

URBAN DESIGN COMMITTEE

The Urban Design Committee will hold a meeting on **Tuesday, May 06, 2025**, at **3:00 p.m.** in the County-City Building, 555 S. 10th Street, Lincoln, Nebraska in **City Council Chambers** on the 1st floor. For more information, contact the Planning Department at 402-441-7491.

AGENDA

1. Approval of UDC meeting record of [March 04, 2024](#).

ADVISE

2. [Lincoln-Lancaster County Public Building Commission Parking Garage Expansion -UDR25041](#) – *Advisory Review*

Urban Design Committee's agendas may be accessed on the Internet at
<https://www.lincoln.ne.gov/City/Departments/Planning-Department/Boards-and-Commissions/Urban-Design-Committee>

ACCOMMODATION NOTICE

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URBAN DESIGN COMMITTEE STAFF REPORT

APPLICATION NUMBER	Urban Design Record #UDR25041
APPLICATION TYPE	Advisory review
ADDRESS/LOCATION	Public Building Commission Parking Garage Expansion (425 S 10 th St)
HEARING DATE	May 06, 2025
ADDITIONAL MEETINGS	-
APPLICANT	Kerin Peterson, kpeterson@lancaster.ne.gov
STAFF CONTACT	Arvind Gopalakrishnan, 402-441-6361, agopalakrishnan@lincoln.ne.gov

RECOMMENDATION: CONDITIONAL APPROVAL

Summary of Request

The project site is located at 425 S 10th Street, and is currently a 2-level parking deck situated just north of the City-County Building.

The goal of this project is to provide a minimum of 915 parking stalls, including public and private parking, as well as accommodation for handicapped stalls, EV stalls, and fleet vehicles. This will be accomplished by adding 3 levels of precast concrete parking deck installed on top of the second level of the existing parking structure. Currently, there are 478 existing stalls. With this proposal, the number of parking stalls will increase to approximately 966 stalls.

This site is in the B-4 zoning district subject to the Downtown Design Standards, based on which, the building design is being reviewed. The existing parking deck is owned by the City of Lincoln & Lancaster County, and as such, the Urban Design Committee is to provide an advisory review of the project for the

Building Design: Architectural design, materials, and aesthetics,

Compatibility of the design with its surroundings, and how it adds functional and aesthetic value to the existing **Downtown** fabric, and

Streetscape Design: Integration with the Downtown Corridors Masterplan

Design description

The existing entrance to the second level from K Street will be closed, and a new entrance and exit are proposed on 10th Street. The existing entrance and exit locations serving level one of the garage will remain on L Street and 9th Street accordingly. New access control

gates are planned for all new and existing entrance/exit locations. New building signage and wayfinding are proposed for the entire facility. This may include physical signs, backlit standoff letters, architectural metal panels, or large, colorful elements to draw users toward the vertical circulation at the southeast corner.

Architectural precast concrete will be used around all four sides of the structure. The south, west, and north facades will utilize precast “fins,” slender elements that emulate the architecture of the existing PBC Campus. The east facade will use precast panels with punched vertical openings to contrast with the other airy faces of the building. The use of form liners and colored concrete will also be implemented to help refine the precast, creating a lasting design element that is integral and durable. Differentiating the east facade from the others helps provide a visual cue to help pedestrians and vehicles identify the main stair tower and parking entry, respectively. In addition to the signage previously identified, this architectural massing reinforces the wayfinding for the project.



The stair towers will utilize curtainwall glass to offer natural light, views, and a sense of security. This is blancheted with precast panels to prioritize maintenance and durability goals.



The following narratives from the design team contain additional detailed information regarding their particular design scopes of work.

Functional Design

General

The bottom level (Level 1) will be a 5-bay parking area on grade, and Levels 2-5 will be structured 3-bay parking areas. The facility will have two basic user groups: public and employee parkers, with discrete parking areas for each user group identified by signage or by physical separation. Employee parkers will occupy the entire lower level (Level 1), a portion of Level 3, and all of Levels 4 and 5. Public parking will occupy all of Level 2 and a portion of Level 3. Levels 2-5 will be connected by a central, internal vehicular ramp. There will *not* be an internal vehicular ramp connecting Level 1 to the upper Levels 2-5.

The functional parking system for the garage features two-way traffic circulation, with 90-degree parking stalls. The layout complies with the City of Lincoln zoning requirements for the dimensions of the parking stalls, width of the drive aisles, and complies with ADA accessibility requirements for the layout, quantity, and signage of accessible parking stalls (including “Electrical Vehicle” stall accessibility if applicable). In addition, turning movements for traffic circulation within the structure are intended to meet reasonable level of service standards.

The garage will provide public and employee parking. Signage is likely to be used to identify employee parking stalls from stalls available for public use. It is anticipated that

very few (quantity to be determined) of the employee parking stalls on the ground level will be identified as “Electrical Vehicle” (EV) parking stalls. It is yet to be determined if EV charging equipment will be provided at such stalls as part of this project. Painted striping for parking floors including stalls, ADA symbols, “EV” stalls markings, and diagonal striping at no-parking areas. Striping paint will be traffic grade reflective paint with colors to be selected later.

Vehicular Access

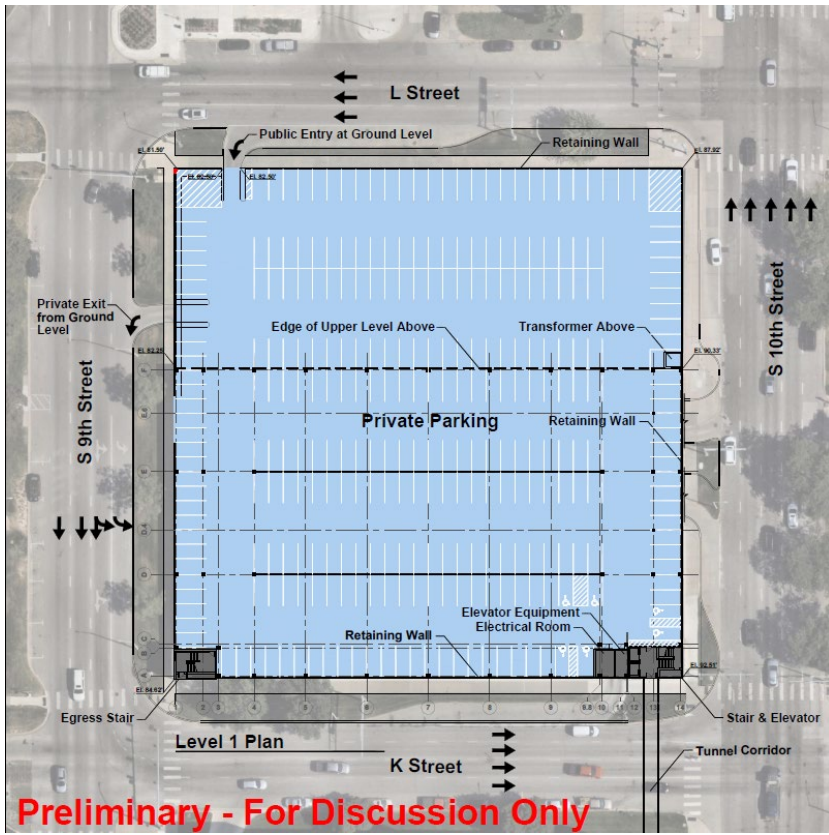
The employee-only bottom level of the garage (Level 1) will be accessed from a controlled entry off of L Street and a controlled exit onto 9th Street. Levels 2 – 5 (Public and Employee) will be accessible from a controlled vehicular entry and exit to 10th Street. The entry/exits will all have access control systems, and the equipment at the Level 2-5 entry/exits will additionally require revenue control features. The Level 1 vehicular entrance and exits will likely have a relatively simple access control system limited to proximity card readers at the entry and gates at the entry and exit.

Signage

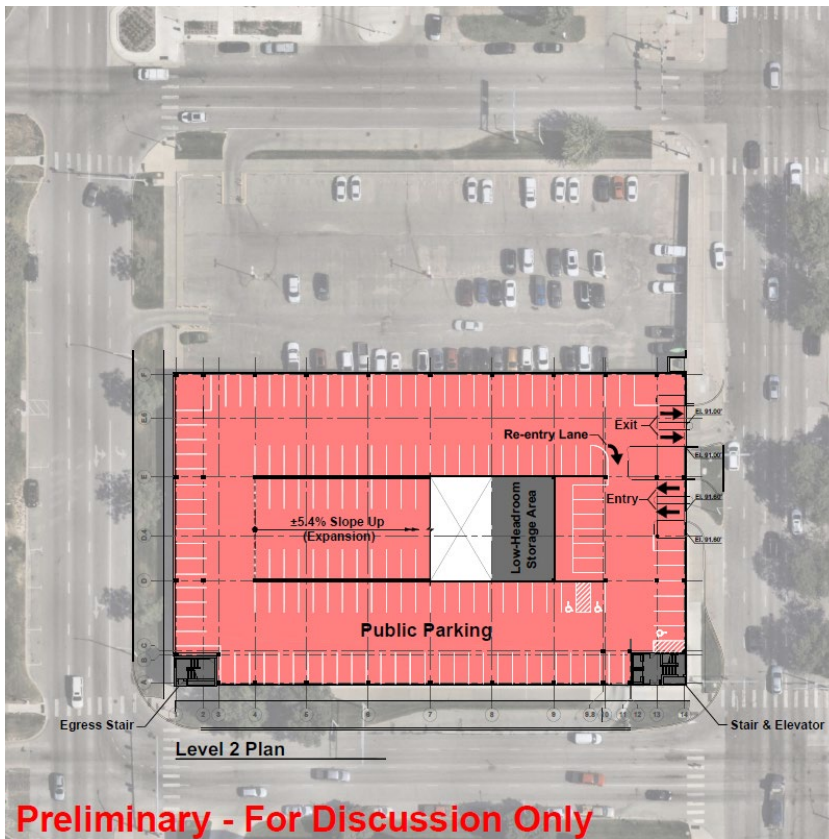
The parking garage shall feature signage for various purposes, including but not limited to vehicular traffic flow, pedestrian wayfinding, garage entry-exit signs, employee stall identification, EV stall identification, and regulatory signage, including ADA parking. Vehicular traffic flow signage will be aluminum plate signs painted with reflective paint of colors and messages to be determined. “Entry”, “Exit”, “Do Not Enter” and “Headroom Clearance” signage will be provided at each entry-exit. Regulatory ADA stalls will be aluminum plate signs.

Site Design

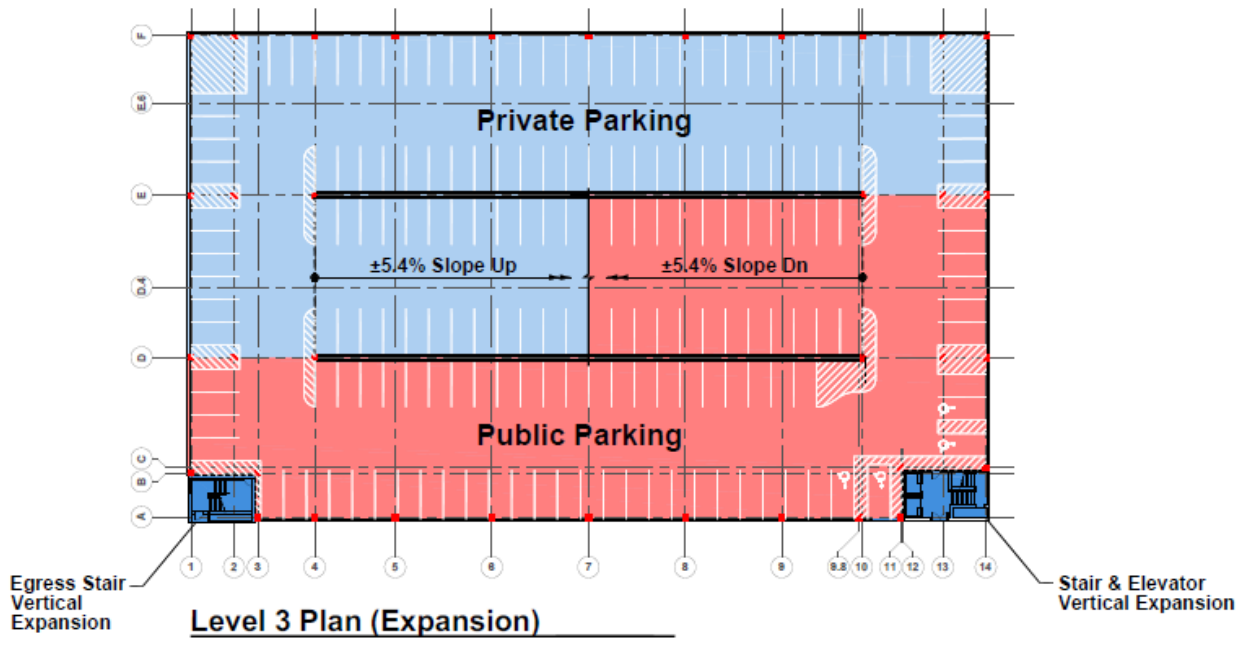
As part of the project, the existing access point into the garage off of ‘K’ Street is shown to be removed. Expanded entry in the form of (2) lanes into the garage is proposed off of S. 10th Street. Two exit lanes are proposed onto S. 10th Street as well to allow for the more efficient flow out of the garage. The existing access points on ‘L’ and S. 9th Street will remain in their current locations; however, new access control is planned to be a part of upgrades to these access locations. The existing sidewalks adjacent to the existing garage will be removed and replaced as they will likely be damaged during construction.



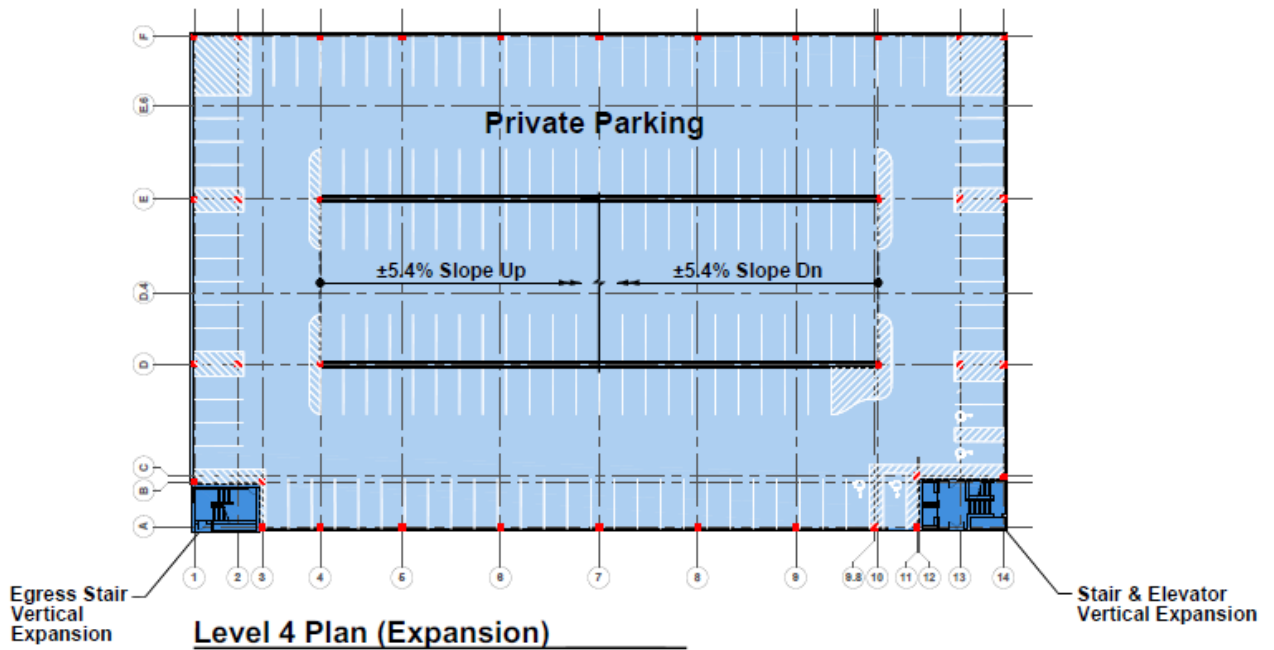
Preliminary - For Discussion Only



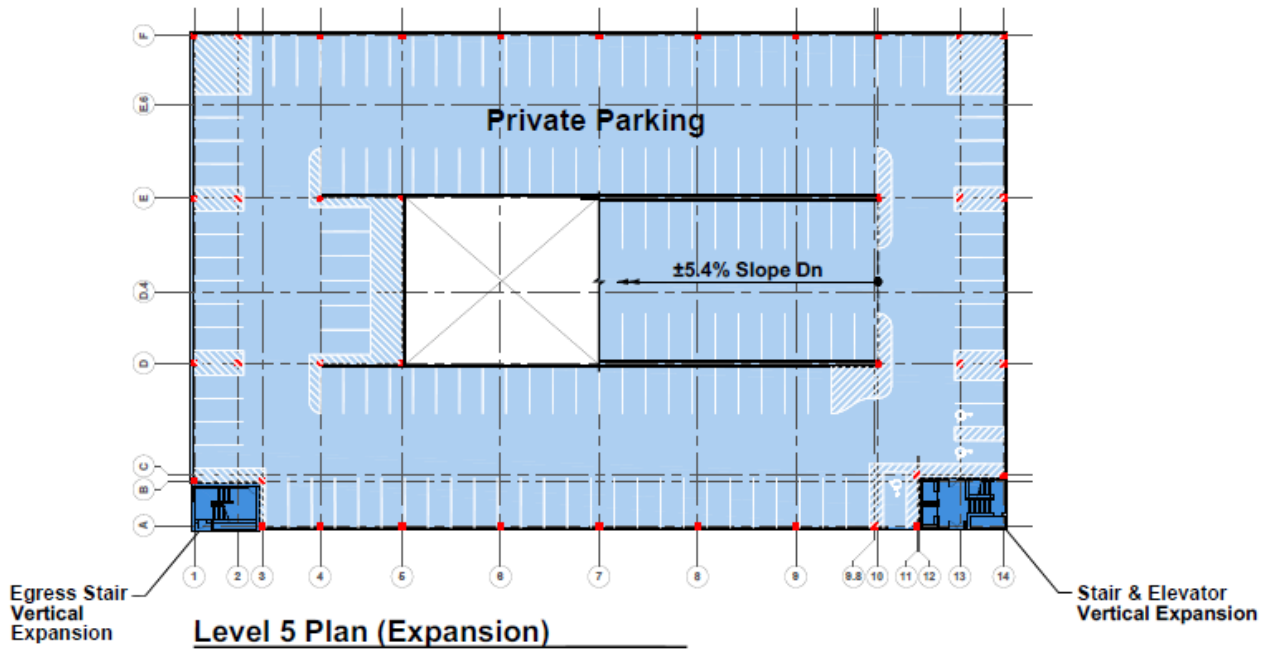
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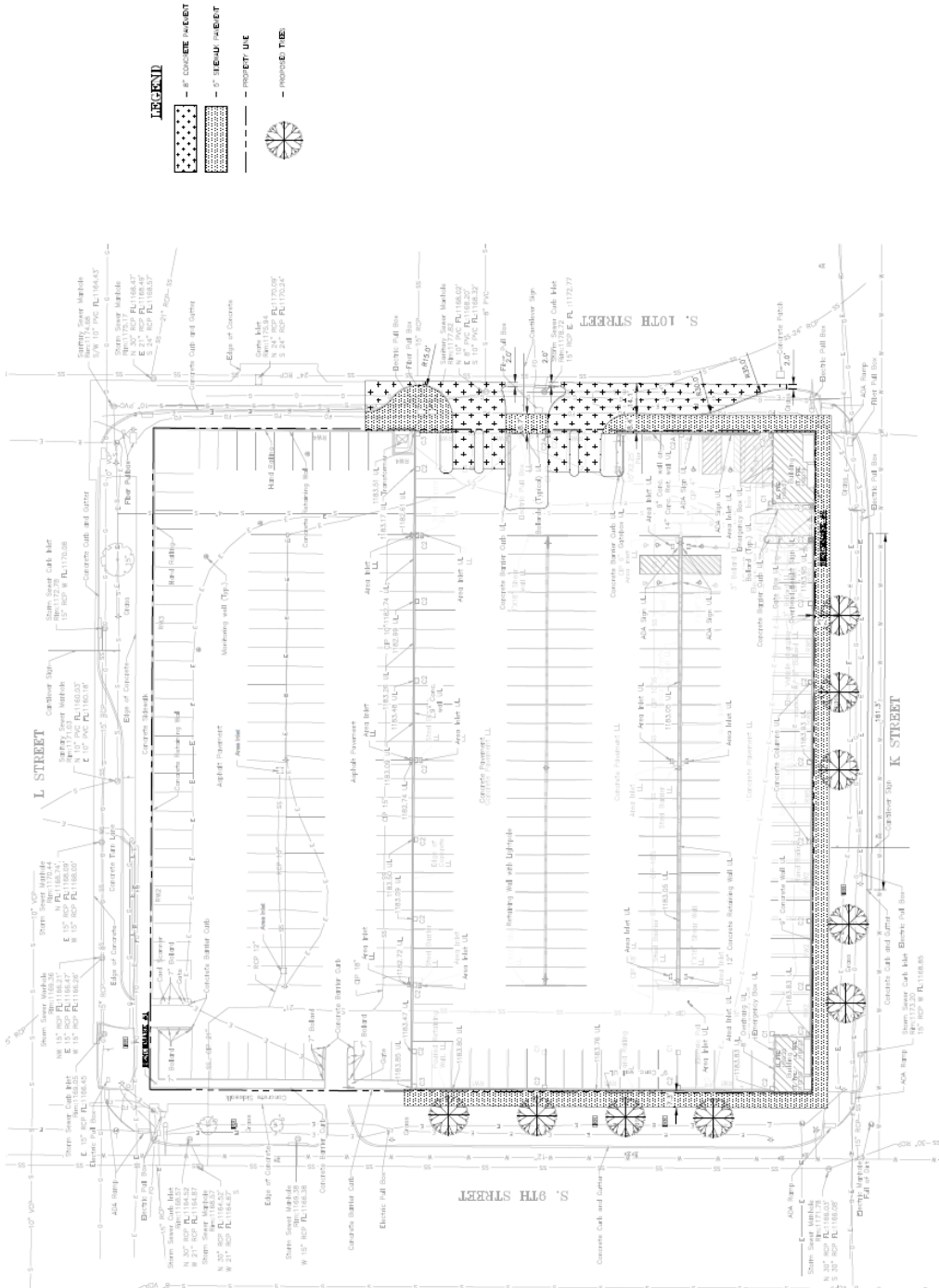
Preliminary - For Discussion Only



Preliminary - For Discussion Only

Landscaping

Existing trees along 'K' and S. 9th Street will be removed for continuity with new landscaping and constructability of the garage addition. Proposed street trees are shown on the Schematic Design Plans. Additionally, the design team will be working with the City of Lincoln on developing the intent for this block from the S. 9th and S. 10th Street Downtown Corridors designs.



