 - 1) Should the agreement be cancelled for any reason by either party, maintenance and updating of diagnostic tools shall be provided to the Owner at the Contractor's cost without the need to purchase or lease additional diagnostic devices, special tools or instructions from the original equipment provider.
 - 2) The Owner may request field and technical instructions be provided by the original installation contractor or manufacturer for proper servicing by other qualified elevator company personnel.
 - 3) The established cost plus profit, as previously specified, shall be applicable for the life of the system.

- a) If the equipment for fault diagnosis is not completely self-contained within the controllers but requires a separate detachable device, that device shall be furnished to the Owner as part of this installation.
- b) Such device shall be in possession of and become property of the Owner.

14. Microprocessor Documentation

- a. Provide and/or obtain complete information on systems' design, component parts, installation and/or modification procedures, adjusting procedures and associated computer conceptual logic circuitry and field connection.
- b. Provide microprocessor upgrading and/or modifications to programs that have been assigned to enhance the operation of the equipment for a period of ten (10) years after project approval.

B. Machine Beams (Existing)

- 1. Provide additional support beams, angles, plates, bearing plates, blocking steel members, etc., to support new machine, governors, dead end hitches, deflector and overhead sheaves from existing machine beams where applicable.
- 2. Contractor shall verify adequacy of all existing supports scheduled to be reused and report any potential issues to the Owner.

C. Not Used

D. Gearless Elevator Hoisting Machine

1. Provide an Alternating Current (AC) gearless traction machine, specially designed and manufactured for elevator service. The machine shall have high starting torque and low starting current, rated for 50° C (90° F) continuous operation, and a minimum of 240 starts per hour.
 - a. The traction driving sheave and brake drum shall be cast integral and bolted securely to the main armature shaft.
 - b. Securely mount the machine frame, including motor fields, bearing stands and brake on a heavy steel bedplate.
 - c. The armature shaft shall be supported in ball or roller type bearings.
 - d. Minimum class "F" (or approved equal) insulation shall be used to ensure long-term reliability.
 - e. The driving sheave shall be cast from the best grade of metal with a Brinell hardness of 215 to 230 and shall be machined with grooves, providing maximum traction with a minimum of rope and sheave wear.
 - 1) Roping requirements and type of steel rope used as suspension means shall be engineered by the contractor and manufacturer of the equipment for maximum life of ropes and sheave.
 - f. Ensure that adequate ventilation of internal stator windings and rotating element is provided to prevent overheating with thermal overload protection. (Constant velocity fan for constant cooling.)
 - g. Equip housing with eyebolt(s) for lifting.
 - h. Provide the machine with an electro-mechanical brake.
 - 1) Brakes shall be drum or disk-type.
 - 2) The brake shall be spring applied and electrically released.
 - 3) Design the brake electro-magnet for quick release and application of the brake.
 - 4) The brake lining material shall be non-asbestos.

- i. Design the brake for quick release to provide smooth and gradual application of the brake shoes or pads.
 - 1) An emergency brake shall be an integral part of the machine design.
- j. Provide 14-gauge hoist cable guards at the car-drop and counterweight-drop side of the machine sheave.
 - 1) Guards shall cover cables from the point of slab penetration to the point where the hoist cables contact the sheave.
 - 2) Guards shall prevent access to cables at pinch points.
 - 3) Guards shall have no sharp edges.
 - 4) Guards shall be properly mounted to prevent vibration.
- k. Where feasible - Provide a raised machine arrangement so that the deflector sheave is located above the machine room slab. Provide adequate steel blocking members to support the machine assembly.
 - 1) Provide service platforms, grating, handrails, ladders and required accessories to service and maintain the hoisting machines.
- l. Span the distance between the car and counterweight with an accurately grooved deflector sheave.

E. Deflector Sheave

- 1. Provide an overhead and/or hoisting machine wire rope deflector sheave(s) with related apparatus and structural mounting supports.
 - a. Locate and size new sheave to maximize use of available clearances maintaining the present car and counterweight hitch drops.
 - b. New support bearings shall be of a roller type designed for a minimum of twice the total load calculation.
 - c. The sheaves shall be equipped with suitable lubrication devices.
 - d. The deflector sheave shall be provided with means to guard the hoist ropes so they do not jump out of their respective grooves during a slack rope condition.
 - e. Required new mounting beams and structural supports shall be interfaced with existing building structures as may be modified under the terms of this contract for the new design rated loading where applicable.

F. AC Drive Motor / Geared Applications – Base Bid

- 1. Provide a vector duty, variable speed, reversible alternating current induction motor with high starting torque and low starting current, rated for 50° C (122° F) during continuous operation, designed for this particular elevator application with 210 starts per hour.

- a. Provide adequate ventilation of internal stator windings and rotating element to prevent overheating. (Constant velocity fan for constant cooling.)
 - b. Provide thermal overload protection of the stator windings.
2. The hoist motor housing shall have a rigid cast iron stator frame.
 - a. Core plate stator laminations shall be press fit into frame and properly secured.
 - b. Minimum class "F" (or approved equal) insulation shall be used to ensure long-term reliability.
3. The rotating element shall be fabricated from drawn bars machined and fitted in slots with end rings brazed together and shall be dynamically balanced for vibration-free operation. The motor shaft shall be manufactured from high-strength alloy steel for maximum strength.
4. Provide a motor coupling machined for proper fit on motor shaft with slotted keyway and key to properly secure same for standard NEMA mounted construction (foot or footless).
5. Properly align the hoisting motor to the hoisting machine for vibration-free operation.
6. The motor shall have proper labeling in accordance with the requirements of the AHJ.

G. VVVF AC Drive

1. Provide a solid-state, variable voltage, variable frequency (VVVF), 3-phase AC hoist motor drive system as part of the microprocessor-based equipment.
 - a. VVVF drive system shall be a low-noise, flux-vector inverter device.
 - b. Include a digital LED readout and touch-key pad to facilitate software parameter adjustments, monitor system operation and display fault codes.
2. The drive shall utilize a 3-phase, full wave rectifier and capacitor bank to provide direct current power for solid-state inversion.
3. The inverter shall utilize IGBT power semiconductors and duty cycle modulation fundamental frequency of not less than one kilohertz to synthesize 3-phase, variable voltage variable frequency output.
4. The system shall be designed and configured with the following countermeasures for noise generated by the pulse-width modulated (PWM) inverters.
 - a. Control of radiated noise via inverter and/or motor cables.
 - b. Conducted noise through power lines.
 - c. Induction noise and ground noise.
5. Inverter shall be encased in metal and independently grounded.
6. A noise filter for the input power line shall be provided to prevent penetration into radios, wireless equipment and smoke detectors.
7. A 3% three-phase line reactor shall be provided on the power system rated at the utility voltage input to the drive and sized for the rated drive current.
8. The drive shall:
 - a. Be configured as a complete digital drive system.

- b. Be totally software configurable.
 - c. Interface with external equipment/signals via either discrete local I/O connections or high speed Local Area Network (LAN).
 - d. Be located within the limits of the control cabinet (where system size allows) or separately mounted in an appropriate chassis with hinged swing-out doors with clearances equal to the cabinet width dimensions.
 - e. Provide programmable linear or S-curve acceleration.
 - f. Provide free run or programmable linear or S-curve deceleration.
 - g. Have controlled reversing.
9. Operating and Environmental Conditions:
- a. Have a service factor of 1.0.
 - b. Rated for continuous duty.
 - c. Humidity - 90% rated humidity non-condensing.
 - d. Cooling - forced air when required.
 - e. Digital display for:
 - 1) Running - output frequency, motor RPM, output current, voltage.
 - 2) Setting - Parameters values for setup and review.
 - 3) Trip - separate message for each trip, last 30 trips to be retained in memory.
10. Protective Features:
- a. Motor overspeed.
 - b. Adjustable current limit.
 - c. Isolated control circuitry.
 - d. Digital display for fault conditions.
 - e. Selectable automatic restart at momentary power loss.
 - f. Manual restart.
 - g. Over/Under Voltage.
 - h. Line to line and line to ground faults.
 - i. Over-temperature.
- H. VVVF AC Drive - Regenerative Module
- 1. The system shall provide full regenerative capabilities to control overhauling motor speed and reduce hoist motor deceleration time by allowing overhaul power to be discharged back into the power lines.
 - a. The regenerative section may be an integral part of the drive or a stand-alone unit mounted in a separate cabinet with proper ventilation as required by the manufacturer.
- I. Overspeed Governor
- 1. Provide a speed governor, located in the machine room to operate the car safety.

- a. Maintain the proper tension in the governor rope with a weighted tension sheave located in the pit.
 - 1) Springs used to develop the tension are not acceptable.
- b. Provide rope grip jaws, designed to clamp the governor rope to actuate the car safety upon a predetermined overspeed downward.
 - 1) The centrifugal type governor shall trip and set rope jaws within 60 degrees of governor sheave rotation after reaching rated tripping speed.
- c. Design the governor rope tripping device so that no appreciable damage to or deformation of the governor rope shall result from the stopping action of the device in operating the car safety.
- d. Provide an electrical governor overspeed protective device which shall remove power from the driving machine motor and brake before or at the application of the safety.
 - 1) The setting for the overspeed switch shall be as prescribed in the ASME A17.1 Safety Code.
 - 2) Locate and enclose the switch to ensure that excess lubrication will not enter the switch enclosure.
 - 3) Overspeed switch shall operate in both direction of travel on systems employing a static power drive unit.
- e. Seal and tag the governor with the running speed, tripping speed and date last tested.
- f. Design the governor to prevent false tripping due to conditions caused by rope dynamics.

J. Equipment Isolation

- 1. Provide sound reducing vibration isolation elements at all support points of elevator controller, solid-state motor drives, isolation transformers, reactance units, hoisting motors and machines.
- 2. The elements for controllers, solid-state motor drives and isolation transformers shall be similar to double deflection neoprene-in-shear mounts, as manufactured by Mason Industries, Type ND, with 0.35" static deflection under design load ratings.
- 3. Elements between the hoisting machine unitized base and machine support beams shall be similar to triple layer ribbed neoprene pads, separated by appropriate steel shims as manufactured by Mason Industries, Type W pads, at 50 durometer, loaded for 40 psi or approved equal.
- 4. All bolts through isolation elements, where necessary, are to incorporate resilient washers and bushings.
- 5. Isolation of existing hoisting machine and motor is contingent on the OEM design of the apparatus.
 - a. Existing isolation pads shall be replaced with new.

K. Emergency Brake

- 1. Ascending Car Overspeed Protection Device

- a. Provide a device designed to prevent an ascending elevator from striking the hoistway overhead structure.
 - b. The device shall decelerate the car with any load up to the rated capacity by applying an emergency brake.
 - 1) The device shall detect an ascending car overspeed condition of not greater than 10% higher than the speed that the car governor is set to trip.
 - 2) The device, when activated, shall prevent operation of the car until the device is manually reset.
 - 3) The device shall meet the requirements of the ASME A17.1 Safety Code as may be modified by the AHJ.
2. Unintended Car Movement Protection Device
- a. Provide a device to prevent unintended car movement away from the landing when the car and hoistway doors are not closed and locked.
 - 1) The device shall prevent such movement in the event of failure of:
 - a) The electric driving machine motor.
 - b) The brake.
 - c) The machine shaft or shaft coupling.
 - d) Machine gearing.
 - e) Control system.
 - f) Any component upon which the speed of the car depends.
 - g) Suspension ropes and the drive sheave of the traction machine are excluded.
 - 2) The device shall prevent operation of the car until the device is manually reset.
 - 3) The device shall meet the requirements of the ASME A17.1 Safety Code as may be modified by the AHJ.
3. Where the installation of the Emergency Brake involves the raising of existing hoisting machines or modifications to the machine room slab, the contractor shall provide necessary engineering data, structural review and drawings as part of the submittal process.
4. An existing emergency brake that meets the all of the requirements of Item 2.5.G, may be reused with written approval of the Consultant.

2.5 HOISTWAY EQUIPMENT

A. Guide Rails / Inserts / Brackets (Reuse)

- 1. Car and counterweight guide rails, fish plates, rail brackets, backing support and related attachments shall be inspected to determine if unfavorable conditions exist that diminish the structural integrity of any component.

- a. In the event substandard conditions are disclosed by means of this inspection, the Contractor shall immediately inform the Consultant as to the exact nature of said problems and then undertake whatever repairs and/or replacements the Consultant may deem appropriate to remedy the situation.
 2. Each stack of guide rails shall be individually examined to determine if excessive compression has occurred from building settlement.
 - a. In the event such conditions are found to exist, each affected stack shall be cut off enough to relieve pressure.
 - b. Jacking bolts shall be provided underneath each stack of both car and counterweight guide rails.
 3. Each stack of guide rails shall be realigned so that total deviation from plumb in any direction does not exceed 1/8" over the entire length of the hoistway and that DBG measurements never vary more than .030".
 4. As required, car guide rails joints shall be individually filled, filed and sanded in order to eliminate minor variations in adjoining machined surfaces.
 5. Existing surface rust shall be removed from the guide rails; rails supports and rail brackets. Guide rails, rail supports and rail brackets shall be repainted with a rust-inhibiting paint.
- B. Counterweight Assembly (Reuse)
1. The existing counterweight assembly shall be refurbished to as new condition and reused.
 2. Individual counterweight frame members shall be inspected for any indication of damage and to determine if the overall assembly is twisted, racked, or otherwise distorted.
 - a. All fastenings between counterweight frame members shall be individually examined, tightened and if necessary renewed.
 - b. In case any of these conditions are found to exist, the Contractor shall immediately inform the Consultant about the exact nature of the problem and undertake whatever corrective action the Consultant may deem appropriate to remedy the situation.
 3. The amount of filler weight placed within the counterweight frame shall be adjusted so the weight of the entire counterweight assembly is equal to that of the renovated elevator car, plus 40-42% of its rated loading capacity unless otherwise required by a manufacturer where new hoisting machinery is employed.
 - a. Filler weights shall be held securely in place at all times with tie rods passing through holes in both the weights and the counterweight frame with tie rods secured on each end with double lock nut and a cotter pin arrangement.
- C. Roller Guides
1. Provide roller guide shoes with adjustable mounting base, rigidly bolted to the top and bottom of each side of the car and counterweight frame.

- a. Roller guides shall consist of a set of sound reducing neoprene wheels in precision bearings held in contact with the three finished rail surfaces by adjustable stabilizing springs.
 - b. The bearings shall be sealed or provided with grease fittings for lubrication.
 - c. Equip roller guides with adjustable stops to control postwise float.
 - d. Fit the top car roller guides with galvanized, painted or powder coated steel guards.
2. Approved applications and manufacturers:
- a. ELSCO Model A for car roller guides and ELSCO Model C for counterweight guides or approved equal.

D. Hoist Ropes

1. Pre-formed traction steel wire rope, specifically constructed for elevator applications, shall be provided for suspension of the elevator car and counterweight assembly.
 - a. Fastenings shall be accomplished by use of individual tapered rope sockets (wedge clamp) with adjustable shackles.
 - b. General design requirements for rope shackles and the method of securing wire rope shall conform with ASME A17.1 elevator safety code as modified by, and/or in addition to codes and standards accepted by the AHJ.
2. New rope shackles shall be provided.
3. Existing hitch plates shall be inspected for wear. Hitch plates with elongated holes or other conditions that may damage shackles shall be replaced with new.
4. Provide anti-spinout as required by applicable code at all shackles where applicable.

E. Governor Rope

1. Pre-formed wire rope specifically constructed for elevator applications, shall be provided for governor ropes.
 - a. Rope shall be traction steel or iron in accordance with OEM design requirements.
 - b. Rope diameter and method of fastening shall be in accordance with ASME A17.1 Safety Code as adopted and/or otherwise modified by the AHJ.

F. Electrical Conduit / Wiring / Traveling Cable

1. Electrical wiring shall be provided.
 - a. All wiring shall be stranded copper conductors, manufactured in compliance with ANSI/ASTM B174-71 and UL 62 requirements, and polyvinyl chloride insulation complying with ETT requirements of UL 62 and Article 400 of the National Electric Code.
 - b. Electrical wiring provided for hoistway interlock shall be of a flame-retardant type, capable of withstanding temperatures of at least 392 degrees Fahrenheit. Conductors shall be Type SF or equivalent.

- c. Each run of electrical conduit or duct shall contain no less than 10% spare wires and, in any case, no fewer than two (2) spare wires.
 - d. Crimp-on type wire terminals shall be used where possible.
- 2. Traveling cable shall be provided.
 - a. Each traveling cable shall be provided with a flame and water resistant polyvinyl chloride jacket.
 - b. Electrical wiring shall consist of stranded copper conductors, manufactured in compliance with ANSI/ASTM B174-71 and UL 62 requirements, and polyvinyl chloride insulation complying with ETT requirements of UL 62 and Article 400 of the National Electric Code.
 - c. Each traveling cable shall contain no less than 10% spare wires.
 - d. Traveling cable exceeding 100' in length shall be provided with a steel wire rope support strand from which the cable shall be suspended.
 - e. Traveling cable must be contained within an approved electrical conduit to within 6' of the final suspension point in the hoistway.
 - f. Each traveling cable shall be arranged to provide no fewer than six (6) individually shielded pairs of 20-gauge wire and arranged to contain no less than one (1) coaxial cable for CCTV remote monitoring.
 - g. Traveling cable conductors that terminate at a hoistway center box shall be connected to stud blocks provided for that purpose.
 - 1) Each wiring terminal shall be clearly identified by its nomenclature as shown on the "as built" wiring diagrams and solderless, crimp-on type wire terminals shall be used where possible.
 - h. The attachment of a traveling cable to the underside of the elevator car shall be performed so that a minimum loop diameter of 30x the cable diameter is provided.
 - i. Pre-hang the cables for at least 24 hours with ends suitably weighted to eliminate twisting during operation.
- 3. Associated Camera wiring shall be properly located on top of the car in an electrical pull-box and any associated power supply (120 VAC) type outlet that would be needed. The same designated wiring shall be brought outside of the controller and stored in an electrical pull-box with the cover labeled "Camera Wiring".
- 4. Rigidly supported EMT conduit, flexible metal conduit and galvanized steel trough shall be utilized throughout the hoistway.
 - a. Both EMT and flexible conduit shall be connected on either end by use of compression fittings and secured in place with metal clamps sized in accordance with the diameter of conduit utilized.
 - 1) Wire or plastic wire ty-raps shall not constitute an acceptable means of fastening.
 - b. The use of flexible metal conduit shall be limited to runs not greater than 3' in length.
 - c. All abandoned or unused electrical conduit shall be removed from the hoistway.
 - d. Existing conduit and wiring duct may be reused if suitable for the application.

- 1) Reuse of existing conduit/duct shall be at the discretion of the Consultant.

G. Compensation Chain (if required by Manufacturer)

1. Provide vinyl encapsulated compensating chain.
 - a. The quantity and size of the chains shall be calculated in accordance with the manufacturer's guidelines based upon the number, diameter and construction of hoist cables being used.
 - b. Final attachment of each compensating chain underneath the car and counterweight frame shall be accomplished by means of 'U-bolts'.
 - c. Intermediate support for each chain shall be provided 24" to 39" from the point of final attachment underneath the elevator car by use of an S-hook and separate U-bolt.
 - 1) Arrange compensation attachment points to maintain recommended loop dimension established by the compensation manufacturers.
 - d. Provide a guidance system designed to prevent cable sway.
 - e. The use of a single compensating chain if not centered on the car and counterweight is unacceptable.
2. Provide manually reset electric switch to monitor each compensating chain connection at the elevator platform which shall stop the elevator immediately upon failure of one or more of the "S" hooks.

H. Normal and Final Terminal Stopping Devices

1. Provide normal terminal stopping devices to stop the car automatically from any speed obtained under normal operation within the top and bottom overtravel, independent of the operating devices, final terminal stopping device and the buffers.
2. Provide final terminal stopping devices to stop the car and counterweight automatically from the speed specified within the top clearance and bottom overtravel.
3. The terminal stopping devices shall have rollers with rubber or other approved composition tread to provide silent operation when actuated by the cam fixed to the top of the car.
 - a. Terminal stopping devices that are not mechanically operated (i.e., magnetic proximity) shall be provided by the manufacturer of the control equipment, intended for use as a terminal limit, and designed for reliable operation in the hoistway environment.
4. Final terminal limits shall be pinned so as to prevent movement after final adjustment where required by the AHJ.

2.6 PIT EQUIPMENT

A. Car and Counterweight Buffer (Reuse)

1. Existing car and counterweight buffers shall be reused.
 - a. Pit channels, related supports and fastenings shall be inspected for damage and to determine if the structural integrity of any component is diminished by the effects of rust or other unfavorable conditions.
 - 1) In the event defects are found, the Contractor shall immediately inform the Consultant and undertake whatever repair and/or replacement the Consultant may deem appropriate.
 - b. Surface rust shall be removed from all reused components of the car and counterweight buffers. A protective coating of rust inhibiting paint shall be applied.
 - c. Where hydraulic buffers are used:
 - 1) Buffer plunger shall be honed free of all surface rust and blemishes and provided with a protective coating of machinist bluing.
 - 2) The hydraulic fluid reservoir on each buffer shall be drained, flushed and refilled with fresh oil. The grade and amount of fluid added to each buffer shall conform to O.E.M. specification.
 - d. Provide a permanent buffer marking plate which indicates the manufacturer's name, identification number, rated impact speed and stroke.
 - e. Provide a permanent data plate in the vicinity of the counterweight buffer indicating the maximum designed counterweight runby in accordance with ASME A17.1 as may be modified by, and/or in addition to codes and standards accepted by the AHJ.
 - f. The buffer shall undergo testing in accordance with ASME A17.1 Code as modified by, and/or in addition to codes and standards accepted by the AHJ.
 - g. Surface rust shall be removed from the pit channels. A protective coating of rust inhibiting paint shall be applied.

B. Governor Rope Tension Assembly

1. Provide a governor rope tension assembly.
 - a. Maintain the proper tension in the governor rope with a weighted tension sheave located in the pit.
 - 1) Springs used to develop the tension are not acceptable.
 - b. The sheave shall be of proper diameter and set directly plumb with the governor rope drop to prevent the rope from pulling off of the sheave at an angle.
 - c. Lubrication fittings shall be provided on the assembly.

- d. The assembly shall have necessary rope guards to prevent accidental contact of the rope/sheave by service personnel and to prevent the governor rope from jumping off of the sheave.

C. Pit Stop Switch

- 1. Where climb-in pit depth exceeds 67", each pit shall be provided with two (2) push/pull or toggle switches conspicuously designated "EMERGENCY STOP".
 - a. Both of these stop switches, shall be located immediately adjacent to the pit access ladder.
 - 1) Place one stop switch approximately 47" above the pit floor.
 - 2) Place the second stop switch 18" above the hoistway entrance sill on the lowest landing served.
 - 3) These switches shall be arranged so as to prevent the application of power to the hoist motor or machine brake when either one is placed in the "OFF" position.

2.7 HOISTWAY ENTRANCES

A. Hoistway Entrances (Reuse – Reclad with Stainless Steel)

- 1. Hoistway entrance sills, sill supports, entrance frames, headers and header supports shall be reused and refurbished.
 - a. Hoistway entrances that have become distorted or bent shall be straightened, plumbed, reset to the proper width dimension and reinforced as necessary.
 - b. Provide 14-gauge steel fascia plates that extend at least the full width of the door and be secured at hanger support and sill with oval head machine screws.
 - 1) Reinforce fascia to allow not more than ¼" of deflection.
 - 2) Provide fascia plates where the clearance between the edge of the loading side of the platform and the inside face of the hoistway enclosure exceeds the code allowed clearance.
 - c. Provide 14-gauge steel toe guards that extend 12" below any sill not protected by fascia.
 - 1) The toe guards shall extend the full width of the door and shall return to the hoistway wall at a 15-degree angle and be firmly fastened.
 - d. Remove oil, dirt and impurities on new and existing apparatus and give a factory coat of rust inhibitive paint to all exposed surfaces of struts, hanger supports, covers, fascias, toe guards, dust covers and other ferrous metal.
 - e. Reclad entrance frames side & top with No. 4 Stainless Steel.
 - f. Any surface rust shall be removed from the landing door sills. Landing doors sills shall be cleaned of rust, lint, dust, dirt and oil contamination.

B. Slide Type Hoistway Door / New in Existing Frame

1. Provide a new elevator hoistway entrance door reusing existing entrance frame.
2. Each new door shall be as follows:
 - a. Hollow metal construction.
 - b. 1-1/2-hour fire-rated test approved with required label.
 - c. Manufactured of cold rolled furniture steel.
 - d. Flush design both sides.
 - e. Rigidly reinforced.
 - f. Sound deadened.
3. Where conditions warrant, and where otherwise required by code, equip all hoistway landing doors with one-piece full height non-vision wings of material and finish to match hall side of door panels.
4. Provide each door panel with two (2) removable laminated plastic composition guides, arranged to run in existing sill grooves with a minimum clearance.
 - a. The guide mounting shall permit their replacement without removing the door from the hangers.
 - b. A steel fire stop shall be enclosed in each guide.
5. Provide the meeting edge of center opening doors with necessary new continuous rubber astragal bumper strips.
 - a. Astragal shall be relatively inconspicuous when the doors are closed.
 - b. Provide rubber bumpers at the top and bottom of each section of door to stop them at their limit of travel in the opening direction.
6. In multi-speed door arrangements, provisions shall be made to interlock the individual panels so all panels close should the normal door panel relating means fail.
7. Provide a special key so that an authorized person can open any landing door when the car is elsewhere.
 - a. The key hole shall be not less than 3/8" in diameter and shall be fitted with a stainless steel or bronze ferrule to match related equipment.
8. Finish all doors in No. 4 Stainless Steel.
9. Where conditions require, provide necessary new masonry around existing entrance frames to maintain fire rating. Painting or other wall surface decorating will be by Others.

C. Tracks / Hangers / Closers / Related Equipment

1. Formed or extruded steel landing door hanger tracks shall be provided.
2. Each landing door panel shall be suspended from a pair of door hanger assemblies that are compatible with the hanger tracks.

- a. Hanger assemblies shall be directly mounted to the door panel using 3/8" diameter or better hardware.
 - b. Solid steel blocks shall be used where job-site conditions dictate the use of spacers between hanger assemblies and the landing door panel.
 - c. Hanger assemblies shall be adjusted or shimmed so that door panels are suspended in a plumb manner with no more than 3/8" vertical clearance to the cab entrance threshold.
 - d. Upthrust rollers shall be adjusted for minimal operating clearance against the bottom edge of the hanger track.
 - e. Means shall be provided to prevent hangers from jumping the track.
 - f. Blocks shall be provided to prevent rollers from overrunning the end of the track.
3. Each set of center opening landing doors shall be provided with a cable driven relating mechanism which is compatible for use with the door hanger assemblies.
- a. The relating mechanism shall be properly tensioned and adjusted so as to equalize the relationship between the door panels and the hoistway entrance.
4. Each set of multi-speed center opening or side slide landing doors shall be provided with a sill-mounted spring closing mechanism with necessary door panel relating hardware.
5. In multi-speed door arrangements, provisions shall be made to interlock the individual panels so all panels close should the normal door panel relating means fail.
6. Where applicable, each hoistway door interlock assembly shall be provided with an emergency release mechanism utilizing manufacturers' standard type access key at all landings served.
- a. Drill each hoistway door to accommodate manufacturers standard lock release key and install escutcheon.
 - 1) Escutcheon shall be brushed stainless steel to match door panels where required.
 - 2) Aluminum shall be provided at all other typical floors.

D. Interlocks / Unlocking Devices

1. Each set of landing doors shall be provided with a complete electromechanical interlock assembly.
 - a. Each interlock assembly shall consist of:
 - 1) A switch housing with contacts.
 - 2) Lock keeper.
 - 3) Clutch engagement/release subassembly.
 - 4) Associated linkages.
 - b. Arrange the lock so that individual leading door panels (side slide or center opening) are locked when in the closed position.
2. Non-typical mounting arrangements for interlocks and/or related mechanisms must receive prior approval from the Consultant.

3. Each hoistway door interlock assembly shall be provided with an emergency release mechanism utilizing a drop-leaf type access key at all landings served.
 - a. Each hoistway door shall accommodate manufacturers standard lock release key with escutcheon.
 - 1) The key hole shall be fitted with a metal ferrule that matches the door finish.
 - 2) Drilling key holes in the field will not be accepted.

E. Hoistway Door Bottom Guides / Safety Retainers

1. The bottom of each side sliding type hoistway door panel shall be equipped with a minimum of two (2) guiding members.
 - a. Metal mounting angles shall be secured to the integral panel frame structure; and when conditions warrant, additional external metal support plates or angles shall be installed to ensure the integrity of the panel frame is not compromised.
 - b. Guides shall be manufactured of low friction non-metal material with sufficient strength to withstand forces placed on door panels per ASME A17.1 Standards.
 - c. Each guide assembly shall incorporate a steel wear indicator and be so designed to permit sliding member replacements without removal of door panel(s) from top hanger devices.
 - d. Panels shall be hung with a maximum vertical clearance of 3/8" between top of sill and bottom of panel and the guide shall engage the sill groove by not less than 1/4".
2. The bottom of each side sliding type hoistway door panel shall be equipped with a guiding member safety retainer to prevent displacement in the event of primary guide means failure.
 - a. A metal reinforcement (12 gauge stainless or galvanized steel) shall be installed between the two (2) primary guiding members (a.k.a. "Z" bracket).
 - b. The reinforcement shall be designed with a minimum length of 8" or the maximum possible length that will fit between the primary members and a minimum overall height of 2.5" secured on the internal face of the door panel (hoistway side).
 - c. The retainer shall be set with the supplemental safety angle 3/8" into the corresponding sill groove; and be capable of preventing displacement of the panel no more than 3/4" with an applied force of 1125 lbf at right angles over an area 12" x 12" at the approximate center of the door panel.

