



IA 2 Peachtree, LLC

33 Pryor Street

October 15, 2024

Revised December 17, 2024



WALKER
CONSULTANTS



6600 Peachtree Dunwoody Road
Building 600, Suite 305
Atlanta, GA 30328
678.534.3860

October 15, 2024
Revised December 17, 2024

Mr. Phil Perkins
Senior Vice President, Community Development
Invest Atlanta
133 Peachtree Street NE, Suite 2900
Atlanta, GA 30303

Re: *Feasibility Report for Parking Expansion at 33 Pryor Street
Atlanta, Georgia
Walker Consultants Project #17-002167.00*

Dear Mr. Perkins:

Walker Consultants is pleased to submit for your review this report for 33 Pryor Street.

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments, please do not hesitate to call.

Sincerely,

WALKER CONSULTANTS

A handwritten signature in blue ink that reads "Chetan Ginne".

Chetan Ginne, P.E. (TX)
Project Manager

A handwritten signature in blue ink that reads "James E. Warner".

James E. Warner, P.E. (PA, TX, OK, AR, MI, WA)
Vice President/Director of Operations

Contents

Executive Summary	4
Section 01 Building Code Review and Comparison	5-9
Life Safety	6
Egress Requirements	6
Openness and Fire Protection	7
Construction Type and Fire Separation	7
Vehicle Barrier System	7
Structural Code Comparison	8
Section 02 Functional Design Summary	10-12
Parking Design Requirements	11
Traffic Circulation and Stall Layout	11
Ramp Slopes and Clearance	11
Parking Count	11
Electric Vehicle (EV) Requirements	12
Section 03 Structural Feasibility	13-15
Demolition	14
New Construction	14
Exploratory Investigation and Concrete Compressive Strength	15
Soil Boring Locations and Logs	15
Appendix A: Fulton County and City of Atlanta Ordinances	17
Appendix B: Conceptual Parking Layout	21
Appendix C: Exploratory Investigation	30
Appendix D: Concrete Compressive Strength	36
Appendix E: Soil Boring Locations and Logs	37
Appendix F: Reinforcing Properties	47
Appendix G: Opinion of Probable Costs	48

Executive Summary

The original drawings received for the mixed-use structure located at 33 Pryor Street in Atlanta, Georgia indicate that the design was complete near the end of 1959. The drawings received did not include a general notes sheet or references to a building code to which the project was designed/permitted. Walker Consultants (Walker) researched the applicable codes around the time the project was being designed to understand the criteria incorporated into the original design. Based on our research, we believe that the project was designed and permitted under the Southern Standard Building Code (SSBC), 1957 Edition with 1958 revisions.

The original design for the mixed-use project consisted of a nine-story cast-in-place concrete structure. The topography for the site varied which placed two levels of parking below grade on the Decatur Street side of the structure and three levels of parking below grade on the Wall Street side of the structure. Along Decatur Street, Level Number 3 incorporated retail stores and Level Number 4 incorporated office space. Passenger vehicle parking was provided at Levels Number 3 and 4 in the bays outside of the retail stores and office space. Level Numbers 5, 6, and 7 were utilized for passenger vehicle parking. Level Numbers 8 and 9 provide additional office space.

Walker performed a building code review for the life safety and structural design criteria to develop a concept for converting the office space at Level Numbers 8 and 9 to parking levels. For the conversion, the existing Level Number 8, Level Number 9, and roof would be demolished and replaced with new floors constructed with structural steel and a concrete slab on metal deck. The challenges realized during the building code review and development of the concept for converting the levels include:

- Incorporating an egress stair that complies with the stair separation distance as required in IBC 2018
- Confirming the existing spandrels provide the capacity to resist the 6,000-pound vehicle impact load since the structural drawings are not available
- Enhancing the lateral load resisting system by incorporating shearwalls to resist the IBC 2018 seismic loads. The SSBC 1957 code only required the design to resist wind loads while the IEBC 2018 code requires the design for the governing wind and/or seismic loads.

The conversion will net approximately 140 additional parking spaces with an estimated opinion of probable construction cost of \$7,980,100.00. This net gain of parking spaces does not account for any revisions to the existing striping in the deck.

The information included in this report is based on comparisons between the 1957 SSBC and 2018 IBC due to the minimal structural information available. The original structural drawings were not included in the drawing set received by Walker. Walker also made assumptions based on the 2018 IEBC that will need confirmation by the code official during the final design of the project. The assumptions include:

- Requirement to place the elevator on standby power
- Guardrail and handrail loads in the stair towers
- Vehicle impact barriers at the ramps and structure perimeter
- Clear height and inclusion of van accessible spaces
- Elevator stretcher requirements



01

Building Code Review and
Comparison

Building Code Review and Comparison

The original drawings received for the mixed-use structure located at 33 Pryor Street in Atlanta, Georgia indicate that the design was complete near the end of 1959. The drawings received did not include a general notes sheet or references to a building code to which the project was designed/permitted. Walker Consultants (Walker) researched the applicable codes around the time the project was being designed to understand the criteria incorporated into the original design. Based on our research, we believe that the project was designed and permitted under the Southern Standard Building Code (SSBC), 1957 Edition with 1958 revisions.

The original design for the mixed-use project consisted of a nine-story cast-in-place concrete structure. The topography for the site varied which placed two levels of parking below grade on the Decatur Street side of the structure and three levels of parking below grade on the Wall Street side of the structure. Along Decatur Street, Level Number 3 incorporated retail stores and Level Number 4 incorporated office space. Passenger vehicle parking was provided at Levels Number 3 and 4 in the bays outside of the retail stores and office space. Level Numbers 5, 6, and 7 were utilized for passenger vehicle parking. Level Numbers 8 and 9 provide additional office space over a portion of the deck footprint.

The following building code review and comparison investigates transforming the current office space on Level Numbers 8 and 9 to passenger vehicle parking while considering the International Existing Building Code (IEBC), 2018 edition, with Georgia Amendments, International Building Code (IBC), 2018 edition, with Georgia Amendments, and the drawings received.

Life Safety

Egress Requirements

For the newly added parking levels at the top, IBC 2018, section 1006.3.2, requires at least two exit stairs. The egress stairs must be located such that the minimum spacing between stairs is one half the maximum diagonal distance for the structure. This requires the distance between stairs to be 134'-9" per section 1007.1.1 of IBC 2018.

The top level of parking, Level Number 9, will be five levels above the exit discharge. IBC 2018, section 1009.2.1, requires an elevator for an accessible means of egress when the exit discharge is four or more levels below an accessible level. This item will need to be discussed with the Building Code Official to gain his/her interpretation. Some Officials will waive this requirement if ADA spaces are not located on the level and some will mandate this requirement since there isn't a guarantee that an ADA person will not park on this level. If the Official mandates this requirement, the elevator would need to be placed on standby power which would require adding a generator.