SITE LAYOUT PLAN
SCALE: 1" = 30'

Staff comments.

Given the project's location within the Downtown area, the Downtown Design Standards are applicable. The proposed design has been reviewed against these standards and is compliant with the following sections that are particularly relevant:

Chapter 3.76, Lincoln Downtown Design Standards

4.2 Building features

b. Parking structures and lots:

2. Any ground-floor parking in structures must be screened from public sidewalks.
3. Entrances and exits shall be located and grouped to minimize curb cuts and other interruptions of pedestrian movement on sidewalks.
4. Parking structures shall be designed with the appearance of horizontal floors, concealing sloped floors or ramps visible on street facades. (Entrance and exit ramps may be visible through openings on the ground floor.)

Design Feedback and Recommendations

- *Building design*

Staff is particularly supportive of the fins, lighting, and overall architectural treatment on the 10th Street façade, which is recognized as the primary face of the structure. This elevation effectively conveys a stronger civic presence and contributes positively to the streetscape.

While the project incorporates precast concrete fins on the south, west, and north facades to reflect the architectural language of the existing PBC Campus, staff have identified opportunities for enhancement, particularly along the K Street and 9th Street elevations. These elevations are highly visible and serve as key gateways into Downtown. In the current proposal, their similarity to the adjacent structures does not create a distinctive or inviting entry experience.

Shared design language.



To strengthen the identity and visual appeal of these façades, staff recommends the incorporation of additional design elements, such as perforated or colored metal panels, murals, colored fins, or other creative treatments that contribute to a more dynamic and engaging street presence.

Additionally, the current design proposal includes a mural at the corner of the east façade, and staff notes that this location is less visible in the broader urban context. We recommend relocating or replicating the mural concept on the more prominent K Street or 9th Street elevations, where it would have a greater visual impact and contribute more

meaningfully to the character of Downtown. Future development on the north sides of the block will also hide this mural.

Attached below is a street cross-section and a perspective of the proposed design, followed by two examples of treatments that could elevate the façade of the building.





Option 1 shows colored perforated metal panels.



Option 2 shows painted murals.

Please note that the placement and scale shown are conceptual and not to scale. Design consultants are encouraged to explore variations and adapt these ideas creatively to suit the context.

- *Streetscape Coordination*

It is also noted that the proposed treatment of 10th Street does not show the proposed plan for 10th St outlined in the Downtown Corridors Master Plan. Staff recommends revising the site plan and accompanying drawings to maintain consistency and reflect the proposed streetscape improvements for this corridor.



SCHEMATIC DESIGN
PBC PARKING GARAGE EXPANSION

APRIL 4, 2025

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SCHEMATIC DESIGN SUBMITTAL

DATE: 04/4/2025

PROJECT: Lincoln-Lancaster County Public Building Commission Parking Garage Expansion
BVH PROJECT #: 24108

Owner

Lincoln-Lancaster County Public Building Commission
Kerin Peterson, Facilities and Property Director
920 O Street
Lincoln, NE 68508
402-441-7355

Project Location

425 S. 10th Street
Lincoln, NE 68508

Project Description and Architectural Narrative

The project consists of the addition of 3 new levels of precast concrete parking deck installed on top of the second level of the existing parking structure. The parking stall count will increase from the existing 478 stalls to approximately 966 stalls total. The existing southeast and southwest stair towers and elevator shaft at the southeast corner will be modified and extended to serve the new parking levels. A new second elevator will be installed within the existing elevator shaft, and the existing elevator will be replaced.

The existing entrance to the second level from K Street will be closed, and a new entrance and exit are proposed on 10th Street. The existing entrance and exit locations serving level one of the garage will remain on L Street and 9th Streets accordingly. New access control gates are planned for all new and existing entrance/exit locations. New building signage and wayfinding are proposed for the entire facility. This may include physical signs, backlit standoff letters, architectural metal panels, or large, colorful elements to draw users toward the vertical circulation at the southeast corner.

Architectural precast concrete will be used around all four sides of the structure. The south, west, and north facades will utilize precast "fins," slender elements that emulate the architecture of the existing PBC Campus. The east facade will use precast panels with punched vertical openings to contrast the other airy faces of the building. The use of formliners and colored concrete will also be implemented to help refine the precast, creating a lasting design element that is integral and durable. Differentiating the east facade from the others helps provide a visual cue to help pedestrians and vehicles identify the main stair tower and parking entry,

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respectively. In addition to the signage previously identified, this architectural massing reinforces the wayfinding for the project.

The stair towers will utilize curtainwall glass to offer natural light, views, and a sense of security. This is blanded with precast panels to prioritize maintenance and durability goals.

The following narratives from the design team contain additional detailed information regarding their particular design scopes of work.

Functional Design

General

The Owner's goal is to provide a minimum of 915 total parking stalls. The expanded parking structure currently accommodates approximately 966 parking stalls on five levels. The bottom level (Level 1) will be a 5-bay parking area on grade and Levels 2-5 will be structured 3-bay parking areas. The facility will have two basic user groups: public and employee parkers with discrete parking areas for each user group identified by signage or by physical separation. Employee parkers will occupy the entire lower level (Level 1), a portion of Level 3, and all of Levels 4 and 5. Public parking will occupy all of Level 2 and a portion of Level 3. Levels 2-5 will be connected by a central, internal vehicular ramp. There will *not* be an internal vehicular ramp connecting Level 1 to the upper Levels 2-5.

The functional parking system for the garage features two-way traffic circulation, with 90-degree parking stalls. The layout complies with the City of Lincoln zoning requirements for the dimensions of the parking stalls, width of the drive aisles, and complies with ADA accessibility requirements for the layout, quantity, and signage of accessible parking stalls (including "Electrical Vehicle" stall accessibility if applicable). In addition, turning movements for traffic circulation within the structure are intended to meet reasonable level of service standards.

The garage will provide public and employee parking. Signage is likely to be used to identify employee parking stalls from stalls available for public use. It is anticipated that very few (quantity to be determined) of the employee parking stalls on the ground level will be identified as "Electrical Vehicle" (EV) parking stalls. It is yet to be determined if EV charging equipment will be provided at such stalls as part of this project. Painted striping for parking floors including stalls, ADA symbols, "EV" stalls markings, and diagonal striping at no parking areas. Striping paint will be traffic grade reflective paint with colors to be selected later.

Vehicular Access

The employee-only bottom level of the garage (Level 1) will be accessed from a controlled entry off of L Street and a controlled exit onto 9th Street. Levels 2 – 5 (Public and Employee) will be accessible from a controlled vehicular entry and exit to 10th Street. The entry/exits will all have access control systems and the equipment at the Level 2-5 entry/exits will additionally require revenue control features. The Level 1 vehicular entrance and exits will likely have a relatively simple access control system limited to proximity card readers at the entry and gates at the entry and exit. The entry to Levels 2-5 will have a more robust access control system likely

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consisting of proximity card readers for the employees, and ticket spitters for the public users to vend the articulating gate arms. There will also likely be communication lines and security links to a central control center. The exits from Levels 2-5 will likely only need proximity card readers to vend the exit gates for the employee users but will need ticket readers, and credit card machines to operate the articulating gate arms. The design of the access control system has yet to be developed in consultation with the Owner's needs. It is not clear if manned booths will be required.

Signage

The parking garage shall feature signage for various purposes including but not limited to vehicular traffic flow, pedestrian wayfinding, garage entry-exit signs, employee stall identification, EV stall identification, and regulatory signage including ADA parking. Vehicular traffic flow signage will be aluminum plate signs painted with reflective paint of colors and messages to be determined. "Entry", "Exit", "Do Not Enter" and "Headroom Clearance" signage will be provided at each entry-exit. Regulatory ADA stalls will be aluminum plate signs.

Site-Civil Narrative

Site Design

Driver expectations for entry and exiting are key to a successful parking garage. As part of the project, the existing access point into the garage off of 'K' Street is shown to be removed. Expanded entry in the form of (2) lanes into the garage is proposed off of S. 10th Street. Two exit lanes are proposed onto S. 10th Street as well to allow for the more efficient flow out of the garage. The existing access points on 'L' and S. 9th Street will remain in their current locations; however, new access control is planned to be a part of upgrades to these access locations. The existing sidewalk adjacent to the existing garage will be removed and replaced as they will likely be damaged during construction.

Landscaping

Existing trees along 'K' and S. 9th Street will be removed for continuity with new landscaping and constructability of the garage addition. Proposed street trees are shown on the SD Plans. Additionally, the design team will be working with the City of Lincoln on developing the intent for this block from the S. 9th and S. 10th Street corridors.

Structural Narrative

This project consists of a three-level vertical expansion of the existing parking structure. The expansion will be designed in accordance with the 2018 version of the International Building Code. The existing foundations and existing vertical precast concrete members (including the stair and stair/elevator towers) are designed to support the gravity loads from three additional garage levels, provided the new precast is the same material, size, and weight as the current supported level. Laterally, the existing precast shear walls and lite walls are designed to resist lateral forces from the additional three levels. Voss & Associates contacted Alfred Benesch & Company (formerly HWS Consulting Group – the geotechnical consultant on the original project) in regards to the Seismic Site Classification

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question that was brought up in the report from Kinley-Horn and Associates' report dated January 31, 2023. Benesch confirmed the Seismic Site Classification used for the design of the existing structure is still applicable for this project.

The east end of the existing second level will require the removal of several existing precast members to allow for the revised vehicular entrance and exit from the parking structure. New precast members will slope to connect the grade along 10th street with the existing precast structure. The existing stair & elevator tower on the southeast corner of the project, and the stair tower on the south west corner of the project, will be modified and expanded vertically to provide vertical circulation for the new parking levels.

The design team will perform visual observations of the existing cast-in-place concrete retaining walls, existing exterior slab on grade, and the existing slab on grade below the parking deck. These visual observations will help to determine if any additional analysis or inspections are required to determine the integrity of these elements. Additionally, at the second level, the design team will visually observe the composite concrete topping to determine if cracks in the topping need to be routed and filled to prevent additional deterioration of the topping.

Mechanical and Electrical Narrative

This Narrative is based on pre-design meetings and plans. All information is included for preliminary use only and is subject to change.

Applicable Codes/Publications

The MEP systems shall be designed according to the locally adopted edition of the following codes/publications and local amendments.

- International Building Code (IBC)
- International Mechanical Code (IMC) – 2018 edition
- International Energy Conservation Code (IECC) – 2018 edition
- International Fuel Gas Code (IFGC) – 2018 edition
- International Fire Code (IFC) – 2018 edition
- Uniform Plumbing Code – 2018 edition
- ASHRAE Standard 90.1 – 2016 as allowed by IECC
- American Gas Association (AGA)
- National Electric Code (NEC) – 2023 edition
- Life Safety Code – 2012 edition
- National Electrical Manufacturer's Association (NEMA)
- American Society of Mechanical Engineers (ASME)

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National Fire Protection Association (NFPA) Standards

Underwriter's Laboratories Inc. (UL)

Americans with Disabilities Act (ADA) Guidelines – 2010 edition

Division 21 – Fire Suppression Systems

Fire Service

A new fire service will be provided in the existing main mechanical/electrical room to serve the building meeting all applicable requirements of NFPA 13/NFPA 14 and 2018 IBC for an open garage.

Fire Sprinkler System

The fire sprinkler system will consist of a dry standpipe system that will be extended to each stairwell. The standpipes will extend up the stair towers on the intermediate landings with a hose connection provided on the landings to allow for serving the floor above or below.

Division 22 – Plumbing Systems

Domestic Water

The existing 1-1/2" domestic water service shall remain. The service was recently updated and in good shape and meets current Lincoln Water requirements. The domestic water will be extended for site irrigation and for garage hose bibbs. Drain down points for winterization will be provided.

Domestic Hot Water

No domestic hot water will be provided for the building.

Sanitary Sewer

The existing 4" sanitary sewer shall remain. The existing mechanical room drainage shall be increased to handle the new required flow of the elevator sump pump.

Storm and Overflow Systems

The existing 21" storm sewer service shall remain. The existing area and deck drains shall be removed and replaced with new cast iron body drains with ductile iron grates. New piping shall be extended up from the existing storm risers to serve the new drains on the added floors above.

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Natural Gas

No natural gas will be provided for the building.

Piping Materials and Insulation

Domestic water piping shall be extended from the water service to the points of use. The piping shall be type “L” copper tubing with soldered wrought copper fittings. All valves and accessories for potable water shall be lead-free per NSF 61 and NSF 372.

Sanitary and storm systems shall be cast iron for all above grade piping located within the garage to provide additional durability. PVC piping shall be utilized for all below grade and concealed piping.

All plumbing piping within the conditioned mechanical room or stair towers shall be insulated per the locally adopted energy code. Insulation shall be fiberglass with one- or two-piece molded sections with a K-value of 0.22 at a 75°F mean temperature. Insulation shall be a minimum density of 3 lbs. per cubic foot. Insulation thicknesses shall be a function of the piping service as follows:

Domestic Cold Water	½” thick
Rainwater Piping	1” thick

Division 23 – Mechanical Systems

Design Criteria

HVAC systems shall be provided to ventilate and condition the building per the mechanical and energy codes. Building loads shall be calculated using ASHRAE 183 compliant software using the following outdoor and indoor criteria:

ASHRAE Fundamentals Handbook – 2021: Climate Zone 5A:

	Winter	Summer
Ambient Dry-Bulb Temperature	-2.4°F	96.3°F
Wet Bulb Temperature	N/A	78.6°F

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Indoor design conditions:

Space Type	Cooling (Occupied/Unoccupied)	Heating (Occupied/Unoccupied)
Stair/Vestibule	80 (°F)	50 (°F)
Mechanical Room	78 (°F)	60 (°F)

HVAC System

Heating and cooling shall be provided for the main mechanical room, elevator equipment room and stair towers. The main mechanical room and elevator equipment room shall utilize the existing electric blower coil unit and associated air-source heat pump for heating and cooling. The stair towers will utilize a mini-split air-source heat pump to provide cooling and heating. Electric heat will be provided at the base to provide uniform heating throughout the stair well. The air-source heat pumps shall be located in the corners of the parking deck and provided with bollards to protect the equipment from vehicle damage.

Electric infrared heaters shall be provided at the entry and main ramp to prevent ice build-up and slippery conditions in the winter.

Ventilation

Mechanical ventilation shall be provided for the stair towers. The ventilation will be ducted into the stair towers low with exhaust fans located on the roof. Outdoor air quantities shall be provided as required by the International Mechanical Code.

Controls

The HVAC controls will be connected back to the 505/555/605 building's central BMS system to allow for monitoring and control of the HVAC system. Alarms will be provided to notify the property management team if the temperatures are out of range to help protect the facility from freezing issues.

HVAC Piping and Ductwork Insulation

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Ductwork shall be of low-pressure design and constructed per SMACNA ductwork standards. All HVAC ductwork and piping shall be insulated per the locally adopted energy code with material and thickness as follows:

Exhaust Air / Fresh Air	From outside isolation damper 4" mineral- fiber blanket
Refrigerant Piping	1/2" closed cell elastomeric thermal insulation

Division 26 – Electrical Systems

Electrical Service

An existing utility 150kVA pad mounted transformer is present in the northeast corner of the garage along S. 10th Street. From this location secondary electrical is extended underground to a distribution panel with a single main breaker in a room at the southeast corner of the garage on the lowest level. Existing utilization voltage is 120/208V, 3-phase, 4-wire. It is expected that this will need to increase and be replaced with a larger size to accommodate electric vehicle charging stations. However, the exact quantity and size of charging stations still needs to be confirmed by the owner.

The project will plan on providing a new concrete pad at the current location as the existing pad has settled. The larger pad will accommodate a larger utility provided transformer with metering cabinets and a meter installed nearby. Existing primary conduits are expected to remain and be reused. New secondary electrical shall be extended to a new electrical room.

Electrical Service and Distribution Equipment

The existing 600A, 120/208V, 3-phase electrical service and distribution shall be removed in its entirety. Due to the anticipated need for electric vehicle charging stations, quantity yet to be determined by owner, a new 600A, 277/480V, 3-phase, 4-wire electrical distribution service shall be provided in a new electrical room. A single distribution panel with a 600A main breaker and feeder breaker distribution shall be provided. All breakers 225A or larger shall be electronic trip type.

External surge protection shall be provided for the service equipment and for panelboards serving exterior and rooftop loads.

New branch circuit panelboards, rated 277/480 volts, three-phase, will be provided for lighting, large HVAC, elevator, and electric heating loads. Dry-Type transformers, with

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aluminum bussing, 80°C rise will be provided to step down transformers to feed 120/208V, 3-phase branch circuit panelboards to serve receptacle and small equipment loads. Panelboards shall be complete with breakers and a grounding bus. All panelboards shall be provided with aluminum lugs and copper or aluminum bussing. The following distribution equipment is anticipated to be provided:

- (3) 125A, 277/480V, 3-phase, 4-wire, 42-circuit, main lug only panelboards.
- (3) 225A, 120/208V, 3-phase, 4-wire, 42-circuit, main breaker panelboards.
- (1) 600A, 120/208V, 3-phase, 4-wire, distribution panel.
- (1) 75kVA 480:277/480V, 3-phase, 4-wire step-down transformers.
- (1) 150kVA 480:277/480V, 3-phase, 4-wire step-down transformer.

Engraved labels shall be provided for identification of all distribution panel breakers, panelboards, disconnect switches, and motor controllers.

All new feeder and branch circuit wiring will be installed in conduit, 3/4" minimum size, unless noted otherwise. Steel compression or steel set screw type fittings will be used for EMT type conduit. PVC Schedule 40 conduit is acceptable for below grade applications. Where conduits are installed exposed below 10FT, RSC or IMC conduit with compression fittings shall be used. Fire stopping shall be provided for penetrations through rated walls and floors, as required by code. Conduits shall be embedded in the concrete structure, where possible.

A green insulated grounding conductor will be installed with each feeder and branch circuit. Type THHN/THWN copper conductors shall be used throughout the facility. All wiring will be installed in accordance with the latest addition of the National Electrical Code (NEC).

New duplex convenience receptacles will be specification grade, 20-amp, 120-volt grounding type devices. Stainless steel faceplates shall be provided for locations within interior rooms. Receptacles shall be weather proof, GFCI, and provided with die-cast aluminum covers.

Branch circuits for heating, ventilating, and air conditioning (HVAC) equipment will be provided with a heavy-duty disconnect switch or horsepower rated toggle switch. Motor starters for equipment shall be combination type, with fused disconnect, hand-off-auto (HOA) switch and run indicating light. Exterior disconnects shall be NEMA 3R rated.

Photovoltaic Systems

A 25kW photovoltaic array shall be provided on the east rooftop of the structure. The system shall be complete with fixed solar panel arrays, mounts, disconnects, inverters, and necessary electrical components to ensure a safe and efficient operation.

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Equipment shall be properly rated for exterior conditions. The system shall be connected for net metering via the building's main distribution panel.

Lightning Protection Systems

A UL Master Labeled lightning protection system in compliance with UL 96A and NFPA 780 standards shall be provided. The system will include air terminals, down conductors, grounding electrodes, bonding connections, surge protection devices, and all necessary components to ensure effective dissipation of lightning strikes. All materials and installation methods will meet UL requirements to achieve Master Label certification.

Electric Vehicle Charging Stations

Level 2 electric vehicle (EV) charging stations shall be provided for charging of fleet vehicles. The exact quantity is still being determined by the owner. The system will include charging units, mounting pedestals or wall mounts, electrical conduit, wiring, disconnects, and any required network communication components. The installation will integrate with the new electrical infrastructure, ensuring proper load management and safety. All work will be performed per local codes, utility requirements, and manufacturer specifications,

Lighting Systems

Existing lighting systems shall be removed in its entirety.

In general, energy-efficient LED type lighting shall be used throughout the interior and exterior of the building. Interior parking garage light fixtures shall be suitable for parking garage use with low glare and spread lens type optics for uniform coverage and distribution of light. Lights will be wet location rated, impact resistant, and vandal resistant. Rooftop light fixtures shall be area type lights mounted to poles.

Stairwell, elevator, and circulation lighting will be surface mounted vandal and impact resistant type lighting with architectural aesthetics and soft modern features.

Exterior building mounted lighting will be wet location rated for perimeter security lighting and wayfinding. Selective locations on the east façade will incorporate linear RGBW color changing light fixtures into the architectural elements.

The lighting system design shall be consistent with State energy codes for ambient lighting in all spaces. IES recommend light levels shall be provided throughout all spaces. The IES Recommended Practice, RP-8-22: Lighting Roadways and Parking Facilities, will be utilized as one of the references and guides for best lighting practices.

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Lighting controls, which shall consist of dimming, daylighting, motion sensors, time-based controls, photocells, etc., shall be provided to meet State energy codes as required for an energy efficient facility and ease of control. Parking garage light fixtures will be provided with integral sensors with motion and ambient light detection to automatically lower and raise fixture light levels dependent upon area traffic and ambient light available. Entry and exit area lighting will have additional light fixtures interior to the garage to assist with bright/dark lighting transitions for drivers as they enter/leave the facility. Exterior lighting shall be controlled by a photocell and/or time clock.

Emergency light fixtures and exit lights shall be powered from a 10kW UL924 listed emergency lighting inverter. Emergency lighting circuits shall be installed in dedicated conduits independent of other branch circuit wiring. Select light fixtures normally used throughout the garage will be connected to standby inverter power. The entire facility shall meet NFPA requirements for illuminating the means of egress, including exterior egress, and for marking exits. Exit lights shall be LED-type, with stencil faces, vandal and impact resistant covers, and rated for wet locations.

Building-mounted fixtures or recessed canopy light fixtures shall be used to illuminate sidewalks and entrances. All exterior light fixtures shall be LED type and shall be specified as full cut-off to reduce light pollution.

Division 27 - Communications

Communication Systems

The existing telecommunications infrastructure shall be removed in its entirety.

New telecommunication services shall be provided from the City/County Building, directly south across K Street. Contractor shall provide outdoor rated single mode fiber through an existing conduit from the City/County Building telecom rack to the garage telecom room.

The telecommunications equipment shall be located in a single and dedicated IT closet. A new room shall be provided that is watertight. A ¾" x 48" high painted plywood board shall be installed along walls for mounting of telecom equipment and punchdown blocks. A new floor mounted data rack shall be provided to house patch panels, fiber equipment, and switches. Equipment cabinets shall be provided as required for owner provided servers, UPS, etc. All racks and cabinets shall be grounded to the electrical service grounding bus.