2.8 CAR EQUIPMENT / FRAME

A. Car Frame (Reuse)

1. The existing car frame assembly shall be refurbished to as new condition and reused.
2. Individual car frame members, platform isolation framework, door operator support structure, related bracing and hardware shall be inspected for any indication of damage or distortion.

- a. Where damage is detected, the Contractor shall immediately inform the Consultant and then undertake corrective action deemed appropriate by the Consultant to remedy the condition.
 3. Provide new elastomer isolation pads for all existing platforms where pads are presently installed.
 4. The car frame, door operator support and related bracing shall be modified or reconfigured as necessary in order to accommodate new cab enclosure and/or master door operating equipment specified herein.
 5. The elevator car shall undergo static balancing upon substantial completion of all work described in the project specifications and subsequent to any car interior refinishing or cab replacement work performed in conjunction with the project.
 6. Any surface rust on the car frame is to be removed and a coat of rust inhibiting paint shall be applied.
- B. Car Platform (Reuse)
1. The existing platform shall be modified to accommodate the new apparatus specified herein.
 - a. Where necessary, the underside of platform shall be refurbished and treated with fire-rated material.
 - b. Where necessary, provide a new safety access hole ring and cover assembly to match selected cab finishes.
 - c. At Contractor's option or when conditions warrant, provide a totally new platform in lieu of repairs, modifications and upgraded specified above.
 - d. New nickel-silver car threshold (sill) shall be furnished and installed.
- C. Car Safety (Reuse)
1. The existing governor actuated car safety device shall be retained, overhauled and upgraded for current code compliance.
 2. Readjust safety for proper operation in accordance with current ASME A17.1 design standards.
 3. Check the existing safety operated switch (plank-switch) for proper adjustment and operation.
 - a. Provide a new plank-switch where none currently exists.
 4. A new safety shall be provided where the existing is not suitable for reuse due to overall condition or in conjunction with an increase in the elevator speed or full load capacity.
- D. Automatic Leveling / Releveling / Positioning Device
1. Equip the elevator with a floor leveling device which shall automatically bring the car to a stop within 1/4" of any floor for which a stop has been initiated regardless of load or direction of travel.
 2. This device shall also provide for releveling which shall be arranged to automatically return the elevator to the floor in the event the elevator should move below or above floor level in excess of 1/4".
 3. This device shall be operative at all floors served and whether the hoistway or car door is open or closed provided there is no interruption of power to the elevator.

4. A positioning device shall be part of the controller microprocessor systems.
 - a. Position determination in the hoistway may be through fixed tape in the hoistway or by sensors fitted on each driving machine to encode and store car movement.
 - b. Design the mechanical features and electrical circuits to permit accurate control and rapid acceleration and retardation without discomfort.
5. Where there are consecutive floors/stops that are short stops, the system shall be capable of distinguishing between the two landing zones without error.
6. All equipment and logic required for leveling system to properly function with short stops shall be included.

E. Top-of-Car Inspection Operating Station

1. An inspection operating station shall be provided on top of the elevator car.
2. This station shall be installed so that the controls are plainly visible and readily accessible from the hoistway entrance without stepping on the car.
3. When the station is operational, all operating devices in the car shall be inoperative.
4. Provide the following control devices and features:
 - a. A push/pull or toggle switch designated "EMERGENCY STOP" shall be arranged so as to prevent the application of power to the hoist motor or machine brake when in the "off" position.
 - b. A toggle switch designated "INSPECTION" and "NORMAL" to activate the top of car Inspection Service Operation.
 - c. Pushbutton designated "Up", "Down" and "Enable" to operate the elevator on Inspection Service (the "Enable" button shall be arranged to operate in conjunction with either the "Up" or "Down" button).
 - d. An indicator light and warning buzzer that are subject to activation under Phase I - Fire Emergency Recall Operation.

F. Load Weighing Device

1. Provide means to measure the load in the car within an accuracy of $\pm 4\%$ of the elevator capacity.
2. Provide one of the following types of devices:
 - a. A device consisting of four strain gauge load cells located at each corner of the car platform and supporting a free floating car platform and cab with summing circuits to calculate the actual load under varying conditions of eccentric loading.
 - b. A strain gauge device located on the crosshead, arranged to measure the deflection of the crosshead and thus determine the load in the car.
 - c. A device consisting of four strain gauge load cells, supporting the weight of the elevator machine with summing circuits to calculate the actual load under varying conditions of load.
 - d. A device to measure the tension in the elevator hoist ropes and thus determine the load in the car.

3. Arrange that the output signal from the load weighing device be connected as an input to the signal and motor control systems to pre-torque of the hoisting machine motors where applicable.
 4. Provide audible and visual signals in connection with the load weighing device when used as an "overload" device.
- G. Car Enclosure Work Light / Receptacle
1. The top and bottom of each car shall be provided with a permanent lighting fixture and 110-volt GFCI receptacle.
 2. Light control switches shall be located for easy accessibility from the hoistway entrance.
 3. Where sufficient overhead clearance exists, the car top lighting fixture shall be extended no less than 24" above the crosshead member of the car frame.
 4. Light bulbs shall be guarded so as to prevent breakage or accidental contact.
- H. Emergency Exits / Top
1. Ensure they operate as per code and have proper electrical contacts and mechanical locks on the exterior of the cab enclosure.
 2. No other key to the building shall unlock the emergency exit lock except access switch keys which may be keyed alike.
 - a. Keys shall be assigned in accordance with ASME A17.1 Group 1 Security requirements.
- I. Master Door Power Operator System – VVVF/AC GAL MOVFR
1. Provide a heavy-duty master door operator on top of the elevator car enclosure for power opening and closing of the cab and hoistway entrance door panels.
 2. The operator may be of the pivot/lever or belted linear drive type.
 3. Operator shall utilize an alternating current motor, controlled by a variable voltage, variable frequency (VVVF) drive and a closed-loop control with programmable operating parameters.
 - a. System may incorporate encoder feedback to monitor positions with a separate speed sensing device or an encoderless closed-loop VVVF-AC control to monitor motor parameters and vary power applied to compensate for load changes.
 4. The type of system shall be designated as a high-speed operator, designed for door panel opening at an average speed of 2.0 feet per second and closing at approximately 1.0 foot per second.
 - a. Reduce the closing speed as required to limit kinetic energy of closing doors to within values permitted by ASME A17.1 as may be adopted and/or modified by the AHJ.
 5. The door shall operate smoothly without a slam or abrupt motion in both the opening and closing cycle directions.
 - a. Provide controls to automatically compensate for load changes such as:
 - 1) Wind conditions (stack effect)

- 2) Use of different weight door panels on multiple landings
- 3) Other unique prevailing conditions that could cause variations in operational speeds.
- b. Provide nudging to limit speed and torque in conjunction with door close signaling/closing and timing devices as permitted by ASME A17.1 as may be adopted and/or modified by the AHJ. Nudging shall be initiated by the signal control system and not from the door protective device.
- 6. In case of interruption or failure of electric power from any cause, the door operating mechanism shall be so designed that it shall permit emergency manual operation of both the car and corridor doors only when the elevator is located in the floor landing unlocking zone.
 - a. The hoistway door shall continue to be self-locking and self-closing during emergency operation.
 - b. The door operator and/or car door panel shall be equipped with safety switches and electrical controls to prevent operation of the elevator with the door in the open position as per ASME A17.1 Code Standards.
 - c. Provide zone-lock devices as required by ASME A17.1 as may be adopted and/or otherwise modified by the AHJ.
- 7. Construct all door operating levers of heavy steel or reinforced extruded aluminum members.
- 8. Belts shall be designed for long life and operate noise free.
- 9. All components shall be designed for stress and forces imposed on the related parts, linkages and fixed components during normal and emergency operation functions.
 - a. All pivot points, pulleys and motors shall have either ball or roller-type bearings, oilite bronze bushings or other non-metallic bushings of ample size.
- 10. Provide operating data / data tag permanently attached to the operator as required by applicable code and standards.
- J. Car Door Panel(s)
 - 1. Provide standard 1" thick, 14-gauge hollow metal flush construction panel(s), reinforced for power operation and insulated for sound deadening.
 - 2. Paint the hoistway side of each panel black and face the cab side with 16-gauge sheet steel with No. 4 stainless steel on the car side.
 - 3. The panels shall have no binder angles and welds shall be continuous, ground smooth and invisible.
 - 4. Drill and reinforce panels for installation of door operator hardware, door protective device, door gibs, etc.
 - a. Provide each door panel with two removable laminated plastic composition guides, arranged to run in the sill grooves with minimum clearance.
 - b. The guide mounting shall permit their replacement without removing the door from the hangers.

5. Provide the meeting edge of center opening doors with necessary continuous rubber astragal bumper strips.
 - a. These strips shall be relatively inconspicuous when the doors are closed.
- K. Door Reopening Device / "3D"
 1. Provide a combination infrared curtain and 3D door protection system.
 2. The door shall be prevented from closing and will reopen when closing if any one of the curtain light rays is interrupted or should an object enter the 3D detection zone.
 3. The door shall start to close when the protection system is free of any obstruction.
 4. The infrared curtain and 3D zone protective system shall provide:
 - a. Protective curtain field not less than 71" above the sill.
 - b. 3D protective zone field not less than 61" above the sill.
 - c. Accurately positioned infrared lights to conform to the requirements of the applicable handicapped code.
 - d. Modular design to permit on board test operation and replacement of all circuit boards without removing the complete unit.
 - e. Self-contained, selectable 3D zone timeout feature to allow for closing at nudging speed with audible signal.
 - f. Automatic turning-off of the 3D zone in the event of three (3) consecutive 3D triggers.
 - 1) Light curtain shall continue to operate after 3D system timeout.
 - g. Selectable control of the 3D zone operation on an "always-on" or "as doors close" basis.
 - h. Controls to shut down the elevator when the unit fails to operate properly.
 - i. Provide audible and visual notification of pending door close.

2.9 FINISH / MATERIALS / SIGNAGE

A. Material, Finishes and Painting

1. General
 - a. Cold-rolled Sheet Steel Sections: ASTM A366, commercial steel, Type B
 - b. Rolled Steel Floor Plate: ASTM A786
 - c. Steel Supports and Reinforcement: ASTM A36
 - d. Aluminum-alloy Rolled Tread Plate: ASTM B632
 - e. Aluminum Plate: ASTM B209
 - f. Stainless Steel: ASTM A167 Type 302, 304 or 316
 - g. Stainless Steel Bars and Shapes: ASTM A276
 - h. Stainless Steel Tubes: ASTM A269
 - i. Aluminum Extrusions: ASTM B221
 - j. Nickel Silver Extrusions: ASTM B155
 - k. Bronze Sheet: ASTM B36(36M) alloy UNS No. C2800 (Muntz Metal)

- l. Structural Tubing: ASTM A500
 - m. Bolts, Nuts and Washers: ASTM A325 and A490
 - n. Laminated / Safety Tempered Glass: ANSI Z97.1
2. Finishes
- a. Stainless Steel
 - 1) Satin Finish: No. 4 satin, long grain
 - b. Sheet Steel:
 - 1) Shop Prime: Factory-applied baked on coat of mineral filler and primer.
 - 2) Finish Paint: Two (2) coats of low sheen baked enamel, color as selected by the Architect.
 - 3) Steel Equipment: Two (2) coats of manufacturer's standard rust-inhibiting paint to exposed ferrous metal surfaces in both the hoistway and pit that do not have galvanized, anodized, baked enamel, or special architectural finishes.
3. Painting
- a. Apply two (2) coats of paint to the machine room and pit floor.
 - b. Remove surface rust and apply a coat of rust inhibiting paint to top of car, car crosshead, top of counterweight frame, landing door fascia, headers, toe guards and spreader beams.
 - c. Remove surface rust and apply a coat of rust inhibiting paint to pit buffers, buffer stands and pit channels.
 - d. Apply two (2) coats of clear lacquer to bronze or similar non-ferrous materials to prevent tarnishing during a period of not less than twelve (12) months after initial acceptance by the Owner or Agent.
 - e. Identify all equipment including buffers, crosshead, safety plank, machine, controller, drive, governor, disconnect switch, etc., by 4" high numerals which shall contrast with the background to which it is applied. The identification shall be either decalcomania or stencil type.
 - f. Paint or provide decal-type floor designation not less than 6" high on hoistway doors (hoistway side), fascias and/or walls as required by A17.1 as may be adopted and/or modified by the AHJ. The color of paint used shall contrast with the color of the surface to which it is applied.
- 2.10 FIXTURES / SIGNAL EQUIPMENT
- A. General - Design and Finish
- 1. The design and location of the hall and car operating and signaling fixtures shall comply with the ADAAG and local requirements of the AHJ.
 - 2. The operating fixtures shall be selected from the manufacturer's or a third party's premium line of fixtures.

3. Custom designed operating and signaling fixtures shall be as shown on the drawings or as approved by the Owner / Architect.
4. The layout of the fixtures including all associated signage and engraving shall be as approved by the Owner / Architect.
5. Where no special design is shown on the drawings, the buttons shall be as follows:
 - a. Stainless Steel convex type as selected by the [Owner / Architect] from the manufacturer's or a third party's premium line of pushbuttons.
 - b. The button shall have a collar with LED call registered light.
6. The faceplates shall be 1/8" thick No. 4 stainless steel.
7. Mount passenger elevator fixtures with tamperproof screws. The screw/fastener and key switch cylinder finishes shall match faceplate finish.
8. Where key-operated switch and or key operated cylinder locks are furnished in conjunction with any component of the installation, six (6) keys for each individual switch or lock shall be furnished, stamped or permanently tagged to indicate function.
9. All caution signs, pictographs, code mandated instructions and directives shall be engraved and filled with epoxy in code required colors.

B. Main Car Operating Panel

1. Provide a main car operating pushbutton panel on the inside front return panel of the car.
2. Car operating panel shall be incorporated in the new swing-front return of the elevator cab.
 - a. Coordination with car front manufacturer shall be the responsibility of the Elevator Contractor.
3. The pushbuttons shall become individually illuminated as they are pressed and shall extinguish as the calls are answered.
4. The operating panel shall include:
 - a. A call button for each floor served, located not more than 48" above the cab floor.
 - b. "Door open" / "Door close" buttons.
 - c. "Alarm" button, interfaced with emergency alarm. The alarm button shall illuminate when pressed.
 - d. "Emergency Stop" switch per local law located at 35" above the cab floor.
 - e. Self-dialing, hands-free telephone with call acknowledging feature and A.D.A. design provisions.
 - f. Three (3) position firefighter key operated switch, call cancel button and illuminated visual/audible signal system with mandated signage engraved per ASME A 17.1 Standards as modified by the AHJ.
5. Locked Firemen's Service cabinet, keyed in accordance with local Code, containing required devices and signals in accordance with ASME A17.1 Standards.
 - a. Automatic opening of the locked cabinet door may be provided with signals initiated by the fire detection and alarm system where approved by the Authority Having Jurisdiction.

6. Provide a locked service cabinet flush mounted and containing the key switches required to operate and maintain the elevator, including, but not limited to:
 - a. Independent service switch
 - b. Light switch.
 - c. Fan switch.
 - d. G. F. C. I. duplex receptacle.
 - e. Emergency light test button and indicator.
 - f. Inspection Service Operation key switch.
 - g. Port for hand-held service tool where applicable.
 - h. Dimmer for cab interior lighting.
 7. Car operating panel shall incorporate:
 - a. An integral (no separate faceplate) digital L.E.D. floor position indicator
 - b. A "No Smoking" advisory.
 - c. The rated passenger load capacity in pounds.
 8. Equip the car operating panel with proximity card reader to disconnect the corresponding floor pushbutton.
 - a. Security system shall be overridden by Phase II Firefighter's Emergency Operations in accordance with code.
 9. Card Reader wiring shall be properly labeled inside the card operating panel "Card Reader Wiring". The same designated wiring shall be brought outside the controller and stored in an electrical pull box with the cover labeled "Card Reader Wiring".
 10. Post Inspection Certificate behind an opening in the car operating panel that is fitted with a flush-mounted clear Plexiglas without a frame.
- C. Car Position Indicator
1. The position of the car in the hoistway shall be indicated by the illumination of the position indicator numeral corresponding to the floor at which the car has stopped or is passing.
 - a. Provide 2" high, 10-segment LED type position indicator with direction arrows, integral with the car operating panel.
 - b. Provide Lexan cover lens with hidden support frame behind fixture plate to protect the indicator readout.
 - c. Provide audible floor passing signal per ADA standards where not provided by the elevator signal control.
 - d. Flush mount fixture with cover to match selected car front or car operating panel finish as directed by the Owner.
- D. Floor Position Indicator
1. Remove existing floor position indicator at the main lobby and provide new digital LED type unit.

2. New plate shall completely cover the present cutout and provide 2" numerals located on center.
3. Provide integral direction arrows that will indicate the direction in which the elevator is traveling.

E. Hall Direction Lanterns

1. Provide a visual and audible signal at each entrance to indicate the direction of travel and, where applicable, which car shall stop in response to the hall call.
 - a. Design the lantern with up and down indication at intermediate landings and a single indication at terminal landings.
 - b. Lanterns shall sound once for the up direction and twice for the down direction.
 - 1) Provide an electronic chime with adjustable sound volume.
 - c. Provide adjustable signal time (three [3] to ten [10] seconds, with one [1] second increments) to notify passengers which car shall answer the hall call and preset per ADAAG notification standards.
2. Main Lobby fixture shall incorporate a 2" high LED floor position indicator in the hall lantern fixture with direction arrows located on both sides of the indicator.
3. Locate the lantern above or adjacent to the corridor entrance.

F. Corridor Pushbutton Stations / Remove Back Boxes

1. Pushbutton signal fixtures shall be provided on each landing.
2. Each signal fixture shall consist of:
 - a. Up and down illuminating pushbuttons measuring 3/4" at their smallest dimension as selected by the Owner.
 - b. A recessed mounting box, electrical conduit and wiring.
3. Intermediate landings shall be provided with fixtures containing two (2) pushbuttons while terminal landings shall be provided with fixtures containing a single pushbutton.
4. Include firefighter key switch in the main lobby level station or other designated recall landing.
5. Where existing fixtures are located greater than 48" above the floor:
 - a. The existing back boxes shall be removed.
 - b. New back boxes shall be installed to provide a new centerline to buttons of 42" above the floor.
 - c. Standardize the new centerline on each floor.
6. All cutting, patching, grouting and/or plastering of masonry walls resulting from the removal or installation of corridor fixtures shall be performed by the Contractor so as to maintain the fire rating of the hoistway.
 - a. Finished painting or decorating of wall surfaces shall be by Others.

G. Hoistway Access Switch

1. Install a cylindrical type keyed switch at top terminal in order to permit the car to be moved at slow speed with the doors open to allow authorized persons to obtain access to the top of the car.
2. Where there is no separate pit access door, a similar switch shall be installed at the lowest landing in order to permit the car to be moved away from the landing with the doors open in order to gain access to the pit.
3. Locate the switch in the hall call pushbutton station at the top and bottom terminal landings where required if allowed by the Authority Having Jurisdiction.
4. This switch is to be of the continuous pressure spring-return type and shall be operated by a cylinder type lock having not less than a five (5) pin or five (5) disc combination with the key removable only in the "OFF" position.
 - a. The lock shall not be operable by any key which operates locks or devices used for other purposes in the building and shall be available to and used only by inspectors, maintenance men and repairmen in accordance with A17.1 applicable Security Group.
5. Existing provisions that meet the aforementioned criteria may be updated with keyed switches to match new apparatus provided for uniformity of systems within the building.

H. Lobby Control Panel

1. Provide a Lobby Control Panel for elevators as directed by the consultant.
2. Provide stainless steel faceplate with tamperproof screws.
3. The panel shall include:
 - a. 2" high LCD car position and travel direction indicators.
 - b. Three (3) position (on/car to lobby/off) switches.
 - c. Emergency power controls and indicators as per code requirements.
 - d. "Car at the designated floor with its doors open" indicator.
 - e. System trouble indications.
 - f. "On / Off" key-switches for car call security system
 - g. Fireman phone jacks where required by the AHJ.

2.11 CAR ENCLOSURES

A. Elevator Car Enclosure(s) and the Five Percent (5%) Rule:

1. In accordance with A17.1, Section 8.7, as adopted and/or modified by the AHJ, entitled "Alterations", where a new or remodeled elevator car enclosure is included in the base scope of work, the Contractor shall, within thirty (30) days after execution of the contract, weigh the elevator, or one elevator of each group of elevators included in the base scope of work, to determine the present deadweight of the platform/sling/cab assembly.
2. The Contractor shall, when necessary, weigh the interior materials of a single cab to better estimate the total existing weight of existing materials being removed as part of the alteration.

3. The Contractor shall make every effort to provide accurate weight measurements while taking into consideration all weights that may present themselves at the time the measurement is taken such as compensation, compensating sheave, hoist ropes and traveling cables that may affect the measurement of the assembly itself.
 4. The Contractor shall evaluate the actual counterbalance percentage for each sample elevator to identify prevailing conditions.
 5. Measurements of actual cab weight shall be compared to the original deadweight of the car as stamped on the crosshead data tag.
 6. Where no data tag exists, the Contractor shall make every effort to determine the original weight of the platform/sling/cab through calculations based on the current weight of the counterweight assembly and the verified percent of full load counterbalance.
 7. The amount of weight that may be added to the car, so as to remain within the limits of the "5% Rule", shall be calculated based on the following:
 - a. $(\text{Original Deadweight} + \text{Capacity}) \times (0.05) = \text{Maximum Additional Weight Allowed}$
 8. The Contractor shall document and notify the Owner and Consultant of the results of the measurements taken and what weight, if any, can be added or needs to be removed from the cab in order to maintain compliance with the 5% Rule.
 9. The Contractor shall work diligently with the Owner and/or Owner's Representative and/or Architect as well as the manufacturer of the car enclosure to minimize additional weights of the new or remodeled car enclosure so as to maintain compliance with the 5% Rule.
 10. Contractor shall be responsible for proper adjustment of the counterbalance of the system, including the static balance of the platform/sling/car enclosure, upon completion of the car interior work.
 11. Costs associated with this work shall be included in the base modernization price.
 12. Provide a new data tag on the crosshead of the elevator indicating the new deadweight, the current percent counterbalance and the date of the alteration.
- B. Elevator Cab Remodel Allowance (\$25,000 material per elevator for side & rear wall panels, ceiling, lighting and handrail.)
1. It is understood that if the selected manufacturer of the cab is not the same as the Elevator Supplier, all cab material will be constructed in a manner to accommodate the elevator manufacturer's associated equipment, such as operator, hangers, interlocks, etc., as purchased by the Owner or Owner's Agent.
 2. The net allowance for the elevator cabs are to be exclusive of:
 - a. Handling charges.
 - b. Applicable sales and/or use taxes.
 - c. Car door hangers, interlocks, exit contact locks.
 - d. New nickel-silver car thresholds (sills), cab doors, stainless steel swing fronts and transom, operating equipment and such items are to be included by the Elevator Supplier in the base contract.
 3. The net allowance covering the elevator cars of a design and material as selected shall include:

- a. Ventilation and lighting.
 - b. Side & rear wall panels.
 - c. Base / cove.
 - d. Handrails.
 4. Contractor shall include all costs associated with coordination of cab related work in the base modernization bid including static and dynamic balance of the system.
 - C. Elevator Cab Interior – New Thresholds
 1. Furnish and install new nickel-silver car thresholds (sills).
 2. Cost of labor and material for installation of new nickel-silver thresholds (sills) shall be included in the lump sum base fee, not the cab remodel allowance.
 - D. Elevator Cab Interior – New Stainless Steel Swing Fronts & Transoms
 1. It is understood that if the selected manufacturer of the cab is not the same as the Elevator Supplier, all cab material will be constructed in a manner to accommodate the elevator manufacturer's associated equipment, such as operator, hangers, interlocks, etc., as purchased by the Owner or Owner's Agent.
 2. Furnish and install new No. 4 stainless steel swing fronts and transoms.
 3. Cost of labor and material for installation of new stainless steel swing fronts and transom shall be included in the lump sum base fee, not the cab remodel allowance.
- 2.12 EMERGENCY LIGHTING / COMMUNICATIONS / SIGNALING
- A. Battery Back Up Emergency Lighting Fixture and Alarm
1. Provide a self-powered emergency light unit.
 - a. Arrange two (2) of the cab light fixtures to operate as the emergency light system.
 - b. Where cab lighting is utilized for emergency lighting, Contractor shall coordinate the battery back-up equipment so that it is compatible with the type of cab lighting specified by the Owner or Architect.
 2. Provide a car-mounted battery unit including solid-state charger and testing means enclosed in common metal container.
 - a. The battery shall be rechargeable nickel cadmium with a 10-year minimum life expectancy. Mount the power pack on the top of the car.
 - b. Provide a 6" diameter alarm bell mounted directly to the battery/charger unit and connected to sound when any alarm pushbutton or stop switch in the car enclosure is operated.
 - c. The bell shall be configured to operate from power supplied by the building emergency power generator. The bell shall produce a sound output of between 80-90 dBa (measured from a distance of 10') mounted on top of the elevator car.

- 1) Activation of this bell shall be controlled by the stop switch and alarm button in the car operating station
 - 2) The alarm button shall illuminate when pressed.
3. Where required by Code for the specific application, the unit shall provide mechanical ventilation for at least one (1) hour.
 4. The operation shall be completely automatic upon failure of normal power supply.
 5. Unit shall be connected to normal power supply for car lights and arranged to be energized at all times so it automatically recharges battery after use.

B. Common Alarm Bell

1. Provide a common alarm bell located in the elevator pit.
 - a. The bell shall be configured to operate when the alarm or stop switch of any elevator is activated, during both normal and battery back-up power conditions.
 - b. Existing common alarm bells may be rehabilitated and reused providing they meet the intent of this section and applicable codes.

C. Emergency Voice Communication / Telephone

1. A hands-free emergency voice communication system shall be furnished in each car, mounted as an integral part of the car operating panel. The system shall meet the IBC requirements for the deaf, hard of hearing and speech impaired. At a minimum, the following features shall be provided:
 - a. A visual and text-based and a video-based 24/7 live interactive system.
 - b. A system that is fully accessible by the deaf, hard of hearing and speech impaired that includes voice-only options for hearing individuals.
 - c. The ability to communicate with emergency personnel utilizing existing video conferencing technology, chat/text software or other approved technology.
 - d. Necessary wires shall be included in the car traveling cable and shall consist of a minimum of two shielded pair of 20AWG conductors.
 - e. 120V power shall be provided to power the hands-free and video devices.
2. The emergency communication system shall be equipped with an auto-dialer and illuminating indicator which shall illuminate when a call has been placed and begin to flash when the call has been answered.
 - a. Engraving shall be provided next to the indicator which says "When lit help is on the way" or similar language.
3. In addition to the standard "Alarm" button, a separate activation button shall be provided on the car operating panel to initiate the emergency call.
 - a. The communication device must not shut off if the activating button is pushed more than once.

- b. The emergency communication device shall transmit a pre-recorded location message only when requested by the operator and be provided with an adjustable call time which can be extended on demand by the operator.
 - c. Once two-way communication has been established, voice prompts shall be provided which instruct the operator on how to activate these functions as well as alerting the operator when a call is being attempted from another elevator in the building.
- 4. The system shall be compatible with ring down equipment and PBX switchboards.
- 5. The system shall be capable of serving as the audio output for an external voice annunciation system.
 - a. Conversation levels shall measure 60 dbA or higher and measure 10 dbA above ambient noise levels.
 - b. Each device shall be provided with a self-diagnostic capability in order to automatically alert building personnel should an operational problem be detected. Provide an audible and visual notification device at the designated level that will announce telephone line failure.
- 6. The emergency communication device shall be able to:
 - a. Receive incoming calls from any On-Site Emergency Responder Rescue Station (when provided or required).
 - b. Receive incoming calls from other off-site locations via the public telephone system.
 - c. Acknowledge incoming calls and automatically establishing hands-free two way communications.
 - 1) If no On-Site Rescue Station is provided, each hands-free device shall have built in line consolidation which will allow up to 6 elevators to be called individually from outside the building over a single telephone line and up to 80 elevators if an On-Site Rescue Station is provided.
- 7. The emergency elevator communication system shall require a maximum of one telephone line.
 - a. The system must provide line sharing capability to eliminate the need for a dedicated telephone line.
 - b. The line sharing function must ensure that the emergency communication devices always receive dialing priority even if the line is in use and that the emergency communication devices can be called into from an off-site location.
- 8. The system shall provide its own four-hour backup power supply in case of a loss of regular AC power.
- 9. The system must provide capability for building personnel to call into elevators and determine the charge state of any backup batteries provided for the emergency telephones.
- 10. Pushing the activation button in any of the elevator car stations will cause any on-site Rescue Station (where provided or required) or security telephone to ring.
 - a. If the on-site call is not picked up within 30 seconds, the call will be automatically forwarded to a 24-hour off-site monitoring service.