For Level Numbers 1 through 7, IBC 2018 also requires two stairs spaced 134'-9" apart and one accessible means of egress. While the current total egress width, based on the occupant load, complies with the minimum code requirements, the stair widths do not comply for accessible means of egress. Both IBC 2018 and the 1957 SSBC require a minimum stair width of 44", but the existing stairs (2 and 3) are only 40" wide. In addition, for one stair

to be considered an accessible means of egress, it shall be 48" wide per IBC 2018. Additionally, these stairs are not spaced 134'-9" apart, as required. Stair 2 terminates at Level Number 4, and Stair 3 terminates at Level Number 3B, meaning Level Numbers 1 and 2 lack the required two exit stairs. To address this, Walker recommends adding a new stair from Level Number 1 to Level Number 9 at the corner of Pryor Street and Wall Street. This new stair will satisfy the IBC code requirements for stair spacing and provide two exits for all levels. This added stair, along with the existing stair/elevator tower, will serve as the two required exit stairs for the newly added top two levels of parking. The existing stair/elevator tower will not require modification.

Openness and Fire Protection

Level Number 5 and above comply with the openness requirements of IBC 2018, section 406.5.2. To be considered "open", the level shall have openings for 40% of the perimeter length and 20% of the perimeter area. Level Number 5 and above are considered "open" and not require mechanical ventilation and sprinkling. Level Number 4 and below do not comply with the openness criteria, but based on the IEBC 2018 modifications are anticipated to not be necessary since the alteration is less than 50% of the total project area.

Construction Type and Fire Separation

Based on the built areas for the stores on Level Number 3, offices on Level Number 4, and parking, the building is classified as Type IB under IBC 2018 (table 504.3, 504.4, and 506.2). As per IBC section 601, this construction type requires a 2-hour fire rating for the structural frame, walls, and floors, which the current concrete framed structure supplies. Since the building is a mixed-use occupancy, a 2-hour fire-rated wall is also required between the parking areas and office/store areas (IBC section 508). The architectural drawings indicate that an 8" CMU wall separates the areas, but it is difficult to determine if the 8" CMU wall supplies the necessary fire rating without the structural drawings. The spacing for the grouted cells impacts the equivalent wall thickness which determines the fire rating.

Vehicle Barrier System

The existing garage has a 2'-0" concrete spandrel above the finished floor at the exterior face for vehicle barrier protection, with a pedestrian guardrail on top. However, IBC 2018 section 406.4.2 requires vehicle barrier protection to extend to 2'-9" above the finished floor. Therefore, the existing guardrail system must be upgraded to withstand vehicular impact loads or the spandrel height increased to 2'-9" above finished floor. The guardrail above the spandrel shall extend to 3'-6" minimum above the floor.

Structural Code Comparison

Loads	SSBC 1957	IBC 2018
Live:		
Parking	75 psf	40 psf/3,000 lb
Office	50 psf	50 psf/2,000 lb
Stores	75 psf	75 psf/1,000 lb (upper floor)
Corridor	100 psf	75 psf stores, 80 psf office/2,000 lb office
Rest Rooms	50 psf	no criteria
Stairs	100 psf	100 psf/300 lb
Stair railings	20 plf at top	50 plf/200 lb at top
Balcony railings	50 plf at top	50 plf/200 lb at top
Snow	no criteria	5 psf + 5psf rain on snow
Wind:	Service	Service
0 to 15	10 psf	11 psf
20	10 psf	11.5 psf
25	10 psf	11.9 psf
30	20 psf	12.3 psf
40	20 psf	12.9 psf
50	24 psf	13.4 psf
60	24 psf	13.8 psf
70	24 psf	14.2 psf
Seismic	no criteria	SDC B or C
Vehicle barriers	no criteria	6,000 lb at 18" & 27"
Roof Live	20 psf	20 psf

The live loads applied to the resisting members in accordance with SSBC 1957, original design, are either the same or have reduced in the currently adopted IBC 2018 Building Code, except for the stair railings. The strength for the stair railings may require further investigation as the IEBC 2018 is not specific on these elements and leaves the final decision up to the code official.

In the original design, SSBC 1957 only required that the lateral load resisting system be designed to resist the lateral loads resulting from wind. The wind pressures noted in the above table were used to calculate the lateral shear and overturning moment for both the SSBC 1957 and IBC 2018 criteria. The lateral shears and overturning moment were compared, and the original loads in accordance with SSBC 1957 are greater than that determined from the currently adopted IBC 2018. The structure does not require further investigation due to the wind loads.

The modification to the current structure is classified as a Level 2 alteration since less than 50% of the area is being altered. A Level 2 alteration requires that the structural lateral load resisting system be analyzed and updated for the seismic load in accordance with IBC 2018. This requirement is noted in IEBC 2018, section 805.3. The seismic loads are significantly greater than the wind loads used in the original design which will most likely

require adding shearwalls to the structural system. The order of magnitude of the seismic loads are 3.5 to 4.5 times the wind loads.

The perimeter spandrels and interior vehicular restraints along the ramps will require further investigation to determine if these elements supply the capacity to resist the 6,000-pound vehicle barrier load noted in the table above. The information included on the drawings received was not sufficient to perform this analysis.



02

Functional Design Summary

Functional Design Summary

Parking Design Requirements

As per the Fulton County ordinance (See appendix A), parking designs must have a minimum aisle width of 18 feet for one-way traffic with 60-degree angled parking, and 22 feet for two-way traffic. Parking stalls must be at least 8'-6" wide by 18'-0" long.

Traffic Circulation and Stall Layout

For the newly added levels at the top, these requirements are met by designating the ramps between grids C-E as one-way going up and the ramps between grids A-C as one-way going down, with turning bays located between grids 1-2 and 9-10. The spaces will be striped at a 60-degree angle to maximize parking efficiency.

For existing Level Numbers 4 through 7, the traffic circulation will follow the same pattern. Ramps between grids C-E will serve as up-ramps, while ramps between grids A-C will serve as down-ramps, with turning bays between grids 1-2 and 9-10.

The current as-built striping layout does not allow vehicular circulation to Level Numbers 3 and below. Should this issue be addressed, a two-way ramping system will be required. To comply with the county's ordinance of a 22'-0" minimum aisle for two-way traffic, parking will be limited to one side of the ramp. Additionally, to provide the required 22-foot aisle at the turning bays, jump ramps are required be added along grid D between grids 8-9 and 2-3. These jump ramps, along with the existing ramps between grids 9-10 and 1-2, will provide the 22'-0" minimum drive aisle width. These revisions will have a significant negative impact on the current space count as further defined herein in Parking Count section.

Ramp Slopes and Clearances

The ramp slopes for the added parking levels will be 5.1%, which is within the maximum allowable slope of 6.67% for parkable ramps under IBC 2018 section 406.4.3. The clearance between Level Numbers 8 and 9 will be 7'-0" and comply with the IBC 2018 minimum requirement. The existing ramps from Level Numbers 1 through 7 have slopes of 3.1%, and the clearance from Level Numbers 2 through 7 is at least 7'-0". However, the clearance at Level Number 1 between grids C-D and 7-9 is less than 7'-0", which does not comply with the IBC 2018 requirements. Parking in this area will be striped for compact spaces. The existing ramps have sufficient flow capacity to accommodate the newly added spaces at the top.