Cat 6/6A cabling shall be provided for elevator emergency communications, two-way communication equipment, wireless access points, electric vehicle charging stations, security systems, and gate systems.

BVH

ARCHITECTURE

Category 6 cabling shall be Commscope CS37P series or equal. All new cabling shall be installed by BISC certified installer and provided with manufacturers 20-year warranty.

Cabling shall be installed in conduit throughout. Fire stopping shall be provided for penetrations through rated walls and floors, as required by code.

Telecommunication systems shall be complete with patch panels, termination boards, equipment racks, voice/data jacks, stainless steel cover plates, punch down blocks, and cables. All cables and jacks shall be labeled and tested.

All work associated with the telecommunications design shall be coordinated with the City/County IT personnel.

Emergency Responder Radio Coverage System (IFC 510):

The existing building and new addition will be tested for unamplified radio signal strength. For all areas determined to be deficient, an approved system will be present that will amplify the native emergency radio responder signals throughout the building.

Two-way communication systems

A two-way communication system will be provided at elevator landings as required by current codes.

Division 28 – Electronic Safety and Security

Access Control and Video Surveillance System

A new access control system shall be provided with electronically controlled gates at main entry and exit locations. The underground tunnel doors leading the City/County building will also be controlled. Card Readers will be provided as needed for operation with all controlled entry doors in addition to a programmable time schedule. The system will be by Avigilon, or equal.

A video management system shall be provided with 30 days of on-site video storage. Network based surveillance cameras will be provided to monitor all exterior entries, interior circulation spaces, stairwells, and gate transaction areas. The video management system shall be integrated with the access control system. New ONVIF certified cameras shall be provided as manufactured by Axis or Avigilon.

Fire Alarm System

A new addressable fire alarm system shall be provided, in accordance with the NFPA, complete with fire alarm control panel, initiation and annunciation devices, and elevator

BVH ARCHITECTURE

control and monitoring relays as required for the elevators. The system shall be provided with a digital communicator, for remote monitoring.

Ceiling mounted notification devices shall be provided wherever possible. In areas where devices are wall mounted, they shall be flush, any surface mounted devices shall be provided with back box skirt to match device finish.

Smoke or heat detection shall be provided in all elevator landings and the elevator machine room.

Budget Summary

PUBLIC BUILDING COMMISSION PARKING GARAGE BUDGET SUMMARY			
	Budget	Committed	Uncommitted
Professional Services	\$ 1,330,665	\$ 1,238,790	\$ 91,875
Construction	\$ 17,835,047	\$ -	\$ 17,835,047
Third Party Vendors	\$ 280,000	\$ -	\$ 280,000
Contingency	\$ 901,753	\$ -	\$ 901,753
Project Total	\$ 20,347,464	\$ 1,238,790	\$ 19,108,674

Context

BVH ARCHITECTURE

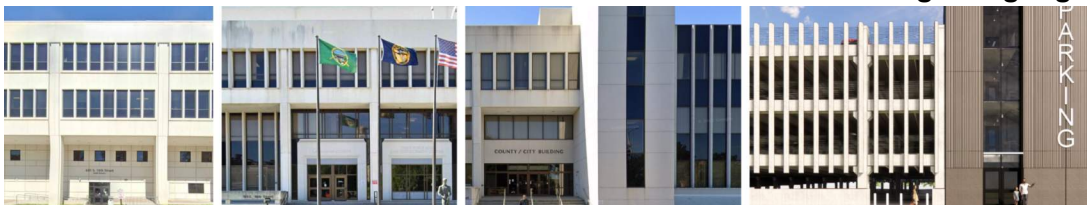
Designed on all sides.



Part of the campus.

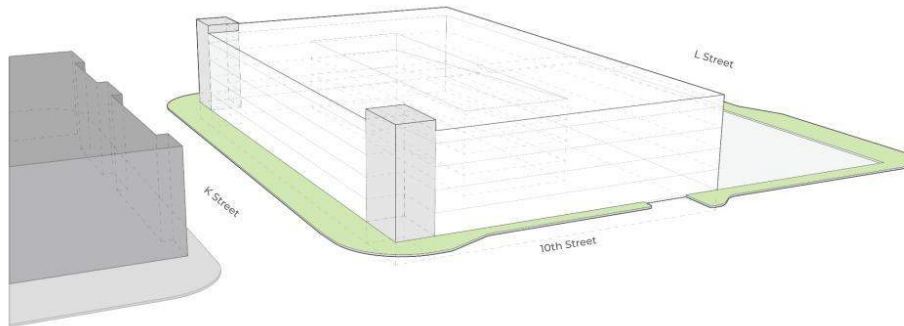


Shared design language.

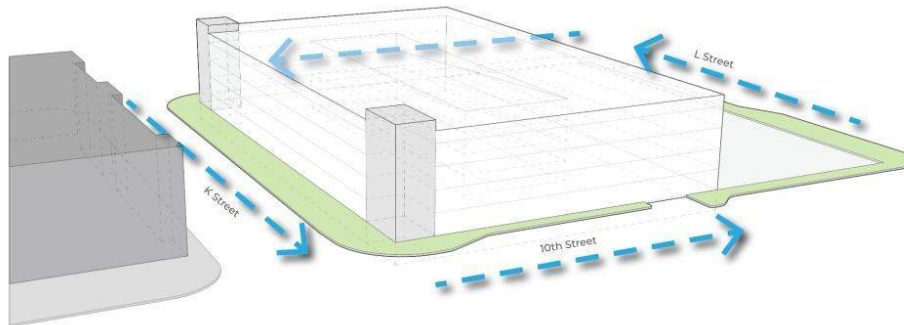


Design Concept Diagrams

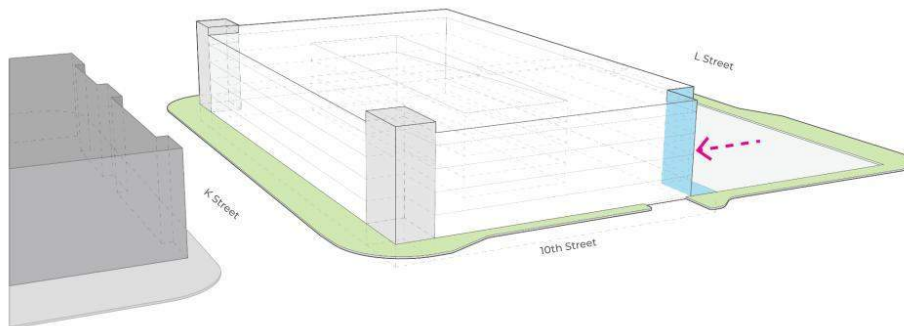
1. Vertical Design:
Similar Footprint to Existing - Match Neighboring Building Height



2. 360 Degree Design:
No "back of building." One Way Traffic on All Sides



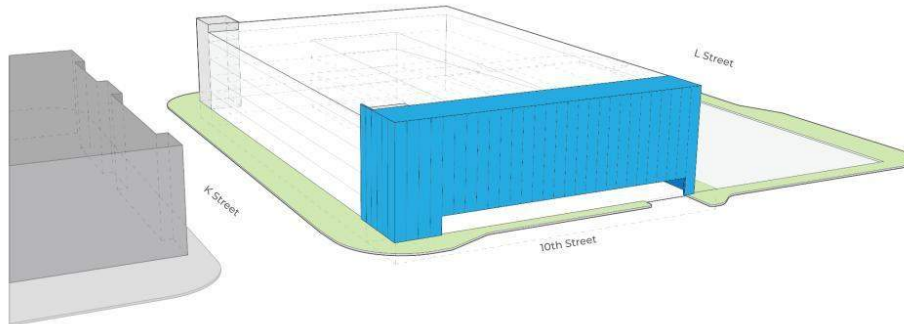
3. Soften Corner:
Remove NE corner to emphasize entry and create usable public space



Design Concept Diagrams

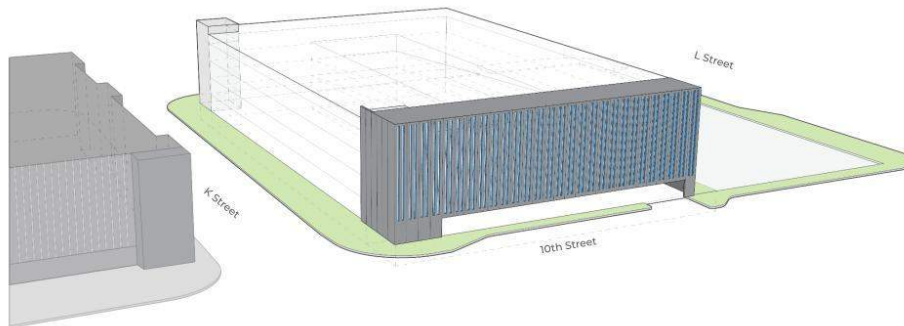
4. Main Entry:

Create prominent entry facade to clearly identify where to enter and exit



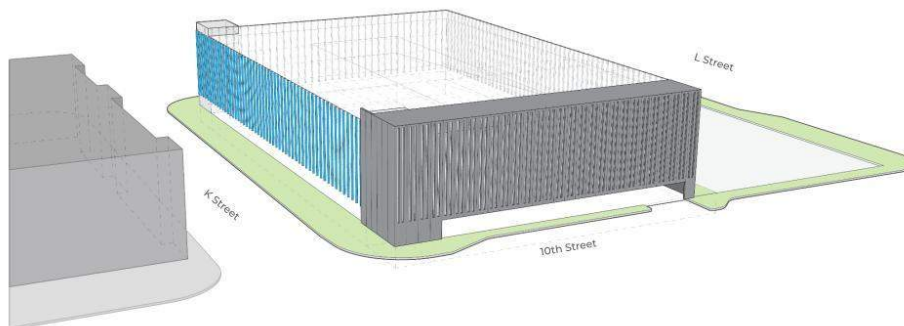
5. Main Entry:

Create openings to match language of campus buildings



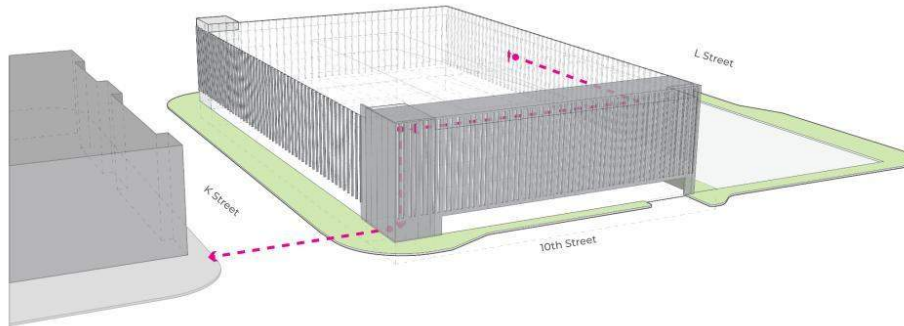
6. Screening 360 design:

Wrap other sides in simple vertical elements that match other campus buildings

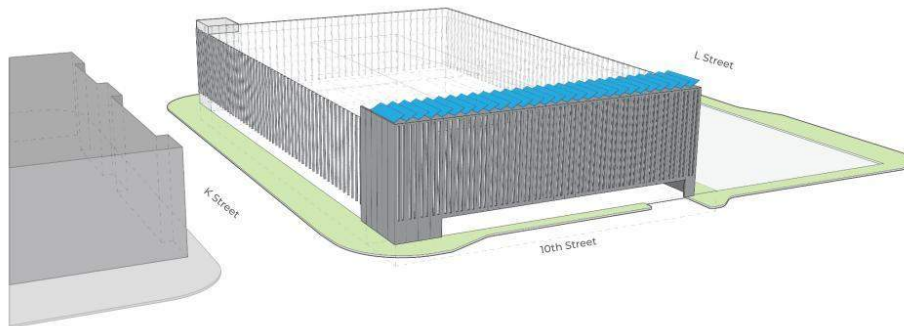


Design Concept Diagrams

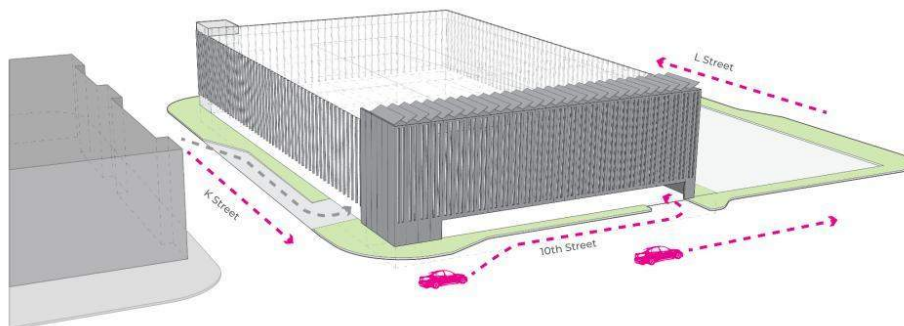
7. Pedestrian Wayfinding:
Main Entry facade Identifies Vertical Circulation, Portal Directs to Destination



8. Solar Panels:
Potential Solar Panel Location and Area

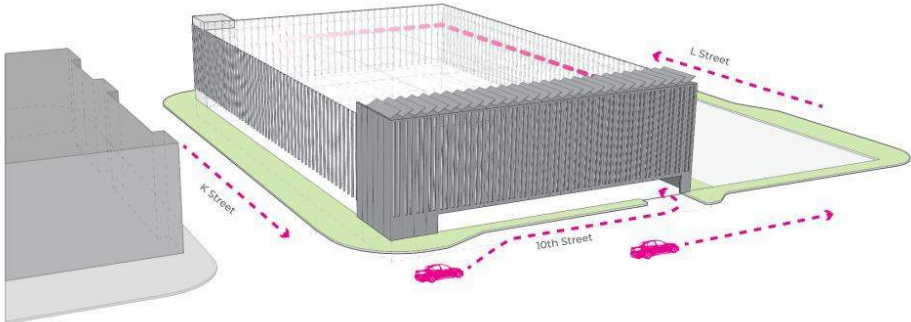


9. Vehicle Access:
Removing K Street entry to simplify entry and exit process

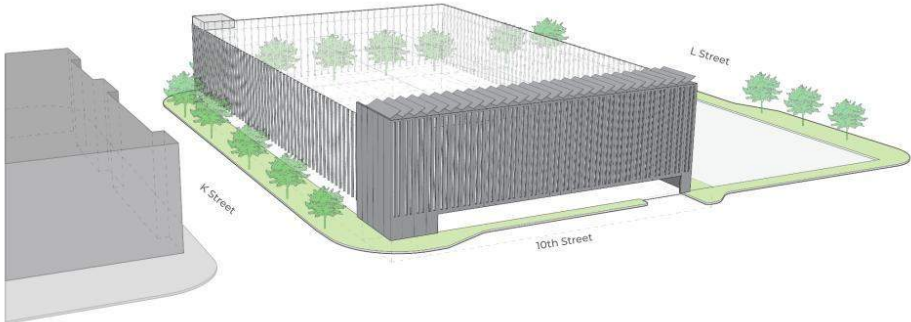


Design Concept Diagrams

10. Vehicle Wayfinding:
Main Entry Mass stands out to simple vertical facade to direct people around to enter and exit



11. Vegetation:
Provide Plantings to Break up Large Mass



Renders

NE Corner



NW Corner



Renders

SW Corner



SE Corner Street View



Renders

Interior 5th Level



NE Corner Street View



Renders

SE Corner Street Night View

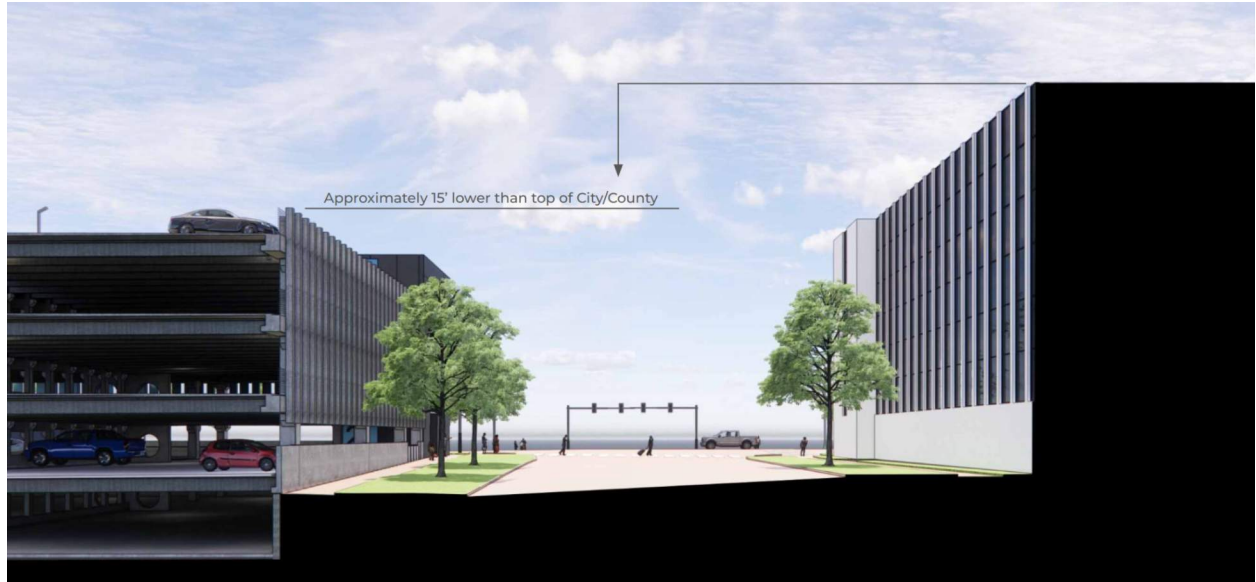


East Elevation



Renders

Schematic Section Through City/County



PBC PARKING GARAGE EXPANSION

425 S 10TH STREET
LINCOLN, NE 68508

BVH PROJECT NO. 24108

SCHEMATIC DESIGN



ARCHITECT
BVH ARCHITECTURE
901 JONES STREET
OMAHA NE 68102
V 402 345 3060
F 402 345 7871
bvh.com

CIVIL ENGINEER
REGA ENGINEERING
601 OLD CHENEY RD A
LINCOLN, NE 68512
V 402 421 2500
regaengineering.com

STRUCTURAL ENGINEER
VOSS & ASSOCIATES
201 N 7TH ST
LINCOLN, NE 68508
V 402 476 6365
voss-assoc.com

MEP ENGINEER
ENGINEERING TECHNOLOGIES, INC.
625 M ST #200
LINCOLN, NE 68508
V 402 476 1273
et-engineers.com

PARKING CONSULTANT
KIMLEY-HORN
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
V 651-845-4197
kimley-horn.com

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

GENERAL

- G1.0 COVER SHEET
- G1.1 LIFE SAFETY AND CODE ANALYSIS
- G1.2 LIFE SAFETY AND CODE ANALYSIS

CIVIL

- C1.2 SITE LAYOUT PLAN

ARCHITECTURAL

- A1.1 LEVEL 01 FLOOR PLAN
- A1.2 LEVEL 02 FLOOR PLAN
- A1.3 LEVEL 03 FLOOR PLAN
- A1.4 LEVEL 04 FLOOR PLAN
- A1.5 LEVEL 05 FLOOR PLAN
- A3.1 BUILDING ELEVATIONS
- A3.2 BUILDING ELEVATIONS

STRUCTURAL

- S1.1 STRUCTURAL DESIGN DATA, GENERAL NOTES, SCHEDULES AND STANDARD DETAILS
- S2.1 STRUCTURAL FIRST LEVEL FOUNDATION PLAN (EXISTING)
- S2.2 STRUCTURAL SECOND LEVEL FRAMING PLAN
- S2.3 STRUCTURAL THIRD LEVEL FRAMING PLAN
- S2.4 STRUCTURAL FOURTH LEVEL FRAMING PLAN
- S2.5 STRUCTURAL FIFTH LEVEL FRAMING PLAN

PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
PROJECT STATUS: SCHEMATIC DESIGN

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CA-0098

COVER SHEET

LIFE SAFETY AND CODE ANALYSIS

PROJECT DESCRIPTION:
THE EXISTING PARKING STRUCTURE IS BEING ADDED ONTO VERTICALLY WITH A THREE FLOOR ADDITION. THE EXISTING STRUCTURE IS MADE UP OF PRECAST STRUCTURAL ELEMENTS. THE NEW ADDITION WILL BE MADE UP OF PRECAST STRUCTURE AND ARCHITECTURAL ELEMENTS. THIS PARKING STRUCTURE IS AN OPEN AIR PARKING STRUCTURE.

APPLICABLE CODES:
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL ENERGY CODE
2012 NFPA LIFE SAFETY CODE
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

IBC CHAPTER 3 / LSC CHAPTER 6 - OCCUPANCY CLASSIFICATION AND USE:
S-2 PARKING GARAGE (ORDINARY STORAGE) - NO SPRINKLER, OPEN AIR GARAGE

IBC CHAPTER 4: SPECIAL REQUIREMENTS
406.2.7 ELECTRIC VEHICLE CHARGING STATIONS - WHERE PROVIDED, ELECTRIC VEHICLE CHARGING STATIONS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70. ELECTRIC VEHICLE CHARGING SYSTEM EQUIPMENT SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 2202. ELECTRIC VEHICLE SUPPLY EQUIPMENT SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 2294. ACCESSIBILITY TO ELECTRIC VEHICLE CHARGING STATIONS SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 11.

406.2.9.1 ELEVATION OF IGNITION SOURCES - EQUIPMENT AND APPLIANCES HAVING AN IGNITION SOURCE AND LOCATED IN HAZARDOUS LOCATIONS AND PUBLIC GARAGES, PRIVATE GARAGES, REPAIR GARAGES, AUTOMOTIVE MOTOR FUEL DISPENSING FACILITIES AND PARKING GARAGES SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18 INCHES ABOVE THE FLOOR SURFACE ON WHICH THE EQUIPMENT OR APPLIANCE RESTS. FOR THE PURPOSE OF THIS SECTION, ROOMS OR SPACES THAT ARE NOT PART OF THE LIVING SPACE OF A DWELLING UNIT AND THAT COMMUNICATE DIRECTLY WITH A PRIVATE GARAGE THROUGH OPENINGS SHALL BE CONSIDERED TO BE PART OF THE PRIVATE GARAGE. EXCEPTION: ELEVATION OF THE IGNITION SOURCE IS NOT REQUIRED FOR APPLIANCES THAT ARE LISTED AS FLAMMABLE VAPOR IGNITION RESISTANT.

406.4.1 GUARDS - GUARDS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1015. GUARDS SERVING AS VEHICLE BARRIERS SHALL COMPLY WITH SECTIONS 406.4.2 AND 1015.