- b. The arrangements and costs of the off-site monitoring and telephone line shall be by others.
 - 11. Elevator cab lighting and ventilation systems shall not shut down if the emergency communication system is in use.
 - 12. All connections from the junction box to the telephone system shall be done by the Elevator Contractor where existing provisions can be reused.
 - 13. New telephone lines, where required, shall be provided and interfaced by others.
 - 14. All connections from the junction box to the security room's main telephone system shall be done by others.
- D. Life Safety System
- 1. Install Life Safety System speaker in each elevator cab.
 - 2. Provide all necessary wiring and interfacing between the elevator system and the Life Safety System as required.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Inspection

- 1. Study the Contract Documents with regard to the work as specified and required so as to ensure its completeness.
- 2. Examine surface and conditions to which this work is to be attached or applied and notify the Owner in writing if conditions or surfaces are detrimental to the proper and expeditious installation of the work. Starting the work shall imply acceptance of the surfaces and conditions to perform the work as specified.
- 3. Verify, by measurements at the job site, dimensions affecting the work. Bring field dimensions which are at variance with those on the accepted shop drawings to the attention of the Owner. Obtain the decision regarding corrective measures before the start of fabrication of items affected.
- 4. Cooperate in the coordination and scheduling of the work of this section with the work of other sections so as not to delay job progress.

3.2 INSTALLATION / PROJECT PHASING

A. Installation

- 1. Modernize the elevators, using skilled personnel in strict accordance with the final accepted shop drawings and other submittals.
- 2. Comply with the code, manufacturer's instructions and recommendations.

3. Coordinate work with the work of other building functions for proper time and sequence to avoid delays and to ensure right-of-way of system. Use lines and levels to ensure dimensional coordination of the work.
4. Accurately and rigidly secure supporting elements within the shaftways to the encountered construction within the tolerance established.
5. Provide and install motor, switch, control, safety and maintenance and operating devices in strict accordance with the submitted wiring diagrams and applicable codes and regulations having jurisdiction.
6. Ensure sill-to-sill running clearances do not exceed 1 1/4" at all landings served.
7. Arrange door tracks and sheaves so that no metal-to-metal contact exists.
8. Reinforce hoistway fascias to allow not more than 1/2" of deflection.
9. Isolate cab fan from canopy to minimize vibration and noise.
10. Remove oil, dirt and impurities and give a factory coat of rust inhibitive paint to all exposed surfaces of struts, hanger supports, covers, fascias, toe guards, dust covers and other ferrous metal.
11. Prehang traveling cables for at least 24 hours with ends suitably weighted to eliminate twisting after installation.

B. Project Phasing

1. Phase I - Final design development and contractors' preliminary work procedures to be completed within four (4) weeks from date of contract award.
 - a. Prevailing conditions review and layout.
 - b. Selection meeting for aesthetic design and finishes with Owners' designee.
 - c. Filing for required permits or other governing authorities work procedure requirements.
2. Phase II - Submittal approvals and confirmations shall be completed within eight (8) weeks from date of contract award.
 - a. Selection confirmations.
 - b. Manufacturer's shop drawings applicable, i.e., fixtures, cab, machine room layouts, doors, etc.
 - c. Engineering data acknowledgment applicable, i.e., power, heat, structural loads.
 - d. Delivery dates for major component suppliers, i.e., controls, machinery, fixtures, cabs, etc.
 - e. Posting of permits or other governing agency authorizations to proceed.
 - f. Proposed work implementation schedule based on the aforementioned procedures/confirmations.
3. Phase III - Mobilization of Final Design Approvals
 - a. Revision confirmations. (Equipment, etc.)
 - b. Preliminary work procedures.
 - c. Schedule confirmations.

4. Phase IV – Implementation

- a. Contractor shall modernize one (1) elevator at a time utilizing a full-time on-site teams of elevator mechanics for the duration of the construction period.
- b. Once the elevator modernization begins, and the first car is removed from service, contractor shall not demobilize modernization team without written approval of the elevator consultant until the end of the construction period after the 2nd car has been turned over for public use and all punch-list items are corrected.

5. Contractor shall provide a project schedule as part of the Bid based on the following:

- a. Include three (3) days of simulated operation, with or without door operation, while not allowing passenger use.
- b. Consultant punch list inspection report shall be performed after acceptance testing by the AHJ for each individual elevator.
- c. Contractor shall complete all punch list items issued by both the AHJ and the Consultant prior to turn-over for beneficial use by the Owner and removal of the next elevator for modernization.

C. Removal of Elevators

1. If extenuating circumstances (i.e. separating controller interconnections, inspection, testing, etc.), require that multiple cars of a single elevator group be removed from service simultaneously, the work shall be performed outside of the normal business hours at a time mutually agreed to by the Owner and Contractor.
2. A minimum of five (5) days advance written notice shall be given to the Owner and Elevator Consultant by the Contractor detailing the reasons for the simultaneous removal of the elevators from service along with the estimated out-of-service time.
3. The request shall be subject to review by the Elevator Consultant and approved by the Owner prior to the commencement of the work.
4. Costs for this work in addition to associated expenses shall be included as part of the base bid pricing.

D. Transfer of Hall Button Risers

1. Transfer of the hall button riser(s) to the new signal control systems shall be performed on a not-to-interfere basis and shall not interrupt building operations or inconvenience building occupants.
2. Costs for this work in addition to associated expenses shall be included as part of the base bid pricing.

3.3 FIELD QUALITY CONTROL

A. Inspection and Testing

1. Upon completion of each work phase or individual elevator specified herein, the Contractor shall, at its own expense, arrange and assist with inspection and testing as may be required by the A.H.J. in order to secure a Certificate of Operation.

B. Substantial Completion

1. The work shall be deemed "Substantially Complete" for an individual unit or group of units when, in the opinion of the Consultant, the unit is complete, such that there are no material and substantial variations from the Contract Documents, and the unit is fit for its intended purpose.
2. Governing authority testing shall be completed and approved in conjunction with inspection for operation of the unit; a certificate of operation or other required documentation issued; and remaining items mandated for final acceptance completion are limited to minor punch list work not incorporating any life safety deficiencies.
3. The issuance of a substantial completion notification shall not relieve the Contractor from its obligations hereunder to complete the work.
4. Final completion cannot be achieved until all deliverables, including but not limited to training, spare parts, manuals, and other documentation requirements, have been completed.

C. Contractor's Superintendent

1. The Contractor shall assign a competent project superintendent during the work progress and any necessary assistant, all satisfactory to the Owner. The superintendent shall represent the Contractor and all instructions given to him shall be as binding as if given to the Contractor.

3.4 PROTECTION / CLEANING

A. Protection and Cleaning

1. Adequately protect surfaces against accumulation of paint, mortar, mastic and disfiguration or discoloration and damage during shipment and installation.
2. Upon completion, remove protection from finished surfaces and thoroughly clean and polish surfaces with due regard to the type of material. Work shall be free from discoloration, scratches, dents and other surface defects.
3. The finished installation shall be free of defects.
4. Before final completion and acceptance, repair and/or replace defective work, to the satisfaction of the Owner, at no additional cost.
5. Remove tools, equipment and surplus materials from the site.

B. Barricades and Hoistway Screening

1. The Contractor shall provide barricades where necessary in order to maintain adequate protection of areas in which work specified by the contract documents is being performed, including open hoistway entrances. Terminal landing enclosures to be 8'-0" tall with a lockable access door. Fabrication and erection of all barricades shall be in compliance with applicable OSHA Regulations.
2. As required, the Contractor shall provide temporary wire mesh screening in the hoistway and of any elevator undergoing work specified in the Contract Documents. This screening shall be installed in such a manner as to completely segregate the hoistway from that of adjacent elevators. Screening shall be constructed from .041" diameter wire in a pattern that rejects passage of a 1" diameter ball.

3.5 DEMONSTRATION

A. Performance and Operating Requirements

1. Passenger elevators shall be adjusted to meet the following performance requirements:
 - a. Speed: within $\pm 3\%$ in both directions of travel under any loading condition.
 - b. Leveling: within $\pm 1/4"$ as measured between the car entrance threshold and the landing sill on any given floor under any loading condition.
 - c. Typical Floor-to-Floor Time: (Recorded from the doors start to close on one floor until they are 3/4 open at the next floor) under various loading conditions.

Passenger Elevators	10.0 – 11.0 seconds.
---------------------	----------------------

d. Door Operating Times

Door Type	Opening	Closing
42" Center Opening	1.5 – 2.0	2.4 – 2.8

- e. Door dwell time for hall calls: 4.0 sec with Advance lantern signals
 - f. Door dwell time for hall calls: 5.0 sec without Advance lantern signals
 - g. Door dwell time for car calls: 3.0 seconds
 - h. Reduced non-interference dwell time: 1.0 seconds.
2. Maintain the following ride quality requirements for the passenger elevators:
 - a. Noise levels inside the car shall not exceed the following:
 - 1) Car at rest with doors closed and fan off - 40 dba.
 - 2) Car at rest with doors closed, fan running - 55 dba.
 - 3) Car running at high speed, fan off - 50 dba.
 - 4) Door in operation - 60 dba.

- b. Vertical accelerations shall not exceed 14 milli-g and horizontal accelerations shall not exceed 25 milli-g.
 - 1) The accelerometer used for this testing shall be capable of measuring and recording acceleration to nearest 0.01 m/s² (1 milli-g) in the range of 0-2 m/s² over a frequency range from 0-80 Hz with ISO 8041 filter weights applied. Accelerometer should provide contact with the floor similar to foot pressure, 60 kPa (8.7psi).
- c. The amplitude of acceleration and deceleration shall not exceed 2.6 - 2.8 ft./sec² for geared and MRL traction, and 3.5 - 4 ft./sec² for gearless traction elevators.
- d. The maximum jerk rate shall be 1.5 to 2.0 times the acceleration and deceleration.
- e. The maximum velocity which the elevator achieves in either direction of travel while operating under load conditions that vary between empty car and full rated load shall be within $\pm 3\%$ of the rated speed.

B. Acceptance Testing

- 1. Comply with the requirements of Division 01.
- 2. The Contractor shall provide at least five (5) days prior written notice to the Owner and Consultant regarding the exact date on which work specified in the Contract Documents will reach completion on any single unit of vertical transportation equipment.
- 3. In addition to conducting whatever testing procedures may be required by local inspecting authorities in order to gain approval of the completed work, and before seeking approval of said work by the Owner, the Contractor shall perform certain other tests in the presence of the Consultant.
- 4. The Contractor shall provide test instruments, test weights, and qualified field labor as required to safely operate the unit under load conditions that vary from empty to full rated load and, in so doing, to successfully demonstrate compliance with applicable performance standards set forth in the project specifications with regard to:
 - a. Operation of safety devices.
 - b. Sustained high-speed velocity of the elevator in either direction of travel.
 - c. Brake-to-brake running time and floor-to-floor time between adjacent floors.
 - d. Floor leveling accuracy.
 - e. Door opening/closing and dwell times.
 - f. Ride quality inside the elevator car.
 - g. Communication system.
 - h. Load settings at which anti-nuisance, load dispatch, and load non-stop features are activated.
- 5. Upon completion of work specified in the Contract Documents on the last car in any group of elevators, and in conjunction with the aforementioned testing procedures, the Contractor shall carry out additional testing of group dispatch/supervisory control features in the presence of the Consultant.

6. The Contractor shall provide test instruments and qualified field labor as required to successfully demonstrate:
 - a. Firefighter and independent service operations
 - b. Restricted access security features and card reader controls
 - c. Emergency power operation
 - d. Floor parking assignments
7. Upon completion of the modernization of each individual elevator, emergency power testing shall be conducted by the Building Management after normal business hours and/or weekends.
8. After hour tests of systems such as emergency generators, fire service, and security systems shall be conducted at no extra cost to the Owner.

END OF SPECIFICATION

SECTION 238126 - SPLIT-SYSTEM HEAT PUMP SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes split-system heat pump units consisting of separate evaporator-fan and compressor-condenser components. Units are designed for exposed or concealed mounting.

1.2 SUBMITTALS

- A. Product Data: Include rated capacities, furnished specialties, and accessories for each type of product indicated. Diagram power, signal, and control wiring.
- B. Operation and Maintenance Data: For split-system air-conditioning units to include in operation and maintenance manuals.

1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

1.4 WARRANTY

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Carrier Air Conditioning; Div. of Carrier Corporation.
 - 2. LG.
 - 3. Mitsubishi Electronics America, Inc.; HVAC Division.
 - 4. Samsung.

2.2 WALL OR CEILING MOUNTED, EVAPORATOR-FAN COMPONENTS

- A. Cabinet: Enameled steel with removable panels on front and ends and discharge drain pans with drain connection.
- B. Refrigerant Coil: Copper tube, with mechanically bonded aluminum fins, complying with ARI 210/240, and with electronic linear expansion valve metering device. The expansion valve shall be controlled by a microprocessor controlled step motor.
- C. Fan: Direct drive fan. The fan shall be statically and dynamically balanced and run on a motor with permanently lubricated bearings. The indoor fan shall consist of four speeds.
- D. Fan Motors:
 - 1. Special Motor Features: Multi-tapped, multispeed with internal thermal protection and permanent lubrication.
- E. Filters: Removable and washable.
- F. A dry air holding charge shall be provided in the indoor fan Section.

2.3 AIR-COOLED, COMPRESSOR-CONDENSER COMPONENTS

- A. Casing: Steel, finished with baked enamel with removable panels for access to controls, weep holes for water drainage, and mounting holes in base. Provide brass service valves, fittings, and gage ports on exterior of casing.
- B. Compressor: The compressor shall be a DC twin rotor rotary compressor with variable speed inverter drive. The compressor shall be driven by inverter circuit to control compressor speed. Provide a minimal amount of current shall be automatically, intermittently applied to compressor motor windings to maintain sufficient heat to vaporize any refrigerant. No crankcase heater is needed.
- C. Refrigerant Coil: Copper tube, with mechanically bonded aluminum fins, complying with ARI 210/240, and with liquid subcooler. The outdoor condensing unit shall have an accumulator and high pressure safety switch.
- D. Fan: Aluminum-propeller type, directly connected to motor.
- E. Motor: Permanently lubricated, with integral thermal-overload protection.
- F. Refrigerant: R-32. The outdoor unit shall be pre-charged with R-32 refrigerant in refrigerant tubing.
- G. The outdoor condensing unit shall be compatible with different types of indoor fan coil units, wall mounted.

- H. The outdoor condensing unit shall be equipped with an electronic control board that interfaces with indoor fan coil unit to perform all necessary operation functions.

2.4 ACCESSORIES

- A. The control system shall contain a microprocessor for indoor units and one microprocessor for outdoor units. The indoor microprocessor shall be the capabilities to monitoring return air temperature, indoor coil temperature, receiving and processing commands from wired controller and controlling the outdoor unit. Provide a 24VDC for control signal between the indoor and outdoor unit.
- B. Thermostat: Wired remote controller functioning to remotely control compressor and evaporator fan, with the following features:
 - 1. Compressor time delay.
 - 2. 24-hour time control of system stop and start.
 - 3. LCD display indicating built in temperature sensor, set-point temperature, time setting, operating mode, timer and fan speed.
 - 4. Fan-speed selection, including auto setting.
 - 5. 12/24 volts control voltage from wired controller to indoor unit.
- C. Refrigerant Line Kits: Annealed, ARC type copper suction and liquid lines factory cleaned, dried, pressurized, and sealed; factory-insulated suction line with flared fittings at both ends; individually insulated in flexible, closed cell elastomeric material with thermal conductivity equal to 0.27 BTU-inch/hour per sqft per deg F. and flame spread index of less than 25 tested by ASTM E84.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install units level and plumb.
- B. Install evaporator-fan components using manufacturer's standard mounting devices securely fastened to building structure.
- C. Install roof-mounting compressor-condenser components on equipment supports. Anchor units to supports with removable, cadmium-plated fasteners.
- D. Install seismic restraints.
- E. Install compressor-condenser components on restrained, spring isolators with a minimum static deflection of 1 inch.
- F. Install and connect precharged refrigerant tubing to component's quick-connect fittings. Install tubing to allow access to unit.

3.2 CONNECTIONS

- A. Piping installation requirements are specified in other related Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to unit to allow service and maintenance.
- C. Unless otherwise indicated, connect piping with unions and shutoff valves to allow units to be disconnected without draining piping. Refer to piping system Sections for specific valve and specialty arrangements.
- D. Ground equipment.

3.3 FIELD QUALITY CONTROL

- A. Contractor to inspect, test, and adjust field-assembled components and equipment installation, including connections. Report results in writing.

3.4 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain units.

END OF SECTION 238126

EXHIBIT D

DRAWINGS BY CUSHING TERRELL DATED OCTOBER 6, 2025

(13 pages)

10.06.2025

CAPITAL CITY DEVELOPMENT CORP (CCDC)

9th and Front ParkBOI Parking Garage

ELEVATOR MODERNIZATION

BID SET

OWNER

Capital City Development Corp. (CCDC)
121 North 9th Street, Suite 501
Boise, ID 83702
208.384.4264
Contact: Kassi Brown

ARCHITECT/ENGINEER

Cushing Terrell
800 Main Street, Suite 800
Boise, ID 83702
208.577.5674
Contact: Joshua Gregoire

SHEET INDEX

SL101 MAIN LEVEL LATERAL PLAN

GENERAL

G001 COVER SHEET, GENERAL INFORMATION

STRUCTURAL

S001 STRUCTURAL GENERAL NOTES
S101 FOUNDATION PLAN
S102 ROOF FRAMING PLAN

ARCHITECTURAL

A101 FLOOR PLANS & PLAN DETAILS
A212 TOP FLOOR EXTERIOR ELEVATIONS
A401 8TH STREET EAST TOWER CIRCULATION / STAIR PLANS
A411 9TH STREET WEST TOWER CIRCULATION / STAIR PLANS

MECHANICAL

M001 MECHANICAL SCHEDULES, LEGENDS & DETAILS
M101 MECHANICAL PLANS
MD100 MECHANICAL DEMOLITION PLANS

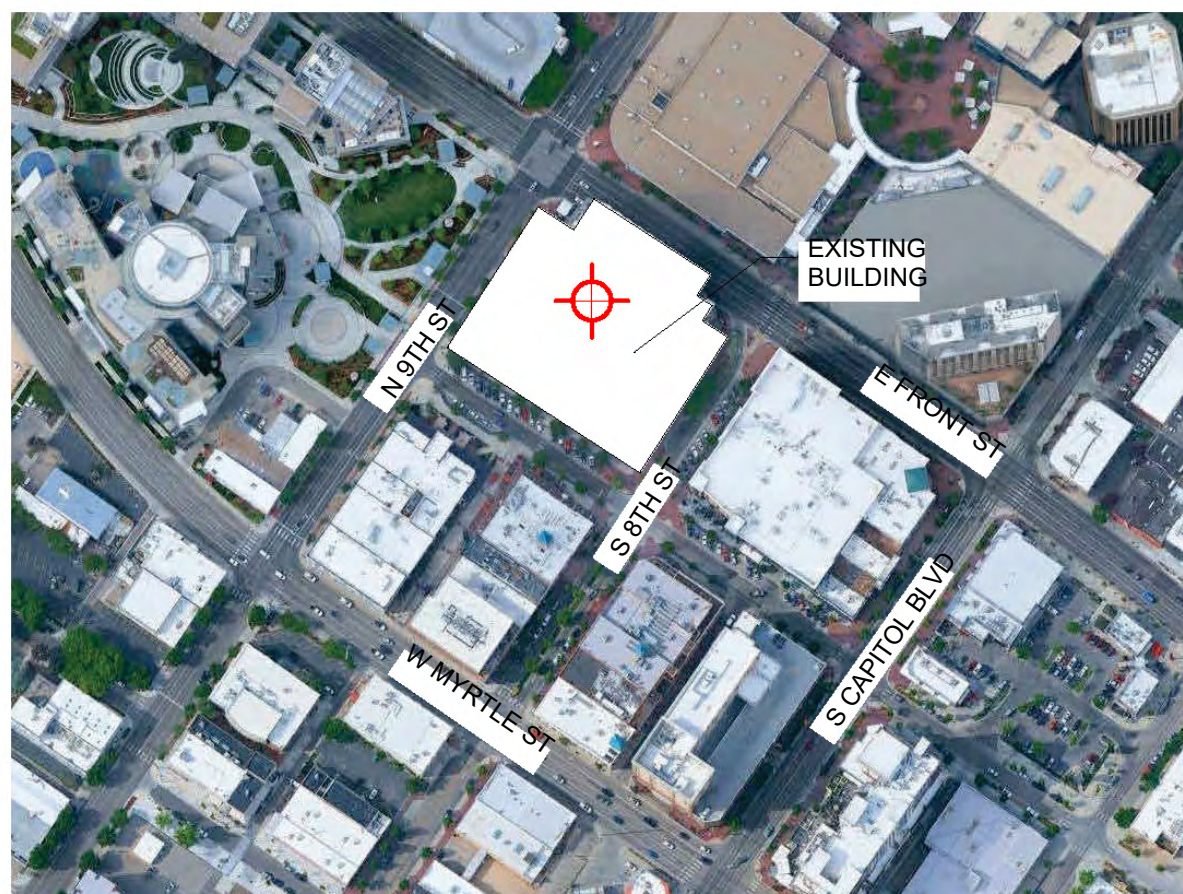
ELECTRICAL

E001 LEGENDS
E002 ONE LINE DIAGRAM
E003 ELECTRICAL SCHEDULES
E100 ELECTRICAL DEMOLITION PLANS
E200 ELECTRICAL PLANS

PROJECT ADDRESS

312 South 9th Street
Boise, ID 83702

VICINITY MAP: Locator

CAPITAL CITY DEVELOPMENT CORP (CCDC)
9th and Front ParkBOI Parking Garage
ELEVATOR MODERNIZATION© 2025 | ALL RIGHTS RESERVED
95% CD SET

BID SET

10.06.2025
PROJ# | GV_CCDC_ELEVATOR
DESIGNED BY | GREGOIRE
DRAWN BY | PARSONS
REVIEWED BY | GREGOIRE
REVISIONS

COVER SHEET,
GENERAL
INFORMATION

G001

100% BID DOCUMENTS

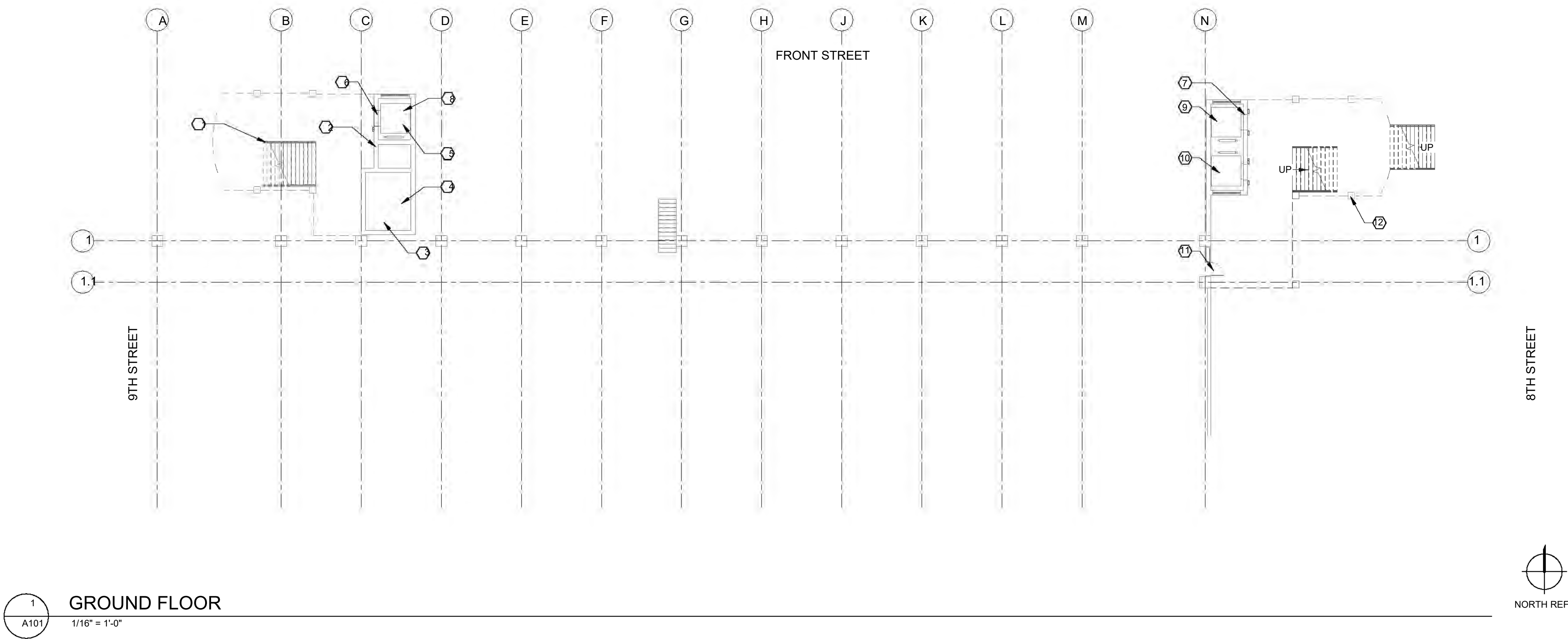
CODE REVIEW INFORMATION

TOTAL GROSS BUILDING AREA:
211405 SF

- GOVERNING CODES:
- 2018 International Building Codes (IBC)
 - 2018 International Existing Building Code (IEBC)
 - 2018 International Fire Code (IFC)
 - 2018 International Mechanical Code (IMC)
 - 2023 National Electrical Code (NEC)
 - 2017 Idaho State Plumbing Code
 - 2018 International Energy Conservation Code (IECC)

310 OCCUPANCY CLASSIFICATION: S-2, - NO CHANGE TO EXISTING CONSTRUCTION TYPE: II-B (FULLY SPRINKLERED, EXISTING TO BE UPGRADED) ZONING: C-5DD
THIS PROJECT DOES NOT PROPOSE TO CHANGE OCCUPANCY OR ZONING.
EXISTING BUILDING: BUILT IN 1998

PROJECT NARRATIVE:
THIS PROJECT CONSISTS OF MODERNIZING THE EXISTING ELEVATOR EQUIPMENT. SCOPE INCLUDES REMOVING AND REPLACING THE EQUIPMENT ON (3) EXISTING ELEVATOR LIFTS; REPLACING CALL BUTTONS, CONTROL PANELS AND INTERIORS OF EACH ELEVATOR CAB; REPLACING ELEVATOR EQUIPMENT IN THE ELEVATOR EQUIPMENT ROOM; REPLACING HVAC IN ELEVATOR EQUIPMENT ROOM; REPLACING CONTROL AND NOTIFICATION EQUIPMENT AS RELATED TO MODERNIZE THE ELEVATORS. REPLACE ELECTRICAL EQUIPMENT AS REQUIRED TO SUPPORT THE MODERNIZATION. THE EXISTING FREIGHT ELEVATOR IS AN INDEPENDENT SYSTEM AND IS NOT PART OF THIS PROJECT.



PLAN LEGEND

- W## → ASSEMBLY TYPE (SEE ASSEMBLIES SHEET)
- NAME 101 → ROOM NAME AND NUMBER
- X → WINDOW TYPE (SEE A600s)
- K → KEYNOTE
- 1 SIM → DIRECTION OF VIEW, IF APPLICABLE
- X000 → DRAWING NUMBER
- 101 → SHEET WHERE DRAWN
- 101 → DOOR NUMBER (SEE SHEET A601)
- DIMENSION TO FACE OF FRAMING
- DIMENSION TO GRID LINE
- DIMENSION TO CENTER LINE

GENERAL NOTES

- A. SEE SHEET A401 FOR GENERAL NOTES, KEYNOTES AND ADDITIONAL INFORMATION.

KEYNOTES

- 1 EXISTING STAIRWAY TO REMAIN
- 2 REMOVE AND REPLACE HALL CALL BUTTONS AND EMERGENCY SWITCHES (LOBBY PANEL) PER SPECIFICATIONS (TYP.)
- 3 RETAIN EXISTING BUFFERS (TYP.)
- 4 EXISTING FREIGHT ELEVATOR (NO WORK)
- 5 REMOVE AND REPLACE PIT SWITCH PER SPECIFICATIONS.
- 6 REMOVE AND REPLACE ALL HALL LANTERNS (UP AND DOWN INDICATORS). PROVIDE ANNOUNCE CHIME PER SPECIFICATIONS. (TYP.)
- 7 REMOVE AND REPLACE DOOR LOOP OPERATOR PER SPECIFICATIONS (TYP.)
- 8 ELEVATOR #1
- 9 ELEVATOR #2
- 10 ELEVATOR #3
- 11 EXISTING DOOR TO REMAIN (NO WORK)
- 12 EXISTING CONCRETE COLUMN TO REMAIN. (TYP.)

CAPITAL CITY DEVELOPMENT CORP (CCDC)
9th and Front ParkBOI Parking Garage

ELEVATOR MODERNIZATION

GENERAL NOTES

A. PROVIDE NEW AUTOMATIC SELF-LEVELING SYSTEM THAT BRINGS THE ELEVATOR CAR LEVEL WITH THE FLOOR LANDINGS TO +/- 1/4" REGARDLESS OF LOAD OR DIRECTION. THE SELF LEVELING SYSTEM SHALL COMPENSATE FOR OVER TRAVEL OR ROPE STRETCH. SEE SPECIFICATIONS.