Parking Count

The conversion of Levels 8 and 9 to parking will result in a net increase of 140 spaces, accounting for the addition of a new egress stair from Level Number 1 to Level Number 9. This space count is based on striping the two new levels per current City of Atlanta parking geometrics. It assumes no restriping is done to the existing parking levels.

It shall be noted that the existing Level Number 1 to Level Number 7 do not comply with current City of Atlanta or industry standard parking geometrics. The stall sizes, layout, and drive aisle widths are very tight compared to current geometrics. In addition, there are existing issues with traffic flow circulation at Level Number 3 and below, with the need to drive down one bay in the wrong direction to access these lower levels.

Should the entire deck be restriping to current City of Atlanta parking geometric standards, a total space count of approximately 570 spaces for the entire deck is anticipated, as depicted in Appendix B. This space count includes addressing the traffic circulation on the lower levels, by eliminating spaces to accommodate two-way traffic flow.

If the City does not require updated striping of the existing levels to current geometric standards, the overall deck will experience some loss of space inventory simply from the fact that not every space will be “parkable” under the current layout. Vehicle sizes have increased over the last 60 years. At the time of construction, what was considered a standard vehicle may now be considered a small or compact vehicle. As such, we often find with tight geometrics that vehicles will encroach beyond the limits of the parking stall, rendering the adjacent stall un-parkable.

Per IBC 2018 section 1106, a percentage of parking spaces must be ADA-compliant. Van-accessible spaces require a clearance of at least 8'-2", but the clearance at the garage entrance/exit on Wall Street is only 8'-0". As a result, van-accessible spaces cannot be located within the garage under the current conditions, as no suitable locations inside the garage meet the clearance requirements. The code official may grant a waiver for the van accessible spaces since the addition of these spaces is not possible and creates a hardship for the owner.

Electric Vehicle (EV) Requirements

The City of Atlanta ordinance (See appendix A) requires that at least 20% of parking spaces be equipped with infrastructure for future EV charging equipment installation. These spaces are not currently included in the layout. If the jurisdiction mandates this requirement, the current electrical system may require upgrading.



03

Structural Feasibility

Structural Feasibility

Demolition

The top of the parking area is currently at elevation 88'-6" at Grid 9 and 89'-0" at Grid 10 with the office floors at elevation 95'-1" and 106'-9". To simplify the demolition, removal of materials, and construction of the future parking levels, we envision the following activities during the demolition phase:

- Removal of the HVAC unit and metal enclosures presently mounted on the roof. If the HVAC unit is supplying conditioning for the Level Number 3 retail space and Level Number 4 office space, a temporary system may be required until a permanent system is installed.
- Cap all utilities, water, sanitary sewer, and power below the Level Number 7 slab.
- Remove roof membrane and insulation above the office space. Install termination for remaining roof at the stair/elevator tower.
- Remove the façade system at the perimeter of the office space at Level Number 8 and above.
- Demolish the concrete roof system at elevation 118'-5" between Grids 1 and 10.
- Demolish the concrete floor system at elevation 106'-9" between Grids 1 and 10.
- Demolish the concrete floor system at elevation 95'-1" between Grids 1 and 10.
- Demolition the interior stairs between Grids 5 and 6 to Level Number 7.
- Saw cut columns and remove. The elevation will vary based on the connection of the new structure.

New Construction

The top of slab elevation for the two new floors will match the elevation in the stair/elevator tower at 95'-1" and 106'-9". This will eliminate modifications to the stair/elevator tower.

Considering the site constraints, we envision that the two new floor levels will be constructed with structural steel and a concrete slab on metal deck. The structural steel will require a spray-on cementitious fireproofing to achieve the 2-hour fire rating noted earlier in the report. The concrete slab on metal deck will be mildly reinforced with both top and bottom reinforcing for resisting the design loads. The metal deck is only being supplied to serve as a form and will not be relied upon for structural capacity.

As noted in the Structural Code Comparison section above, shearwalls will need to be incorporated for the lateral load resisting system due to the seismic loads. We envision using the solid wall currently located along Grid 1, between Grids C and E while adding a shearwall along Grid 10. In the perpendicular direction, we envision adding shearwalls along Grid C. Incorporating these shearwalls will most likely require strengthening the foundations by increasing their size for the added lateral loads and overturning.

For the added stair noted in the Egress Requirements section, we envision constructing a switchback stair. The stair would be structural steel with metal pan treads and landings. The main landing would be located at the exterior of the structural so that the existing spandrel could be used for support. The intermediate landing would be towards the interior of the structure and will require a CMU wall for support. A foundation will need to be added for support of the CMU wall.

The two added parking levels will require extending the following Mechanical, Electrical, Plumbing, and Fire Protection system:

- Top level lighting, (6) poles and 12 fixtures are anticipated.
- Covered level lighting, approximately 100 fixtures are anticipated.
- Extending the storm drainage to the two levels.
- Extending the standpipes/fire protection to the two levels.

Exploratory Investigation and Concrete Compressive Strength

Walker reviewed the photos obtained during the exploratory investigation and the results of the concrete compressive strength tests. The reinforcing steel visible in the photos is not experiencing loss of section or levels of concern for corrosion. A sample of the photos reviewed are included in Appendix C. The results of the concrete compressive strength, included in Appendix D, indicate that a concrete design strength of 5,000 psi is very reasonable. A 5,000 psi concrete compressive strength is typical for a parking garage design for both strength and durability.

Soil Boring Locations and Log

Walker performed a gravity load takedown to determine the vertical loads applied to the existing foundations for both the existing condition and the condition when the upper portion of the structure is converted to parking. The gravity loads calculated for Grids A, B, D, and E were approximately the same or slightly reduced for the conversion to parking when compared to the current condition. The gravity loads calculated for Grid C increased by approximately 15% due to the added level/floor. The Geotechnical Engineer, NOVA, used this information to perform a preliminary differential settlement analysis. The preliminary differential settlement analysis indicated that there will be less than 1" of differential settlement between Grids B/D and Grids C. Walker does not have any concerns with the potential differential settlement as the preliminary value should be consistent with the original design criteria.

Walker performed a preliminary seismic analysis to determine the seismic loads applied to the structure for comparison with the wind loads applicable in the original design in accordance with SSBC 1957. For the preliminary analysis, we considered a Site Class C, very dense soil and soft rock, based on the boring logs above.

The above information will be confirmed once the final Geotechnical Report is received which should occur within the next week or two.



Appendices

Appendix A: Fulton County and City of Atlanta Ordinances

10/9/24, 2:24 PM

Fulton County, GA Code of Ordinances

18.4 - Off-street parking design requirements.

18.4.1 Angled or parallel parking. Aisles serving off-street parking shall be no fewer than 22 feet in width, except that aisles designed for one-way circulation systems shall be no fewer than 14 feet in width for zero—45-degree parking, 18 feet in width for 46-to-60-degree parking and 22 feet in width for 61-to-90-degree parking. A standard parking space shall measure no fewer than 153 square feet, and shall be no fewer than 8.5 feet wide. Twenty percent of the total parking spaces may be designated as compact car spaces. A compact space shall measure a minimum of 120 square feet with a minimum width of eight feet. Each compact space shall be clearly marked. No part of a vehicle shall overhang into a landscaped portion of a required landscape area. (Amended 3/6/91, 4/5/95)

18.4.2 Landscape islands. Landscape islands shall be provided throughout parking lots in accordance with the requirements of section 4.23 of this resolution.