406.4.2 VEHICLE BARRIERS - VEHICLE BARRIERS NOT LESS THAN 2 FEET 9 INCHES IN HEIGHT SHALL BE PLACED WHERE THE VERTICAL DISTANCE FROM THE FLOOR OF A DRIVE LANE OR PARKING SPACE TO THE GROUND OR SURFACE DIRECTLY BELOW IS GREATER THAN 1 FOOT. VEHICLE BARRIERS SHALL COMPLY WITH THE LOADING REQUIREMENTS OF SECTION 1607.9. EXCEPTION: VEHICLE BARRIERS ARE NOT REQUIRED IN VEHICLE STORAGE COMPARTMENTS IN A MECHANICAL ACCESS PARKING GARAGE.

406.4.3 RAMPS - VEHICLE RAMPS SHALL NOT BE CONSIDERED AS REQUIRED EXITS UNLESS PEDESTRIAN FACILITIES ARE PROVIDED. VEHICLE RAMPS THAT ARE UTILIZED FOR VERTICAL CIRCULATION AS WELL AS FOR PARKING SHALL NOT EXCEED A SLOPE OF 1:15.

406.5 OPEN PARKING GARAGES - OPEN PARKING GARAGES SHALL COMPLY WITH SECTION 406.2, 406.4, 406.5.

406.5.2 OPENINGS - FOR NATURAL VENTILATION PURPOSES, THE EXTERIOR SIDE OF THE STRUCTURE SHALL HAVE UNIFORMLY DISTRIBUTED OPENINGS ON TWO OR MORE SIDES. THE AREA OF SUCH OPENINGS IN EXTERIOR WALLS ON A TIER SHALL BE NOT LESS THAN 20 PERCENT OF THE TOTAL PERIMETER WALL AREA OF EACH TIER. THE AGGREGATE LENGTH OF THE OPENINGS CONSIDERED TO BE PROVIDING NATURAL VENTILATION SHALL BE NOT LESS THAN 40 PERCENT OF THE PERIMETER OF THE TIER. INTERIOR WALLS SHALL NOT BE LESS THAN 20 PERCENT OPEN WITH UNIFORMLY DISTRIBUTED OPENINGS. EXCEPTION: OPENINGS ARE NOT REQUIRED TO BE DISTRIBUTED OVER 40 PERCENT OF THE BUILDING PERIMETER WHERE THE REQUIRED OPENINGS ARE UNIFORMLY DISTRIBUTED OVER TWO OPPOSING SIDES OF THE BUILDING.

406.5.2.1 OPENINGS BELOW GRADE - WHERE OPENINGS BELOW GRADE PROVIDE REQUIRED NATURAL VENTILATION, THE OUTSIDE HORIZONTAL CLEAR SPACE SHALL BE ONE AND ONE-HALF TIMES THE DEPTH OF THE OPENING. THE WIDTH OF THE HORIZONTAL CLEAR SPACE SHALL BE MAINTAINED FROM GRADE DOWN TO THE BOTTOM OF THE LOWEST REQUIRED OPENING.

406.5.4 AREA AND HEIGHT - AREA AND HEIGHT OF OPEN PARKING GARAGES SHALL BE LIMITED AS SET FORTH IN CHAPTER 5 FOR GROUP S-2 OCCUPANCIES AS FURTHER PROVIDED IN SECTION 508.1.

406.5.4.1 SINGLE USE - WHERE THE OPEN PARKING GARAGE IS USED EXCLUSIVELY FOR THE PARKING OR STORAGE OF PRIVATE MOTOR VEHICLES, AND THE BUILDING IS WITHOUT OTHER USES, THE AREA AND HEIGHT SHALL BE PERMITTED TO COMPLY WITH TABLE 406.5.4, ALONG WITH INCREASES ALLOWED BY SECTION 406.5.5.

406.5.4.1 SINGLE USE - TABLE 406.5.4

406.5.5 AREA AND HEIGHT INCREASES - GARAGES WITH SIDES OPEN ON THREE-FOURTHS OF THE BUILDING'S PERIMETER ARE PERMITTED TO BE INCREASED BY 25 PERCENT IN AREA AND ONE TIER IN HEIGHT.

406.5.6 FIRE SEPARATION DISTANCE - EXTERIOR WALLS AND OPENINGS IN EXTERIOR WALLS SHALL COMPLY WITH TABLES 601 AND 602. THIS DISTANCE TO AN ADJACENT LOT LINE SHALL BE DETERMINED IN ACCORDANCE WITH TABLE 602 AND SECTION 705.

406.5.7 MEANS OF EGRESS - WHERE PERSONS OTHER THAN PARKING ATTENDANTS ARE PERMITTED, OPEN PARKING GARAGES SHALL MEET THE MEANS OF EGRESS REQUIREMENTS OF CHAPTER 10. WHERE PERSONS OTHER THAN PARKING ATTENDANTS ARE NOT PERMITTED, THERE SHALL BE NOT FEWER THAN TWO EXIT STAIRWAYS, EACH EXIT STAIRWAY SHALL BE NOT LESS THAN 36 INCHES IN WIDTH. LIFTS SHALL BE PERMITTED TO BE INSTALLED FOR USE OF EMPLOYEES ONLY, PROVIDED THAT THEY ARE COMPLETELY ENCLOSED BY NONCOMBUSTIBLE MATERIALS.

406.5.8 STANDPIPE SYSTEM - AN OPEN PARKING GARAGE SHALL BE EQUIPPED WITH A STANDPIPE SYSTEM AS REQUIRED BY SECTION 905.3.

406.5.9 ENCLOSURE OF VERTICAL OPENINGS - ENCLOSURE SHALL NOT BE REQUIRED FOR VERTICAL OPENINGS EXCEPT AS SPECIFIED IN SECTION 406.5.7.

IBC CHAPTER 5: GENERAL BUILDING HEIGHT AND AREAS

SECTION 504 - BUILDING HEIGHT AND NUMBER OF STORIES

LEVEL	OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION	SPRINKLERS COVERAGE	STORY LIMITATION		HEIGHT LIMITATION (FT)	
				ALLOWABLE (TABLE 504.4)	ACTUAL (TABLE 504.3)	ALLOWABLE	ACTUAL
2 TO 5	S-2	S.A.	(NO)	5	4	65'	48'
LOWER	S-2	S.A.	(NO)	#	#	#	#

SECTION 506 - BUILDING AREA (TABLE 506.2) - SEE SECTION 406.5.5

LEVEL	OCC. CLASS	TYPE OF CONSTRUCTION	SPRINKLERS COVERAGE	ALLOWABLE AREA (SF)	ALLOWABLE PERMITS (SF)	BUILDING PERMITS (SF)	PUBLICWAY FRONTAGE (FT)	ALLOWABLE INCREASE PER 406.5.5	ACTUAL BUILDING AREA (SF)	
										PERMITS (SF)
5								62,500	53,510	
4								62,500	53,510	
3	S-2	S.A.	(NO)	39,000	967'-0"	967'-0"	NA	NA	62,500	53,510
2								62,500	53,510	
LOWER	S-2	S.A.	(NO)	39,000	967'-0"	967'-0"	NA	NA	62,500	54,960
TOTAL ACTUAL BUILDING GROSS SF = 263,200										

SECTION 508 - MIXED OCCUPANCIES

508.2 ACCESSORY OCCUPANCIES

508.2.3.5.4 - NO SEPARATION BETWEEN PRIMARY AND ACCESSORY OCCUPANCIES IF < 10% PER STORY AND NOT TO EXCEED HIS TABLE VALUE.

TABLE 508.4 - SEPARATED OCCUPANCIES

SECTION 509 - INCIDENTAL USE
TABLE 509 - 1 HR FIRE BARRIER PROVIDED AT THESE INCIDENTAL USES:

ELECTRICAL INSTALLATIONS
STATIONARY BATTERY STORAGE (IF PV AND EV SYSTEMS PART OF PROJECT)

SECTION 510 - SPECIAL PROVISIONS

1. NONE

IBC TABLE 601 - FIRE RESISTANCE RATING REQUIREMENTS:

"GRIER DESCRIPTION OF PRIMARY CONSTRUCTION"
FIRE-RESISTANCE RATING WILL COMPLY WITH REQUIREMENTS OUTLINED BELOW (IBC TABLE 601):

BUILDING ELEMENT	CONSTRUCTION TYPE	#A - 1ST TO 5TH FLOOR	
		PRIMARY STRUCTURAL FRAME	1 HR
BEARING WALLS	EXTERIOR	1 HR	
	INTERIOR	1 HR	
NONBEARING WALLS & PARTITIONS	EXTERIOR	0 HR	OR BASED ON TABLE 602)
	INTERIOR	0 HR	
FLOOR CONSTRUCTION		1 HR	
ROOF CONSTRUCTION		1 HR	
ROOF COVERING CLASS		REQUIRED: B	PROVIDED: B
TABLE 1505.1			

IBC TABLE 602 - FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE + K (FEET)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP I, M, S, U	OCCUPANCY GROUP A, B, E, F, L, S, U, U-L
X < 4	ALL	2	1
5.5 X + 10	OTHERS	1	1
10 X + 30	A, B, UB	0	0
	UB, UB	0	0
X < 30	ALL	0	0

IBC CHAPTER 7: FIRE AND SMOKE PROTECTION FEATURES

BUILDING ELEMENT	CODE	TYPE OF ASSEMBLY	ASSEMBLY FIRE RATING		OPENING FIRE RATING (SECTION 716)	
			REQUIRED	PROVIDED	REQUIRED	PROVIDED
OCCUPANCY SEPARATION	SECTION 508.4	FIRE BARRIER	SEE 508.4 NOTES		1.12 HR	1.12 HR
RESIDENTIAL USE SEPARATION	SECTION 508	FIRE BARRIER	1 HR		1.12 HR	1.12 HR
FIRE WALL	SECTION 702.2	FIRE WALL	2 HR		1.12 HR	1.12 HR
SHAFTS ENCLOSURES	SECTION 713	FIRE BARRIERS AND/OR HORIZONTAL ASSEMBLIES	2 HR	2 HR	1.12 HR	1.12 HR
DWELLING UNITS SEPARATION (PER SECTION 405.2)	SECTION 708.3	FIRE PARTITIONS	1 HR	1 HR	3/4 HR	3/4 HR
CORRIDORS	TABLE 1003.1	XX	1 HR	1 HR	1/2 HR	1/2 HR
EXITS STAIRWAYS ENCLOSURES (# OF STORES)	SECTION 1023	FIRE BARRIERS AND/OR HORIZONTAL ASSEMBLIES	2 HR	2 HR	1.12 HR	1.12 HR

IBC 705.1 - EXTERIOR WALLS

705.2 MINIMUM DISTANCE OF PROJECTION
FSD = 0-2" MIN DISTANCE = NOT PERMITTED
FSD = 2-3" MIN DISTANCE = 2-4"
FSD = 3-5" MIN DISTANCE = 2-4" + 8" FOR EVERY FOOT OF FSD BEYOND 3"
FSD = 5-6" MIN DISTANCE = 4-0"

705.2.1 TYPES I AND II CONSTRUCTION, PROJECTIONS FROM WALLS OF TYPE I OR II CONSTRUCTION SHALL BE OF NONCOMBUSTIBLE MATERIALS OR COMBUSTIBLE MATERIALS ALLOWED BY SECTIONS 705.2.3.1 AND 705.2.4.

IBC TABLE 705.8 - MAX AREA OF EXTERIOR OPENINGS

NOTE (g)

705.8.4 - EXCEPTION 3

IBC CHAPTER 8: INTERIOR FINISHES

INTERIOR WALL AND CEILING FINISHES WILL COMPLY WITH REQUIREMENTS FOR GROUP XX (SPRINKLERED/UNSPRINKLERED) BUILDING (IBC TABLE 803.1.3):

- INTERIOR EXIT STAIRWAYS, RAMPS, AND PASSAGEWAYS CLASS [B]
- CORRIDORS AND ENCLOSURES FOR EXIT ACCESS STAIRWAYS AND RAMPS CLASS [B]
- ROOMS AND ENCLOSED SPACES CLASS [C]

NOTE ANY PROJECT SPECIFIC REQUIREMENTS FOUND IN CHAPTER 8

IBC CHAPTER 9: FIRE PROTECTION SYSTEMS

901.7 NOTE USE OF FIRE AREAS AND REQUIREMENTS IF BUILDING IS NS
905 NOTE ANY SPECIFIC RELEVANT CODE REQUIREMENTS, GROUP R, ETC.)
905 NOTE IF STANDPIPE IS REQUIRED/PROVIDED
907 NOTE ANY SPECIFIC FIRE ALARM REQUIREMENTS BASED ON GROUP

IBC TABLE 906.3(1) & NFPA 10.6.2.1.1 PORTABLE FIRE EXTINGUISHERS WILL BE DISTRIBUTED SUCH THAT OCCUPANTS SHALL TRAVEL A MAXIMUM DISTANCE OF 75 FT TO REACH AN EXTINGUISHER.

IBC CHAPTER 10 / NFPA CHAPTER 7: MEANS OF EGRESS & CHAPTER 11-43 LSC

TABLE 1004.4 OCCUPANT LOADS DERIVED FROM MAXIMUM FLOOR AREA ALLOWED PER OCCUPANT. SEE OCCUPANT LOAD SCHEDULE.
SEE SCHEDULES PROVIDED FOR TOTALS AND EXITING PATHS.

IBC TABLE 1004.1.1 / NFPA TABLE 7.3.1.2 - OCCUPANT LOAD FACTOR:

SEE OCCUPANT LOAD SCHEDULE

IBC 1005 / NFPA 7.3.3.1.1 - EGRESS WIDTHS:
EGRESS COMPONENTS (DOORS + CORRIDORS): 0.2" OCCUPANT STAIRWAYS: 0.3" OCCUPANT MINIMUM STAIR WIDTH PROVIDED= ##" (IBC 1011.2 & NFPA 7.2.2.2.1.2(B))
MIN EGRESS DOOR WIDTH = 32" (NFPA 7.2.1.2.3.2), PROVIDED ##"

IBC SECTION 1009 - ACCESSIBLE MEANS OF EGRESS:

NOTE ANY SPECIAL ACCESSIBLE MEANS OF EGRESS REQUIREMENTS, INCLUDING FOR ELEVATORS AND GROUP R OCCUPANCY TYPES

IBC TABLE 1006.2.1 & LSC 11-43) MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE:

S-2 75 FEET (100 MAX OCC 2)

IBC TABLE 1617.2 & LSC 11-43) MAXIMUM EXIT ACCESS TRAVEL DISTANCE:

S-2 300 FEET
REFER TO TRAVEL DISTANCE ROUTE SCHEDULE.

1017.3 - EXCEPTION: IN OPEN PARKING GARAGES, EXIT ACCESS TRAVEL DISTANCE IS PERMITTED TO BE MEASURED FROM THE CLOSEST RISER OF AN EXIT ACCESS STAIRWAY OR THE CLOSEST SLOPE OF AN EXIT ACCESS RAMP.

NFPA CHAPTER 11-43)

NOTE SPECIAL MEANS OF EGRESS REQUIREMENTS

IBC TABLE 1020 - CORRIDORS:

1020.1 OCC CLASS S-2 + 1 HR FIRE PARTITIONS REQUIRED FOR BUILDINGS EQUIPPED THROUGHOUT WITHOUT/AN AUTOMATIC SPRINKLER SYSTEM. 1 PROVIDED.

1020.2 MINIMUM CORRIDOR WIDTH = 44 INCHES

1020.4 & LSC 11-43) DEAD ENDS:
OCC CLASS S-2 + 20" MAX DEAD END

DETERMINE IBC CHAPTER 11 ACCESSIBILITY REQUIREMENTS

IBC SECTION 1XX - DESCRIPTION:

NOTES:

DETERMINE IBC CHAPTER 14 EXTERIOR WALL CONSTRUCTION REQUIREMENTS

IBC SECTION 14XX - DESCRIPTION:

NOTES:

DETERMINE IBC CHAPTER 26 REQUIREMENTS

IBC SECTION 26XX - DESCRIPTION:

NOTES:

DETERMINE IBC CHAPTER 24 GLASS AND GLAZING SPECIAL REQUIREMENTS

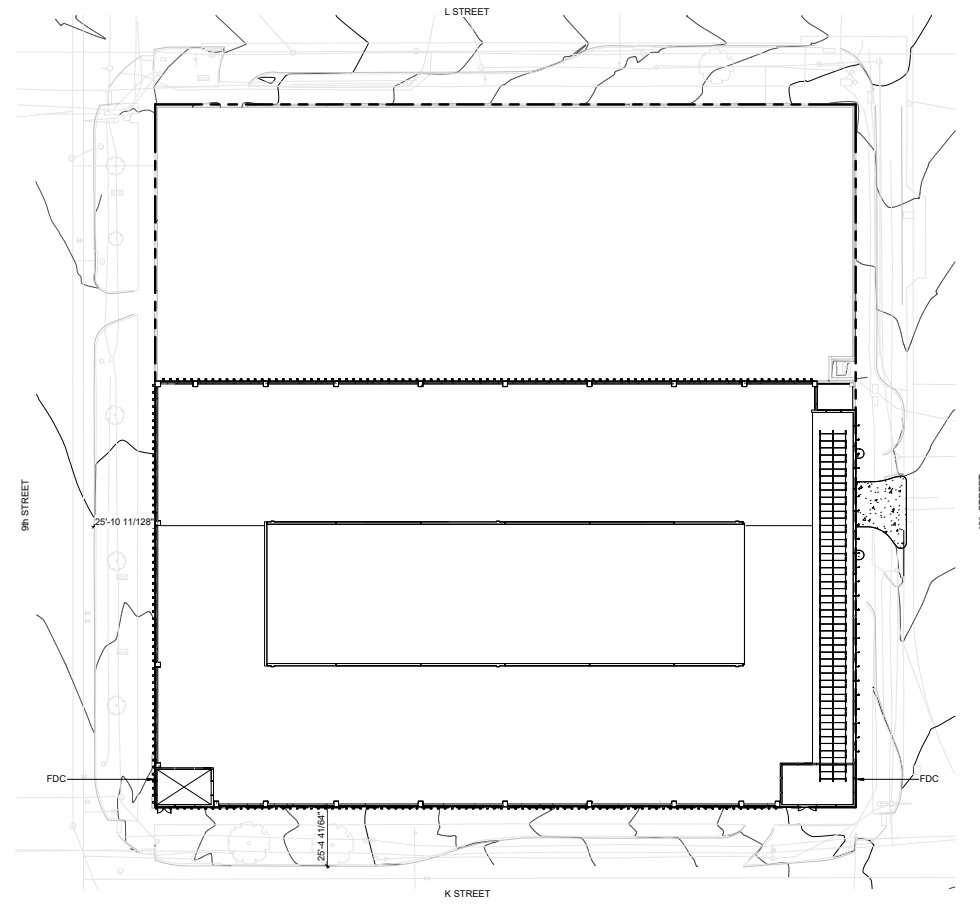
IBC SECTION 24XX - DESCRIPTION:

NOTES:

DETERMINE IBC CHAPTER 30 ELEVATOR SPECIAL REQUIREMENTS

IBC SECTION 30XX - DESCRIPTION:

NOTES:



3 SITE PLAN - LIFE SAFETY
1" = 30'-0"



ARCHITECT
BVH ARCHITECTURE
440 N 8TH ST STE 100
LINCOLN, NE 68508
V 402 475 4551
F 402 475 0226
bvh.com

CIVIL ENGINEER
REGA ENGINEERING
601 OLD CHENEY RD A
LINCOLN, NE 68512
V 402 421 2500
regaeengineering.com

STRUCTURAL ENGINEER
VOSS & ASSOCIATES
201 N 77th ST
LINCOLN, NE 68508
V 402 476 6365
voss-assoc.com

MEP ENGINEER
ENGINEERING TECHNOLOGIES, INC.
825 M ST #200
LINCOLN, NE 68508
V 402 476 1273
et-engineers.com

PARKING CONSULTANT
KIMLEY-HORN
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
V 651 945-4197
kimley-horn.com

REVISIONS SCHEDULE		
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PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
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LIFE SAFETY AND CODE ANALYSIS

LIFE SAFETY PLAN LEGEND

WALL ASSEMBLY LISTINGS

- WALL - 1HR RATED
- WALL - 2HR RATED
- WALL - 3HR RATED
- WALL - FIRE BARRIER
- WALL - FIRE PARTITION
- WALL - SMOKE BARRIER
- WALL - SMOKE PARTITION

EGRESS SYMBOL

- XXX OCCUPANT LOAD
- DIRECTION OF EGRESS

CODE IBC TAGS

- STAIR OCCUPANT LOAD
- XXX STAIR WIDTH REQUIRED
- XXX STAIR WIDTH PROVIDED

- IBC FUNCTION OF SPACE
- XXX OCCUPANCE USE CLASSIFICATION
- XXX SPACE SQUARE FOOTAGE AND OCCUPANCY LOAD FACTOR
- XXX OCCUPANT LOAD

- DOOR NUMBER
- DOOR FIRE RATING (MINUTES)
- DOOR OCCUPANT LOAD
- DOOR WIDTH REQUIRED
- DOOR WIDTH PROVIDED
- DOOR OCCUPANT CAPACITY

INCIDENTAL OR ACCESSORY USE



TRAVEL DISTANCES

ROUTE NAME	DISTANCE	EXIT LOAD	NOTES
LEVEL 1 ROUTE 1	222'-0"	<varies>	
LEVEL 1 ROUTE 2	221'-0"	<varies>	
LEVEL 1 ROUTE 3	212'-0"	<varies>	
LEVEL 2 ROUTE 1	269'-6"	<varies>	
LEVEL 2 ROUTE 2	252'-0"	<varies>	
LEVEL 3 ROUTE 1	269'-6"	<varies>	
LEVEL 3 ROUTE 2	252'-0"	<varies>	
LEVEL 4 ROUTE 1	269'-6"	<varies>	
LEVEL 4 ROUTE 2	252'-0"	<varies>	
LEVEL 5 ROUTE 1	269'-6"	<varies>	
LEVEL 5 ROUTE 2	252'-0"	<varies>	

OCCUPANT LOAD SCHEDULE

FUNCTION OF SPACE	AREA	OCC LOAD FACTOR	OCC LOAD	GROSSNET
LEVEL 01				
PARKING GARAGE	51,637 SF	200	259	Gross
STORAGE, MECHANICAL	286 SF	300	2	Gross
	51,926 SF		261	
LEVEL 02				
PARKING GARAGE	47,469 SF	200	238	Gross
	47,469 SF		238	
LEVEL 03				
PARKING GARAGE	51,746 SF	200	259	Gross
	51,746 SF		259	
LEVEL 04				
PARKING GARAGE	51,738 SF	200	259	Gross
	51,738 SF		259	
LEVEL 05				
PARKING GARAGE	45,684 SF	200	229	Gross
	45,684 SF		229	
TOTAL:	248,563 SF		1246	