B. PROVIDE NEW SPECIAL EMERGENCY SERVICE OPERATION IN COMPLIANCE WITH CURRENT VERSION OF ASME/ANSI A17.1. SEE SPECIFICATIONS.

C. A KEY SWITCH IN EACH ELEVATOR SHALL BE PROVIDED FOR IN-CAR CONTROL OF EACH CAR WHEN IN PHASE II OF EMERGENCY SERVICE. SEE SPECIFICATIONS.

D. ELEVATORS SHALL BE CONFIGURED THAT IF AN ELEVATOR IS OPERATING ON INDEPENDENT SERVICE ON PHASE I OPERATION, A BUZZER SHALL SOUND IN THE CAR AND A LIGHT SHALL BE ILLUMINATED IN THE CAB.

E. WHEN THE INDEPENDENT SERVICE KEY SWITCH IS ON IN THE CAR OPERATION PANEL, IT SHALL CANCEL ALL PREVIOUS CALLS AND DISCONNECT FROM THE HALL BUTTONS ALLOWING THE ELEVATOR TO OPERATE BY CAR BUTTONS ONLY. DOOR OPERATION SHALL ONLY OCCUR AFTER THE DOOR CLOSE BUTTON IS PUSHED.

F. PROVIDE A KEY SWITCH IN EACH ELEVATOR CAR OPERATING PANEL TO PERMIT OPERATION OF THE ELEVATOR FROM ON TOP OF THE CAR AND MAKE CAR AND HALL BUTTON INOPERATIVE.

G. A NEW ANTI-NUISANCE FEATURE SHALL BE PROVIDED THAT WILL RESET CAR BUTTONS AND REQUIRE RE-REGISTRATION IF EXCESSIVE NUMBER OF CALLS ARE REGISTERED FOR THE LOAD.

H. HOIST WAY ACCESS SWITCHES SHALL BE PROVIDED IN THE CAR OPERATING PANEL TO RENDER ALL CAR AND HALL BUTTONS INOPERATIVE AND TO PERMIT OPERATION OF THE ELEVATOR BY MEANS OF AN ACCESS KEY SWITCH ADJACENT TO THE HOIST WAY ENTRANCE AT THE ACCESS LANDING.

I. THE ELEVATOR CONTRACTOR SHALL PROVED AN ADVANCED MONITORING SYSTEMS THAT PROVIDES DATA ANALYSIS, REAL TIME DATA AND ELEVATOR STATUS, AUTOMATIC UPDATES, AND PREDICTIVE MAINTENANCE FEEDBACK TO ADDRESS POTENTIAL ISSUES BEFORE THEY OCCUR.

J. PROVIDE NEW INTERLOCKS ON EACH ELEVATOR TO PREVENT OPERATION OF THE ELEVATOR UNLESS ALL DOORS FOR THAT ELEVATOR ARE CLOSED. THE SYSTEM SHALL MAINTAIN THE DOORS IN THEIR CLOSED POSITION WHILE THE ELEVATOR IS AWAY FROM THE LANDING.

K. TERMINAL STOPPING DEVICES SHALL BE PROVIDED TO SLOW OR AUTOMATICALLY STOP THE CAR AT THE TERMINAL LANDINGS TO AUTOMATICALLY CUT OFF THE POWER AND APPLY THE BRAKE SHOULD THE CAR TRAVEL BEYOND THE TERMINAL LANDINGS.

L. NOTES SHOWN ON EACH LEVEL FLOOR PLAN ARE TYPICAL ON ALL LEVELS.

M. THE FOLLOWING ITEMS SHALL BE REPLACED IN EACH ELEVATOR CONTROL / EQUIPMENT ROOM.

-CONTROLLER, NEW CONROLLER SHALL BE PROVIDED TO PERFORM ALL THE FUNCTIONS OF ELEVATOR MOTION AND ELEVATOR DOOR CONTROL. ALL HARDWARE TO CONNECT, TRANSFER AND INTERRUPT POWER, AND PROTECT THE MOTOR SHALL BE INCLUDED. THE SYSTEM SHALL ALSO PERFORM CAR OPERATION CONTROL.

- DRIVE SYSTEM. PROVIDE VARIABLE VOLTAGE, VARIABLE FREQUENCY SELF COMMISSING REGENERATIVE DRIVE. STEP UP OR DOWN TRANSFORMER SHALL BE INCLUDED IN ITEMS PROVIDED.

- POWER CONVERTER THAT UPON SHUT DOWN ALLOWS ONLY ONE CONVERTER TO START AT A SINGLE TIME.

- MOTOR. A NEW 500 VOLT VARIABLE FREQUENCY 3 PHASE LOW SLIP MOTOR SHALL REPLACE EACH EXISTING ELEVATOR MOTOR.

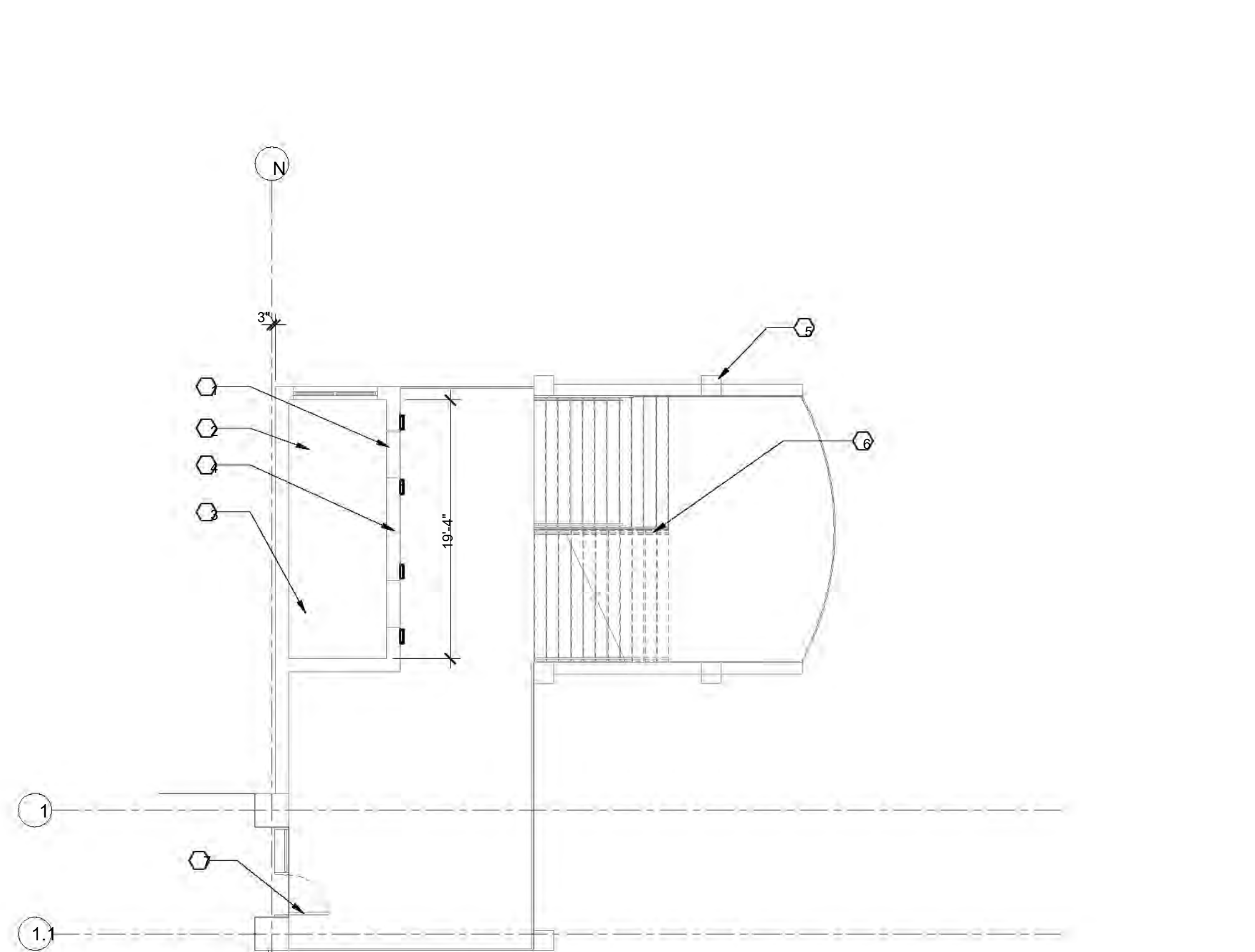
- GOVERNOR. PROVIDE A NEW CENTRIFUGAL SPEED GOVERNOR AT EACH ELEVATOR THAT OPERATES THE CAR SAFELY, INSTALLED AT THE TOP OF THE HOISTWAY IN THE EXISTING MACHING ROOM. THE NEW GOVERNOR SHALL ACTUATE A SWITCH WHEN EXCESIVE SPEEDS OCCUR, DISCONNECTING THE MOTOR AND APPLY THE BRAKE FOR SAFETY.

- ROPE GRIPPER. PROVIDE A NEW ROPE GRIPPER AT EACH ELEVATOR TO PREVENT THE ELEVATOR FROM OVER SPEEDING IN THE UP DIRECTION PER ASME/ANSI A17.1 STANDARDS.

SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

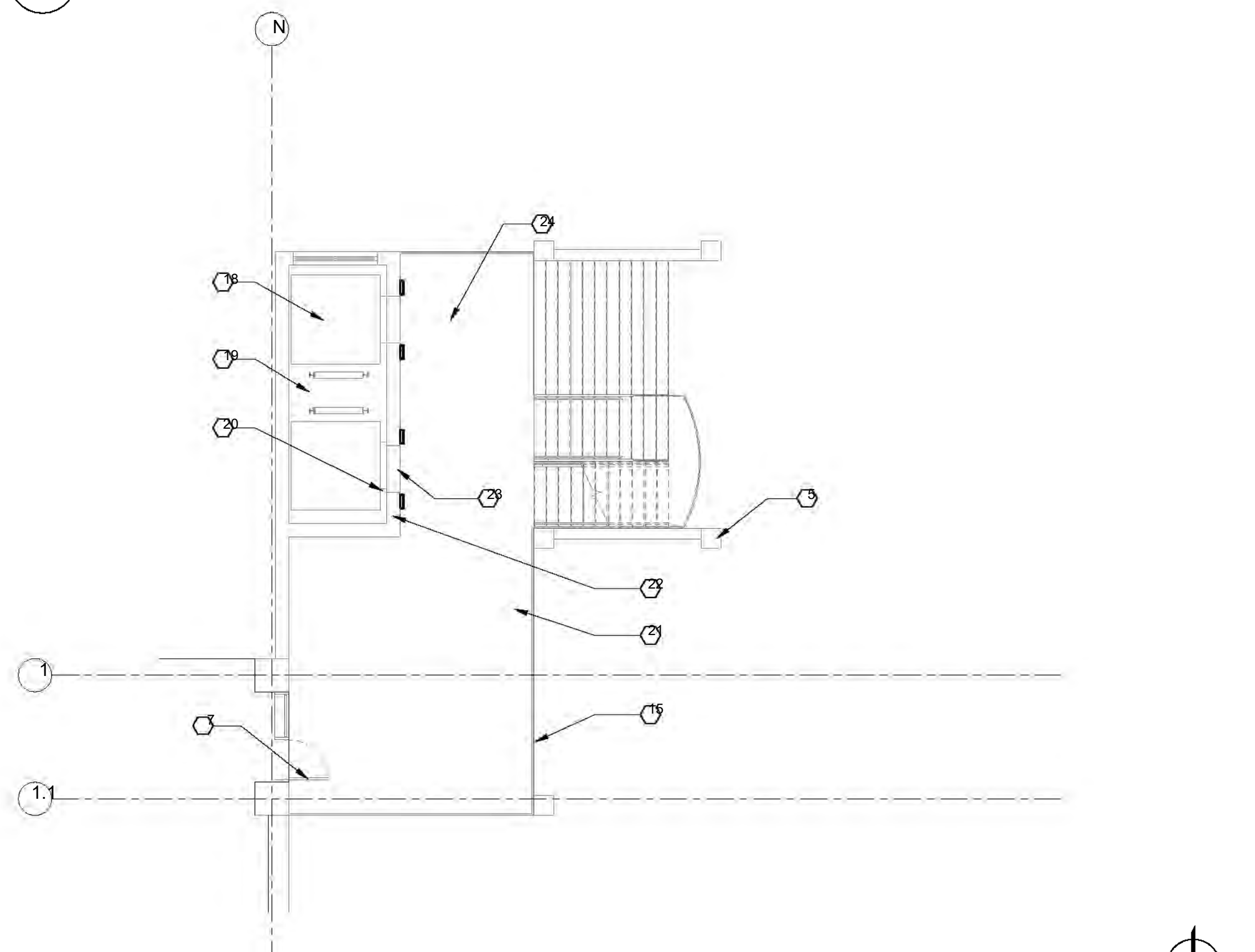
KEYNOTES

- REMOVE AND REPLACE ALL HALL LANTERNS ABOVE DOORS. PROVIDE ANNOUNCE CHIME PER SPECIFICATIONS. (TYP.)
- ELEVATOR #2
- ELEVATOR #3
- REMOVE AND REPLACE HALL CALL BUTTONS PER SPECIFICATIONS. (TYP)
- EXISTING CONCRETE COLUMN TO REMAIN. (TYP)
- EXISTING HANDRAIL TO REMAIN
- EXISTING DOOR TO REMAIN
- PROVIDE NEW ILLUMINATED CAR POSITION INDICATOR IN EACH CAB ABOVE NEW CONTROL PANEL.
- REMOVE AND REPLACE CAR GUIDES.
- RETAIN EXISTING CAR SAFETY DEVICE THAT STOPS THE CAR IF IT ATTAINS A DESCENDING SPEED IN EXCESS OF THE CONTRACT SPEED.
- RETAIN EXISTING CAR FRAME AND PLATFORM.
- EXISTING DOOR TO REMAIN.
- EXISTING EQUIPMENT PLATFORM STAIRWAY TO REMAIN.
- EXISTING METAL GUARDRAIL TO REMAIN
- REMOVE AND REPLACE ALL HOIST WAY DOOR TRACK AND HANGERS. SEE SPECIFICATIONS.
- INSTALL NEW HOIST WAY DOOR RESTRICTIONS. SEE SPECIFICATIONS.
- REMOVE AND REPLACE ALL CAR DOOR TRACKS AND HANGERS. SEE SPECIFICATIONS.
- REMOVE AND REPLACE CAR LIGHTING. PROVIDE NEW EMERGENCY UNIT EMPLOYING A 6-VOLT SEALED RECHARGEABLE BATTERY WITH A STATIC CIRCUIT. THE POWER UNIT SHALL ILLUMINATE THE ELEVATOR CAR AND PROVIDE POWER TO ALARM BELL IN THE EVENT OF POWER FAILURE PER ASME/ANSI A17.1
- REMOVE AND REPLACE COUNTERWEIGHT GUIDES
- PROVIDE NEW CAR OPERATING PANEL THAT MATCHES THE EXISTING INTERIOR FINISH OF CAB. PANEL SHALL HAVE MECHANICALLY ILLUMINATED BUTTONS TO CORRESPOND WITH LANDINGS SERVED. AN EMERGENCY CALL BUTTON, DOOR OPEN BUTTON, DOOR CLOSE BUTTON, AND KEY OPERATED LIGHT SWITCH. THE EMERGENCY CALL BUTTON SHALL BE CONNECTED TO A BELL THAT SERVES AS AN EMERGENCY SIGNAL. ALL BUTTON SHALL HAVE LONG LASTING LED ILLUMINATION.
- EXISTING CONCRETE PLATFORM TO REMAIN
- PROVIDE NEW AUDIBLE SIGNAL IN EACH CAB THAT ALERTS ARRIVAL AND PASSING OF EACH FLOOR.
- PROVIDE NEW SOLID STATE INFRARED PASSENGER PROTECTION DEVICE AT THE CAR DOOR. PROVIDE A NEW DEVICE THAT WILL STOP AND RE-OPEN THE CAR DOOR AND HOIST WAY DOOR AUTOMATICALLY SHOULD THE DOORS BECOME OBSTRUCTED.
- PROVIDE NEW CLOSED LOOP DOOR OPERATOR. CAR AND HOIST DOOR SHALL BE POWER OPERATED BY MEANS OF A CLOSED LOOP DOOR OPERATOR MOUNTED ON TOP OF THE CAR TO PROVIDE CONSISTENT OPERATION. THE SYSTEM SHALL CONTINUALLY MONITOR DOOR SPEED AND POSITION, AND ALSO MAKE ADJUSTMENTS ACCORDINGLY TO PROVIDE SMOOTH OPERATION. (TYP.)
- REMOVE EXISTING HEAT PUMP PER MECHANICAL PLANS. RETAIN METAL FRAME IN OPENING. INFILL OPENING PER DETAIL 1/A411



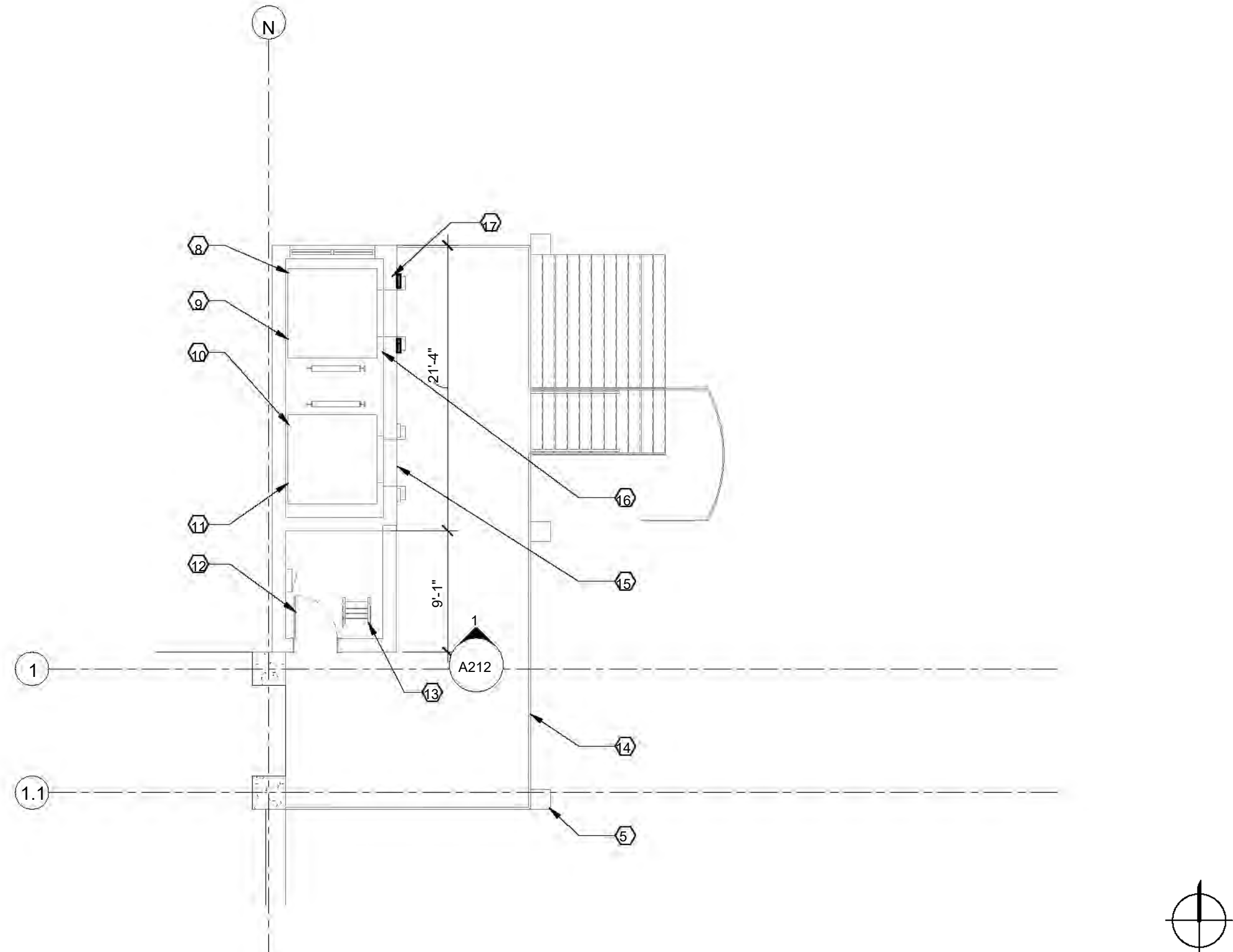
2 EAST TOWER - 2ND FLOOR THRU 5TH FLOOR

A401
1/8" = 1'-0"



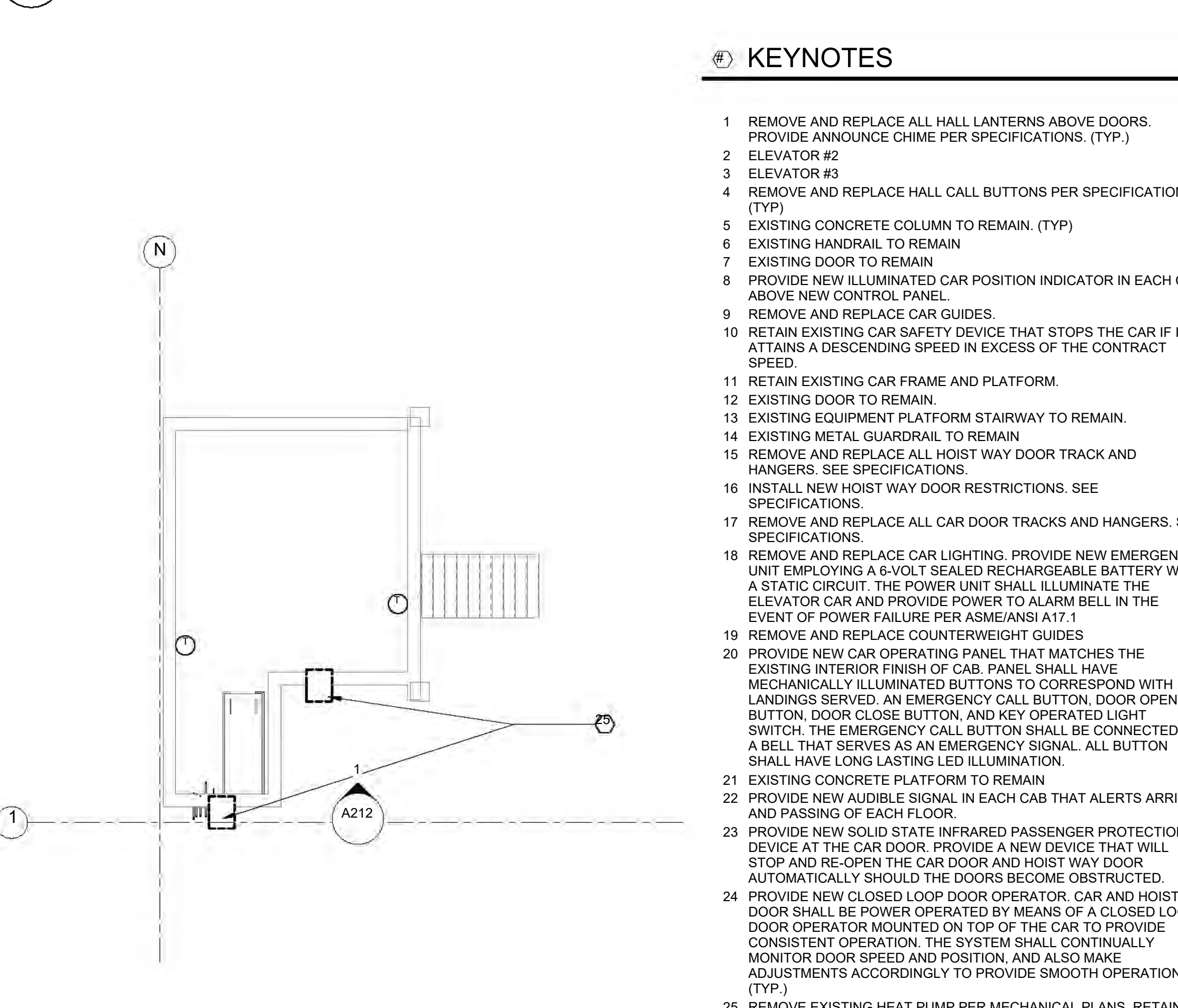
3 EAST TOWER - 6TH AND 7TH FLOOR

A401
1/8" = 1'-0"



4 EAST TOWER - 8TH FLOOR

A401
1/8" = 1'-0"



1 ELEVATOR PENTHOUSE - EAST TOWER 8TH STREET

A401
1/8" = 1'-0"

GENERAL NOTES

- A. SEE SHEET A401 FOR GENERAL NOTES, KEYNOTES,
AND ADDITIONAL INFORMATIO..

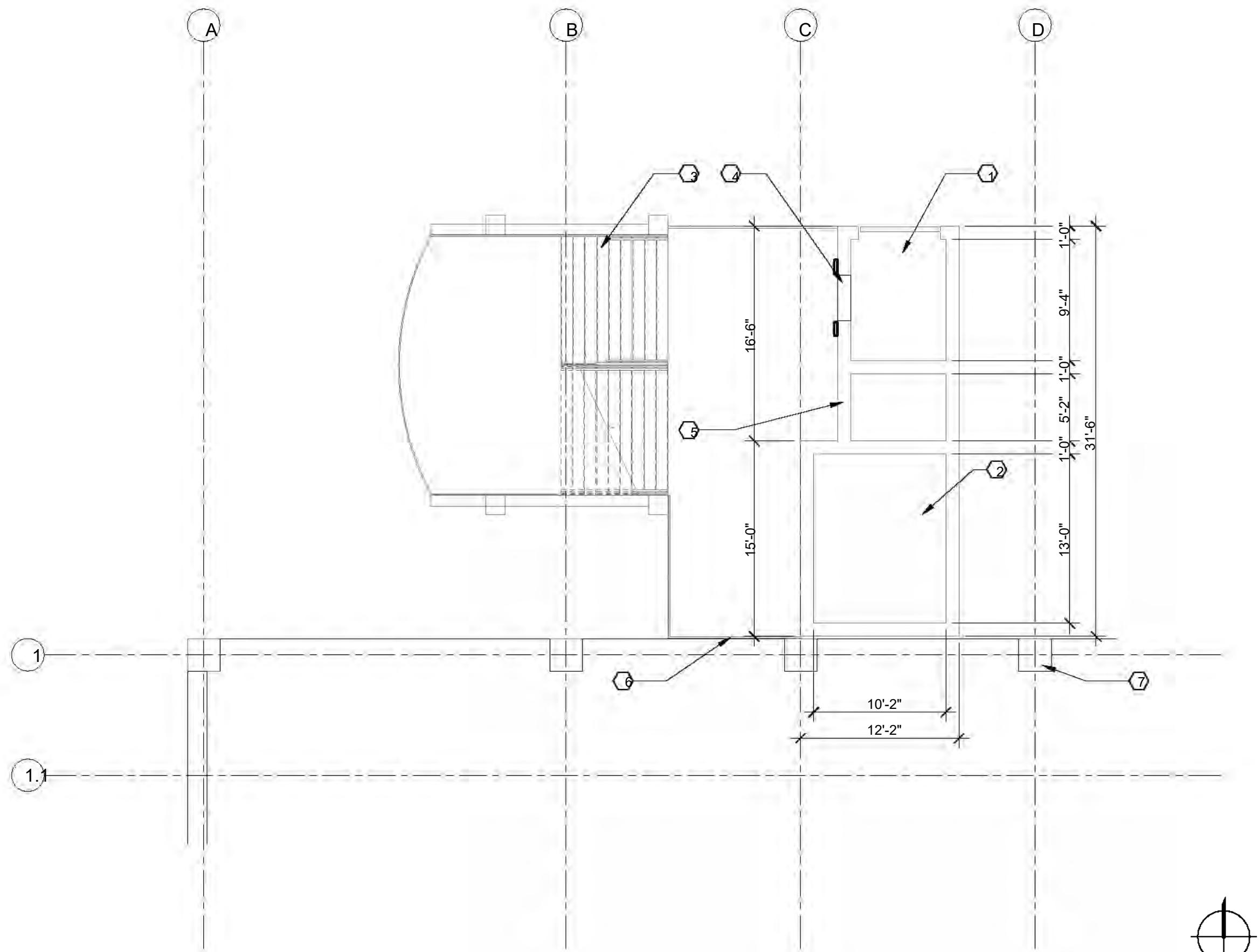
KEYNOTES

- ELEVATOR #1
- FREIGHT ELEVATOR (NO WORK)
- EXISTING STAIRWAY AND PLATFORM TO REMAIN (NO WORK)
- REMOVE AND REPLACE ALL HALL LANTERNS ABOVE DOORS (UP
AND DOWN INDICATORS), PROVIDE ANNOUNCE CHIME PER
SPECIFICATIONS. (TYP. ALL LEVELS AND LOCATIONS)
- REMOVE AND REPLACE HALL CALL BUTTONS PER SPECIFICATION.
(TYP. ALL LEVELS AND LOCATIONS)
- EXISTING GUARDRAIL TO REMAIN.
- EXISTING CONCRETE COLUMN TO REMAIN. (TYP)
- REMOVE AND REPLACE ALL CAR DOOR TRACKS AND HANGERS. SEE
SPECIFICATIONS
- INSTALL NEW HOISTS WAY DOOR RESTRICTIONS. SEE
SPECIFICATIONS. (TYP.)
- REMOVE AND REPLACE ALL HOIST WAY DOOR TRACKS AND
HANGERS. SEE SPECIFICATIONS.
- EXISTING CONCRETE COLUMN (TYP.)
- EXISTING EQUIPMENT PLATFORM STAIRWAY TO REMAIN.
- EXISTING DOOR TO REMAIN
- RETAIN EXISTING CAR FRAME AND PLATFORM. (TYP.)
- RETAIN EXISTING CAR SAFETY DEVICE THAT STOPS THE CAR IF IT
ATTAINS A DESCENDING SPEED IN EXCESS OF THE CONTRACT
SPEED (TYP.)
- REMOVE AND REPLACE CAR GUIDES (TYP.)
- PROVIDE NEW ILLUMINATED CAR POSITION INDICATOR IN EACH CAB
ABOVE NEW CONTROL PANEL.
- PROVIDE NEW CLOSED LOOP DOOR OPERATOR. CAR AND HOIST
DOOR SHALL BE POWER OPERATED BY MEANS OF A CLOSED LOOP
DOOR OPERATOR MOUNTED ON TOP OF THE CAR TO PROVIDE
CONSISTENT OPERATION. THE SYSTEM SHALL CONTINUALLY
MONITOR DOOR SPEED AND POSITION AND MAKE ADJUSTMENTS
ACCORDINGLY TO PROVIDE SMOOTH OPERATION. (TYP.)
- PROVIDE NEW SOLID STATE INFRARED PASSENGER PROTECTION
DEVICE AT THE CAR DOOR. PROVIDE A NEW DEVICE THAT WILL
STOP AND RE-OPEN THE CAR DOOR AND HOIST WAY DOOR
AUTOMATICALLY SHOULD THE DOORS BECOME OBSTRUCTED (TYP.)
- PROVIDE NEW CAR OPERATING PANEL THAT MATCHES THE
EXISTING INTERIOR FINISH OF THE CAB. THE PANEL SHALL HAVE
MECHANICALLY ILLUMINATED BUTTONS TO CORRESPOND WITH
LANDINGS SERVED, AN EMERGENCY CALL BUTTON, EMERGENCY
STOP BUTTON, DOOR OPEN BUTTON, A DOOR CLOSE BUTTON, AND
A KEY OPERATED LIGHT SWITCH. THE EMERGENCY CALL BUTTON
SHALL BE CONNECTED TO A BELL THAT SERVES AS AN EMERGENCY
SIGNAL. ALL BUTTON SHALL HAVE A LONG LASTING LED
ILLUMINATION.
- REMOVE AND REPLACE CAR LIGHTING. PROVIDE NEW EMERGENCY
UNIT EMPLOYING A 6-VOLT SEALED RECHARGEABLE BATTERY WITH
A STATIC CIRCUIT. THE POWER UNIT SHALL ILLUMINATE THE
ELEVATOR CAR AND PROVIDE POWER TO THE ALARM BELL IN THE
EVENT OF A POWER FAILURE PER ASME/ANSI A17.1 (TYP.)
- PROVIDE NEW AUDIBLE SIGNAL IN EACH CAB THAT ALERTS ARRIVAL
AND PASSING OF EACH FLOOR.
- REMOVE AND REPLACE COUNTERWEIGHT GUIDES (TYP.)
- EXISTING CONCRETE PLATFORM TO REMAIN (TYP.)
- REMOVE EXISTING HEAT PUMP PER MECHANICAL PLANS. RETAIN
METAL FRAME IN OPENING. INFILL OPENING PER DETAIL 1/A411