18.4.3 Handicapped parking. Parking spaces designed for handicap persons shall be provided in accordance [with] Georgia law.

10/11/24, 9:49 AM

Atlanta, GA Code of Ordinances

101.8. - ELECTRIC VEHICLE CHARGING INFRASTRUCTURE READINESS REQUIREMENT FOR NEW COMMERCIAL CONSTRUCTION.

(a) Definitions:

- (1) **Electric Vehicle (EV):** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current which is charged by being plugged into an electrical source. For the purpose of this ordinance, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included, an automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current which is charged by being plugged into an electrical source.
 - (2) **Electric Vehicle Supply Equipment (EVSE):** The conductors, including the ungrounded, grounded, and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.
 - (3) **Electric Vehicle Supply Equipment (EVSE) infrastructure:** The equipment, as defined by the National Electrical Code, which is provided to support future electric vehicle charging. This shall include, but not be limited to: the design load placed on electrical panels and service equipment to support the additional electrical demand, the panel capacity to support additional feeder / branch circuits, the installation of raceways, both underground and surface mounted, to support the electrical vehicle supply equipment.
 - (4) **Plug-In Hybrid Electric Vehicle (PHEV):** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current which is charged by being plugged into an electrical source, and having a second source of motive power such as gasoline or diesel.
- (b) All new occupancy classifications and all new S-2 parking garages (including S-2 parking garages associated with other new occupancies), as regulated by the International Building Code, are required to provide EVSE infrastructure to accommodate the future installation of Electric Vehicle Supply Equipment. The infrastructure shall be provided per this section.
- (1)

10/11/24, 9:49 AM

Atlanta, GA Code of Ordinances

The EVSE infrastructure shall be installed per the requirements of the current edition of the National Electrical Code (NFPA 70) as adopted and amended by the State of Georgia for enforcement by the City of Atlanta.

- (a) The off-road parking provided for all occupancy classifications parking garages and S-2 parking garages associated with other new occupancies shall have EVSE infrastructure installed at the parking spaces dedicated for the use of the building.
 - (b) The ratio of electric vehicle parking spaces to non-electrical vehicle parking spaces shall be 1:5.
 - (c) Designated dual-port EVSE may be dual-use for ADA accessible EV charging spaces and non-ADA accessible EV charging spaces with ADA compliant hardware. The use of the space for accessible parking takes precedence over the need to use this space for EV charging.
- (2) All new off-road parking, or the expansion of the existing footprint of off-road parking, including additional floors on existing parking decks, for all occupancy classifications shall include EVSE infrastructure based on the total number of parking spaces established in subsection (b).
- (3) The EVSE infrastructure shall include a raceway, which is continuous from the branch circuit / feeder panel location to the future PHEV / EV parking space. The raceway shall be sized and installed per the National Electric Code; with infrastructure raceway that shall be at least 1" (one inch) in size or a suitable raceway pursuant to the required conductor size. The EVSE infrastructure raceway shall include a pull rope or line installed for future conductor installation, with the raceway with the raceway sealed and labeled for future use.
- (a) The electrical load capacity for the service panel shall be provided on the submitted electrical construction documents to ensure the service panel has adequate electrical load capacity.
 - (b) The project construction documentation shall provide sufficient electrical capacity by using a 60-amp 240-volt, 2 pole single phase, (208 volt if 3-phase feeder supplied) branch circuit to estimate the future electrical load capacity needed for the EVSE required based on the total number of parking spaces established in subsection (1)(b).
 - (c) Locations of electrical vehicle equipment installation exposed to physical damage shall be arranged to prevent damage. Vehicle impact protection is required by posts / bollards.
 - i. Constructed of steel not less than 4 inches in diameter filled with concrete.
 - ii. Spaced no more than 4 feet on center between posts.
 - iii. Set not less than 3 feet deep in concrete footing in not less than 15-inch diameter.
 - iv.

10/11/24, 9:49 AM

Atlanta, GA Code of Ordinances

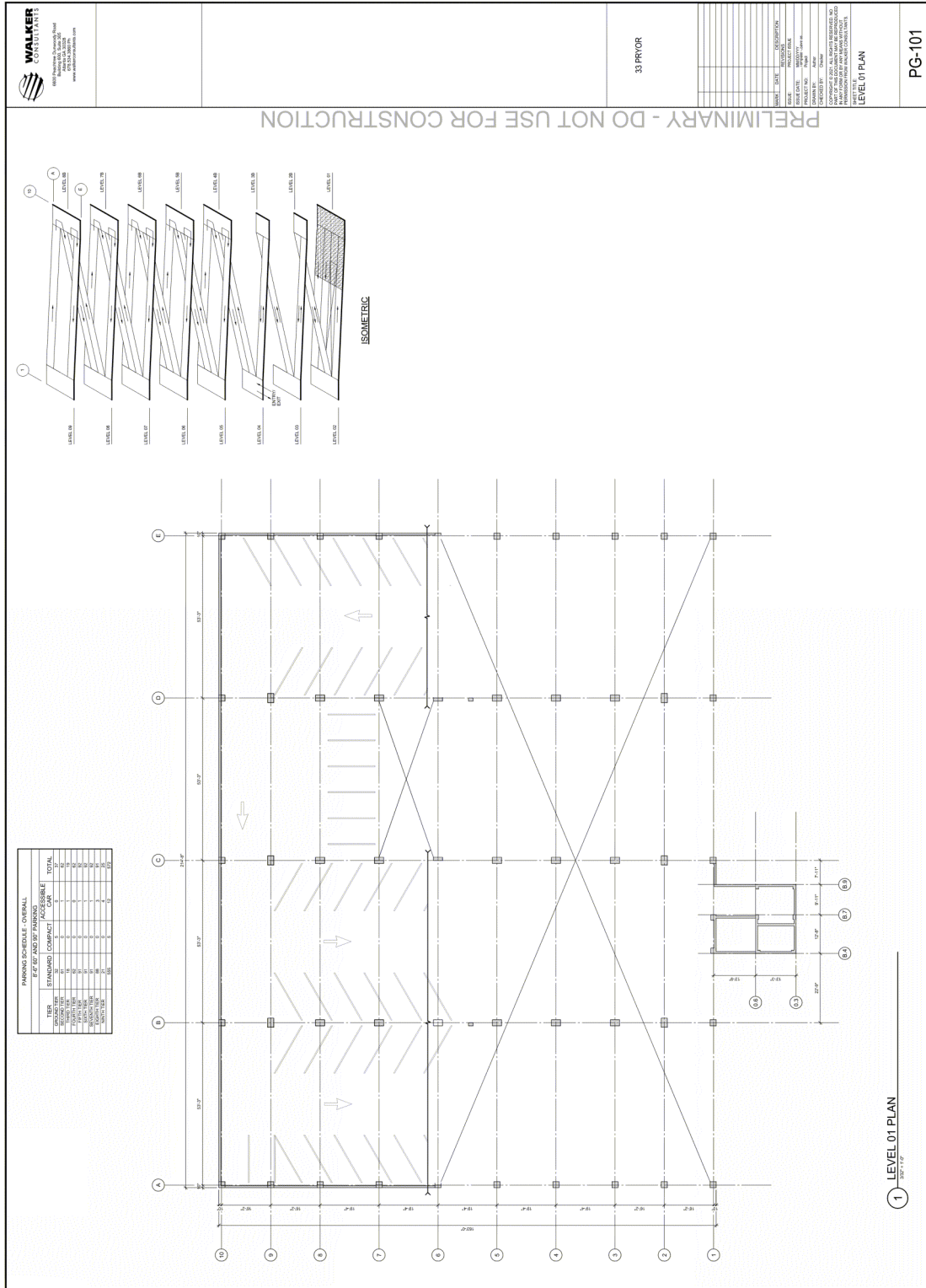
Bollard installations in elevated parking deck slabs shall be per the engineer's design.