9 INCH SCALE 3" = 1'-0"

12 INCH SCALE 1 1/2" = 1'-0"

3 FEET SCALE 1" = 3'-0"

12 FEET SCALE 1" = 3'-0"

3 FEET SCALE 3/4" = 1'-0"

5 FEET SCALE 1/2" = 1'-0"

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

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

10 FEET SCALE 1" = 1'-0"

20 FEET SCALE 1/2" = 1'-0"

5 FEET SCALE 1/8" = 1'-0"

45 FEET SCALE 1/8" = 1'-0"

35 FEET SCALE 1/8" = 1'-0"

25 FEET SCALE 1/8" = 1'-0"

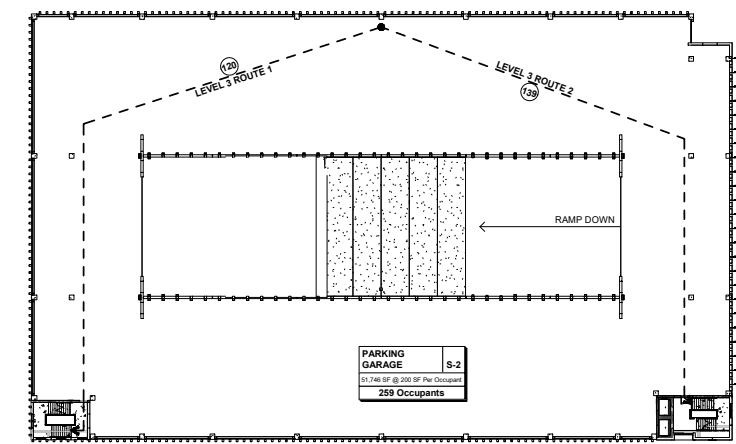
15 FEET SCALE 1/8" = 1'-0"

5 FEET SCALE 1/8" = 1'-0"

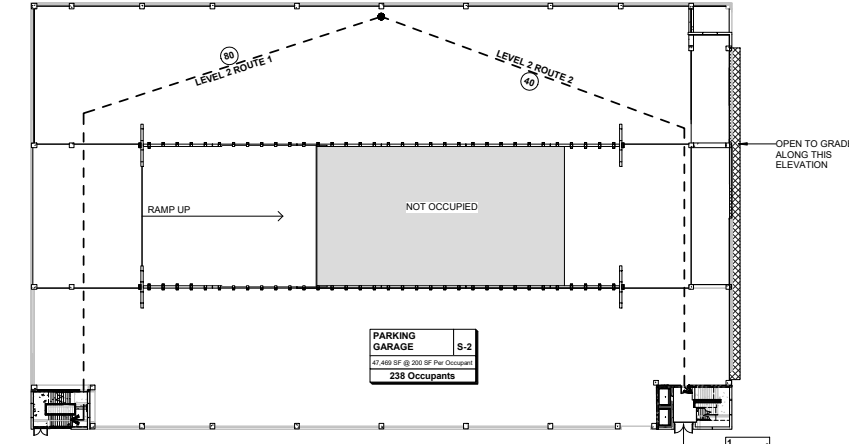
30 FEET SCALE 3/32" = 1'-0"

5 FEET SCALE 3/32" = 1'-0"

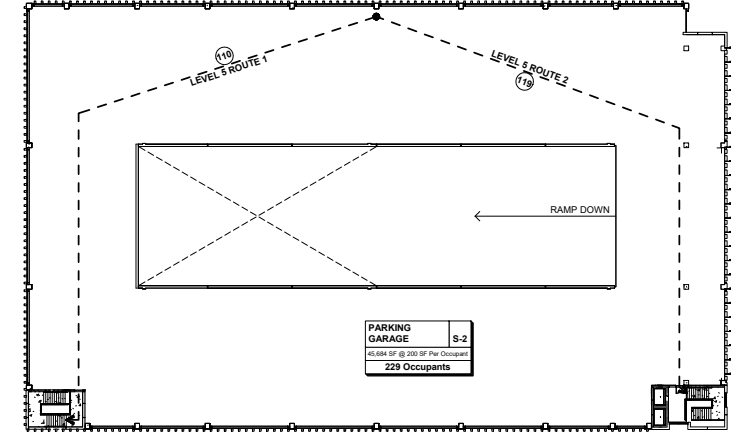
4/25/23 13:34:11



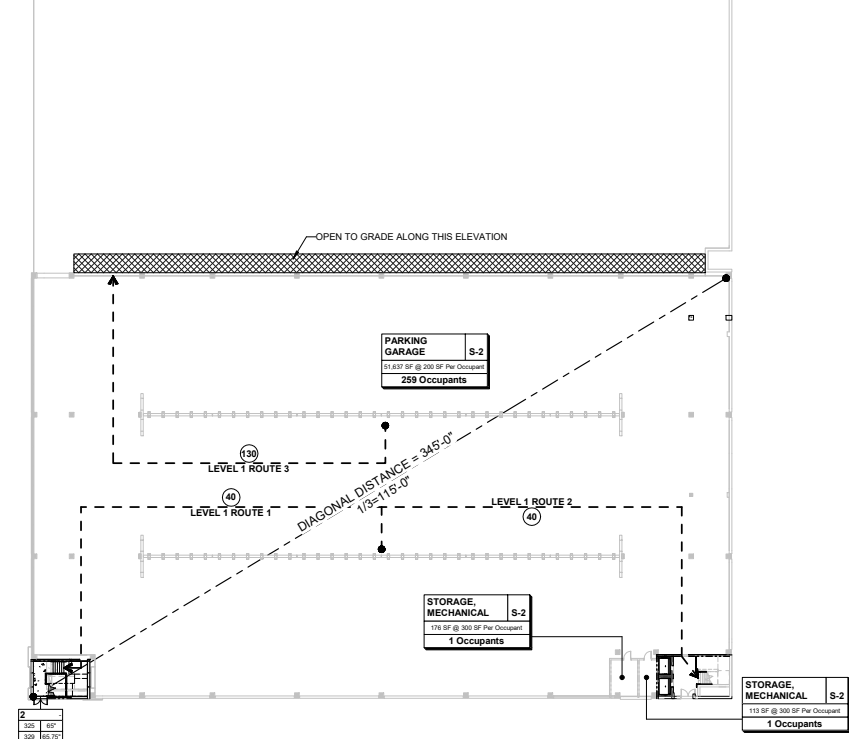
3 THIRD FLOOR
 1" = 3'-0"



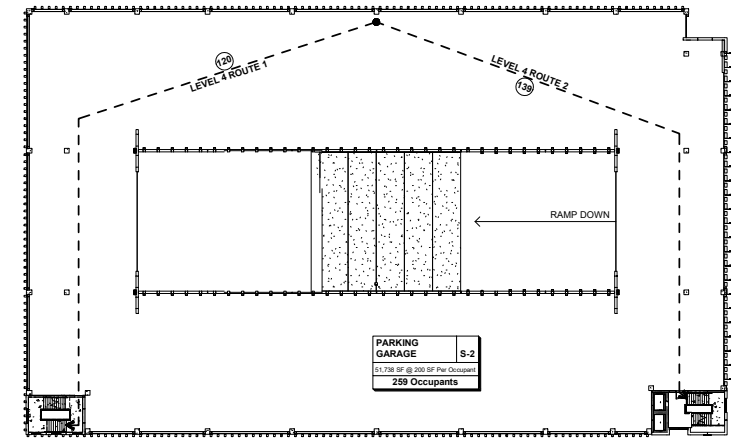
2 SECOND FLOOR
 1" = 3'-0"



5 FIFTH FLOOR
 1" = 3'-0"



1 FIRST FLOOR
 1" = 3'-0"



4 FOURTH FLOOR
 1" = 3'-0"

REVISIONS SCHEDULE

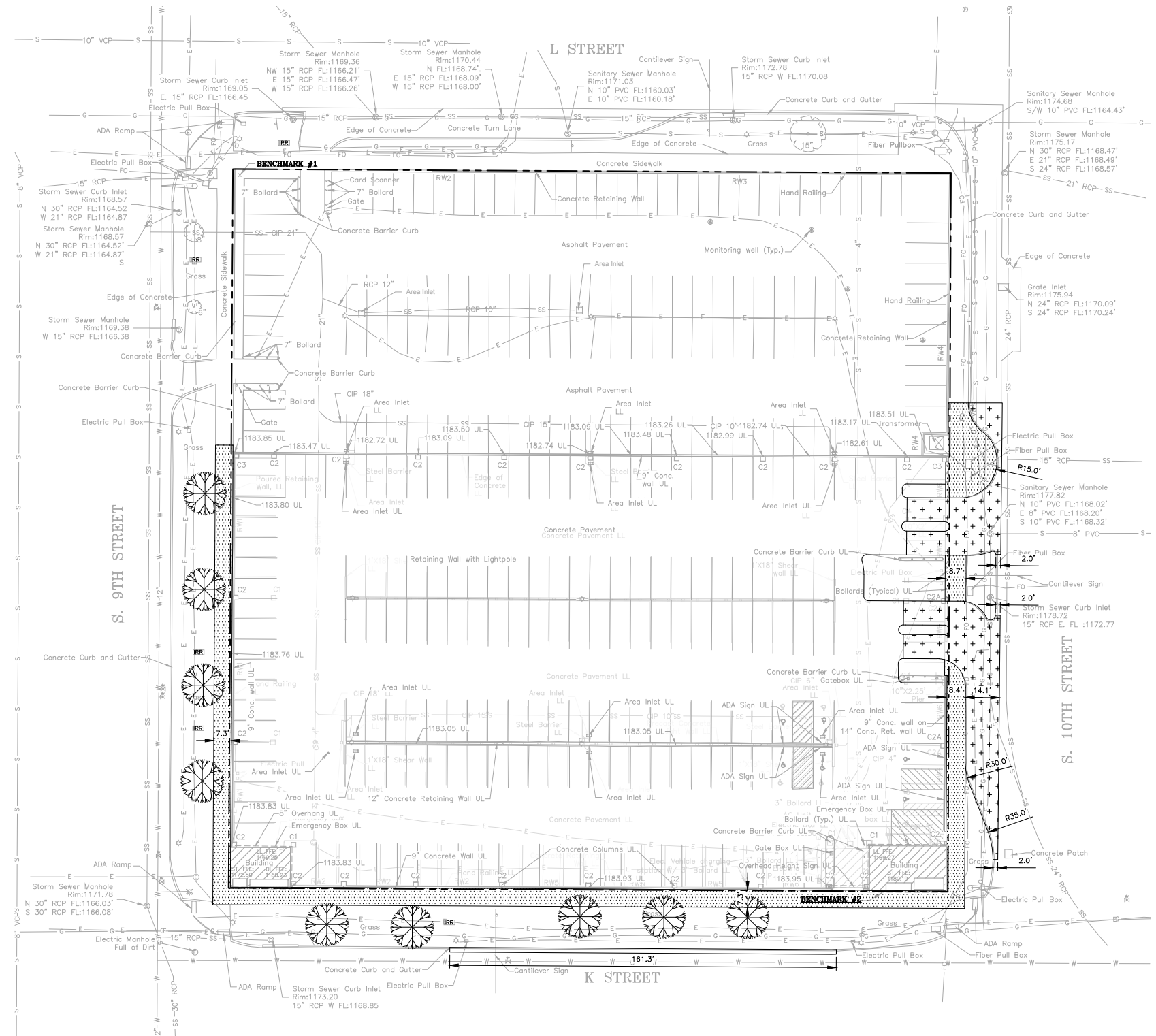
MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN



LIFE SAFETY AND CODE ANALYSIS

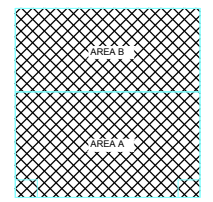


LEGEND

- 8" CONCRETE PAVEMENT
- 5" SIDEWALK PAVEMENT
- PROPERTY LINE
- PROPOSED TREES

REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION



PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 03-31-2025
 PROJECT STATUS: PROJECT STATUS

SITE LAYOUT PLAN
 SCALE: 1" = 20'-0"

BENCHMARK

BENCHMARK#1 CUT "X" NW CORNER OF PROJECT, 2.05' EAST OF EAST EDGE OF EXISTING SIDEWALK, 2.45' SOUTH OF SOUTH EDGE OF EXISTING SIDEWALK; ELEVATION OF 1169.70
 BENCHMARK#2 CUT "X" SE CORNER OF PROJECT, 1' SOUTH OF SOUTH FACE OF BUILDING, 2' WEST OF SOUTH EXIT IN SIDEWALK; ELEVATION 1180.05



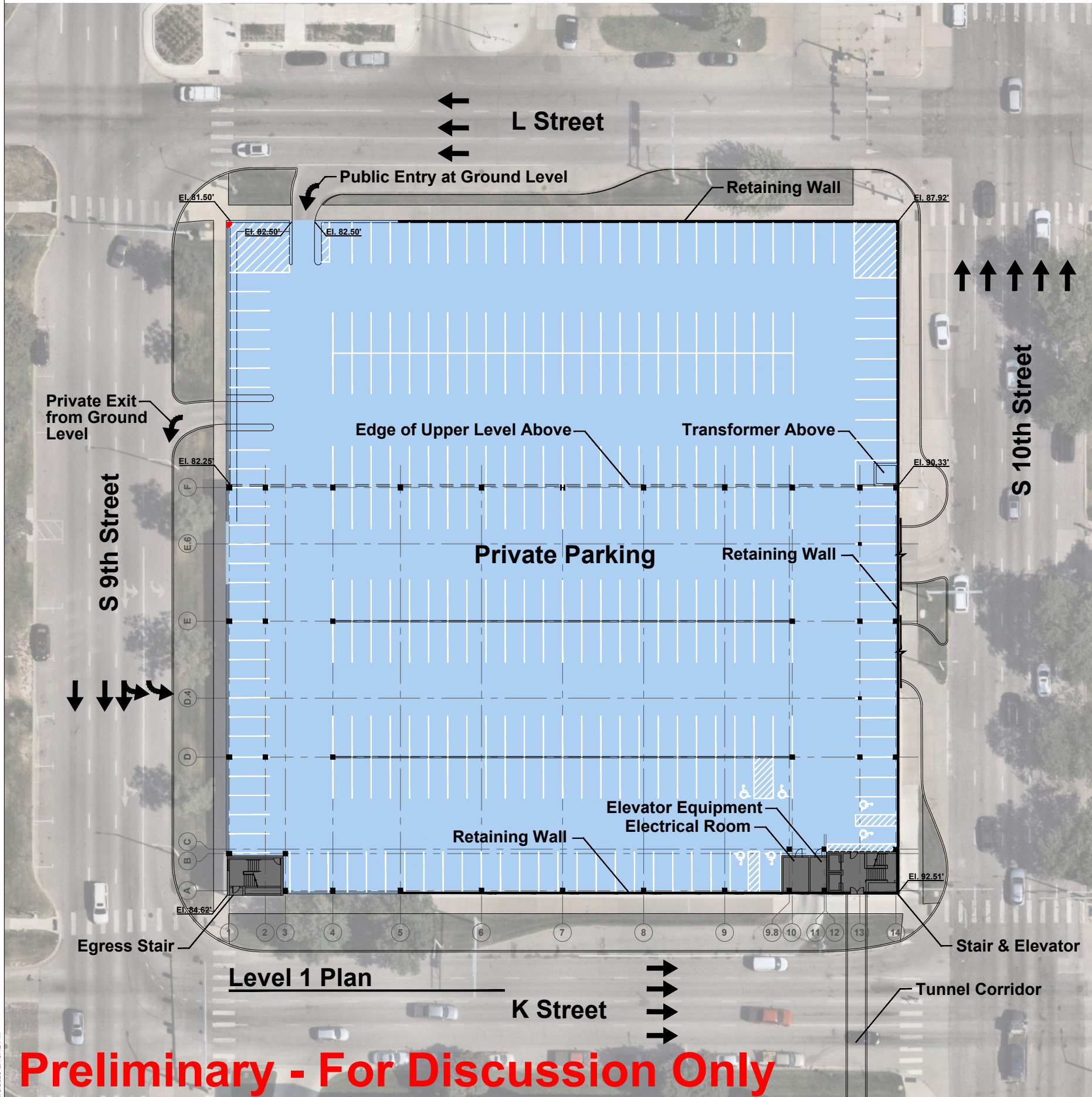
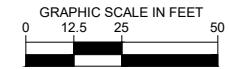
REGA #251003

ISSUED FOR:	DATE:
X	03/XX/2025

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 LINCOLN, NEBRASKA 68512
 (402).484.7342
 ● ENGINEERING
 ● PLANNING
 ● LANDSCAPE ARCHITECTURE
 ● LAND SURVEYING
 ● IRRIGATION
 REGA CA#1678



SITE LAYOUT PLAN



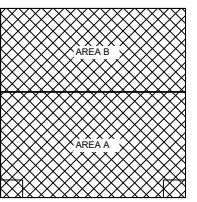
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 SCALE 3/32" = 1'-0"
 SCALE 1/16" = 1'-0"
 SCALE 1/8" = 1'-0"
 SCALE 1/4" = 1'-0"
 SCALE 1/2" = 1'-0"
 SCALE 3/4" = 1'-0"
 SCALE 1-1/2" = 1'-0"
 SCALE 3" = 1'-0"
 3/6/2025 2:18:42 PM

- Public Parking
- Private Parking
- (All Stalls 8'-6" Wide)

Desired Parking Stalls:
 Public Parking = 227
 Private Parking = 688
 Total = 915

Parking Stall Tabulation					
Level	Public	Private	ADA	EV	Total
5	0	157	3	0	160
4	0	174	4	0	178
3	82	92	4	0	178
2	149	0	3	0	152
1	0	292	6	0	298
Total	231	715	20	0	966

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION



PBC PARKING GARAGE EXPANSION

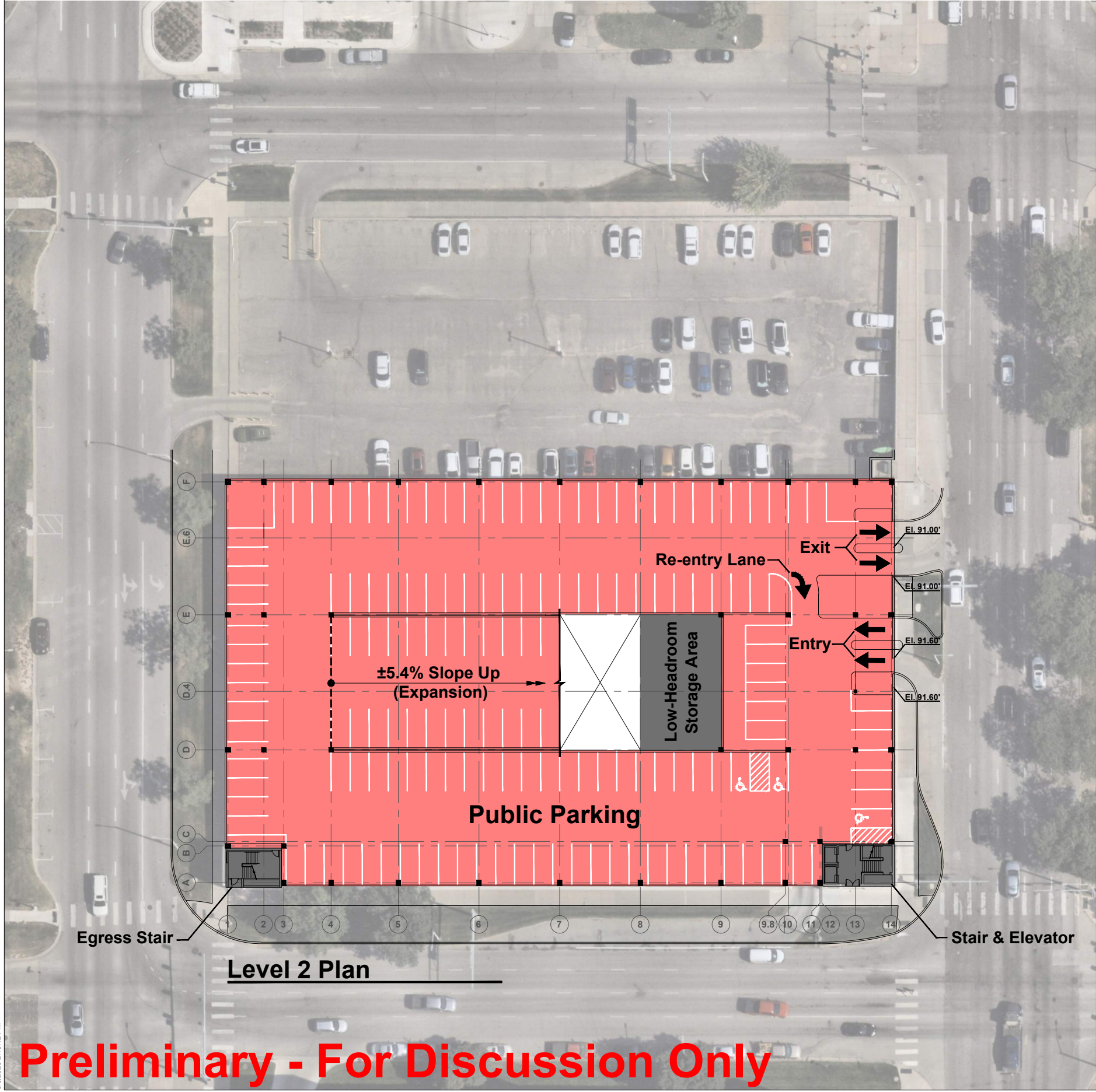
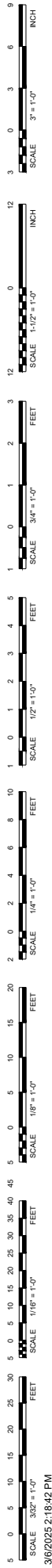
PROJECT: 24108 DATE: DATE
 PROJECT STATUS: PROJECT STATUS



LEVEL 01 FLOOR PLAN

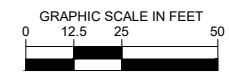
Preliminary - For Discussion Only

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Level 2 Plan

Preliminary - For Discussion Only



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BVH ARCHITECTURE
440 N 8TH ST STE 100
LINCOLN, NE 68508
V 402 475 4551
F 402 475 0225
bvh.com

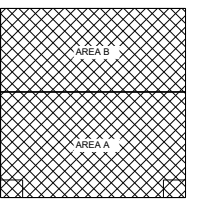
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V 402 421 2500
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STRUCTURAL ENGINEER
VOSS & ASSOCIATES
321 N 77th ST
LINCOLN, NE 68508
V 402 476 6365
voss-assoc.com