- PROVIDE 1/4" SS SIMPSON TITEN HD, 9"
FROM EA. CORNER, (2) TOTAL. DRILL
PER MFR'S SPECS AND GUIDELINES.
MIN EMBED 1 1/2" INTO CONCRETE
WALL. TORQUE TO 40 FT/LBS. TYPICAL
TOP AND BOTTOM.
- EXISTING CONCRETE WALL
- 3/16" THICK STEEL METAL PANEL.
(PAINT EXTERIOR TO MATCH EXISTING
BEFORE INSTALL.)
- CAULK PERIMETER OF INFILL PANEL
- 3/16" THICK STEEL METAL PLATE.
EXTEND PLATE 4" BEYOND OPENING
ON EA. SIDE.
- CAULK PIPING PENETRATION TO
PROVIDE WEATHER TIGHT CONDITION.
VERIFY EXACT LOCATION, SIZE, AND
QUANTITY W/ MECHANICAL AND
ELECTRICAL DRAWINGS.
- L3" x 3" x 3/16" CONT. STEEL ANGLE AT
TOP AND BOTTOM OF OPENING.
- PROVIDE 1/4" SS SIMPSON TITEN HD,
9" FROM EA CORNER, (4) TOTAL, 2"
FROM EDGE OF (E) OPENING, 1 1/2"
MIN. EMBED IN (E) CONCRETE WALL.
TORQUE TO 40 FT/LBS.
- INFILL WITH R-23 MINERAL WOOL
INSULATION.

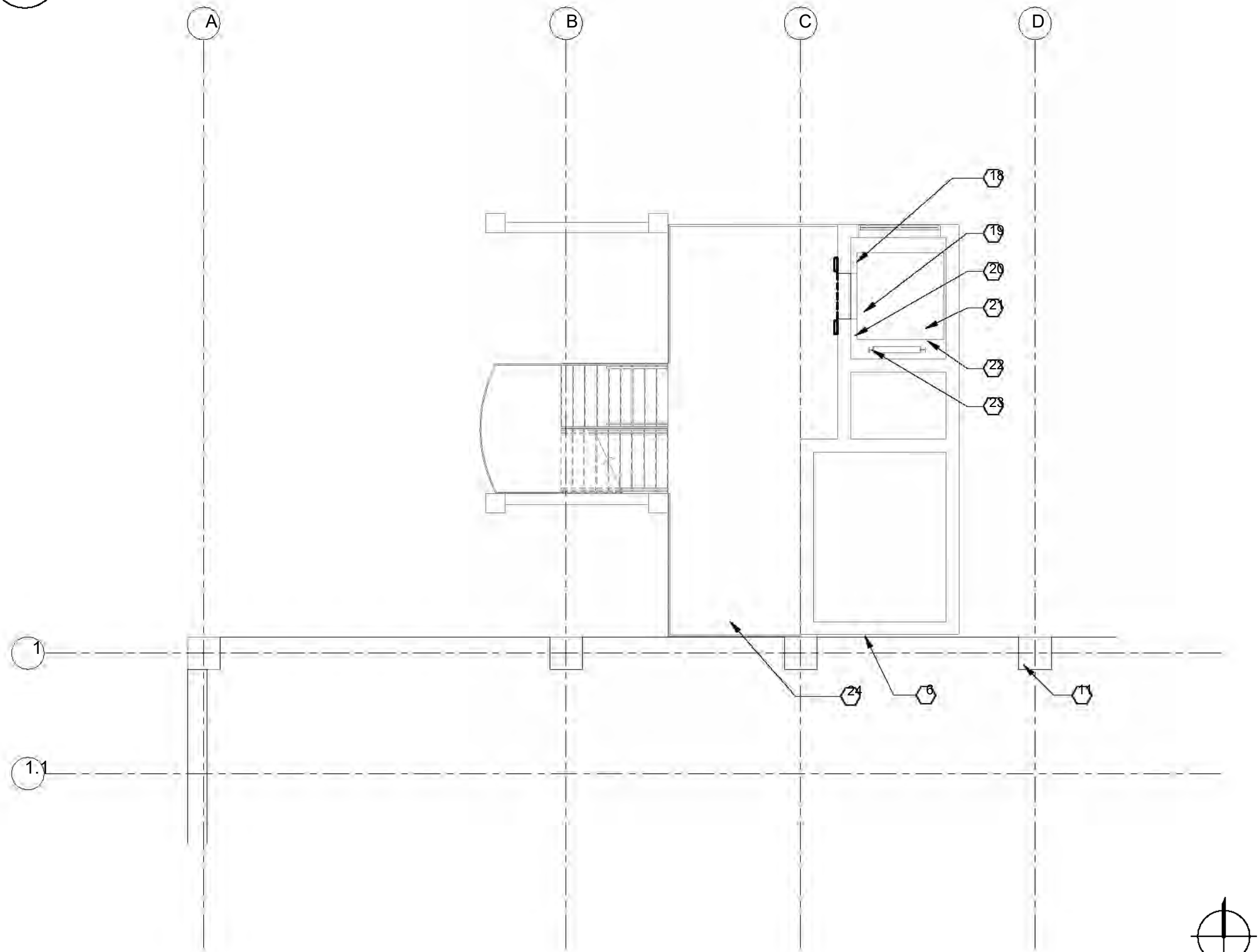
WALL INFILL (DETAIL 1/A411)

1 1/2" = 1'-0"



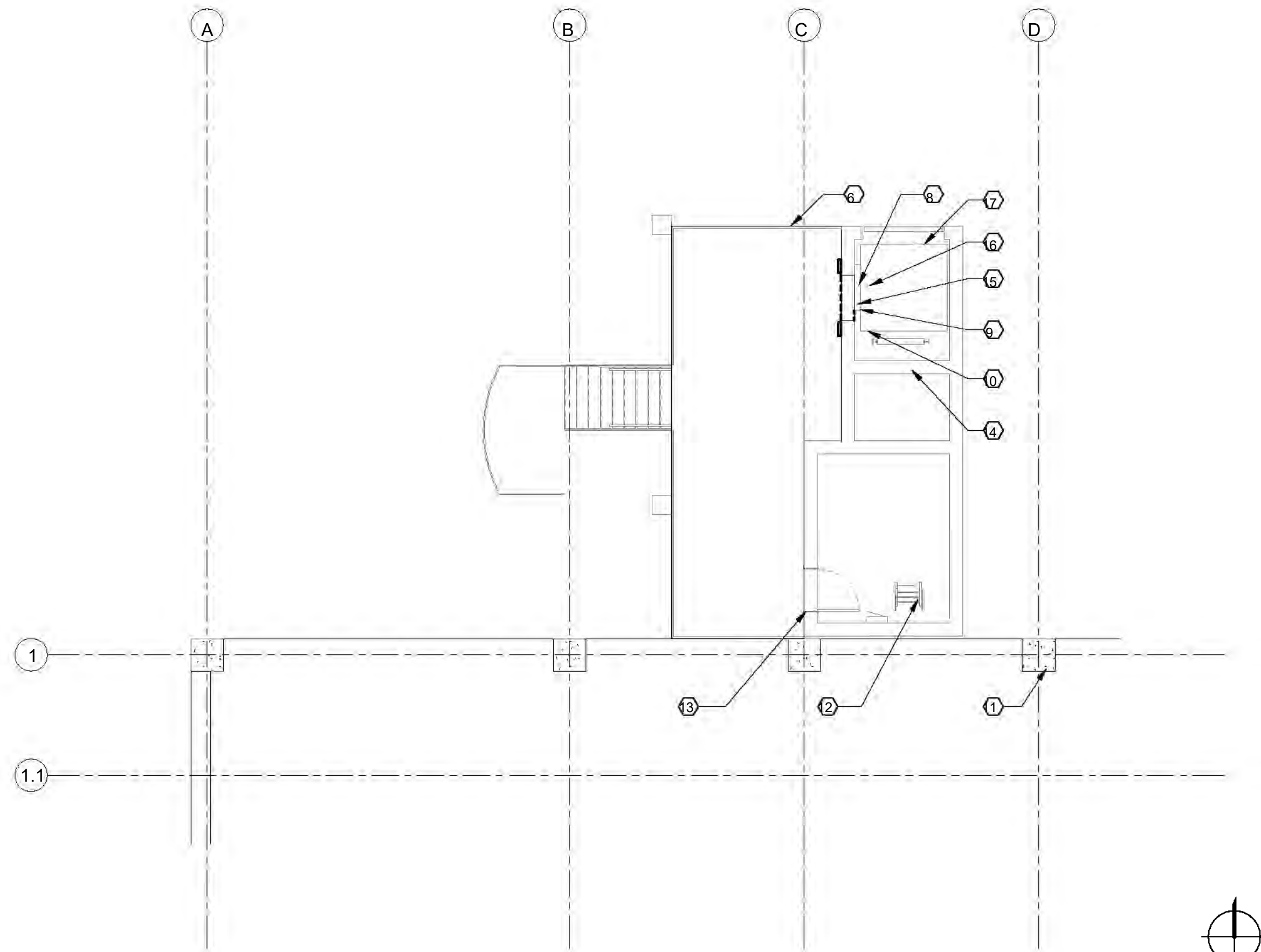
WEST TOWER 2ND FLOOR THRU 5TH FLOOR

1/8" = 1'-0"



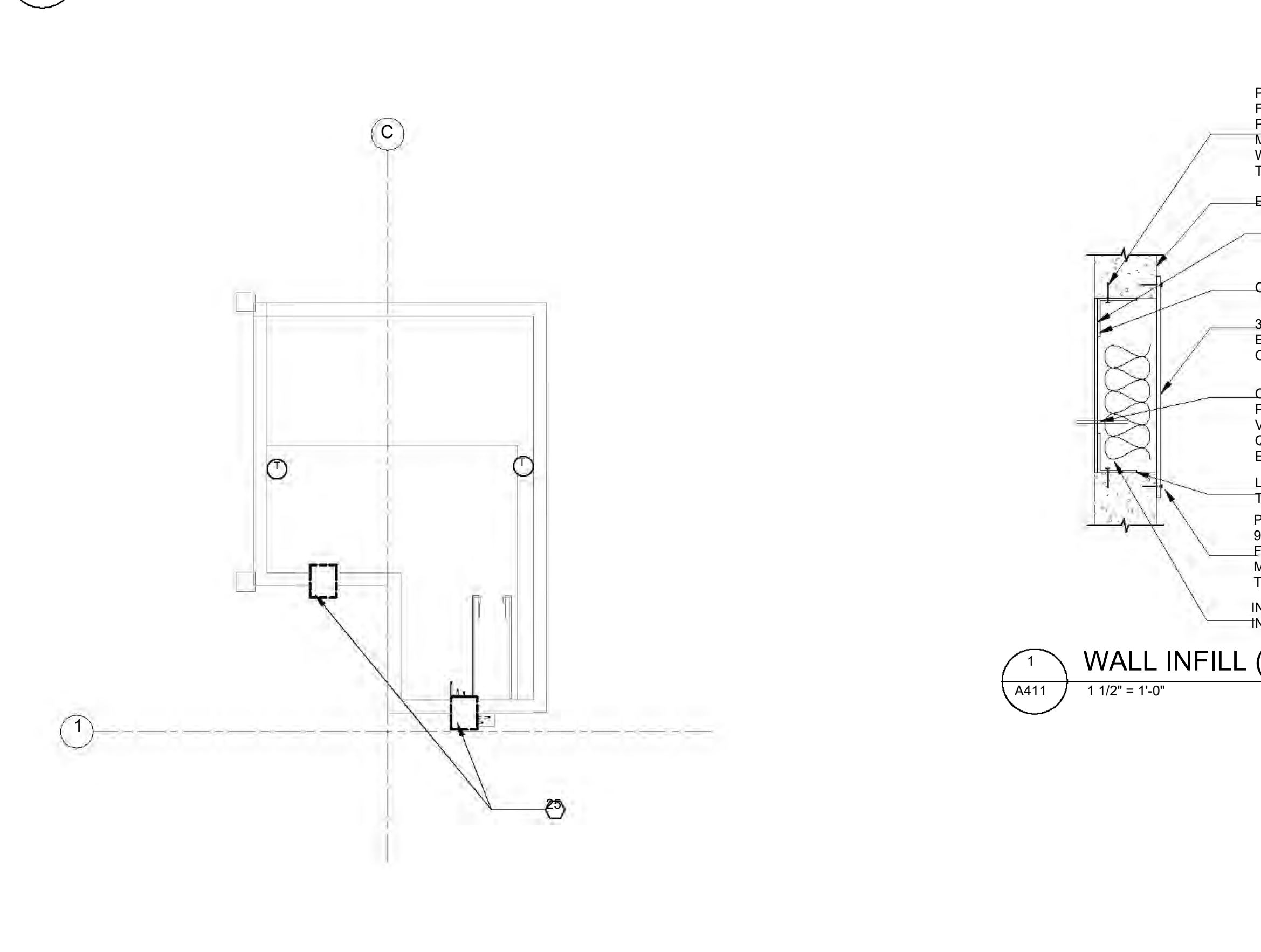
WEST TOWER - 6TH AND 7TH FLOOR

1/8" = 1'-0"



WEST TOWER - 8TH FLOOR

1/8" = 1'-0"



ELEVATOR PENTHOUSE - WEST TOWER 9TH STREET

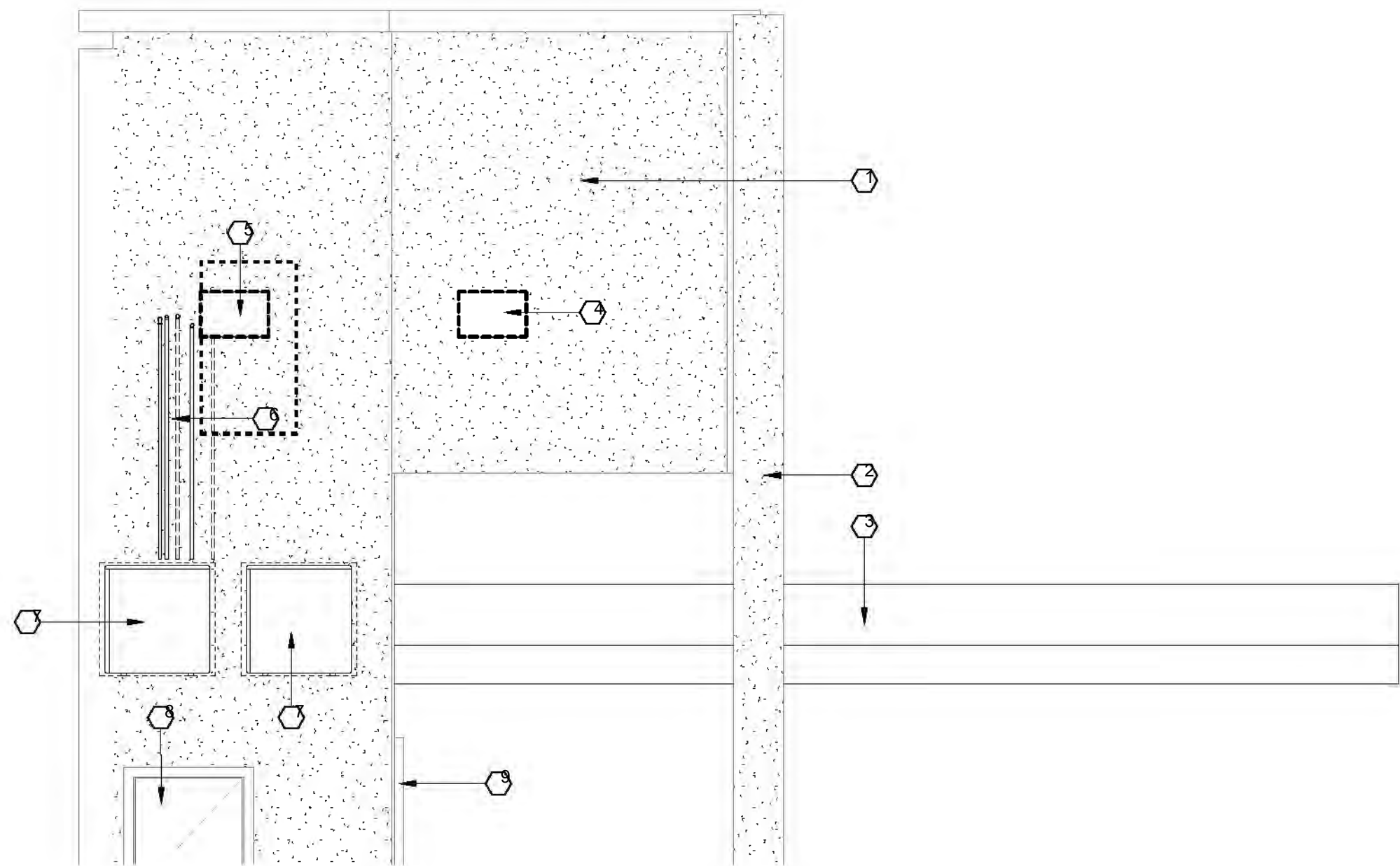
1/8" = 1'-0"

KEYNOTES

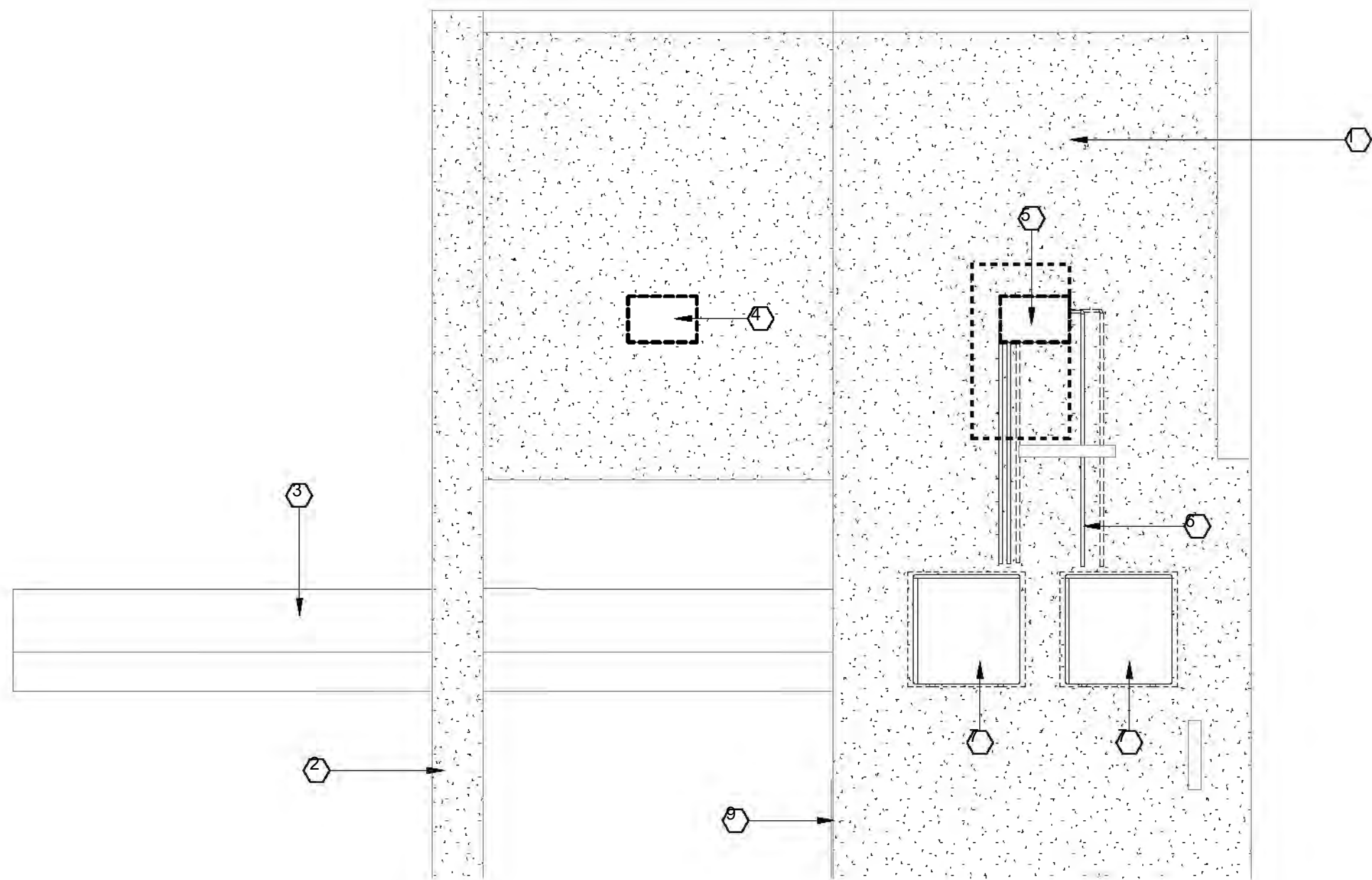
- 1 EXISTING CONCRETE WALL
- 2 EXISTING CONCRETE COLUMN
- 3 EXISTING METAL AWNING
- 4 EXISTING OPENING IN WALL. REMOVE HEAT PUMP PER MECHANICAL. PATCH OPENING PER DETAIL 1/A411
- 5 EXISTING OPENING WALL. REMOVE HEAT PUMP PER MECHANICAL. SAWCUT AND ENLARGE OPENING TO 3'-0" WIDE X 7'-0" HIGH TO REMOVE EXISTING ELEVATOR EQUIPMENT. PATCH PER DETAIL 1/A411
- 6 MECHANICAL PIPING. SEE MECHANICAL PLANS.
- 7 NEW MECHANICAL UNIT. SEE MECHANICAL PLANS.
- 8 EXISTING METAL DOOR TO REMAIN.
- 9 EXISTING ELEVATOR TRIM TO REMAIN.

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1
A212
8TH STREET TOP FLOOR ELEVATION
1/4" = 1'-0"



2
A212
9TH STREET TOP FLOOR ELEVATION
1/4" = 1'-0"

CAPITAL CITY DEVELOPMENT CORP (CCDC)
9th and Front ParkBOI Parking Garage
ELEVATOR MODERNIZATION

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95% CD SET

BID SET

10.06.2025
PROJ# | GV_CCDC_ELEVATOR
DESIGNED BY | GREGOIRE
DRAWN BY | PARSONS
REVIEWED BY | GREGOIRE
REVISIONS

TOP FLOOR EXTERIOR
ELEVATIONS

A212

100% BID DOCUMENTS

GENERAL DEMOLITION MECHANICAL NOTES

- A. THIS CONTRACTOR SHALL BE AWARE THAT THIS IS A REMODELING PROJECT AND AS SUCH, CERTAIN ITEMS AND SIZES CANNOT BE FULLY ILLUSTRATED NOR EXPLAINED WITHOUT FIELD OBSERVATION. THEREFORE, THIS CONTRACTOR IS ADVISED TO VISIT AND EXAMINE THE JOB SITE AND BUILDING IN EVERY DETAIL AS PERTAINS TO THIS PROJECT AND MAKE ALLOWANCES IN HIS PROPOSAL FOR ALL CONDITIONS THAT WILL AFFECT THE WORK INDICATED IN THE PROJECT SPECIFICATIONS AND CONTRACT DRAWINGS.
- B. SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REMOVAL ITEMS.
- C. ALL REMOVED ITEMS, EXCEPT THOSE NOTED TO BE REUSED OR TO REMAIN THE PROPERTY OF THE OWNER, SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE JOB SITE. THE OWNER RESERVES THE RIGHT TO KEEP ANY REMOVED ITEMS EVEN THOUGH NOT NOTED ON DRAWINGS.
- D. WHERE EXISTING EQUIPMENT, DUCTS, ETC. ARE TO BE REMOVED, SUCH REMOVAL SHALL INCLUDE ALL ANCHORS, BASES, HANGERS, ETC.
- E. THIS CONTRACTOR MUST MEET WITH THE OWNER OR HIS REPRESENTATIVE AND DISCUSS THE PROPOSED WORK SCHEDULE FOR REMOVAL, AND REMODELED WORK WITHIN CONTRACT DRAWINGS PRIOR TO PERFORMING ANY WORK. THE CONTRACTOR SHALL INFORM THE OWNER OR HIS REPRESENTATIVE, OF THE INTENT TO DO SO AT LEAST 48 HOURS BEFORE SUCH WORK BEGINS.
- F. THIS CONTRACTOR SHALL BE AWARE THAT CERTAIN AREAS OF REMOVAL AND REMODELED WORK MUST BE DONE AFTER NORMAL BUSINESS HOURS. REFER TO ARCHITECTURAL PHASING AND SCHEDULING DOCUMENTS FOR DETAILS AND SPECIFICATION SECTION 01 10 00.
- G. THIS CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING REQUIRED IN ACCORDANCE WITH DIVISION 1 "CUTTING AND PATCHING", OF SPECIFICATIONS.