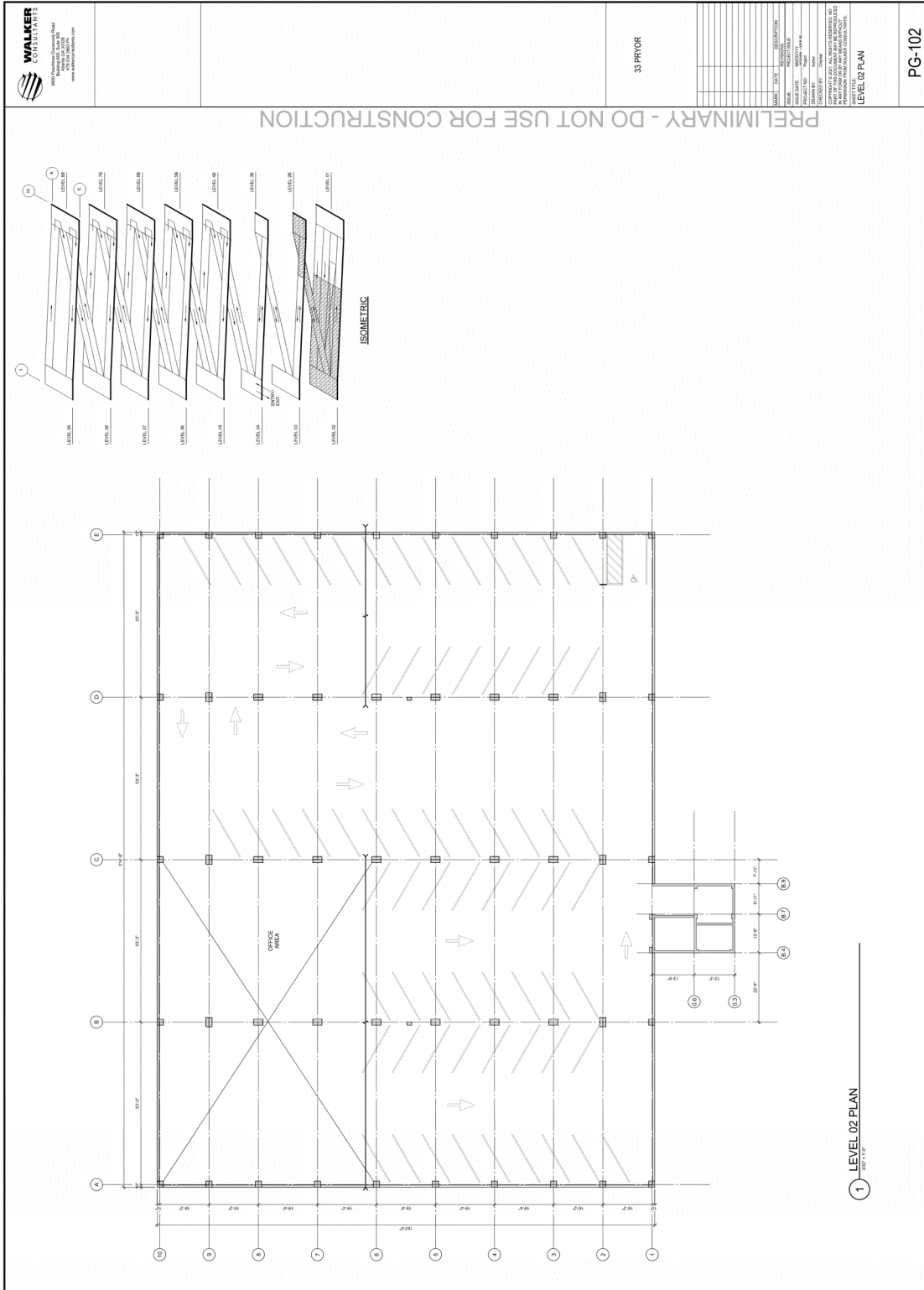
- v. The top of the post is not less than 3 feet above grade.
 - vi. Located not less than 3 feet from the Electrical Vehicle Charging Unit / Equipment.
 - vii. Other barriers, other than posts specified in (i.) through (v.) that are designed to resist or deflect vehicular impact equal to (i.) through (v.) shall be permitted where approved.
- (4) The electrical equipment room, when provided for all occupancy classifications parking garages and S-2 parking garages associated with other new occupancies must have a dedicated space for the future installation of EVSE. This space shall be identified on all construction documents submitted for review, and the dedicated space shall not allow for violation of the National Electrical Code prescriptive requirements regulating working space clearances around equipment, or violation of the National Electrical Code prescriptive requirements governing the entrance to and egress from electrical equipment working space.
- (a) When a disconnect is required or installed for EV charging unit(s) the disconnect shall be allowed to use aluminum conductor from the service panel to the disconnect. The conductor from the disconnect to the charging unit shall be copper conductors.
- (5) During construction of the electrical equipment room, all raceways installed for the EVSE infrastructure shall terminate at the space dedicated for the future EVSE installation.
- (6) Prior to the final electrical inspection approval, the space dedicated within the electrical equipment room for the future EVSE installation shall have the wall stenciled or marked legibly with the following text: FUTURE ELECTRICAL VEHICLE CHARGING EQUIPMENT AND PANELS".
- (7) The proposed placement and installation of EVSE infrastructure or equipment shall not allow for any violation of the Americans with Disabilities Act of 1990 (42 U.S.C. § 12101).
- (8) The placement of EVSE shall not create a trip hazard or violation of the accessible path of travel when the cord is connected to an EV or PHEV.