MEP ENGINEER
ENGINEERING TECHNOLOGIES, INC.
825 M ST #200
LINCOLN, NE 68508
V 402 476 1273
et-engineers.com

PARKING CONSULTANT
KIMLEY-HORN
707 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
V 651-645-4197
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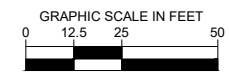


LEVEL 02 FLOOR PLAN



A1.2

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 BVH ARCHITECTURE
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 LINCOLN NE 68508
 V 402 475 4551
 F 402 475 0225
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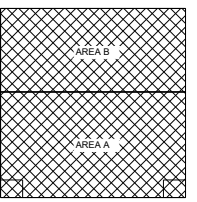
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STRUCTURAL ENGINEER
 VOSS & ASSOCIATES
 321 N 7TH ST
 LINCOLN, NE 68508
 V 402 476 6365
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MEP ENGINEER
 ENGINEERING TECHNOLOGIES, INC.
 825 M ST #200
 LINCOLN, NE 68508
 V 402 476 1273
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PARKING CONSULTANT
 KIMLEY-HORN
 707 EUSTIS STREET, SUITE 100
 ST. PAUL, MN 55114
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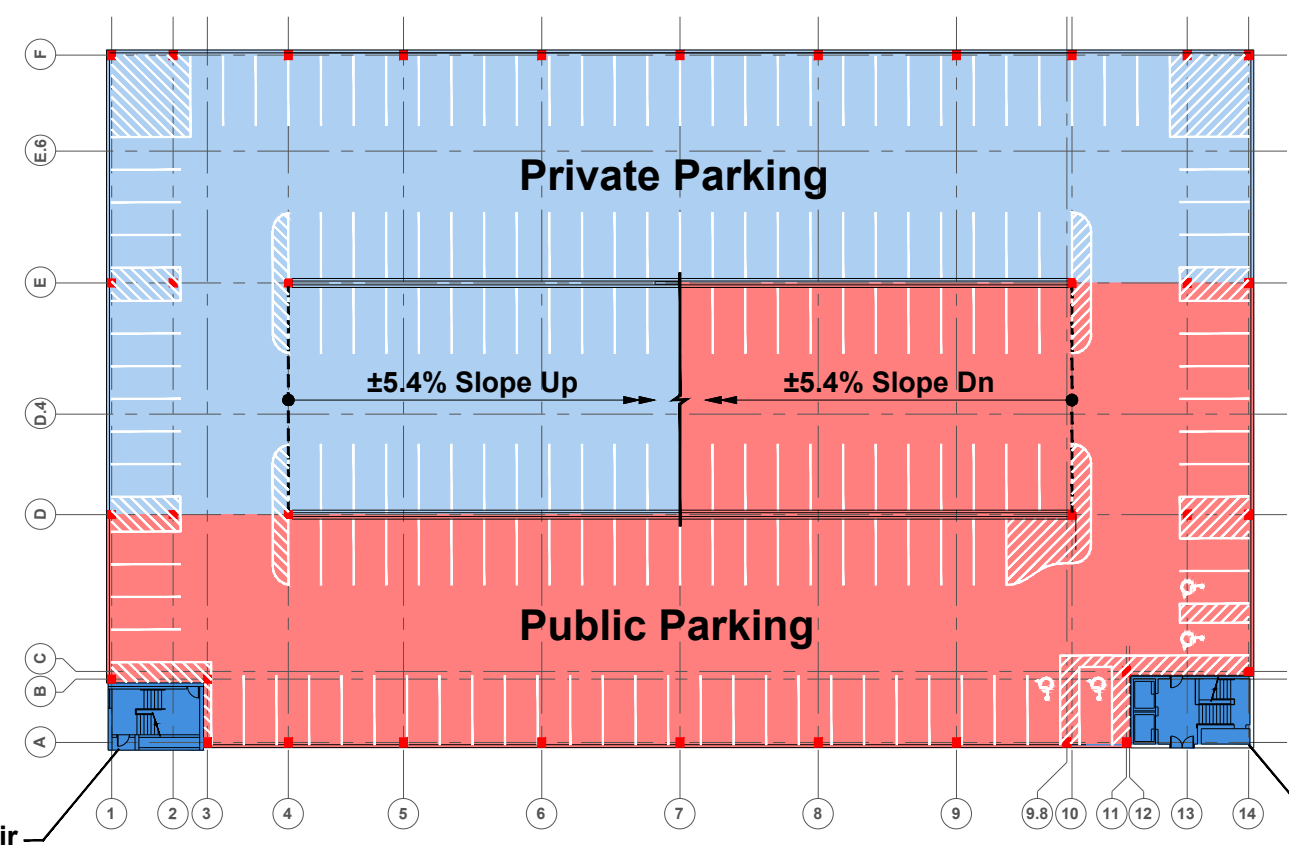


PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: DATE
 PROJECT STATUS: PROJECT STATUS



LEVEL 03 FLOOR PLAN



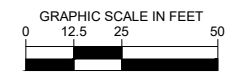
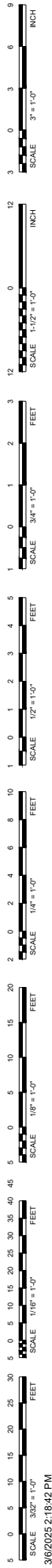
Egress Stair Vertical Expansion

Level 3 Plan (Expansion)

Stair & Elevator Vertical Expansion

Preliminary - For Discussion Only

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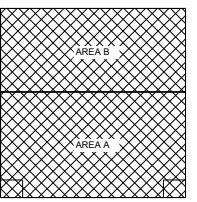
CIVIL ENGINEER
 REGA ENGINEERING
 601 OLD CHENEY RD A
 LINCOLN, NE 68512
 V 402 421 2500
 rgea@regae.com

STRUCTURAL ENGINEER
 VOSS & ASSOCIATES
 321 N 7TH ST
 LINCOLN, NE 68508
 V 402 476 6365
 voss-assoc.com

MEP ENGINEER
 ENGINEERING TECHNOLOGIES, INC.
 825 M ST #200
 LINCOLN, NE 68508
 V 402 476 1273
 et-engineers.com

PARKING CONSULTANT
 KIMLEY-HORN
 707 EUSTIS STREET, SUITE 100
 ST. PAUL, MN 55114
 V 651-645-4197
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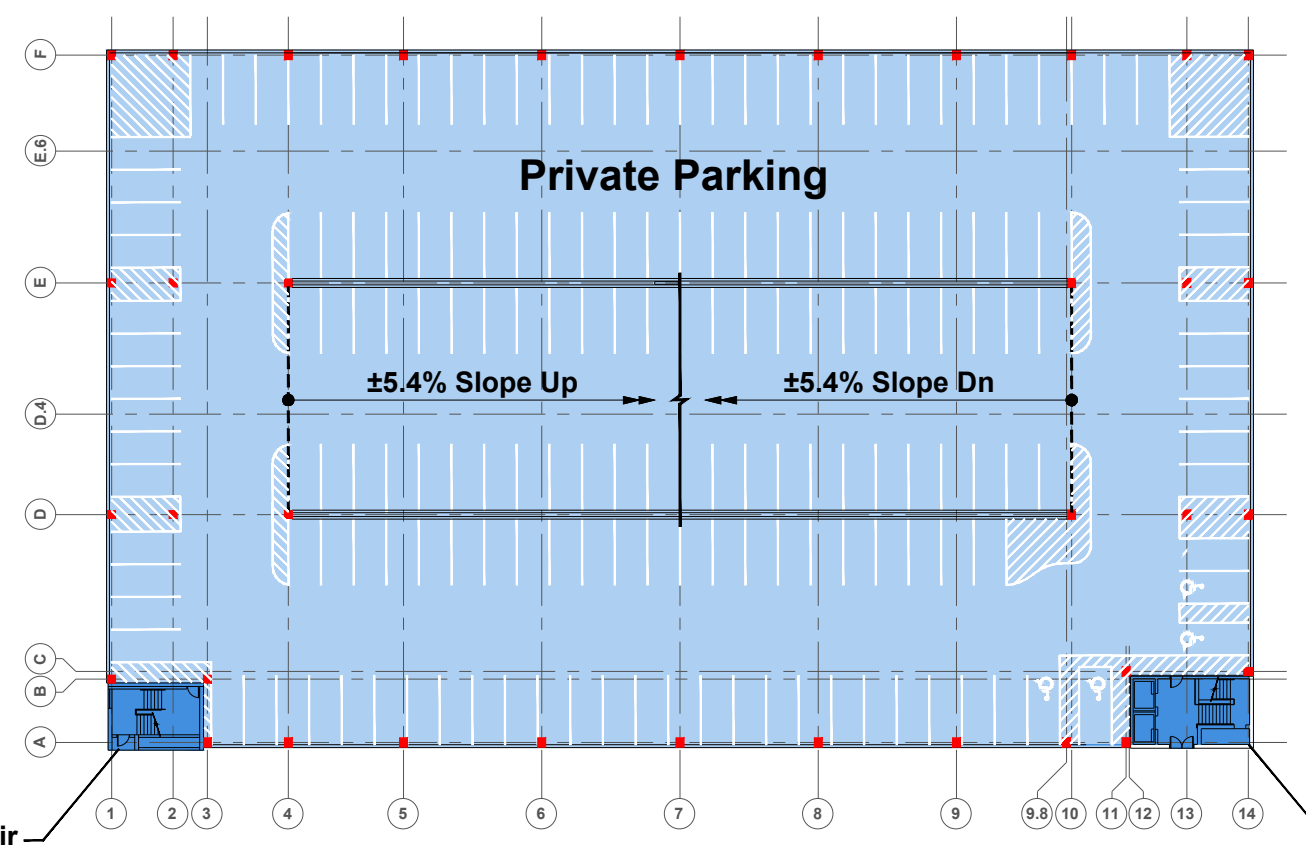
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LEVEL 04 FLOOR PLAN



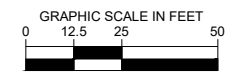
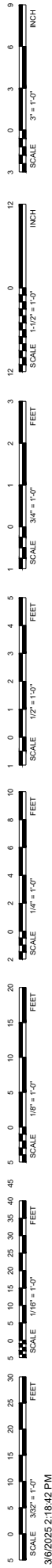
A1.4



Level 4 Plan (Expansion)

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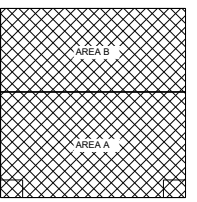
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 REGA ENGINEERING
 601 OLD CHENEY RD A
 LINCOLN, NE 68512
 V 402 421 2500
 rregan@regain.com

STRUCTURAL ENGINEER
 VOSS & ASSOCIATES
 321 N 7TH ST
 LINCOLN, NE 68508
 V 402 476 6365
 voss-assoc.com

MEP ENGINEER
 ENGINEERING TECHNOLOGIES, INC.
 825 M ST #200
 LINCOLN, NE 68508
 V 402 476 1273
 et-engineers.com

PARKING CONSULTANT
 KIMLEY-HORN
 707 EUSTIS STREET, SUITE 100
 ST. PAUL, MN 55114
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REVISIONS SCHEDULE		
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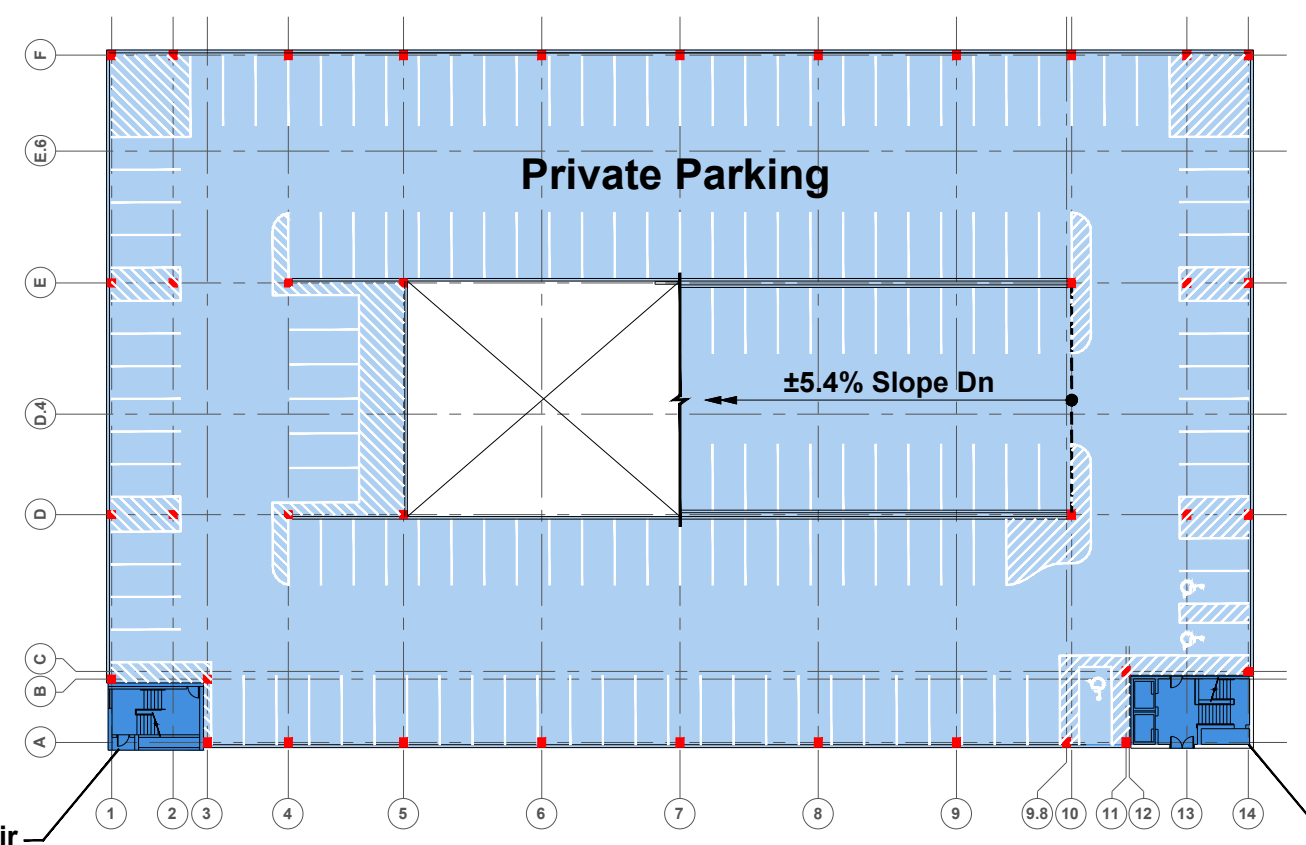
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LEVEL 05 FLOOR PLAN



A1.5

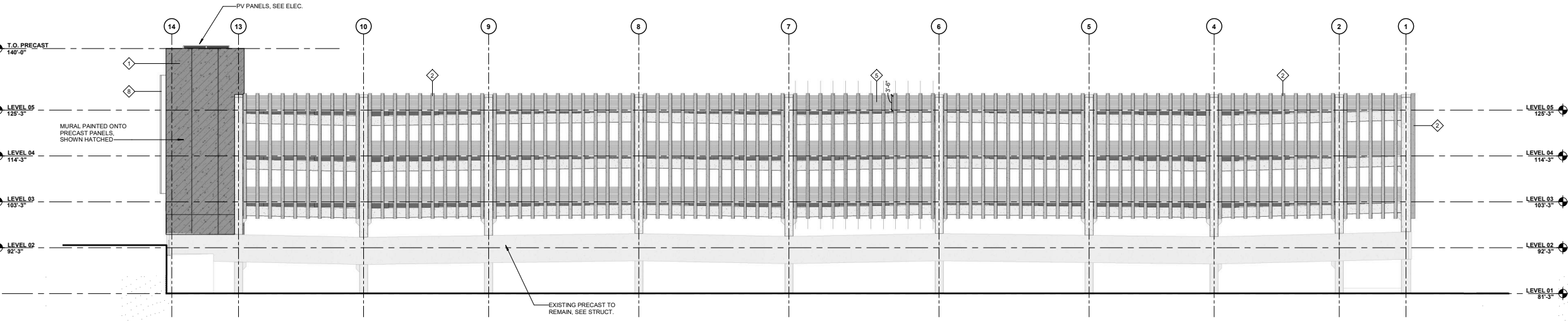
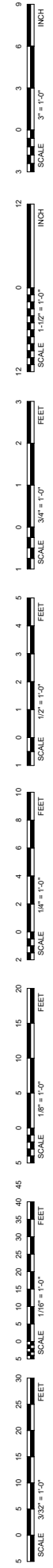


Level 5 Plan (Expansion)

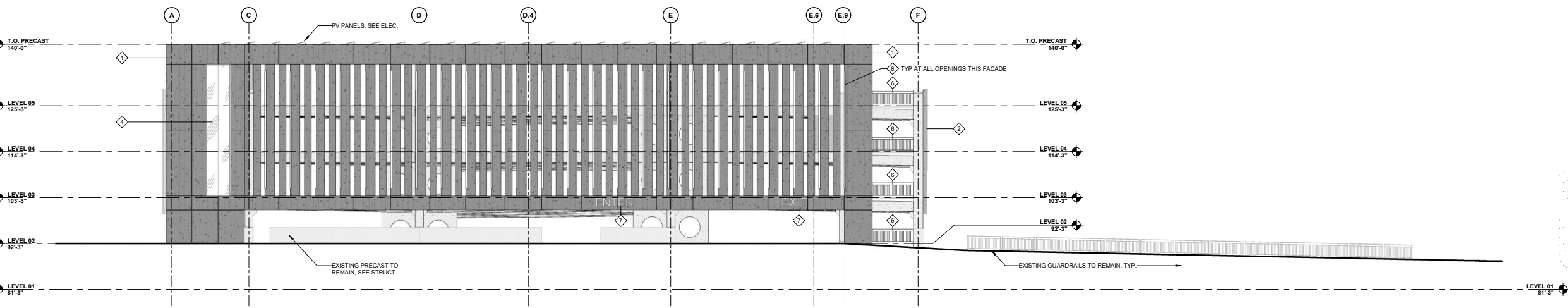
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ELEVATION NOTES

1	PRECAST CONCRETE PANEL	CONCRETE INDUSTRIES	ACID ETCH	CHARCOAL GRAY	FORM LINER PANEL
2	PRECAST CONCRETE FIN	CONCRETE INDUSTRIES	ACID ETCH	MEDIUM GRAY	-
3	PRECAST CONCRETE PANEL	CONCRETE INDUSTRIES	ACID ETCH	MEDIUM GRAY	-
4	ALUMINUM FRAMING AND GLASS	KAWNEER	-	ANNODIZED BLACK	-
5	CABLE GUARD RAIL	TBD	-	-	TYP AT LEVELS 3-5
6	STEEL GUARD RAIL	TBD	-	-	-
7	BACKLIT SIGNAGE	TBD	GALVANIZED	ALUMINUM	ANNODIZED BLACK
8	STEEL FINIS	TBD	SEALED	-	SIGNAGE SIZE/LOCATIONS TBD
					LIGHTING AT FACE, SEE ELEC.



1 BUILDING ELEVATION - NORTH
 3/32" = 1'-0"



2 BUILDING ELEVATION - EAST
 3/32" = 1'-0"

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN

DRAFT

BUILDING ELEVATIONS

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 BVH ARCHITECTURE
 440 N 8TH ST STE 100
 LINCOLN NE 68508
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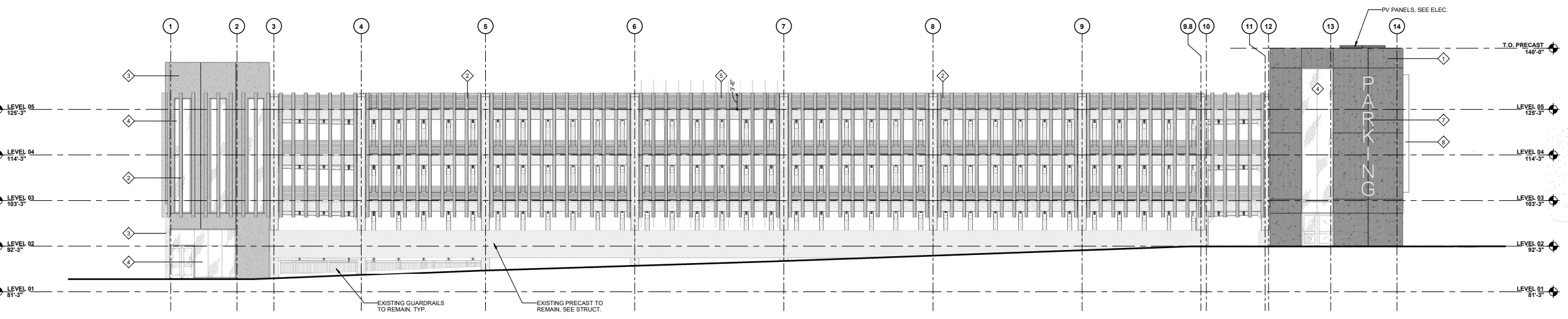
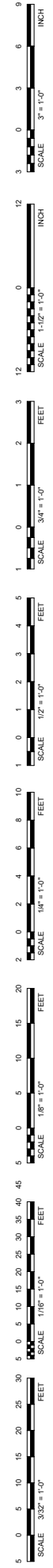
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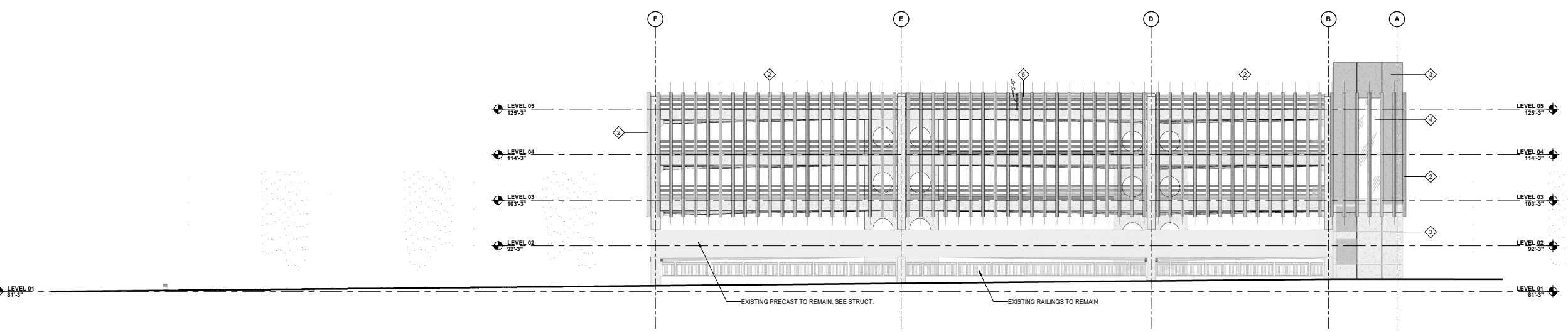
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 KIMLEY-HORN
 767 EUSTIS STREET, SUITE 100
 ST. PAUL, MN 55114
 V 651-945-4197
 kimley-horn.com

ELEVATION NOTES

1	PRECAST CONCRETE PANEL	CONCRETE INDUSTRIES	ACID ETCH	CHARCOAL GRAY	FORM LINER PANEL
2	PRECAST CONCRETE FIN	CONCRETE INDUSTRIES	ACID ETCH	MEDIUM GRAY	-
3	PRECAST CONCRETE PANEL	CONCRETE INDUSTRIES	ACID ETCH	MEDIUM GRAY	-
4	ALUMINUM FRAMING AND GLASS	KAWNEER	CURTAINWALL	ANNODIZED BLACK	-
5	CABLE GUARD RAIL	TBD	-	-	TYP AT LEVELS 3-5
6	STEEL GUARD RAIL	TBD	GALVANIZED	-	-
7	BACKLIT SIGNAGE	TBD	ALUMINUM	ANNODIZED BLACK	SIGNAGE SIZE/LOCATIONS TBD
8	STEEL FINIS	TBD	SEALED	-	LIGHTING AT FACE, SEE ELEC.