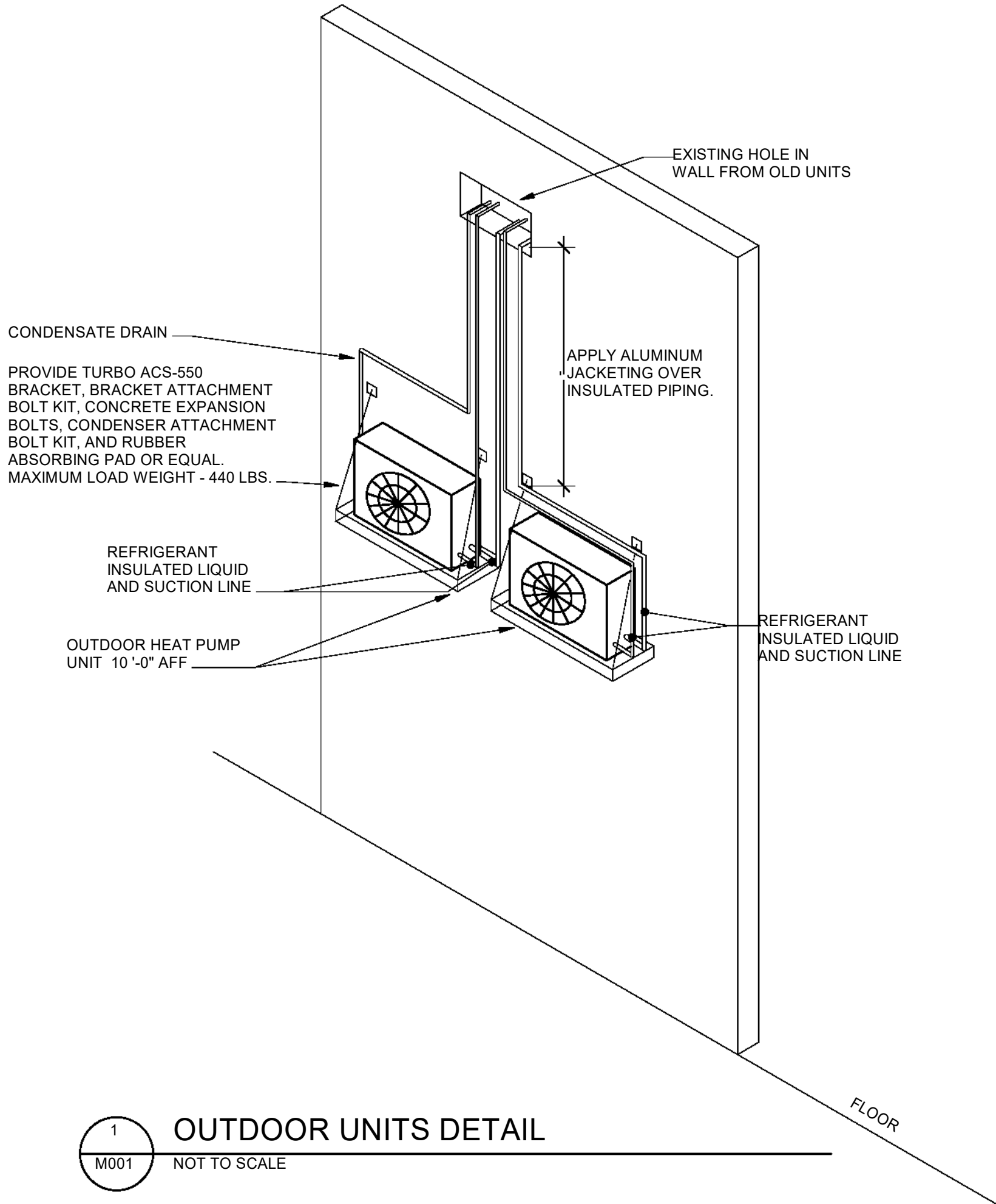
HVAC ABBREVIATIONS

%	PERCENT	MAX	MAXIMUM
ACFM	ACTUAL CFM	MBH	BTU PER HOUR (THOUSAND)
AFF	ABOVE FINISHED FLOOR	MC	MECHANICAL CONTRACTOR
AHU	AIR HANDLING UNIT	MIN	MINIMUM
AMP	AMPERE (AMP, AMPS)	N/A	NOT APPLICABLE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	NC	NORMALLY CLOSED
APD	AIR PRESSURE DROP	NIC	NOT IN CONTRACT
APPROX	APPROXIMATE	NO	NORMALLY OPEN
BHP	BRAKE HORSEPOWER, BOILER HORSEPOWER	NO	NUMBER
BOD	BOTTOM OF DUCT	NTS	NOT TO SCALE
BTU	BRITISH THERMAL UNIT	OA	OUTSIDE AIR
C	COMMON	OBD	OPPOSED BLADE DAMPER
CFM	CUBIC FEET PER MINUTE	OD	OUTSIDE DIAMETER
COD	CENTER OF DUCT	PD	PRESSURE DROP
CU FT	CUBIC FEET	PH	PHASE (ELECTRICAL)
CU IN	CUBIC INCH	PSI	POUNDS PER SQUARE INCH
DB	DECIBEL	PSIA	PSI ABSOLUTE
DBT	DRY-BULB TEMPERATURE	PSIG	PSI GAUGE
DIA	DIAMETER	R/O	RUN OUT
EAT	ENTERING AIR TEMPERATURE	RA	RETURN AIR
EC	ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EDR	EQUIVALENT DIRECT RADIATION	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	SA	SUPPLY AIR
EXP	EXPANSION	SCFM	CFM, STANDARD CONDITIONS
F	FAHRENHEIT	SH	SENSIBLE HEAT
FPM	FEET PER MINUTE	SP	STATIC PRESSURE
FPS	FEET PER SECOND	SP VOL	SPECIFIC VOLUME
FT	FOOT OR FEET	SPEC	SPECIFICATION
GA	GAGE OR GUAGE	STD	STANDARD
GAL	GALLONS	SUCT	SUCTION
GC	GENERAL CONTRACTOR	T STAT	THERMOSTAT
GPD	GALLONS PER DAY	TC	TEMPERATURE CONTROL
GPH	GALLONS PER HOUR	TD	TEMPERATURE DIFFERENCE
GPM	GALLONS PER MINUTE	TEMP	TEMPERATURE
HD	HEAD	TOD	TOP OF DUCT
HGT	HEIGHT	TONS	TONS OF REFRIGERATION
HP	HORSEPOWER	V	VOLT
HZ	FREQUENCY	VAC	VACUUM
ID	INSIDE DIAMETER	VAV	VARIABLE AIR VOLUME
KW	KILOWATT	VEL	VELOCITY
KWH	KILOWATT HOUR	VFD	VARIABLE FREQUENCY DRIVE
LAT	LEAVING AIR TEMPERATURE	VOL	VOLUME
LBS	POUNDS	W/	WITH
LF	LINEAR FEET	WPD	WATER PRESSURE DROP
LWT	LEAVING WATER TEMPERATURE		

MECHANICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
—HWS—	HEATING WATER SUPPLY		ACOUSTICALLY LINED SHEET METAL DUCT
-----HWR-----	HEATING WATER RETURN		MANUAL BALANCING DAMPER
—CWS—	CONDENSER WATER SUPPLY		FLEX CONNECTOR
-----CWR-----	CONDENSER WATER RETURN		ACCESS DOORS
—CHWS—	CHILLED WATER SUPPLY		FIRE DAMPER
-----CHWR-----	CHILLED WATER RETURN		FIRE/SMOKE DAMPER
—RS—	REFRIGERANT SUCTION LINE		MOTORIZED DAMPERS
—RL—	REFRIGERANT LIQUID LINE		TURNING VANE ELBOW
—HG—	REFRIGERANT HOT GAS LINE		HIGH EFFICIENCY BRANCH TAKE-OFF HETO* WITH VOLUME DAMPER & FLEXIBLE DUCT
—HPS—	HEAT PUMP SUPPLY		HIGH EFFICIENCY BRANCH TAKE-OFF "HETO" WITH VOLUME DAMPER & RIGID DUCT
-----HPR-----	HEAT PUMP RETURN		SUPPLY DIFFUSER, 4-WAY THROW UNLESS INDICATED OTHERWISE (W/ FLEXIBLE DUCT)
—LPS—	LOW PRESS. STEAM SUPPLY		RETURN GRILLE
-----LPR-----	LOW PRESS. CONDENSATE RETURN		EXHAUST GRILLE (W/ RIGID BRANCH DUCT)
—MPS—	MEDIUM PRESS. STEAM SUPPLY		CONNECT NEW WORK TO EXISTING
-----MPR-----	MEDIUM PRESS. CONDENSATE RETURN		POINT OF DISCONNECT
-----CD-----	CONDENSATE DRAIN		EXISTING
	GATE VALVE		RELOCATE / RELOCATED
	BALL VALVE		THERMOSTAT/TEMPERATURE SENSOR
	BUTTERFLY VALVE		THERMOSTAT/TEMPERATURE SENSOR W/ GUARD
	GLOBE VALVE		
	TRIPLE DUTY VALVE		
	SWING CHECK VALVE		
	STRAINER		
	FLEX CONNECTOR		
	HOSE END DRAIN VALVE		
	PRESSURE REDUCING VALVE		
	SAFETY RELIEF VALVE		
	UNION		
	MOTORIZED TC VALVE / 2-WAY		
	MOTORIZED TC VALVE / 3-WAY		
	ECCENTRIC PLUG BALANCING VALVE		
	VALVE IN RISER		
	TEE UP		
	TEE DOWN		
	ELBOW UP		
	ELBOW DOWN		
	PIPE SIZE CHANGE		
	DIRECTION OF FLOW		
	MANUAL FLOW BALANCING VALVE (CIRCUIT SETTER)		
	AUTOMATIC FLOW BALANCING VALVE		
	PIPE GUIDE		
	PIPE ANCHOR		
	PRESSURE / TEMP. TEST PLUG		
	DIAL THERMOMETER		
	PRESSURE GAUGE W/ SNUBBER		

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE																	
PLAN CODE	BASIS OF DESIGN MFGR	MODEL NO.	ROOM SERVED	INDOOR UNIT					PLAN CODE	OUTDOOR UNIT						NOTES	
				COOLING BTUH	MIN SEER	HSPF2	FAN CFM	HEATING BTUH		MODEL NO.	SUMMER AMBIENT TEMP (F)	REFRIGERANT	ELEC PWR(V/PH/Hz)	MCA	MOP		WEIGHT (LBS)
FC-1	SAMSUNG	CNG18ADD	NW ELEVATOR	18,000	21.0	9.5	441-615	20,000	HP-1	CXG18SCD	95F	R-32	208 / 1 / 60	22.7	25	117	1, 2, 3, 4, 5, 6
FC-2	SAMSUNG	CNG18ADD	NW ELEVATOR	18,000	21.0	9.5	441-615	20,000	HP-2	CXG18SCD	95F	R-32	208 / 1 / 60	22.7	25	117	1, 2, 3, 4, 5, 6
FC-3	SAMSUNG	CNG18ADD	SE ELEVATOR	18,000	21.0	9.5	441-615	20,000	HP-3	CXG18SCD	95F	R-32	208 / 1 / 60	22.7	25	117	1, 2, 3, 4, 5, 6
FC-4	SAMSUNG	CNG18ADD	SE ELEVATOR	18,000	21.0	9.5	441-615	20,000	HP-4	CXG18SCD	95F	R-32	208 / 1 / 60	22.7	25	117	1, 2, 3, 4, 5, 6
SCHEDULE NOTES:																	
1. PROVIDE WITH WIRED PROGRAMMABLE CONTROLLER. BASIS OF DESIGN SAMSUNG MWR-SH12UN.																	
2. FAN COIL ELEC POWER IS SUPPLIED TO OUTDOOR UNIT.																	
3. PROVIDE WALL MOUNTING BRACKETS FOR WALL UNITS.																	
4. PROVIDE WITH PRE INSULATED REFRIGERATION LINE SET.																	
5. COOLING RATING CONDITIONS: INDOOR 80F DB/67 F WB, OUTDOOR 95F DB/75F WB.																	
6. UNIT OPERATING TEMP RANGE IN COOLING: INDOOR UNIT 67-95°F, OUTDOOR UNIT: 0°-115°F (PROVIDE WIND BAFFLE / LOW AMBIENT ACCESSORY).																	

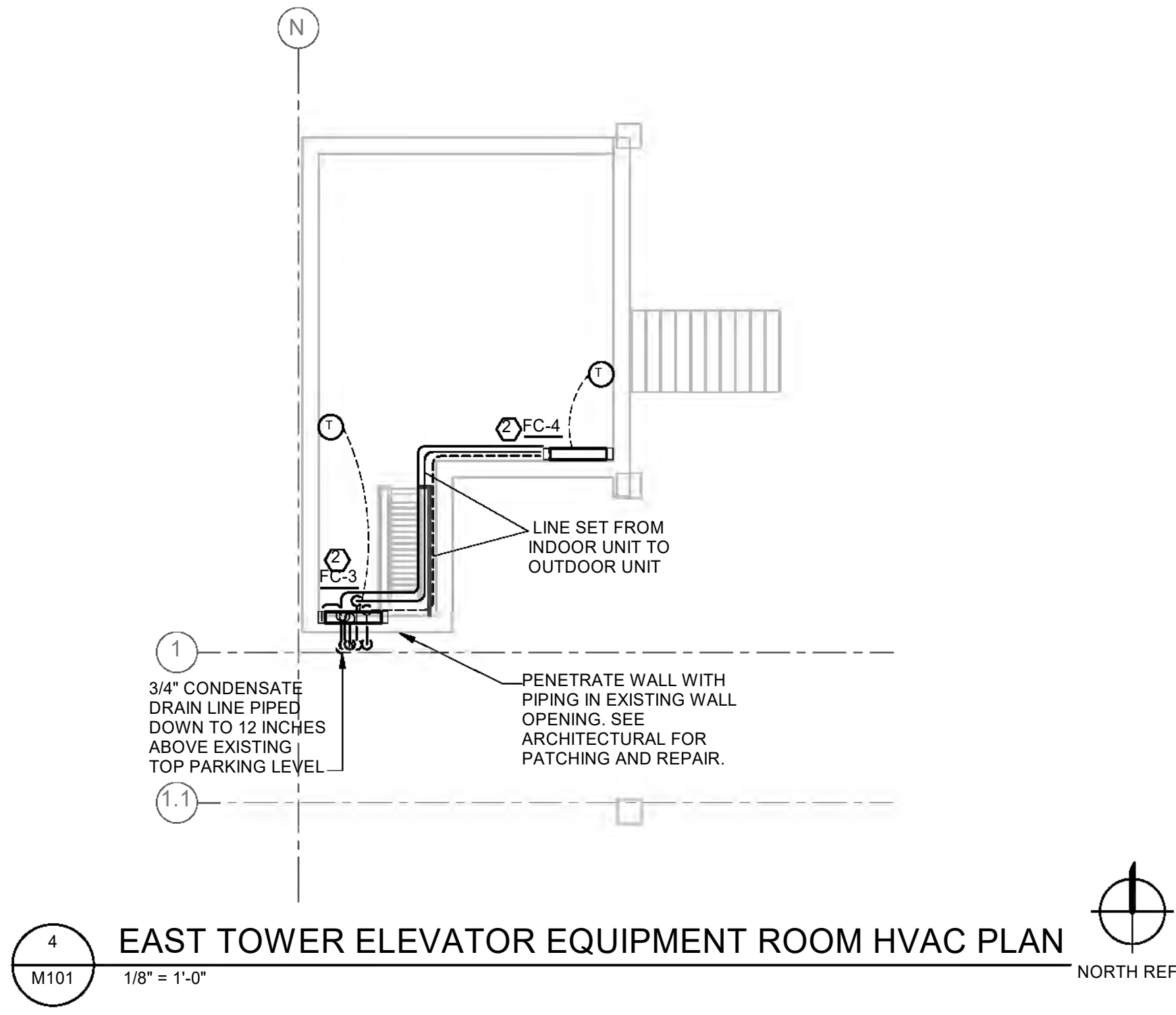
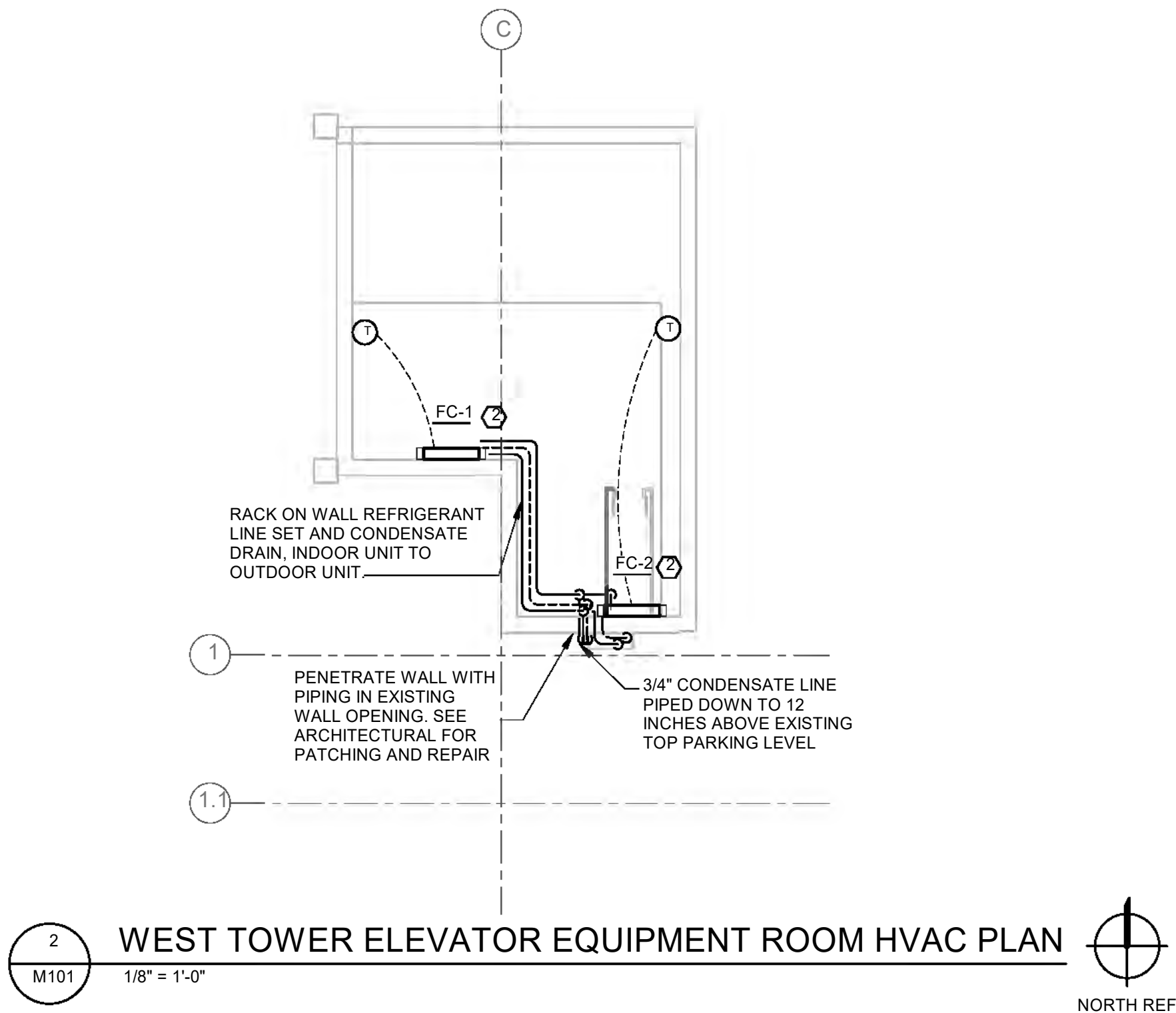
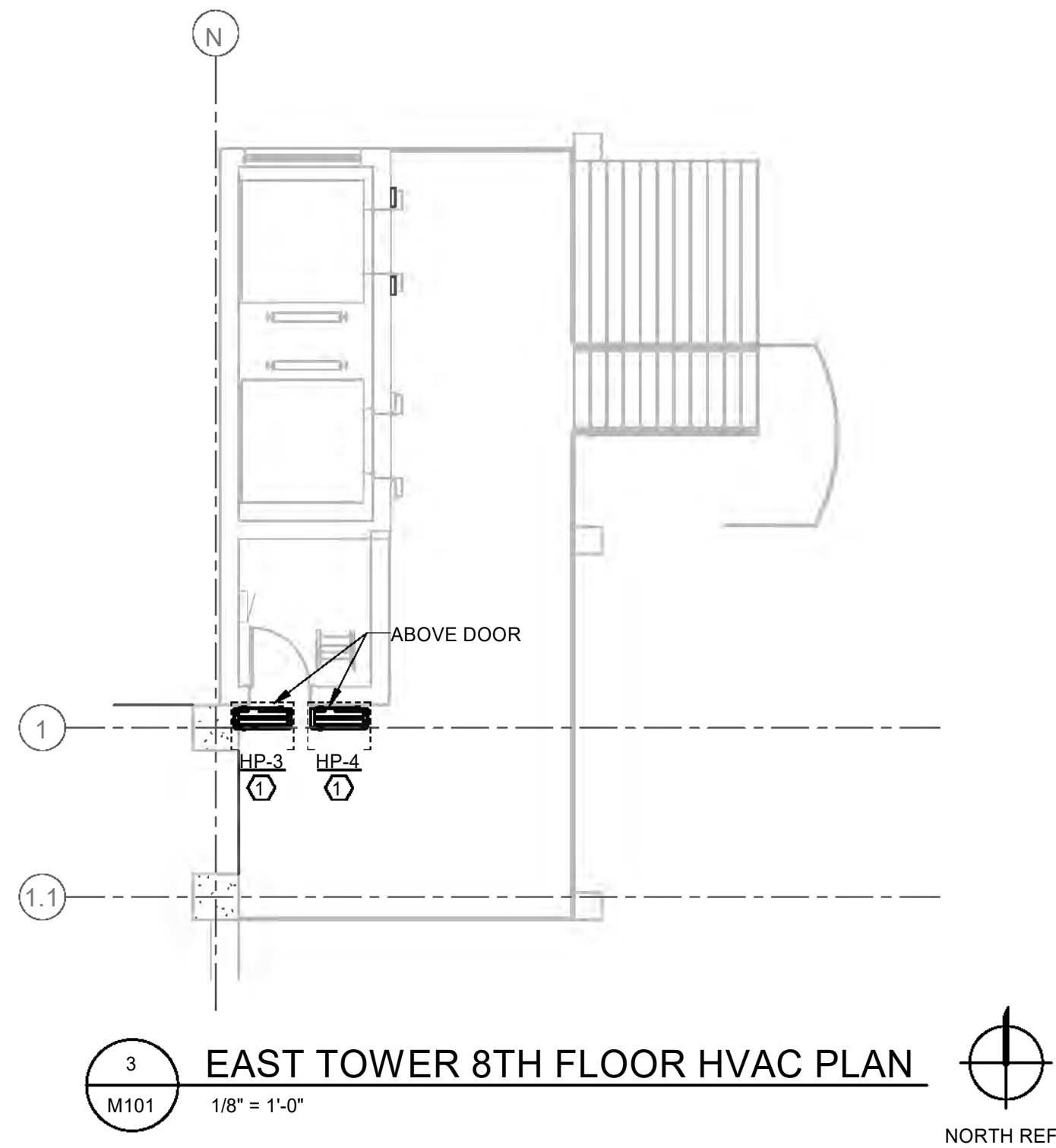
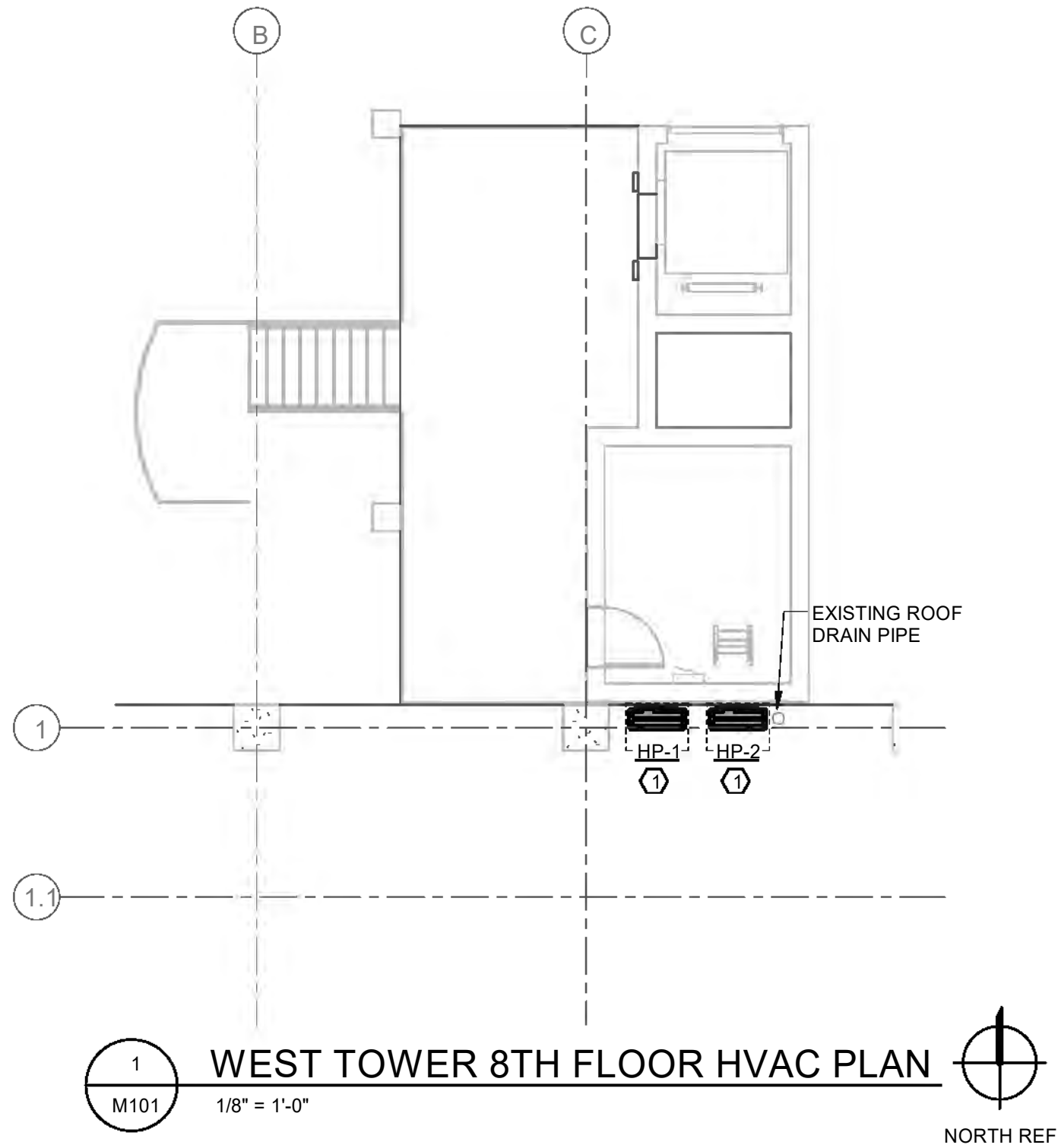


KEYNOTES

1. MOUNT OUTDOOR HEAT PUMP ON EXTERIOR WALL AT 9'-0" ABOVE FINISHED FLOOR. SEE DETAIL 2 ON M001 FOR OUTDOOR UNITS.
2. MOUNT FAN COIL AT 6'-0" ABOVE FINISHED FLOOR.