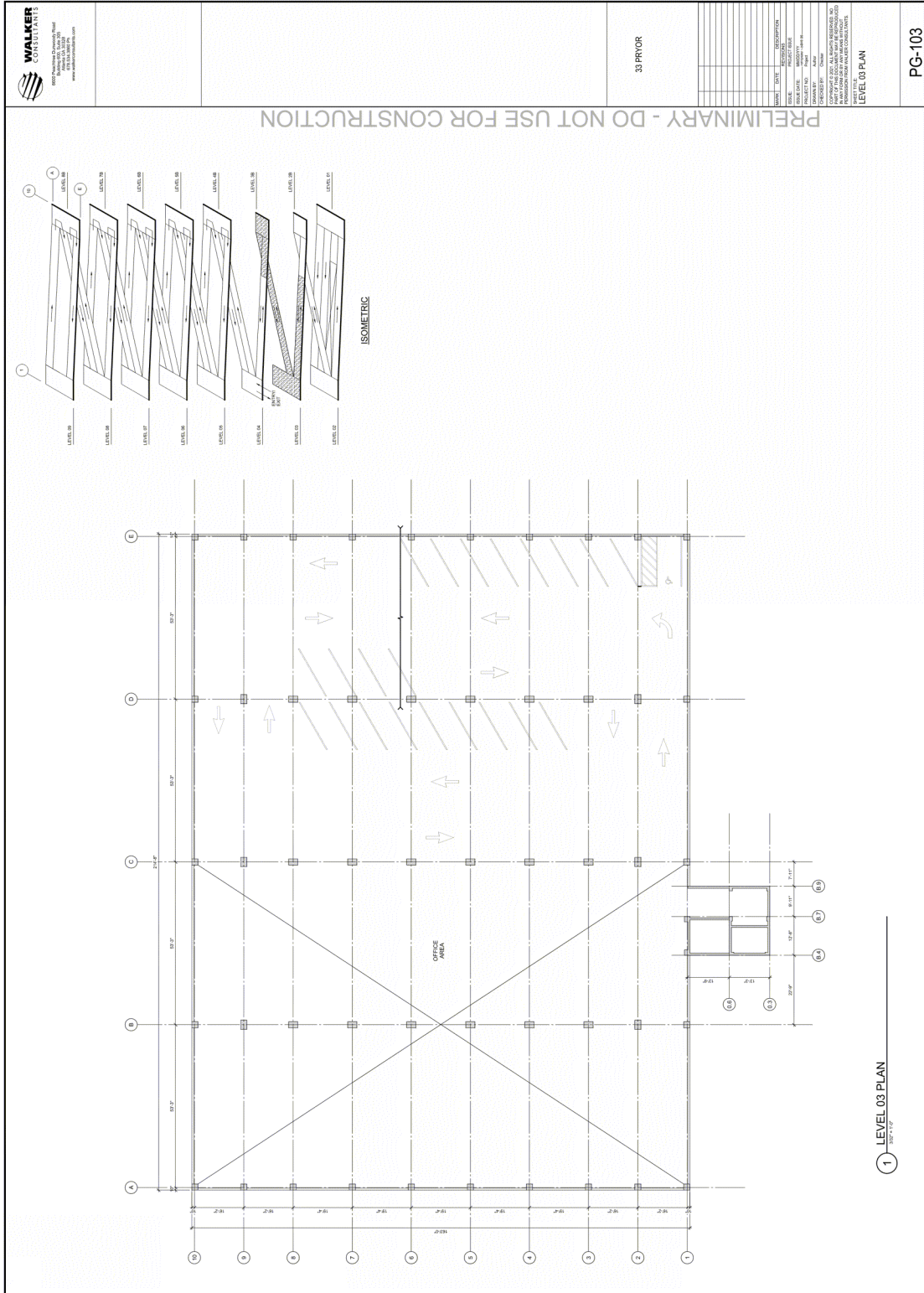
(Ord. No. 2017-76(17-O-1654), § 2, 11-29-17; Ord. No. 2018-09(18-O-1143), § 1, 4-25-18; Ord. No. 2021-43(21-O-0618), § 1, 9-15-21)