1 BUILDING ELEVATION - SOUTH
 3/32" = 1'-0"



2 BUILDING ELEVATION - WEST
 3/32" = 1'-0"

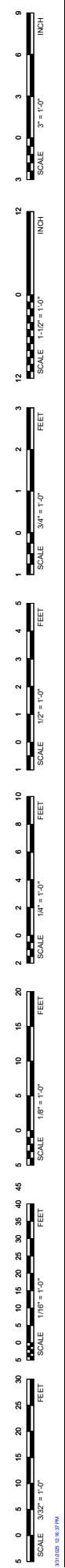
REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN

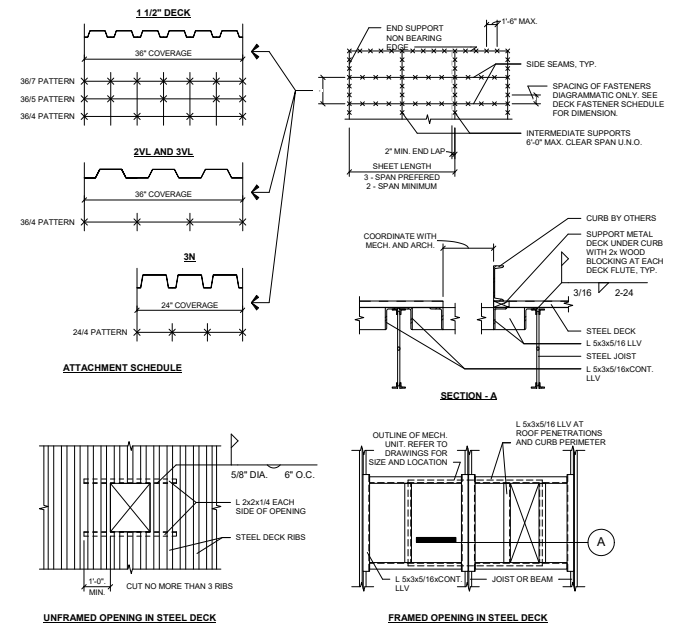


BUILDING ELEVATIONS



	FASTENER	SPACING (FLOOR)	SPACING (ROOF)
INTERMEDIATE AND END SUPPORTS	5/8" DIA. PUDDLE WELD	-	36/4 PATTERN
DECK EDGE	5/8" DIA. PUDDLE WELD	-	1'-0" O.C. MAX.
SIDE LAPS	#10 TEK SCREWS	-	2/SPAN

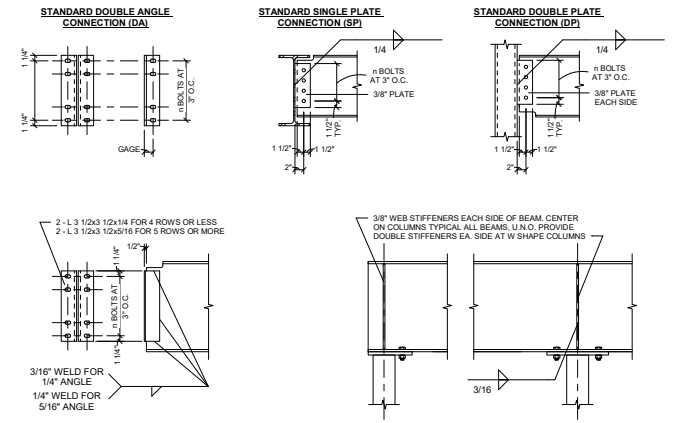
NOTES:
1. HLT1EN2P (OR EQUIV.) POWDER ACTUATED FASTENERS MAY BE USED IN LIEU OF PUDDLE WELDS.



STEEL DECK ATTACHMENT SCHEDULE AND DETAILS

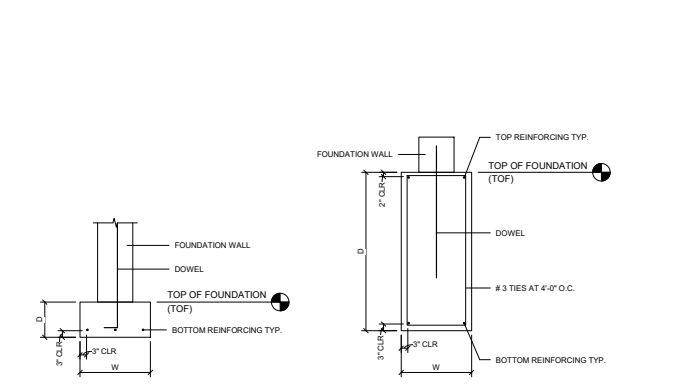
NUMBER OF 3/4\" DIA. A325N BOLT ROWS REQ'D. (n)								
BEAM SIZE	w8	w10	w12	w14	w16	w18	w21	w24
2\" MAX. COPE	2	2	3	3	4	5	5	6
4 1/2\" MAX. COPE	-	-	2	2	3	4	5	5

NOTES:
1. ALL PRIMARY BEAM TO PRIMARY BEAM CONNECTIONS SHALL BE DOUBLE ANGLE OR DOUBLE PLATE CONNECTIONS.
2. ALL PRIMARY BEAM TO HSS COLUMN CONNECTIONS SHALL BE SINGLE PLATE CONNECTIONS.
3. ALL PRIMARY BEAM TO WIDE FLANGE COLUMN CONNECTIONS SHALL BE DOUBLE ANGLE CONNECTIONS.



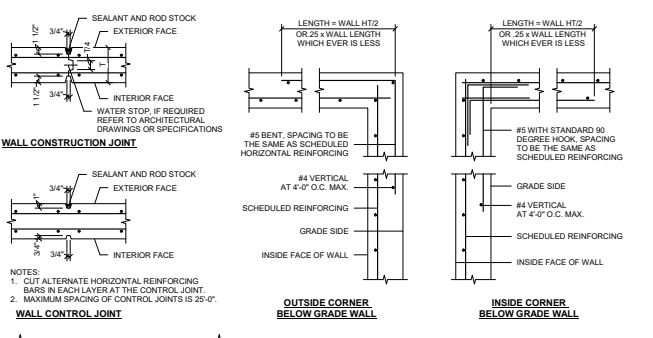
STANDARD STEEL CONNECTION SCHEDULE

MARK	WIDTH	DEPTH	REINFORCING



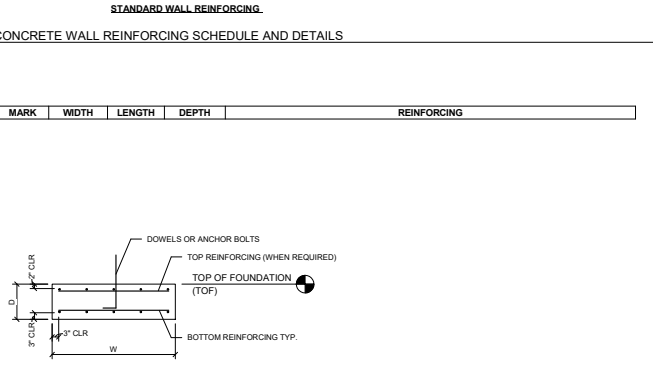
CONTINUOUS FOOTING SCHEDULE

MARK	WALL DIM.	REINFORCING		
		DOUBLE LAYER	INSIDE FACE	OUTSIDE FACE
1	12"	VERTICAL	#5 AT 18" O.C.	#5 AT 18" O.C.
		HORIZONTAL	#5 AT 18" O.C.	#5 AT 18" O.C.
2		HORIZONTAL		

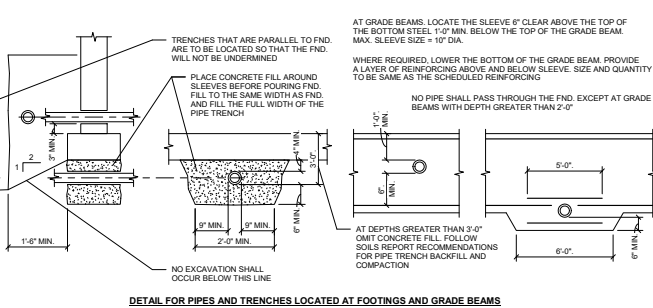


CIP CONCRETE WALL REINFORCING SCHEDULE AND DETAILS

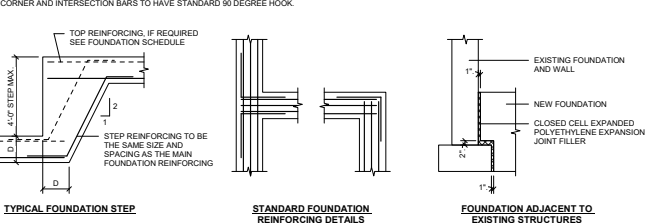
MARK	WIDTH	LENGTH	DEPTH	REINFORCING



SPREAD FOOTING SCHEDULE



DETAIL FOR PIPES AND TRENCHES LOCATED AT FOOTINGS AND GRADE BEAMS



TYPICAL FOUNDATION DETAILS

GENERAL STRUCTURAL NOTES

- GENERAL CONTRACTOR RESPONSIBILITIES SHALL INCLUDE BUT ARE NOT LIMITED TO:
 - DETERMINING CONSTRUCTION PROCEDURE AND SEQUENCE.
 - PROVIDING SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS WHICH MIGHT BE NECESSARY TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING CONSTRUCTION.
 - COORDINATE THE LOCATION OF LOADS, OPENINGS, AND STRUCTURE RELATED TO MECHANICAL EQUIPMENT.
 - MECHANICAL LOADS, OPENINGS AND STRUCTURE RELATED TO MECHANICAL REQUIREMENTS SHOWN ARE FOR BIDDING PURPOSES ONLY.
 - LOADS OR OPENINGS GREATER THAN THOSE SHOWN ON STRUCTURAL OR MECHANICAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD BEFORE PROCEEDING WITH WORK.
 - VERIFYING AND COORDINATING DIMENSIONS AND ELEVATIONS SHOWN ON THE CONTRACT DOCUMENTS. IF DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
 - TAKE PROPER PRECAUTIONS TO PROTECT SHALLOW FOOTINGS FROM FROST DURING COLD WEATHER CONSTRUCTION. REFER TO GEOTECHNICAL REPORT FOR MINIMUM FOOTING DEPTHS REQUIRED FOR FROST PROTECTION.
- IF CONFLICTING INFORMATION IS PRESENT IN THE CONSTRUCTION DOCUMENTS, THE STRICTER PROVISIONS SHALL GOVERN.
- UNLESS NOTED OTHERWISE, REQUIREMENTS GIVEN FOR ONE OR MORE LOCATIONS SHALL APPLY AT ALL OTHER LOCATIONS AT WHICH CONDITIONS ARE SIMILAR.

REINFORCED CONCRETE

- REFER TO DESIGN DATA FOR FURTHER INFORMATION.
- CONFORM TO ACI AMERICAN CONCRETE INSTITUTE STANDARDS AND RECOMMENDATIONS AS OUTLINED IN FIELD REFERENCE MANUAL, SP-15, PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
- PROVIDE CONTROL JOINTS IN SLAB ON GRADE AS FOLLOWS:
 - 8\" THICK SLABS _____ 24'-0\" MAX. SPACING ON ANY SIDE
 - 6\" THICK SLABS _____ 18'-0\" MAX. SPACING ON ANY SIDE
 - 5\" THICK SLABS _____ 15'-0\" MAX. SPACING ON ANY SIDE
 - 4\" THICK SLABS _____ 12'-0\" MAX. SPACING ON ANY SIDE
- THE SECTIONS BOUNDED BY CONTROL OR CONSTRUCTION JOINTS SHALL BE APPROXIMATELY SQUARE, WITH THE LENGTH TO WIDTH RATIO LESS THAN 1 TO 1.
- PROVIDE REINFORCING AT LOCATIONS AS SHOWN IN CIP CONCRETE STANDARD REINFORCING DETAILS.
- UNLESS NOTED OTHERWISE, ALL REINFORCING BAR SPLICES SHALL BE IN ACCORDANCE WITH THE TABLE SHOWN BELOW:

BAR SIZE	SPLICE LENGTH (IN INCHES) MON TOP BAR	TOP BAR
#3	14	18
#4	19	24
#5	23	30
#6	30	36
#7	41	44
#8	55	71
#9	69	86
#10	88	114
#11	108	140

TOP BARS ARE HORIZONTAL. REINFORCEMENT PLACED SO THAT MORE THAN 1/2\" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	MIN. COVER (INCHES)
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#5 THROUGH #18 BARS	2
#5 BAR AND SMALLER	1 1/2
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLAB AND JOIST:	
#11 BAR AND SMALLER	3/4
WALLS	1 1/2
BEAMS, COLUMN, PRIMARY REINFORCEMENT, TIES, STIRRUPS AND SPIRALS	1 1/2

IF CAST-IN-PLACE WALLS ARE SHOWN ON THE DRAWINGS BUT THE REINFORCING IS NOT INDICATED, PROVIDE THE FOLLOWING STEEL IN CONCRETE WALLS:

THICKNESS	VERTICAL BARS	HORIZONTAL BARS
6\"	#4 AT 18\" O.C.	#4 AT 18\" O.C.
8\"	#4 AT 18\" O.C.	#4 AT 12\" O.C.
10\"	#4 AT 18\" O.C.	#4 AT 10\" O.C.
12\"	#4 AT 18\" O.C.	#4 AT 10\" O.C.

CENTER REINFORCING IN WALLS 10\" AND SMALLER UNLESS NOTED OTHERWISE. PROVIDE REINFORCING IN EACH FACE FOR WALLS GREATER THAN 10\".

PROVIDE 2 - #5 BARS AROUND ALL RECTANGULAR OPENINGS IN CAST-IN-PLACE WALLS. BARS SHALL EXTEND NO LESS THAN 24\" BEYOND THE OPENING.

STRUCTURAL STEEL

- REFER TO DESIGN DATA FOR FURTHER INFORMATION.
- FIELD CUTTING OR OTHER FIELD MODIFICATIONS TO STRUCTURAL STEEL SHALL NOT BE MADE WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
- SIZES OF FILLET WELDS NOT SHOWN SHALL CONFORM TO MINIMUM SIZES AS SPECIFIED BY AISC "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS".
- PROVIDE TWO COATS OF ASPHALTIC PAINT ON ALL STRUCTURAL STEEL SHAPES EXPOSED TO THE SOIL OR BELOW TOP OF SLAB ON GRADE.

STEEL DECK

- REFER TO DESIGN DATA FOR FURTHER INFORMATION.
- PROVIDE GALVANIZED DECK UNLESS DIRECTED BY THE ARCHITECT TO SUPPLY MANUFACTURERS STANDARD BASED ON RUST INHIBITIVE PAINT. PAINT ALL OTHER SURFACES AND ALL OTHER ACCESSORIES REQUIRED FOR A COMPLETE AND PROPER INSTALLATION OF STEEL DECK.
- ALL OPENINGS IN DECK SHALL BE SUPPORTED AS FOLLOWS UNLESS NOTED OTHERWISE ON DRAWINGS:
 - FOR OPENINGS LESS THAN 6\" IN EACH DIRECTION, PROVIDE SUPPORT WITH A FLAT SHEET OF 20 GAUGE SHEET METAL PLACED OVER THE OPENING AND WELDED TO THE TOP SURFACE OF THE DECK. SHEET METAL SHALL BE AT LEAST 12\" LONGER AND WIDER THAN THE OPENING.
 - FOR OPENINGS 6\" OR LARGER, REFER TO DETAILS.

PRESTRESSED / PRECAST CONCRETE

- REFER TO DESIGN DATA FOR FURTHER INFORMATION.
- SUBMIT SHOP DRAWINGS AND STAMPED DESIGN CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE PROJECT IS LOCATED, FOR CONNECTIONS AND PRECAST PRODUCT.
- OPENING HEADERS SHALL BE FURNISHED BY THE HOLLOWCORE SUPPLIER.
- ALL HOLLOWCORE SLABS SHALL BE GROUTED AND GROUT CURED, PRIOR TO INSTALLATION OF COMPOSITE STRUCTURAL TOPPING OR ROOFING MATERIALS.

DESIGN DATA

GOVERNING CODE: _____ 2018 INTERNATIONAL BUILDING CODE
SOILS REPORT: _____
A SOILS INVESTIGATION WAS PERFORMED BY: _____
COMPANY: _____
REPORT # _____
THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS OF THE SOILS REPORT.

EXCAVATIONS SHALL BE TESTED BY AN APPROVED TESTING LABORATORY PRIOR TO PLACING CONCRETE.
ALLOWABLE NET SOIL BEARING PRESSURE _____ 2000 PSF

DESIGN LOADS:
BUILDING CATEGORY _____ II
LIVE LOADS

FLOOR
TYPICAL FLOOR _____ 40 PSF
STAIRS _____ 100 PSF

ROOF
GROUND SNOW (Ps) _____ 30 PSF
FLAT ROOF SNOW (Pp) _____ 25 PSF
SNOW EXPOSURE (Ce) _____ 1.0
THERMAL FACTOR (Ct) _____ 1.0
RAIN ON SNOW _____ ASCE 7 SECTION 7.10
UNBALANCED SNOW LOADS _____ ASCE 7 SECTION 7.6
MECHANICAL UNITS _____ SEE FRAMING PLAN

WIND LOADS
SPEED EXPOSURE _____ 115 M.P.H.
NET UPLIFT FOR STEEL JOIST SYSTEMS _____ 15 PSF

SEISMIC LOADS
SITE CLASSIFICATION - D
SEISMIC DESIGN CATEGORY - B
Ss = 18
Sv = 25

MATERIALS:
CONCRETE
28 DAY CONCRETE STRENGTHS (MINIMUM):
FOOTINGS _____ 4000 PSI
SLAB ON GRADE _____ 3000 PSI
C.I.P. SUPPORTED FLOORS AND STOODS _____ 4000 PSI
REINFORCING BARS _____ ASTM A615 GRADE 60
WELDED BARS AND ANCHORS _____ ASTM A705 GRADE 60
WELDED WIRE FABRIC (WWF) _____
SLABS ON GRADE < 6\" THICK _____ 6x6-W1 4W14 WWF

STRUCTURAL STEEL
W SHAPES _____ ASTM A992
ROLLED SHAPES AND PLATES _____ ASTM A572
TUBES _____ ASTM A500 GRADE B
PIPES _____ ASTM A53 TYPE E OR S
BOLTS (UNLESS NOTED OTHERWISE) _____ ASTM A325

ANCHOR RODS _____ ASTM F1554, GRADE 36
EXPANSION BOLTS _____ HLT1ENW BOLT 3
OR APPROVED EQUIVALENT
ADHESIVE ANCHORS _____ HLT1EN HY 200 MAX.
OR APPROVED EQUIVALENT
SCREW ANCHORS _____ HLT1EN H OR SMIPSON TITEN HD
SLEEVE ANCHORS _____ HLT1EN OR APPROVED EQUIVALENT
FASTENERS IN CONTACT WITH TREATED WOOD _____ 304 OR 316
STAINLESS STEEL OR HOT DIP GALVANIZED OR APPROVED EQUIVALENT

STEEL ROOF DECK _____ 1 1/2\", TYPE '9', 20 GAUGE, GALV.
CONCRETE FLOOR AND FORM DECK _____ 1 1/2\", TYPE 'VL', 20 GAUGE, GALV.