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800.757.9522



NOT FOR CONSTRUCTION - PRELIMINARY DESIGN

CAPITAL CITY DEVELOPMENT CORP. (CCDC)
9th and Front ParkBOI Parking Garage

ELEVATOR MODERNIZATION

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NOT FOR
CONSTRUCTION

10.06.2025
PROJ# | GV_CCDC_ELEVATOR
DESIGNED BY | RANKIN
DRAWN BY | WILSON
REVIEWED BY | WILSON
REVISIONS

MECHANICAL PLANS

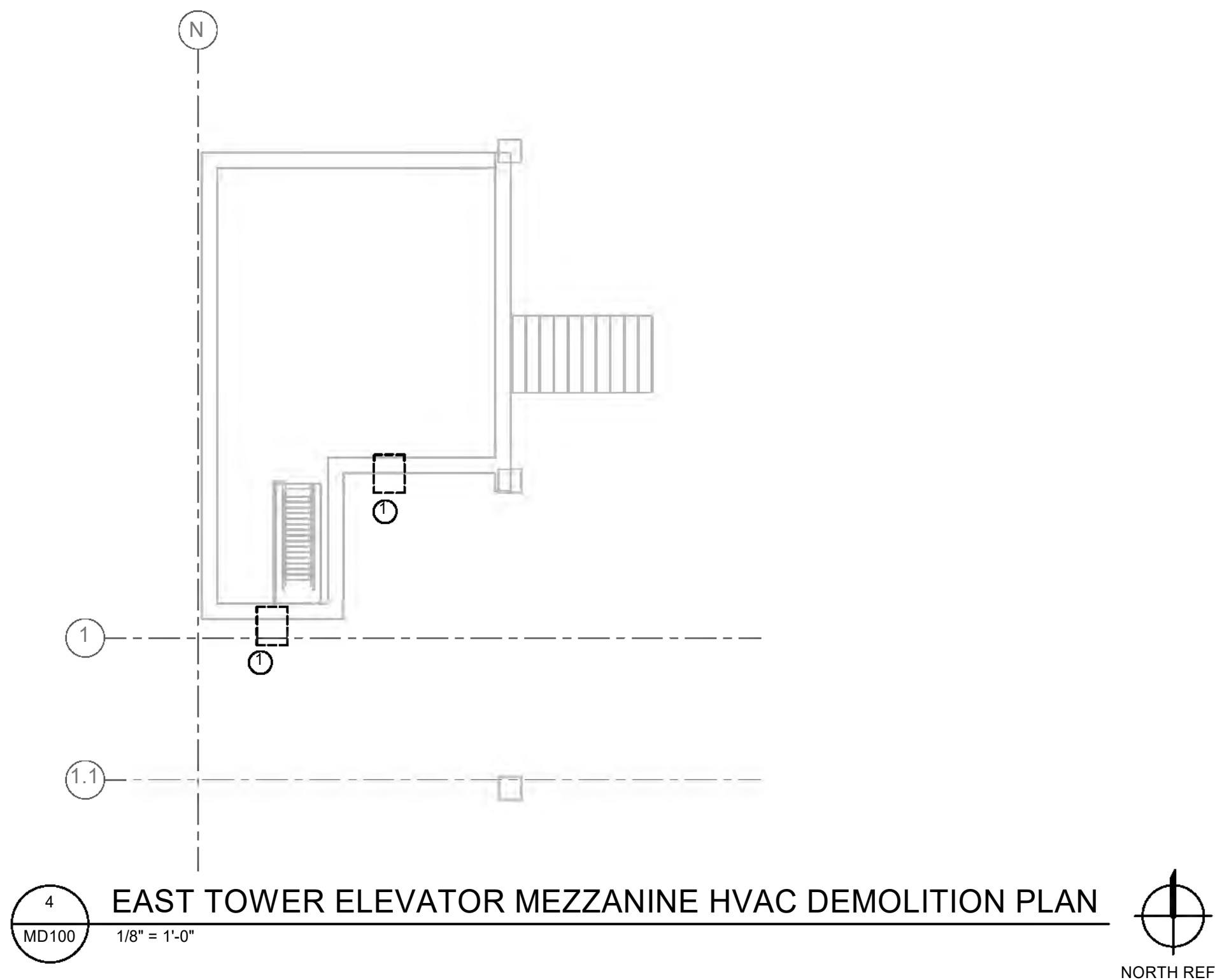
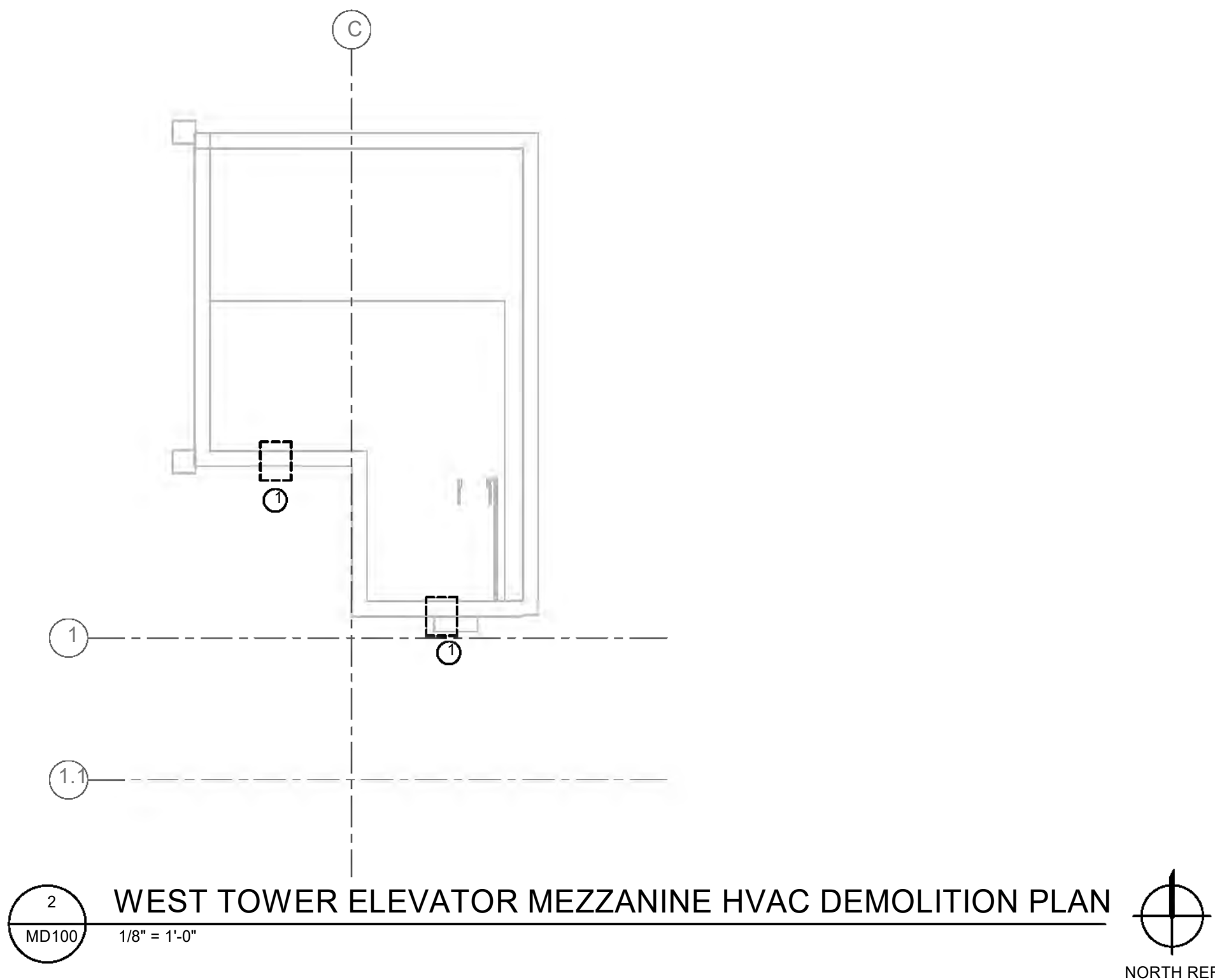
M101

DEMOLITION KEYNOTES

1. REMOVE FOR DEMOLITION THRU WALL HP UNITS. REMOVE ALL UNITS COMPLETELY FROM SITE.

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9th and Front ParkBOI Parking Garage

ELEVATOR MODERNIZATION

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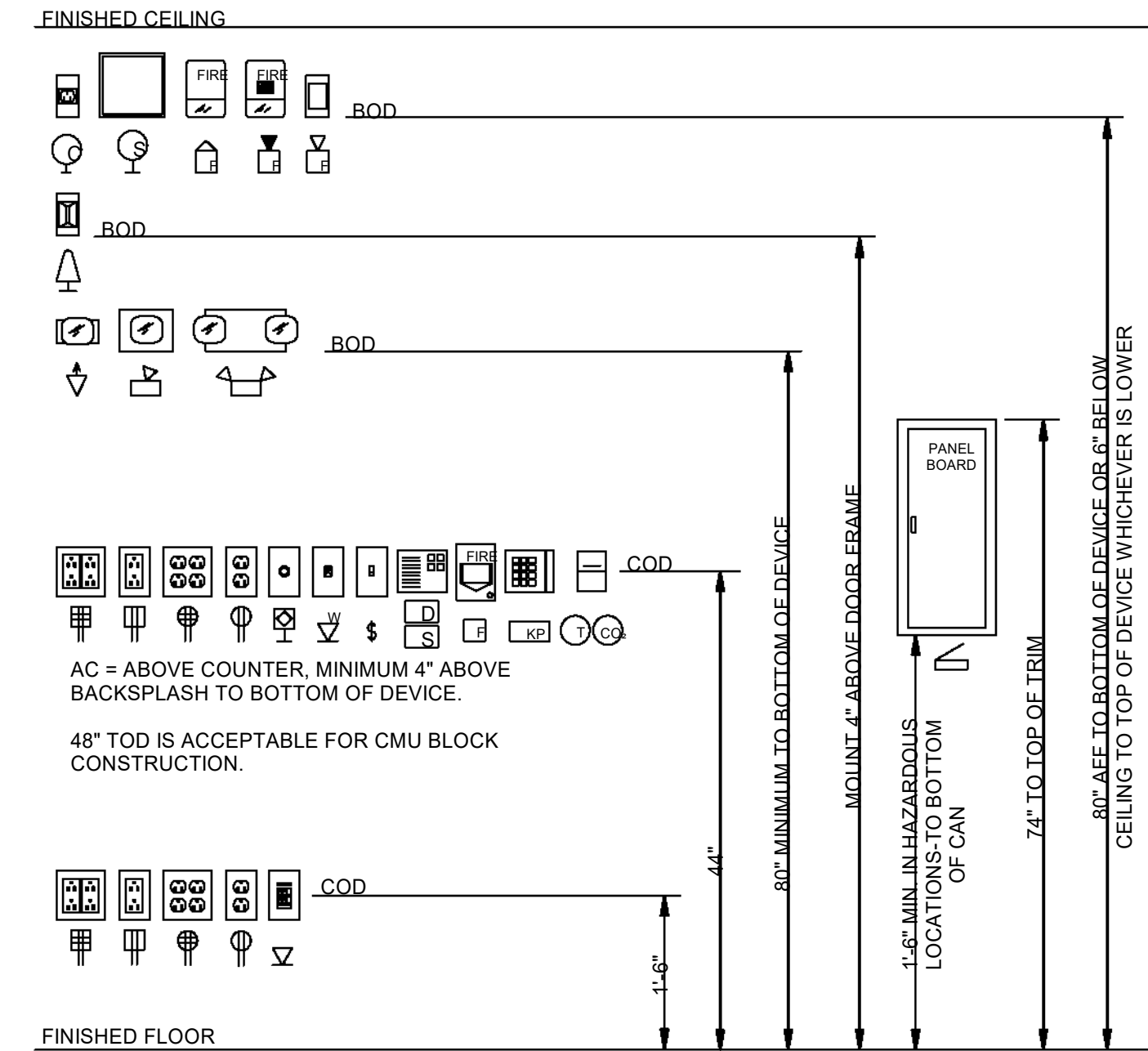
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PROJ# | GV_CCDC_ELEVATOR
DESIGNED BY | RANKIN
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REVISIONS

MECHANICAL
DEMOLITION PLANS

MD100

INTERIOR BOX MOUNTING HEIGHTS



ELECTRICAL SPECIFICATIONS

1. CODES: ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AS WELL AS ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.
2. COMPLETE INSTALLATION: PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, ACCESSORIES, ETC., NECESSARY TO ACCOMPLISH A COMPLETE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE PLANS TOGETHER WITH THE SPECIFICATIONS.
3. GROUNDING: GROUND ALL EQUIPMENT AND SYSTEM NEUTRAL IN ACCORDANCE WITH ARTICLE 250 OF THE NEC. A SEPARATE GROUND CONDUCTOR SHALL BE PULLED WITH ALL BRANCH EQUIPMENT AND FEEDER CIRCUITS.
4. CIRCUITING: ALL WIRING SHALL BE IN CONDUIT, CONCEALED EXCEPT WHERE NOTED. EMT WITH STEEL FITTINGS MAY BE USED IN DRY PROTECTED INTERIOR LOCATIONS. PVC SCHEDULE 40 SHALL BE USED BELOW GRADE AT MINIMUM -24 INCHES. WRAPPED RIGID ELBOWS AND RISERS SHALL BE USED FOR ALL THROUGH-GRADE TRANSITIONS AND STUB-UPS. GRC OR IMC CONDUIT WITH THREADED FITTINGS SHALL BE USED IN ALL LOCATIONS WHERE EXPOSED TO THE ELEMENTS OR SUBJECT TO PHYSICAL DAMAGE. NM AND ENT ARE NOT ALLOWED. CONNECT RECESSED AND SUSPENDED LIGHT FIXTURES, MOTORIZED AND VIBRATING EQUIPMENT WITH STEEL FLEX.
5. WIRING: WIRE SHALL BE COPPER AND INSULATION SHALL BE THHN UNLESS OTHERWISE INDICATED. MINIMUM SIZE SHALL BE #12.
6. EXISTING CONDITIONS: CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING AND PROPOSED CONDITIONS WHICH MAY AFFECT THE COURSE OF WORK PRIOR TO SUBMITTING A BID ON THIS PROJECT. EXTRAS WILL NOT BE ALLOWED FOR FAILURE TO COMPLY WITH THIS REQUIREMENT.
7. PERMITS: OBTAIN AND PAY FOR ALL BUILDING AND WORK PERMITS AND INSPECTION FEES REQUIRED FOR THIS PROJECT.
8. UTILITY SERVICE: PROVIDE POWER AND COMMUNICATIONS SYSTEM SERVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SERVING UTILITIES. PROVIDE EXCAVATION, RACEWAY STRUCTURES, GROUNDING, ETC. AS DIRECTED. IN ACCORDANCE WITH UTILITY STANDARDS. CONTACT SERVING UTILITIES AND OBTAIN THEIR REQUIREMENTS PRIOR TO BID. UTILITY SERVICE AND LINE EXTENSIONS CHARGES PAID BY OTHERS.)
9. TEMPORARY CONSTRUCTION POWER: PROVIDE TEMPORARY ELECTRICAL POWER AND LIGHTING FOR ALL TRADES THAT REQUIRE SERVICE DURING THE COURSE OF THIS PROJECT. PROVIDE TEMPORARY SERVICE AND DISTRIBUTION AS REQUIRED. COMPLY WITH THE NEC AND OSHA REQUIREMENTS. (ENERGY COSTS BY GENERAL CONTRACTOR.)
10. FUSES AND CIRCUIT BREAKERS: FUSES AND CIRCUIT BREAKERS SHALL BE SIZED PER ACTUAL NAME PLATE OF EQUIPMENT SERVED. FUSES SHALL BE DUAL-ELEMENT, CURRENT-LIMITING, AND SHALL BE INTER-CHANGEABLE BETWEEN FRAME SIZES WITH STANDARD FACTORY FUSE REDUCERS.
11. EQUIPMENT STANDARDS: ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND OF THE HIGHEST QUALITY AVAILABLE ("SPECIFICATION GRADE"). SERVICE EQUIPMENT SHALL BE FACTORY-ASSEMBLED COMMERCIAL GRADE. CONFIGURED PER SERVING UTILITY STANDARDS. WIRING DEVICES SHALL BE SPECIFICATION GRADE WITH NYLON PLATES, IVORY UNLESS NOTED. RAISED STEEL BOX COVERS MAY BE USED IN UTILITY AREAS.
12. GUARANTEE: THE COMPLETE ELECTRICAL SYSTEM, AND ALL PORTIONS, THEREOF, SHALL BE GUARANTEED TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE. PROMPTLY REMEDY SUCH DEFECTS AND ANY SUBSEQUENT DAMAGE CAUSED BY THE DEFECTS OR REPAIR THEREOF AT NO EXPENSE TO THE OWNER. LAMPS ARE EXEMPT FROM THIS GUARANTEE, BUT SHALL BE NEW AND UNUSED AT THE TIME OF ACCEPTANCE.
13. SUBMITTALS: SUBMIT AN ELECTRONIC COPY OF FACTORY SHOP DRAWINGS FOR ALL SWITCHGEAR, PANELS, MOTOR CONTROL, WIRING DEVICES, ETC. PROPOSED FOR THIS PROJECT. PROPOSED SUBSTITUTIONS SHALL BE EQUAL OR SUPERIOR TO SPECIFIED ITEMS IN ALL RESPECTS. DETERMINATION OF EQUALITY RESTS SOLELY WITH THE ENGINEER. ALL PROPOSED SUBSTITUTIONS SHALL BE RECEIVED BY THE ENGINEER 10 DAYS PRIOR TO BID.
14. LOCATIONS: INDICATED LOCATIONS OF ALL OUTLETS AND EQUIPMENT ARE SUBJECT TO CHANGE. SHIFT/RELOCATE/RECONFIGURE ANY OUTLET, EQUIPMENT, OR CONNECTION POINT UP TO 10 FEET AS DIRECTED BY THE ENGINEER, AT NO ADDED COST.
15. IDENTIFICATION: IDENTIFY ALL EQUIPMENT, SWITCHBOARD CIRCUITS AND ELECTRICALLY-CONNECTED EQUIPMENT WITH ENGRAVED NAMEPLATES. PANEL DIRECTORIES SHALL BE TYPED.

ELECTRICAL LEGEND

LIGHTING		ABBREVIATIONS AND MISCELLANEOUS	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	LAY-IN OR RECESSED FIXTURE, SIZE ON PLANS	AC	ABOVE COUNTER, 4" BACK SPLASH
	WALL MOUNTED FIXTURE, SIZE ON PLANS	ATS	AUTOMATIC TRANSFER SWITCH
	SURFACE MOUNTED FIXTURE, SIZE ON PLANS	AFG	ABOVE FINISHED GRADE
	PENDANT OR SURFACE MOUNTED FIXTURE, SIZE ON PLANS	AFF	ABOVE FINISHED FLOOR
	PENDANT MOUNTED FIXTURE, SIZE ON PLANS	BLG	BELOW GRADE
	SHADED FIXTURE INDICATES FIXTURE IS UNSWITCHED AND ALSO INDICATES EMERGENCY POWER.	BOD	BOTTOM OF DEVICE
	RECESSED DOWNLIGHT FIXTURE	C	CONDUIT
	SURFACE MOUNTED FIXTURE	CAS	CARD ACCESS SYSTEM
	WALL MOUNTED FIXTURE	CCTV	CLOSED CIRCUIT TV
	WALL WASH OR DIRECTIONAL FIXTURE	CLG	CEILING
	WALL SCONCE FIXTURE	COD	CENTER OF DEVICE
	TRACK FIXTURE, SEE PLAN FOR SIZE AND HEADS	CU	COPPER
	CEILING FAN FIXTURE	DVR	DIGITAL VIDEO RECORDER
	CEILING MOUNTED, WALL MOUNTED EXIT LIGHT (W/ DIRECTIONAL ARROWS)	(E)	EXISTING
	1 HEAD REMOTE EMERGENCY LIGHT	EC	ELECTRICAL CONTRACTOR
	2 HEAD EMERGENCY LIGHT BATTERY PACK	EF	EXHAUST FAN
	2 HEAD REMOTE EMERGENCY LIGHT BATTERY PACK	GC	GENERAL CONTRACTOR
	SQUARE POLE MOUNTED FIXTURE, EXTERIOR	GND	GROUND
	ROUND POLE MOUNTED FIXTURE, EXTERIOR	LSI	FIELD ADJUSTABLE LONG TIME, SHORT TIME AND INSTANTANEOUS
	POST TOP FIXTURE, EXTERIOR	LSIG	FIELD ADJUSTABLE LONG TIME, SHORT TIME, INSTANTANEOUS AND GROUND FAULT
	BOLLARD FIXTURE, EXTERIOR	MC	MECHANICAL CONTRACTOR
	DIRECTIONAL INGROUND FIXTURE, EXTERIOR	(N)	NEW
		NL	NIGHT LIGHT
		PTZ	PAN-TILT-ZOOM
		QTY	QUANTITY
		(R)	RELOCATED
		SF	SURFACE
		TBB	TELECOMMUNICATIONS BONDING BACKBONE
		TC	TEMPERATURE CONTROL CONTRACTOR
		TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUS BAR
		TTB	TELEPHONE TERMINAL BOARD
		TYP	TYPICAL
		UG	UNDERGROUND
		UON	UNLESS OTHERWISE NOTED
		W/	WITH
		WM	WIRE MOLD
		WP	WEATHER PROOF (WHILE IN USE)
		XFMR	TRANSFORMER
		a,b,c etc	SWITCH DESIGNATION
		BN1L-2,4,6	CIRCUIT DESIGNATION, PANEL BN1L, CIRCUITS 2,4,6
		1/E501	INDICATES DETAIL 1 ON SHEET E501
			SHEET WORK NOTE
			SHEET DEMO WORK NOTE
			HOME RUN TO PANEL
			CONDUIT CONCEALED IN CEILING OR WALL
			CONDUIT CONCEALED UNDER FLOOR

DEVICES AND POWER	
SYMBOL	DESCRIPTION
	SWITCH - SPST
	SINGLE POLE, DOUBLE THROW
	THREEWAY
	FOURWAY
	KEY OPERATED
	PILOT LIGHT
	WEATHERPROOF
	OCCUPANCY SENSOR
	DIMMER
	SPOT-MOMENTARY CONTACT
	LOW VOLTAGE
	TIMER SWITCH
	TEST SWITCH
	OCCUPANCY SENSOR (CEILING) - SUBSCRIPT IS TYPE
	RECEPTACLE - SIMPLEX
	RECEPTACLE - DUPLEX, MOUNTING IN CEILING
	GFI RECEPTACLE - DUPLEX, MOUNTING IN CEILING
	RECEPTACLE - DUPLEX
	DEVICE RECEPTACLE W/ USB-A & USB-C PORTS
	DROP CORD
	WEATHERPROOF COVER & WEATHER RESISTANT RECEPTACLE
	TAMPER RESISTANT
	SURGE PROTECTED
	ISOLATED GROUND
	FILLED CENTER INDICATES HOSPITAL GRADE EMERGENCY RECEPTACLE
	RECEPTACLE - DUPLEX WITH TOP HALF CONTROLLED AND PERMANENTLY MARKED "CONTROLLED"
	- SAME INDICATORS AS SHOWN FOR DUPLEX RECEPTACLE
	GFI RECEPTACLE - DUPLEX (GROUND FAULT INTERRUPT)
	- SAME INDICATORS AS SHOWN FOR DUPLEX RECEPTACLE
	RECEPTACLE - DOUBLE DUPLEX
	GFI RECEPTACLE - DOUBLE DUPLEX
	- SAME INDICATORS AS SHOWN FOR DUPLEX RECEPTACLE
	RECEPTACLE - DOUBLE DUPLEX WITH TOP HALF CONTROLLED AND PERMANENTLY MARKED "CONTROLLED"
	- SAME INDICATORS AS SHOWN FOR DUPLEX RECEPTACLE
	RECEPTACLE - 208V
	RANGE - NEMA 14-50R
	DRYER - NEMA 14-30R
	WELDER - NEMA 14-50R
	NEMA CONFIGURATION AS NOTED
	208V RECEPTACLE IN RECESSED FLOORBOX
	DUPLEX RECEPTACLE/GFI IN RECESSED FLOORBOX
	- SAME INDICATORS AS SHOWN FOR DUPLEX RECEPTACLE
	DOUBLE DUPLEX RECEPTACLE/GFI IN RECESSED FLOORBOX
	- SAME INDICATORS AS SHOWN FOR DUPLEX RECEPTACLE
	J-BOX - BOX INDICATES FLOOR MOUNTING -4"x4"x2-1/8" DEEP UNLESS OTHERWISE NOTED
	POWER POLE
	THERMOSTAT/TEMPERATURE SENSOR BY MC OR TC, J-BOX AND CONDUIT TO CEILING BY EC
	CARBON MONOXIDE DETECTOR BY MC, J-BOX & CONDUIT TO CEILING BY EC
	MANUAL MOTOR DISCONNECT/STARTER SWITCH
	EMERGENCY PUSHBUTTON
	RELAY
	PHOTOCELL, PHOTOCELL WALL MOUNTED
	SPECIAL PURPOSE CONNECTION - BOX INDICATES FLOOR MOUNTING - WORK AS NOTED
	ELECTRIC MOTOR CONNECTION
	COMBINATION STARTER/DISCONNECT SWITCH
	DISCONNECT SWITCH
	CONTACTOR
	CIRCUIT BREAKER
	VARIABLE FREQUENCY DRIVE
	CONTROL PANEL
	LIGHTING RELAY PANEL
	TEMPERATURE CONTROL PANEL
	GENERATOR ANNUNCIATOR PANEL
	PA CONTROL PANEL
	MED GAS ALARM PANEL
	TIME CLOCK
	EXISTING PANELBOARD, SURFACE MOUNTED
	EXISTING PANELBOARD, FLUSH MOUNTED
	PANELBOARD, SURFACE MOUNTED
	PANELBOARD, FLUSH MOUNTED
	ELECTRIC METER, BUILDING MOUNTED
	TRANSFORMER, INTERIOR
	TRANSFORMER, EXTERIOR

ELECTRICAL SHEET INDEX

E001	LEGENDS
E002	ONE LINE DIAGRAM
E003	ELECTRICAL SCHEDULES
E100	ELECTRICAL DEMOLITION PLANS
E200	ELECTRICAL PLANS

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LINE LEGEND

EXISTING
NEW
DEMO
FUTURE

KEYNOTES

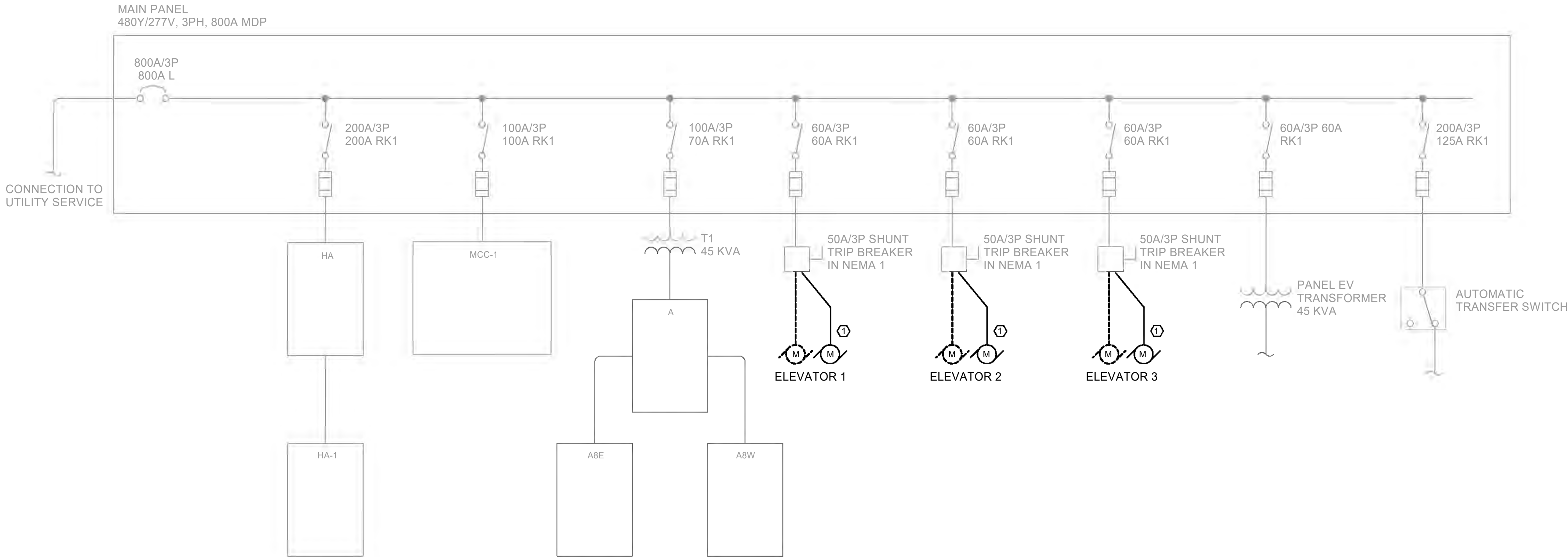
1. DISCONNECT EXISTING ELEVATOR AS REQUIRED FOR REMOVAL.
RECONNECT NEW ELEVATOR TO EXISTING CONNECTION AS SHOWN.

ONE LINE SHEET NOTES

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ONE LINE DIAGRAM

NOT TO SCALE

CAPITAL CITY DEVELOPMENT CORP. (CCDC)
9th and Front ParkBOI Parking Garage

ELEVATOR MODERNIZATION

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DESIGNED BY | GROSS
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REVIEWED BY | VICTORINO
REVISIONS

ONE LINE DIAGRAM

E002

PANEL: MP								
LOCATION:		AMPS: 800 A			MAIN TYPE: MCB			
MOUNTING TYPE: SURFACE		VOLTAGE: 480/277 Wye			MINIMUM AIC RATING: EXISTING			
MANUFACTURER: CUTLER-HAMMER		PHASES: 3			FED FROM:			
MODEL TYPE: SWITCHBOARD		WIRES: 4			ENCLOSURE: EXISTING			
NOTES:								
CIRCUIT DESCRIPTION		CKT NO	POLE	FRAME	BKR AMP	A	B	C
(E) PANEL HA		1	3	400	200	44333	44333	44333
(E) MCC-1		2	3	200	100	22167	22167	22167
(E) PANEL A TRANSFORMER		3	3	200	100	22167	22167	22167
ELEVATOR #1		4	3	400	60	7500	7500	7500
ELEVATOR #2		5	3	400	60	7500	7500	7500
ELEVATOR #3		6	3	400	60	7500	7500	7500
(E) PANEL EV TRANSFORMER		7	3	200	60	13300	13300	13300
(E) AUTOMATIC TRANSFER SWITCH		8	3	400	200	4433	4433	4433
		9						
		10						
		11						
		12						
		13						
		14						
		15						
		16						
		17						
		18						
		19						
		20						
TOTAL PHASE VA:						128900	128900	128900
TOTAL PHASE AMPS:						465.3	465.3	465.3
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS
EQUIPMENT		386700		100.00%		386700		
								TOTAL CONNECTED LOAD: 386700
								465 A
								TOTAL EST. DEMAND: 386700
								465 A
NOTES:								

PANEL: A8E										EXISTING PANEL											
LOCATION:					AMPS: 100 A					TYPE OF MAIN:					MLO						
MOUNTING TYPE: SURFACE					VOLTAGE: 120/208 Wye					MINIMUM AIC RATING:					EXISTING						
MANUFACTURER: CUTLER-HAMMER					PHASES: 3					FED FROM:					PANEL A						
MODEL TYPE: PANELBOARD					WIRES: 4					ENCLOSURE:					EXISTING						
NOTES:																					
LOAD NAME					CKT NO	BKR AMP	POLE	A	B	C	POLE	BKR AMP	CKT NO	LOAD NAME							
(E) ELEVATOR POWER IN ROOM					1	20	1	1920	540			1	20	2	(E) RECEPTICALS ON LANDINGS						
(E) ELEVATOR POWER					3	20	1		1920	1920		1	20	4	(E) ELEVATOR PIT						
(E) ELEVATOR POWER					5	20	1			1920	1920	1	20	6	(E) ELEVATOR PIT						
(E) FIRST FLOOR					7	20	1	1920	540			1	20	8	(E) LIGHTS PAY SIGN						
(E) FIRST FLOOR					9	20	1		1920	1920		1	20	10	(E) RECEPTICALS						
(E) SPACE					11	--	1			--	500	1	20	12	(E) TIME CLOCK						
(E) SPACE					13	--	1	--	1920			1	20	14	(E) UNKNOWN						
HP-3 (NOTE 1)					15	25	2			2363	2363	2	25	16	HP-4 (NOTE 1)						
--					17	--	--				2363	2363	--	18	--						
								6840						TOTAL CONNECTED PHASE VA							
								57						TOTAL CONNECTED PHASE AMPS							
LOAD CLASSIFICATION					CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS										
EQUIPMENT					27230		100.00%		27230		TOTAL CONNECTED LOAD: 28310										
RECEPTACLES					1080		100.00%		1080		TOTAL CONNECTED AMPS: 78.6										
											TOTAL EST. DEMAND: 28310										
											TOTAL EST. DEMAND AMPS: 78.6										
NOTES: 1) EXISTING CIRCUIT BREAKER FOR UNIT TO BE REMOVED AND PROVIDE NEW CIRCUIT BREAKER AS SHOWN.																					