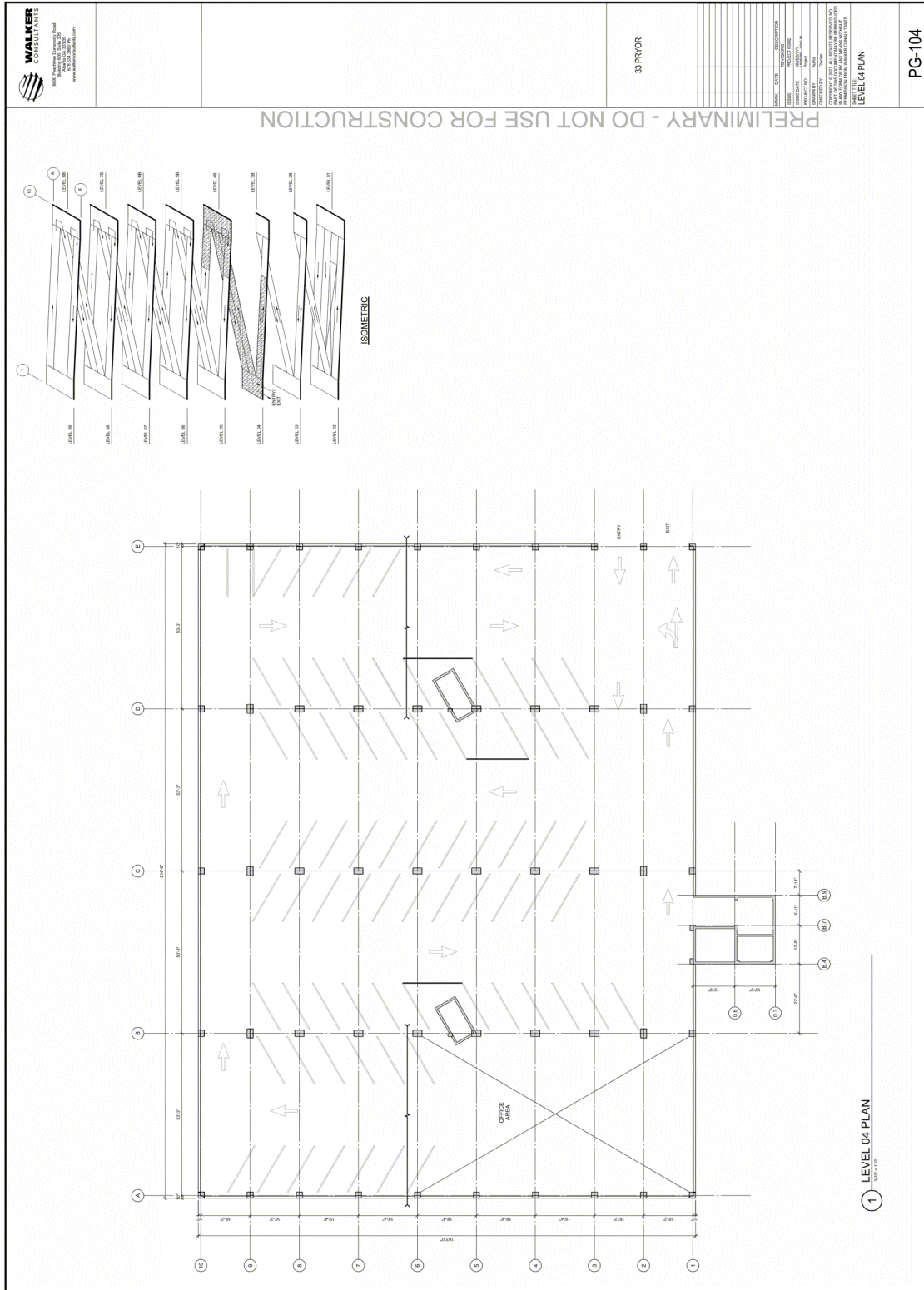


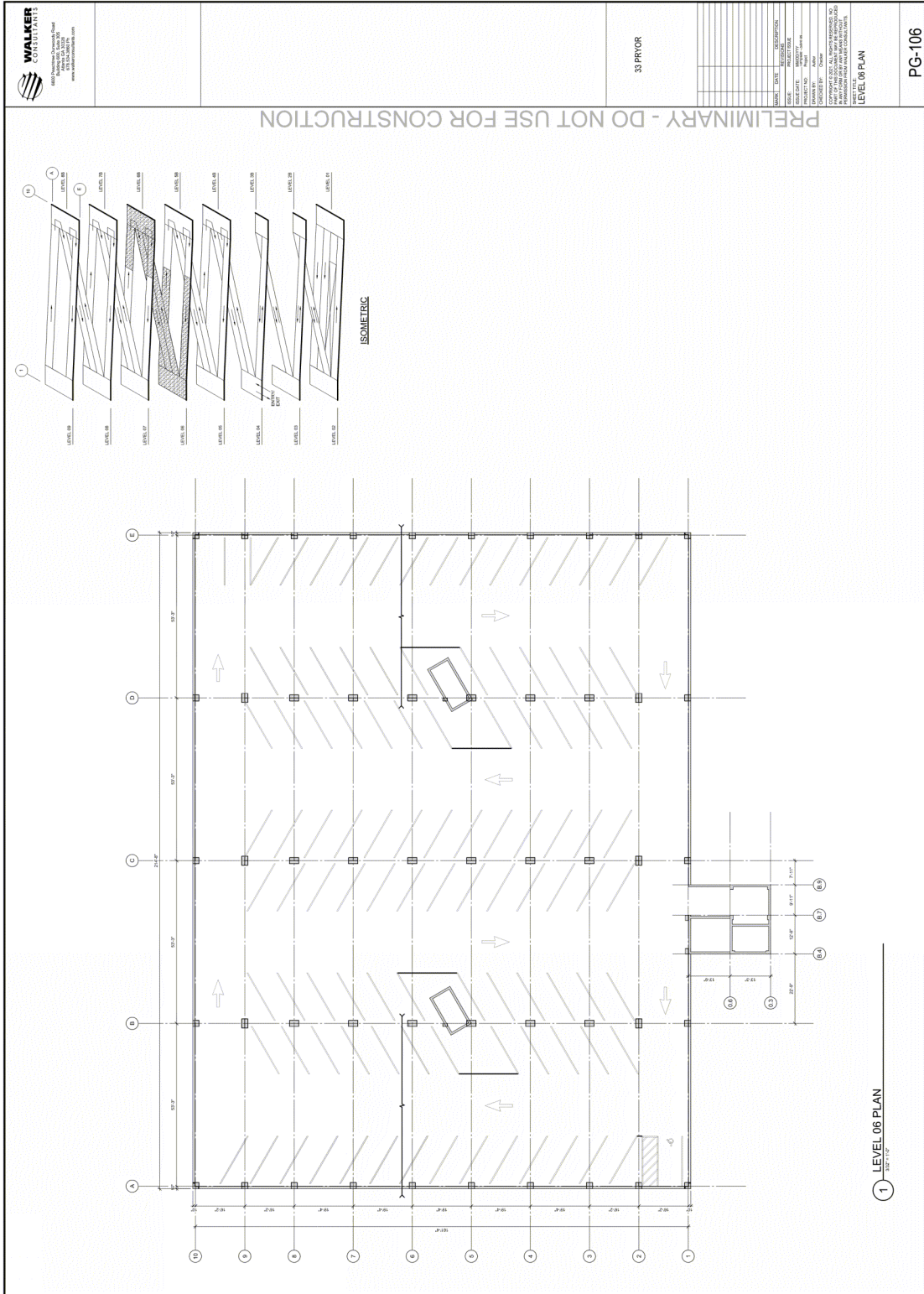
Appendix B: Conceptual Parking Layout







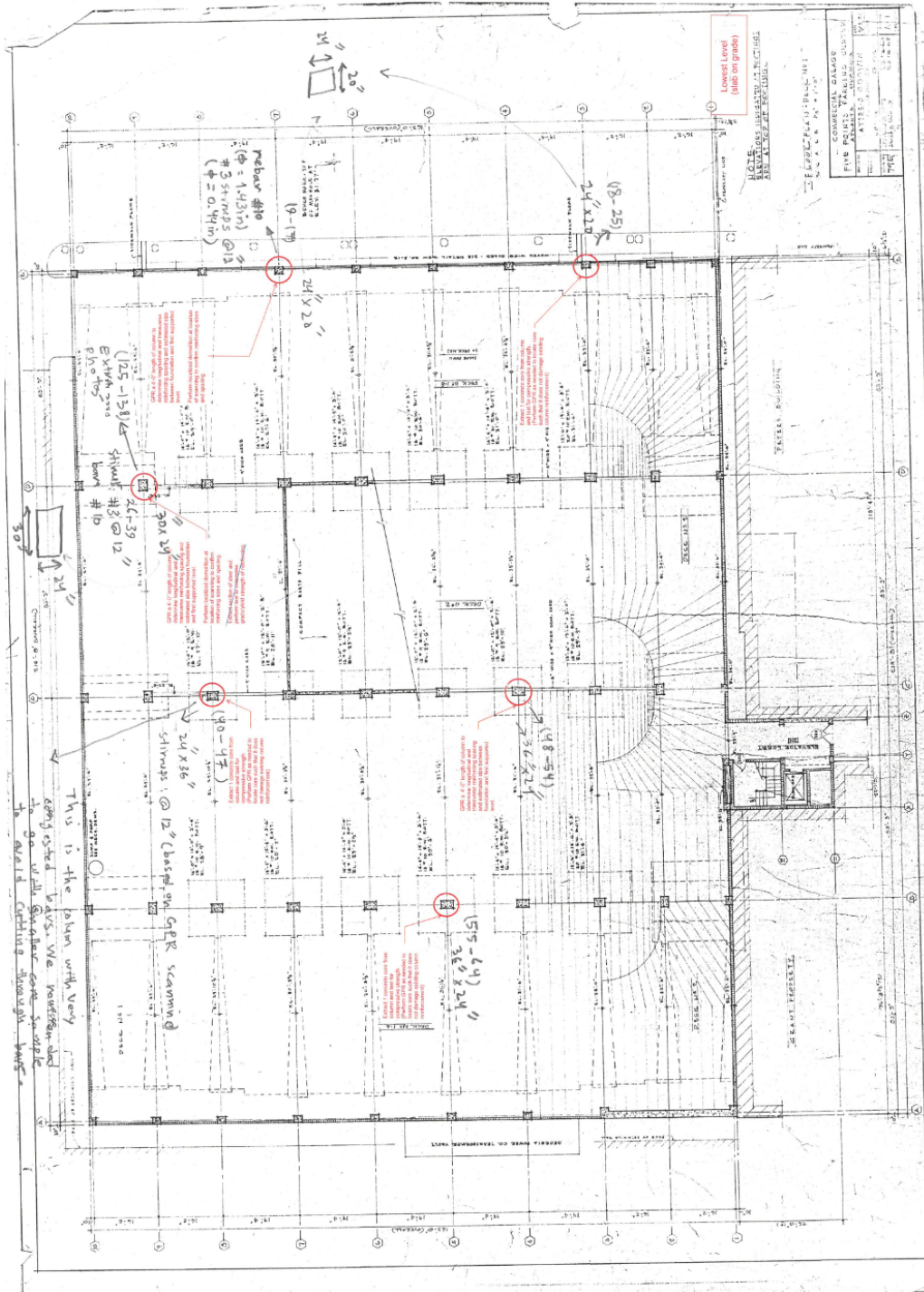




PG-106



Appendix C: Exploratory Investigation



Level Number 1 – Slab on Grade, Elevation 29'-6"

Photo 1. Column E-7 at Level Number 1

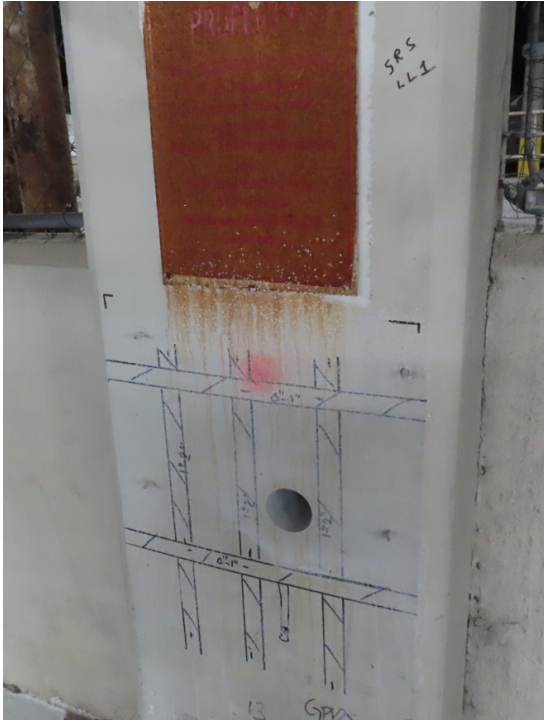


Photo 2. Column C-4 at Level Number 1

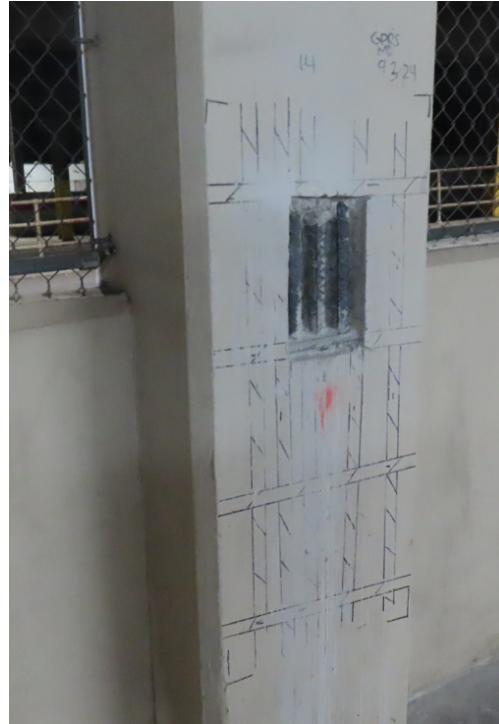


Photo 3. Column D-9 at Level Number 1



Photo 4. Bottom of Beam Grid 5, Between Grids C and D, Level Number 2



Photo 5. Column B-7 at Level Number 7



Photo 6. Column D-4 at Level Number 7

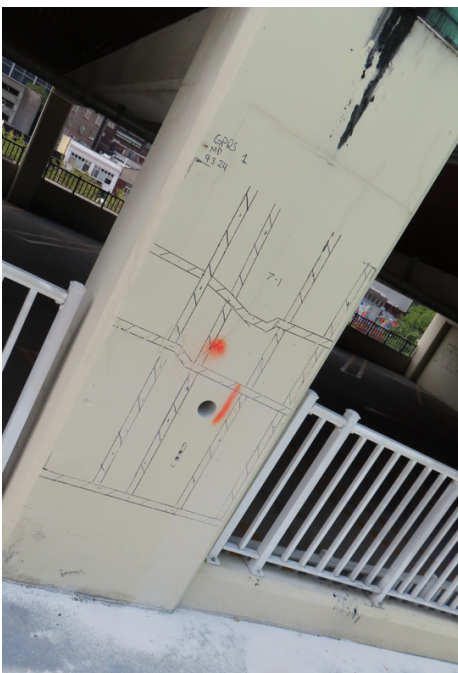


Photo 7. Column C-2 at Level Number 7



Appendix D: Concrete Compressive Strength



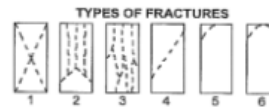
Report of ASTM C42-20 Concrete Core Compressive Strength Determination

Client:	<u>Walker Consultants</u>	Date Tested:	<u>10/2/2024</u>
Project Name:	<u>33 Prior Street</u>	Lab Number:	<u>24-1656</u>