PRESTRESSED / PRECAST CONCRETE
CONCRETE (HARDENED, 150 PCF) _____ 28 DAY STRENGTH _____ 8000 PSI
RELEASE STRENGTH _____ 3000 PSI
STRAND _____ 7 WIRE LOW RELAXATION STRAND
ASTM A418 GRADE 270K
HOLLOWCORE KEYWAY GROUT _____ 1500 PSI
3 PART SAND / 1 PART CEMENT, BY VOLUME
WATER AS REQUIRED FOR FLOWABLE GROUT

SPECIAL INSPECTION
SPECIAL INSPECTION SHALL BE PERFORMED AS REQUIRED BY LOCAL BUILDING OFFICIAL, ACCORDING TO CHAPTER 17 OF IBC, AND AS DIRECTED BELOW:
STEEL CONSTRUCTION TABLE 1705.2.2
CONCRETE CONSTRUCTION TABLE 1705.3



ARCHITECT
BVH ARCHITECTURE
901 JONES STREET
OMAHA NE 68102
V 402 345 3060
F 402 345 7871
bvh.com

CIVIL ENGINEER
REGA ENGINEERING
601 OLD CHENEY RD A
LINCOLN, NE 68512
V 402 471 2500
regaeengineering.com

STRUCTURAL ENGINEER
VOSS & ASSOCIATES
201 N 77TH ST
LINCOLN, NE 68508
V 402 476 6365
voss-asso.com

MEP ENGINEER
ENGINEERING TECHNOLOGIES, INC.
825 M ST #200
LINCOLN, NE 68508
V 402 476 1273
et-engineers.com

PARKING CONSULTANT
KIMLEY-HORN
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
V 651 945 4197
kimley-horn.com

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

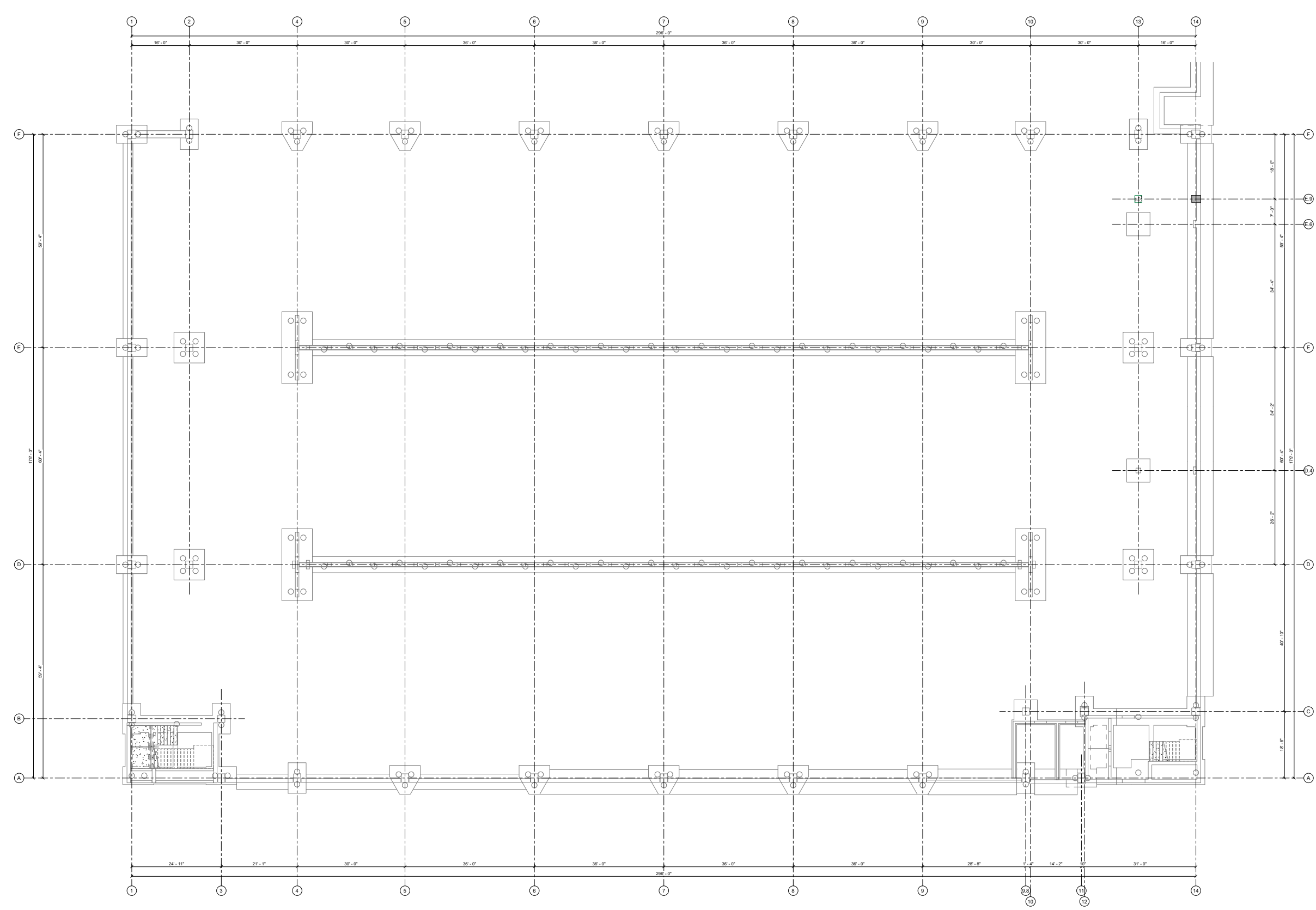
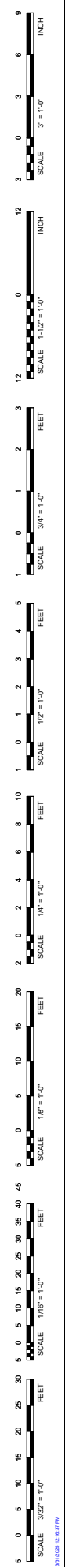
PROJECT: 24108 DATE: 04/04/2025
PROJECT STATUS: SCHEMATIC DESIGN



STRUCTURAL DESIGN DATA, GENERAL NOTES, SCHEDULES AND STANDARD DETAILS

SHEET NOTES:

- X GENERAL SHEET NOTE
- X REFER TO PLAN FOR NOTE LOCATION
- 1. ALL FOOTING ELEVATIONS GIVEN ARE TO TOP OF FOOTING.
- 2. TOP OF FOOTING ELEVATION VARIES - SEE PLAN
- 3. FINISH FLOOR EL. = 91'-0" TYP. U.N.D.
 SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND EXTENTS OF RECESSES AND SLOPED SLABS.
- 4. 1" CONC. SLAB ON COMPACTED FILL. REINFORCE WITH #4@12" W/ 3" WIRE MESH, CENTER IN SLAB TYP. PROVIDE VAPOR BARRIER. SEE SPECIFICATIONS FOR LOCATION BELOW SLAB. REFER TO SOILS REPORT FOR SLAB SUBGRADE REQUIREMENTS, TYP. U.N.D.
- 5. PROVIDE 1/2" JOINT FILLER WITH SEALANT BETWEEN ALL COLUMNS AND SLAB ON GRADE.



1 STRUCTURAL FIRST LEVEL FOUNDATION PLAN (EXISTING)
 3/32" = 1'-0"

REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN



STRUCTURAL FIRST LEVEL FOUNDATION PLAN (EXISTING)

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

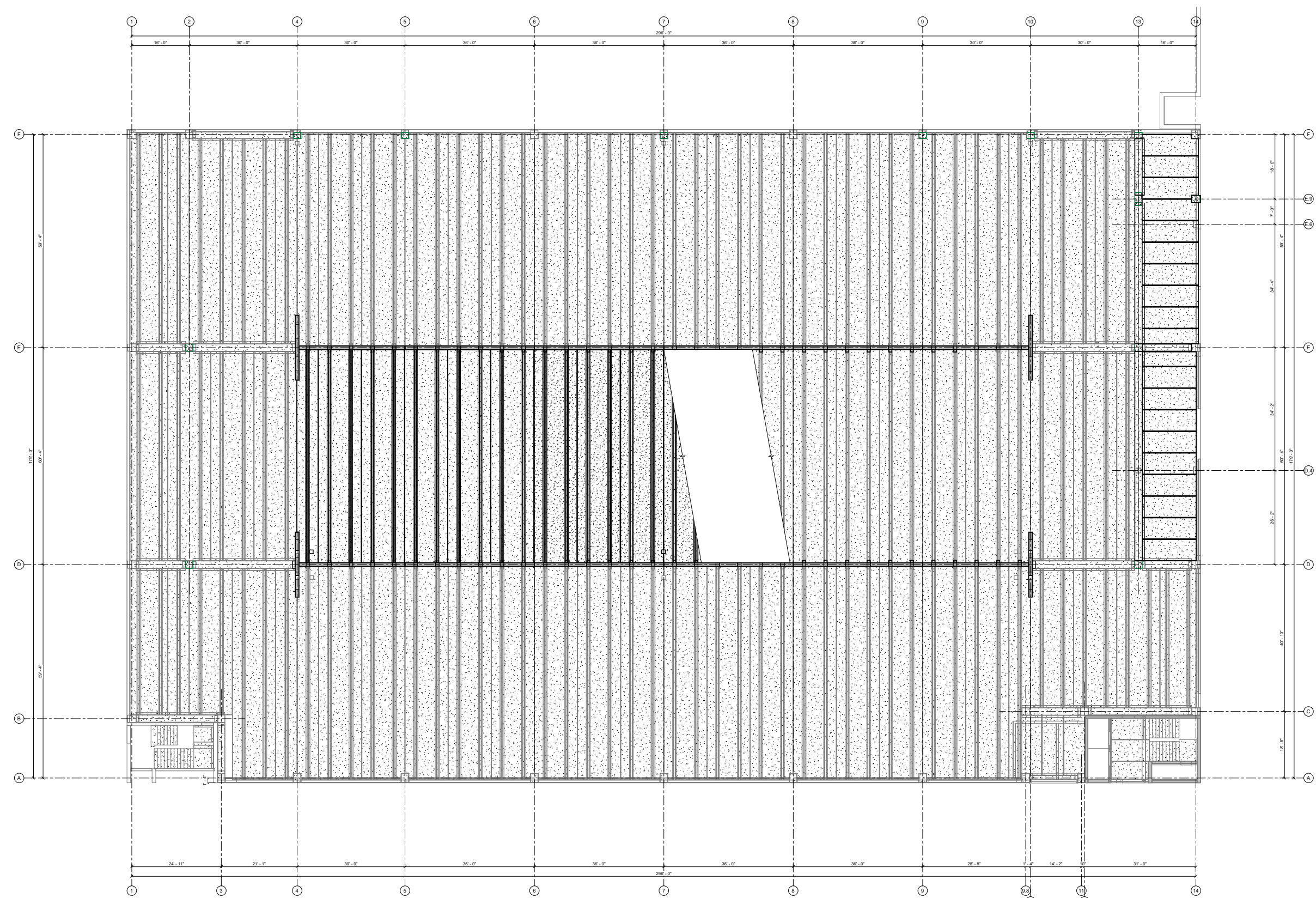
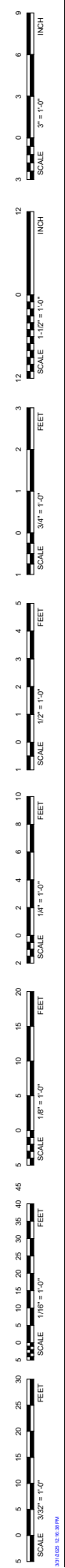
PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN

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STRUCTURAL SECOND LEVEL FRAMING PLAN



1 STRUCTURAL SECOND LEVEL FRAMING PLAN
 3/32" = 1'-0"

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

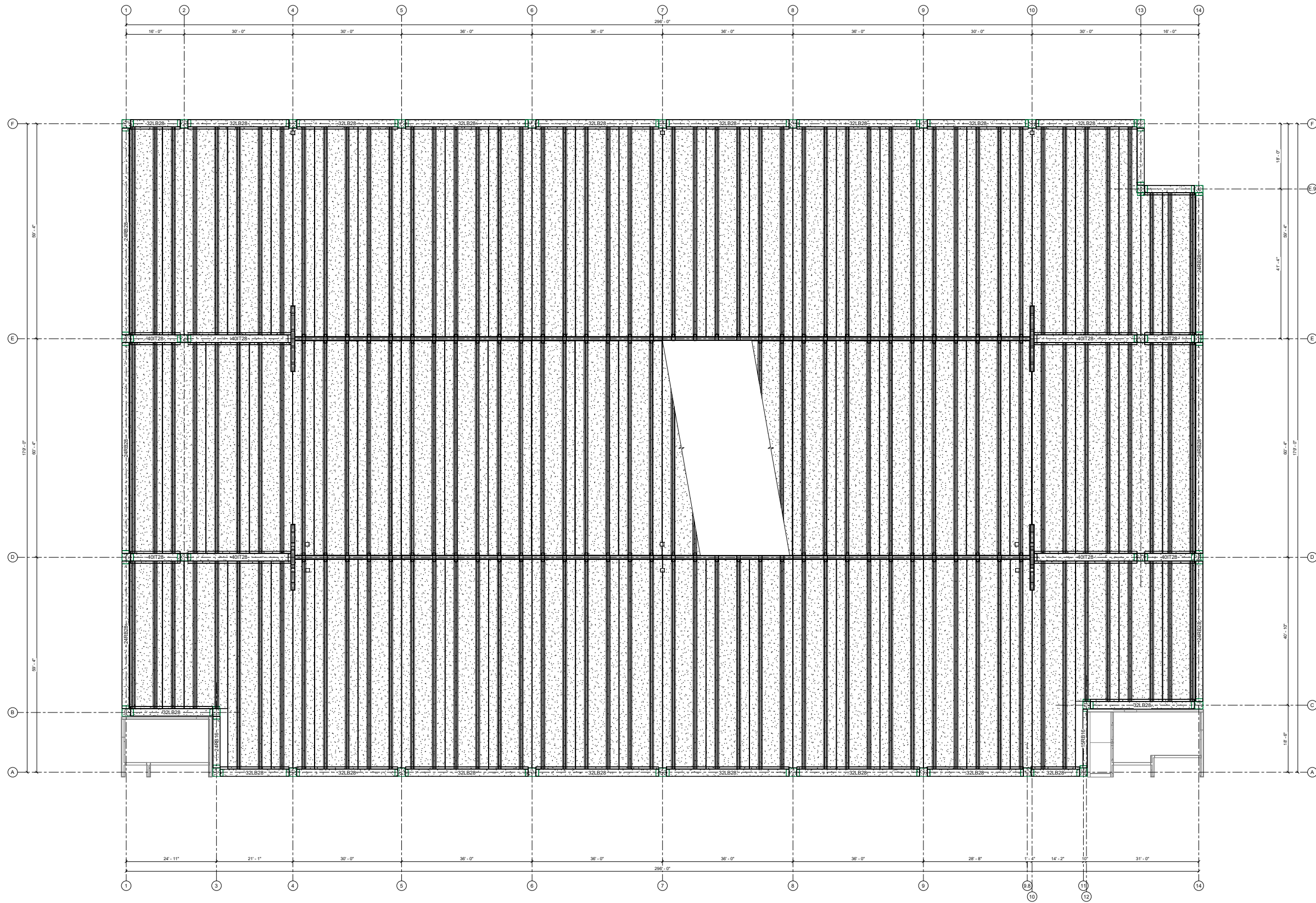
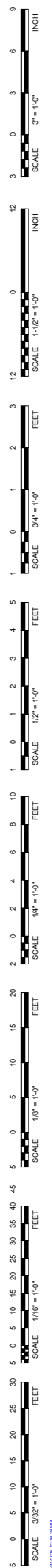
PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN



STRUCTURAL THIRD LEVEL FRAMING PLAN



S2.3



1 STRUCTURAL THIRD LEVEL FRAMING PLAN
 3/32" = 1'-0"

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN

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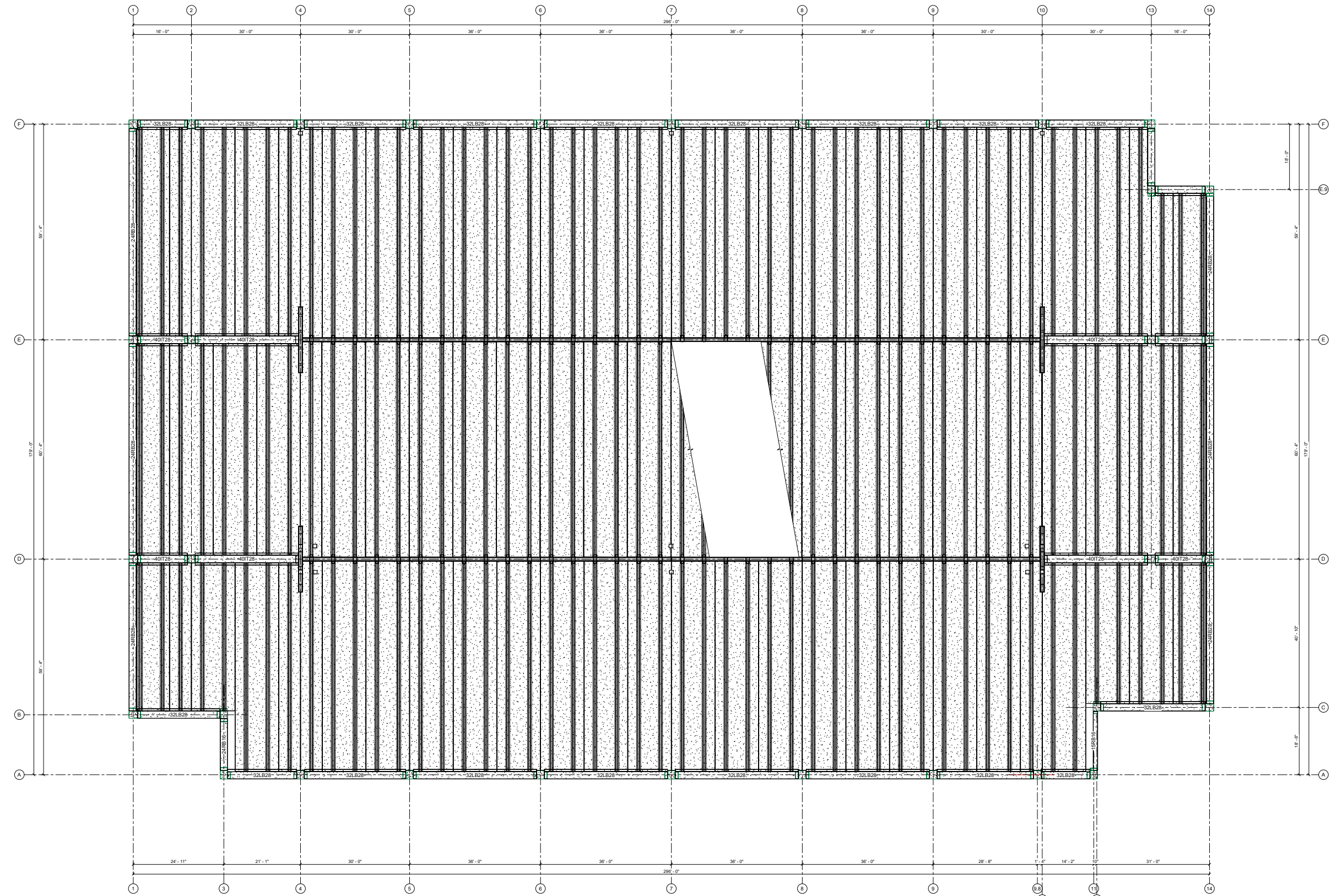
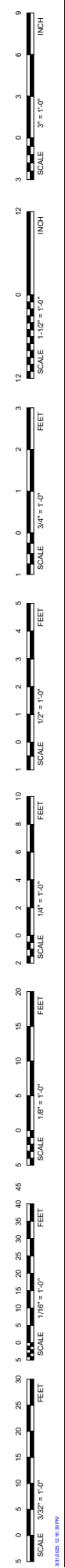


STRUCTURAL FOURTH LEVEL FRAMING PLAN

NORTH



S2.4



1 STRUCTURAL FOURTH LEVEL FRAMING PLAN
 3/32" = 1'-0"

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

PBC PARKING GARAGE EXPANSION

PROJECT: 24108 DATE: 04/04/2025
 PROJECT STATUS: SCHEMATIC DESIGN

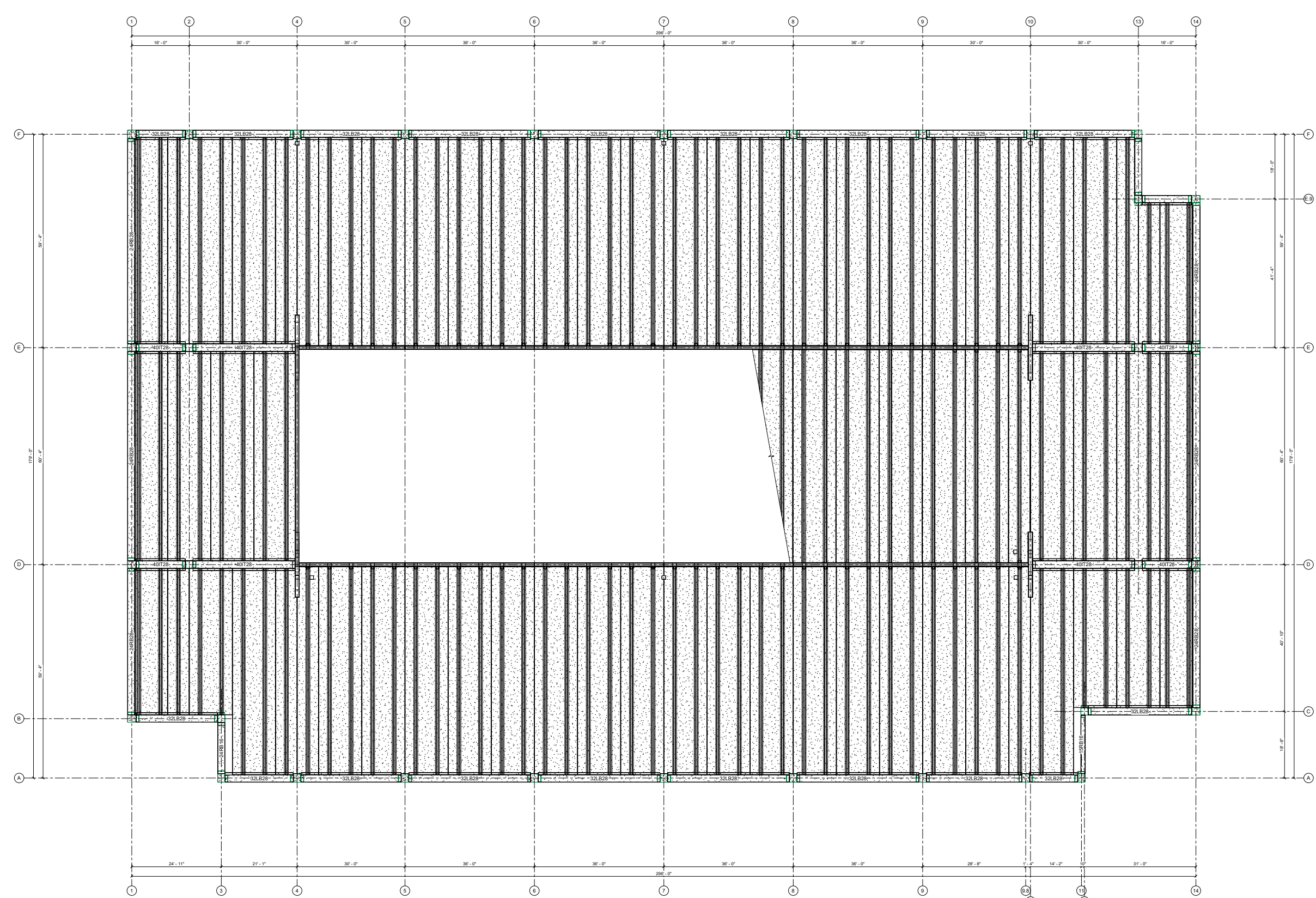
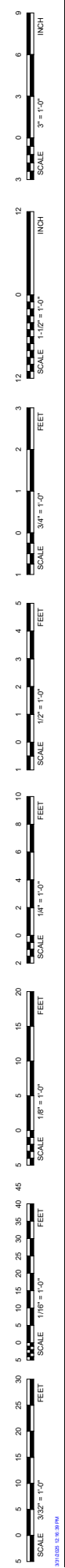
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STRUCTURAL FIFTH LEVEL FRAMING PLAN



S2.5



1 STRUCTURAL FIFTH LEVEL FRAMING PLAN
 3/32" = 1'-0"