PANEL: A8W										EXISTING PANEL									
LOCATION:					AMPS: 100 A					TYPE OF MAIN: MLO									
MOUNTING TYPE: SURFACE					VOLTAGE: 120/208 Wye					MINIMUM AIC RATING: EXISTING									
MANUFACTURER: CUTLER-HAMMER					PHASES: 3					FED FROM: PANEL A									
MODEL TYPE: PANELBOARD					WIRES: 4					ENCLOSURE: EXISTING									
NOTES:																			
LOAD NAME		CKT NO	BKR AMP	POLE	A		B		C		POLE	BKR AMP	CKT NO	LOAD NAME					
(E) ELEVATOR POWER		1	20	1	1920	540		1920	1920		1	20	2	(E) RECEPTICAL ON LANDING					
(E) ELEVATOR POWER		3	20	1							1	20	4	(E) ELEVATOR PIT					
(E) OUTLET BELOW PANEL		5	20	1					540	500	1	20	6	(E) LIGHTS					
(E) UNKNOWN		7	20	1	1920	1920					1	20	8	(E) POP					
(E) UNKNOWN		9	20	1			1920	1920			1	20	10	(E) UNKNOWN					
(E) UNKNOWN		11	50	2					4160	--	1	--	12	(E) SPACE					
(E) UNKNOWN		13	--	--	4160	--					1	--	14	(E) SPACE					
HP-1 (NOTE 1)		15	25	2			2363	2363			2	25	16	HP-2 (NOTE 1)					
-		17	--	--					2363	2363	--	--	18	-					
					10460		12405	9925	TOTAL CONNECTED PHASE VA										
					87.9		104.1		82.7	TOTAL CONNECTED PHASE AMPS									
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS											
EQUIPMENT		31210		100.00%		31210		TOTAL CONNECTED LOAD: 32790											
LIGHTING		500		125.00%		625		TOTAL CONNECTED AMPS: 91											
RECEPTACLES		1080		100.00%		1080													
								TOTAL EST. DEMAND AMPS: 32915											
								TOTAL EST. DEMAND AMPS: 91.4											
NOTES: 1) EXISTING CIRCUIT BREAKER FOR UNIT TO BE REMOVED AND PROVIDE NEW CIRCUIT BREAKER AS SHOWN.																			

GENERAL DEMOLITION NOTES

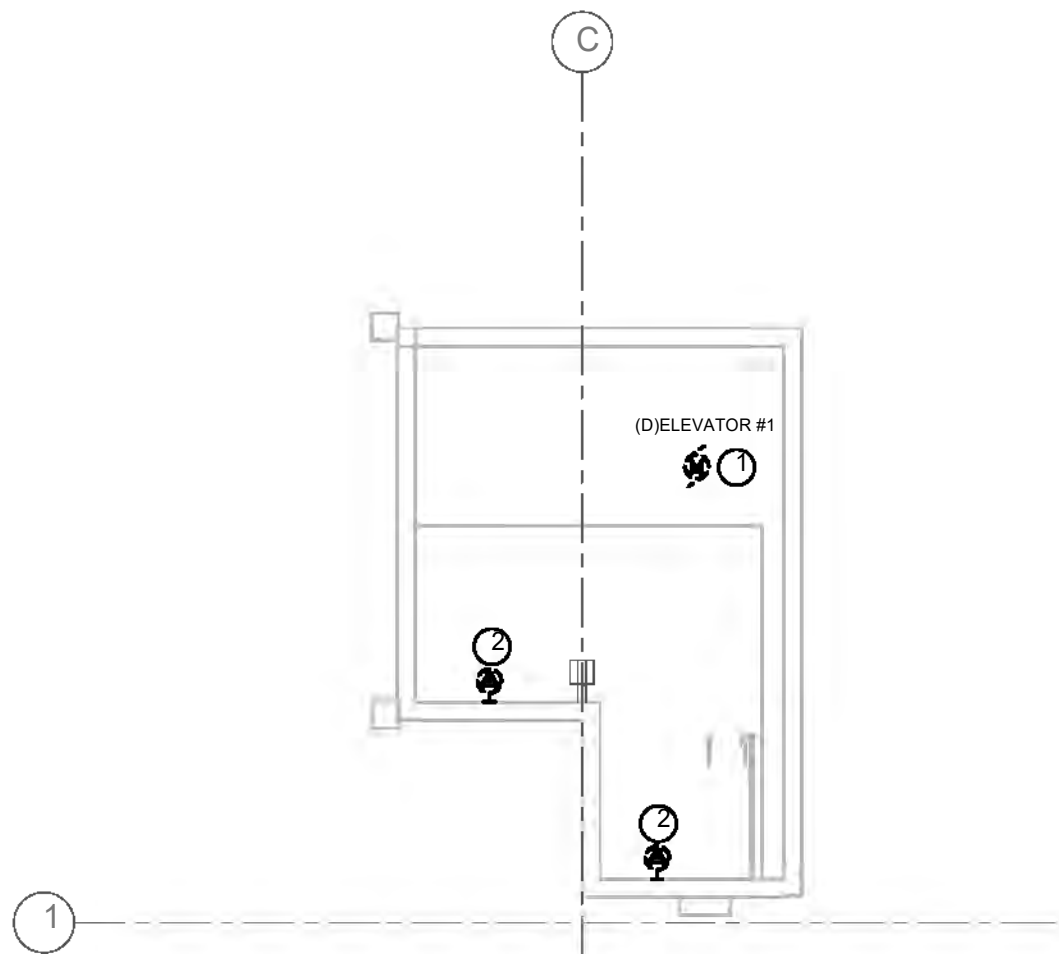
- A. ALL DASHED ITEMS ON DEMOLITION PLANS ARE TO BE REMOVED; SOLID ITEMS ARE TO REMAIN UNLESS NOTED OTHERWISE. ITEMS SHOWN IN THE DEMOLITION PLANS ARE BASED ON FIELD OBSERVATIONS. ADDITIONAL ELECTRICAL ITEMS MAY BE ENCOUNTERED THAT ARE NOT SHOWN - ALL GENERAL ELECTRICAL ITEMS ARE TO BE REMOVED THAT ARE NOT SHOWN, BUT ARE IN AREAS OF COMPLETE REMODEL.
- B. PRIOR TO BID, CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL EXISTING CONDITIONS ASSOCIATED WITH DEMOLITION; CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS AS REQUIRED TO MAINTAIN FUNCTIONALITY OF ALL DOWNSTREAM EQUIPMENT, DEVICES, FIXTURES, ETC. THAT ARE TO REMAIN.
- C. ELECTRICAL EQUIPMENT AND CONNECTIONS SHOWN FOR DEMOLITION SHALL BE REMOVED BACK TO SOURCE OR NEAREST UPSTREAM DEVICE THAT IS TO REMAIN, U.N.O.
- D. WHERE REMOVED ITEMS AFFECT DOWNSTREAM CONNECTIONS, CONTRACTOR IS RESPONSIBLE TO PROVIDE BOXES, RACEWAYS, CONDUCTORS, ETC. AS REQUIRED TO MAINTAIN FUNCTIONALITY OF DOWNSTREAM DEVICES.
- E. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF REQUIRED PATCHING AND PAINTING WITH THE GENERAL CONTRACTOR.
- F. EXISTING CONDUITS IN THE FLOOR WHICH ARE NOT USED AND WHICH ARE ABANDONED SHALL BE TRIMMED TO FLOOR SURFACE, GROUND FLUSH AND FILLED WITH GROUT, AND FINISHED TO MATCH ADJACENT FLOOR SURFACE.
- G. WORK SHALL BE PERFORMED WITH NO DISRUPTION OF THE OWNER'S BUSINESS. ALL ELECTRICAL POWER DISRUPTIONS SHALL BE SCHEDULED AND APPROVED BY THE OWNER.

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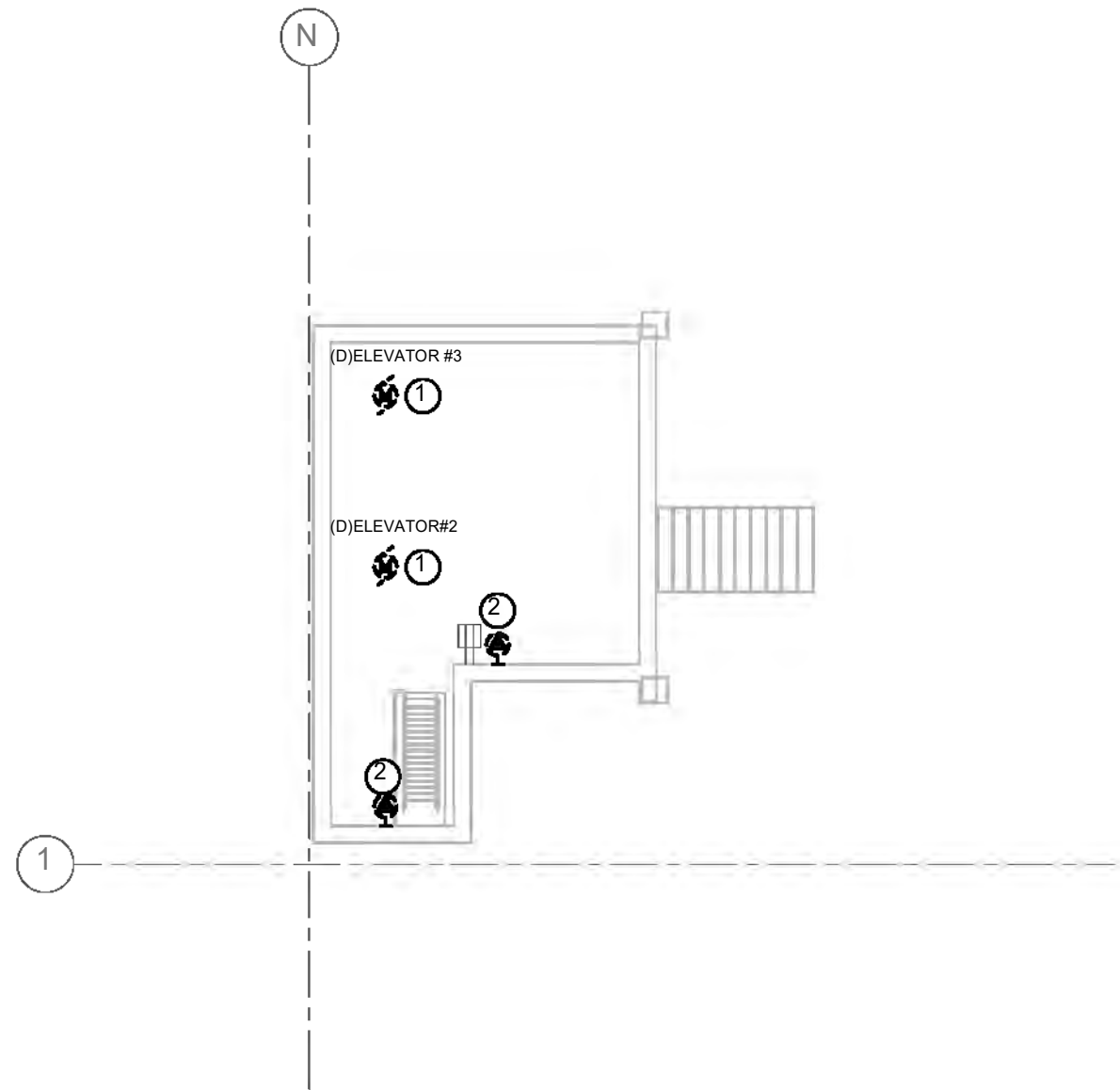
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KEYNOTES

- 1. DISCONNECT EXISTING ELEVATOR AS REQUIRED FOR REPLACEMENT. CONNECTION TO REMAIN FOR REUSE. REFER TO ONE LINE DIAGRAM ON SHEET E002.
- 2. REMOVE EXISTING HVAC EQUIPMENT CONNECTION. COORDINATE WITH MECHANICAL DRAWINGS PRIOR TO DEMOLITION.



2 WEST TOWER ELEVATOR PENTHOUSE ELECTRICAL DEMO PLAN
E100 3/32" = 1'-0"



3 EAST TOWER ELEVATOR PENTHOUSE ELECTRICAL DEMO PLAN
E100 3/32" = 1'-0"

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CAPITAL CITY DEVELOPMENT CORP. (CCDC)
9th and Front ParkBOI Parking Garage

ELEVATOR MODERNIZATION

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10.06.2025
PROJ# | GV_CCDC_ELEVATOR
DESIGNED BY | GROSS
DRAWN BY | GROSS
REVIEWED BY | VICTORINO
REVISIONS

ELECTRICAL
DEMOLITION PLANS

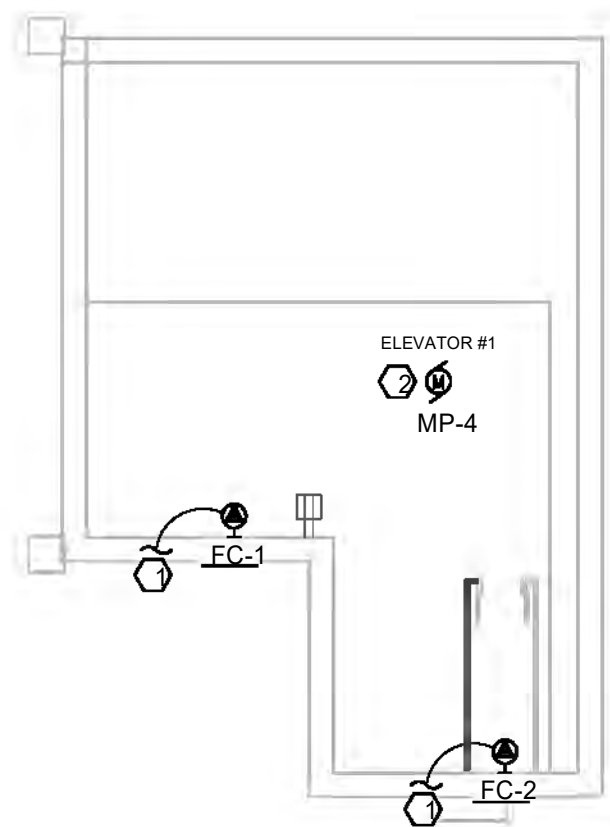
E100

GENERAL NOTES

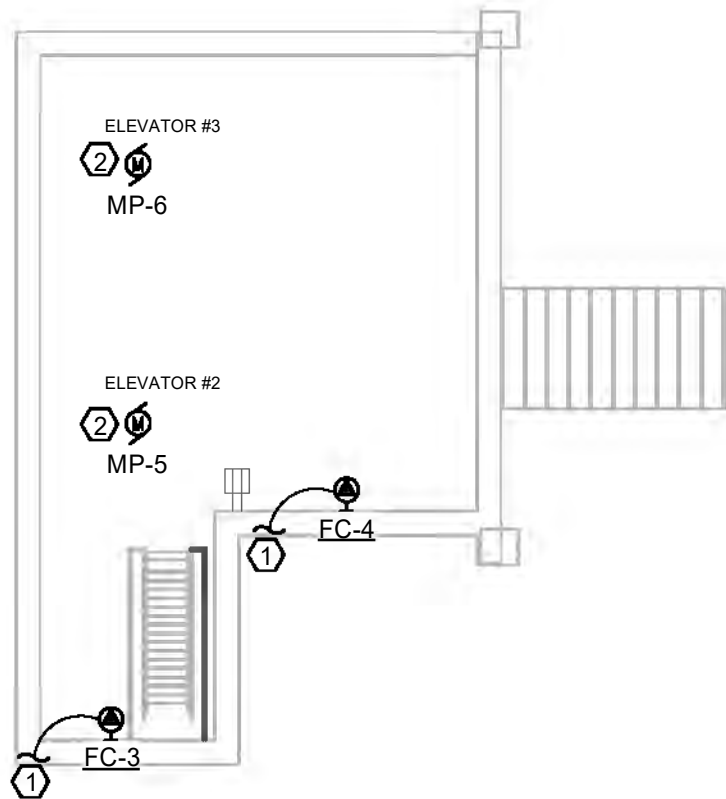
- A. REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET HEIGHTS WHERE THE SPECIFIC OUTLET HEIGHT IS NOT INDICATED ON THIS SHEET. REFER TO THE ELECTRICAL LEGEND FOR THE DEFAULT OUTLET HEIGHT WHEN NOT INDICATED ON ELEVATIONS OR ON THIS SHEET.
- B. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL EQUIPMENT AND DEVICE LOCATIONS WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DIVISIONS PRIOR TO ROUGH-IN. REFER TO AND COORDINATE WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL WORK THAT IS REQUIRED BY THE CONTRACTOR.
- C. ALL CONDUIT AND JUNCTION BOXES ARE TO BE CONCEALED IN WALLS, FUR OUTS, AND ACCESSIBLE CEILINGS. USE OF SURFACE MOUNTED RACEWAYS MUST BE APPROVED BY THE ARCHITECT FOR EACH LOCATION. WHERE APPROVED, UTILIZE WIREMOLD OR APPROVED EQUAL SURFACE MOUNTED RACEWAYS PAINTED TO MATCH SURROUNDING WALLS.
- D. WHERE NEW DEVICES ARE SHOWN FOR INSTALLATION ON EXISTING WALLS, ELECTRICAL CONTRACTOR IS RESPONSIBLE TO COORDINATE CUTTING, PATCHING, AND REPAIR OF EXISTING WALL WITH OTHER TRADES AS REQUIRED TO PROVIDE FLUSH MOUNTED INSTALLATION.
- E. ALL MULTI-WIRE BRANCH CIRCUITS SHALL BE PROVIDED WITH SEPARATE NEUTRAL CONDUCTORS. LABEL NEUTRAL CONDUCTORS WITH RESPECTIVE CIRCUIT AT ALL PULL BOXES, JUNCTION BOXES, TERMINATIONS, ETC.

KEYNOTES

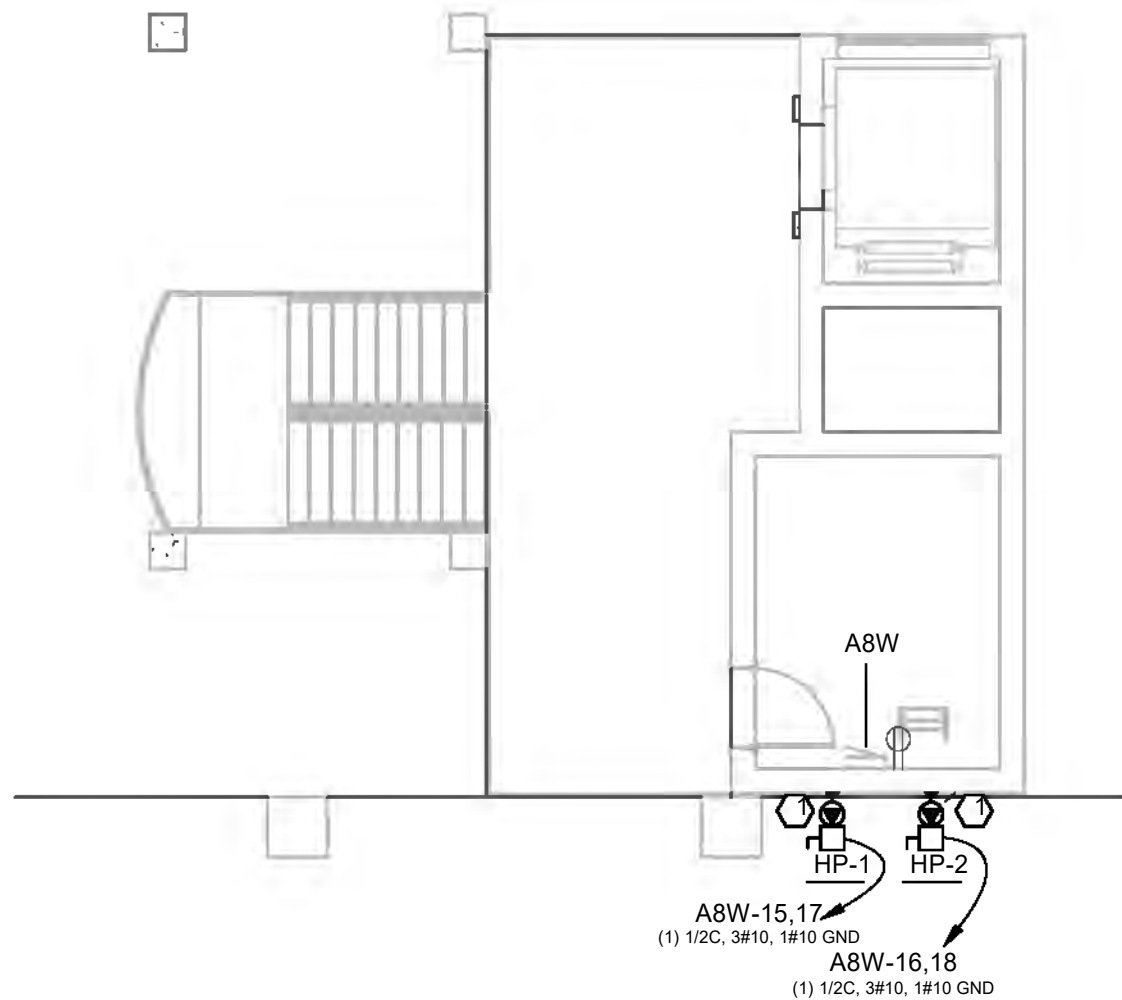
1. INTERCONNECT INDOOR AND OUTDOOR SPLIT SYSTEM UNITS AS DIRECTED BY EQUIPMENT MANUFACTURER. REFER TO EQUIPMENT CONNECTION SCHEDULE ON SHEET E003.
2. CONNECT TO RESPECTIVE EXISTING ELEVATOR CONNECTION. REFER TO ONE LINE DIAGRAM ON SHEET E002



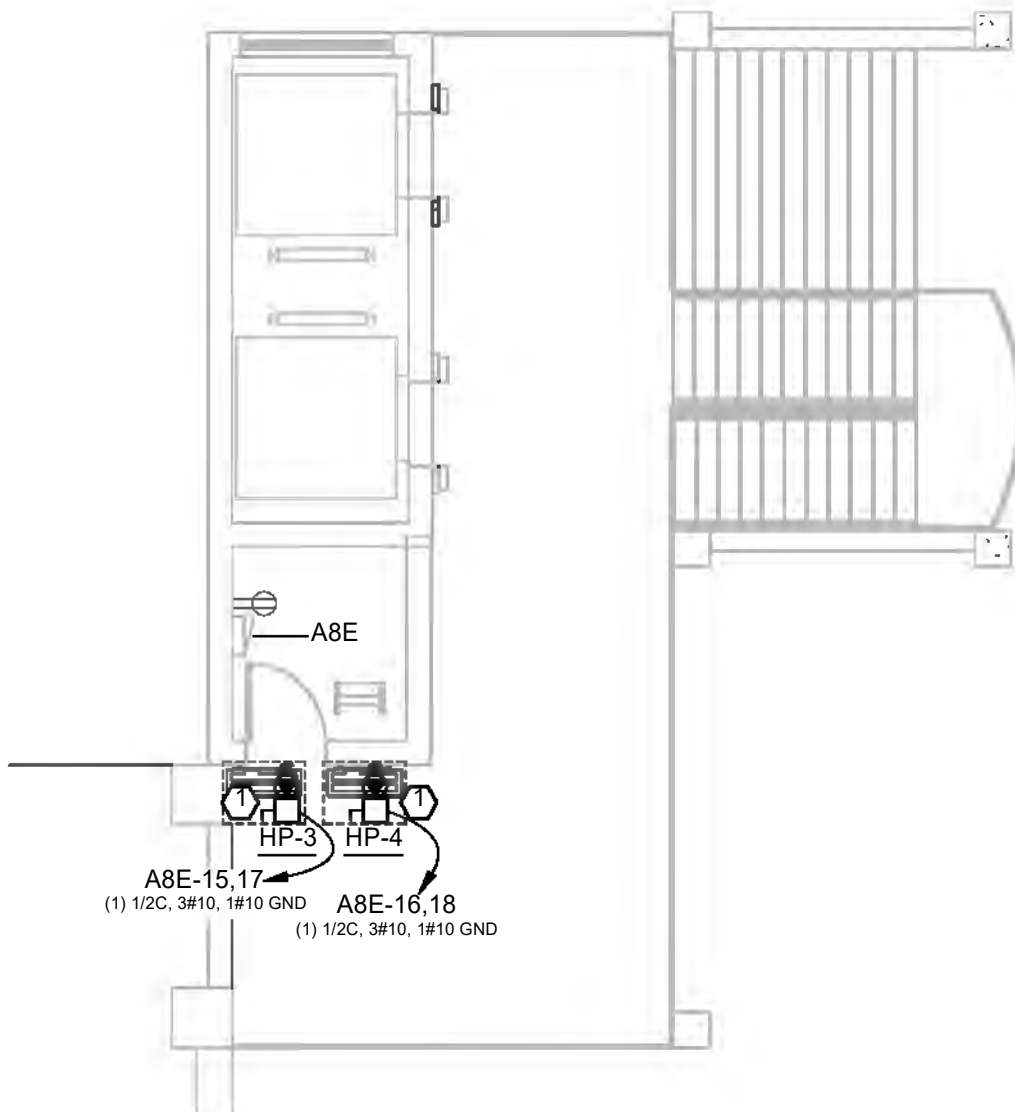
2 WEST TOWER ELEVATOR PENTHOUSE ELECTRICAL PLAN
E200 1/8" = 1'-0"



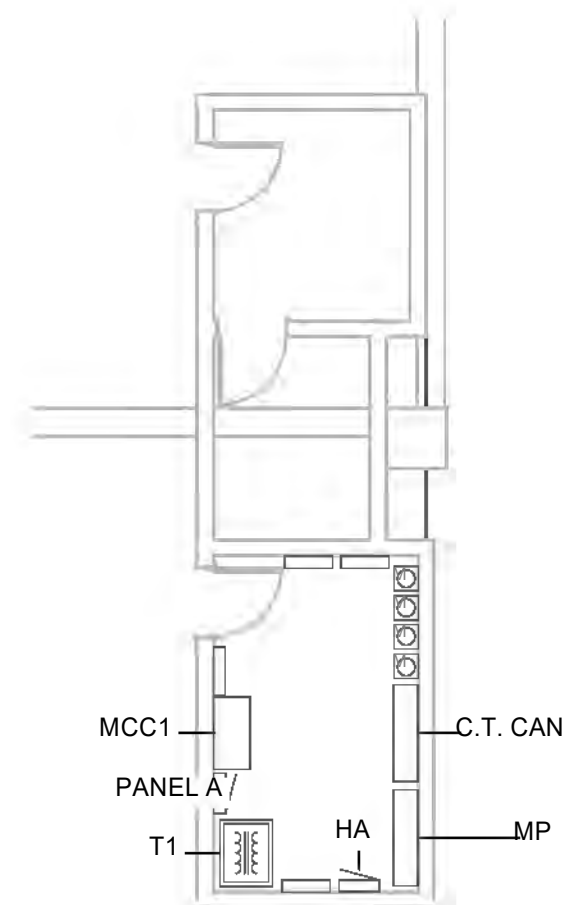
5 EAST TOWER ELEVATOR PENTHOUSE ELECTRICAL PLAN
E200 1/8" = 1'-0"



4 WEST TOWER 8TH FLOOR ELECTRICAL PLAN
E200 1/8" = 1'-0"



1 EAST TOWER 8TH FLOOR ELECTRICAL PLAN
E200 1/8" = 1'-0"



6 1ST FLOOR ELECTRICAL ROOM PLAN
E200 1/8" = 1'-0"

NOT FOR CONSTRUCTION - PRELIMINARY DESIGN

CAPITAL CITY DEVELOPMENT CORP. (CCDC)
9th and Front ParkBOI Parking Garage

ELEVATOR MODERNIZATION

NOT FOR
CONSTRUCTION

10.06.2025
PROJ# | GV_CCDC_ELEVATOR
DESIGNED BY | GROSS
DRAWN BY | GROSS
REVIEWED BY | VICTORINO
REVISIONS

ELECTRICAL PLANS

E200



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VI. EXECUTIVE SESSION



VII. ADJOURN



END