Date of Coring:	<u>Unknown</u>	Project Number:	<u>24131</u>
Date of Placement:	<u>Unknown</u>	Location:	<u>33 Prior Street</u>
Specified Strength:	<u>Unknown</u>	Age at Testing:	<u>Unknown</u>
Sample Curing:	<u>per ASTM C42</u>	Machine Used:	<u>Instron or Testmark?</u>
Max Agg. Size:	<u>3/4"</u>	Calipers:	<u>4044</u>
Obtained By:	<u>SGS TEC Services</u>	Orientation of Cores:	<u>Perpendicular to concrete surface</u>
		Loading Rate:	<u>35 psi/s</u>


Sample ID	Diameter (in)	Core Length (in)	Sawn Length (in)	Partially Saturated Weight (g)	Partially Saturated Unit Weight (pcf)	Tested Core Length (in)	Area (in ²)	Maximum Load (lbf)	L/D Ratio	Correction Factor	Core Compressive Strength (psi)	Fracture Type ¹
FA-1	2.78	3.70	2.84	620.05	137.0	3.20	6.07	33,425	1.15	0.906	4990	2
FA-2	2.77	3.50	2.81	638.00	143.5	3.10	6.03	35,400	1.12	0.899	5280	1
#2-1	2.77	3.90	3.04	717.02	149.1	3.41	6.03	49,135	1.23	0.925	7540	2
LL-1	2.77	7.80	4.96	1141.36	145.5	5.26	6.03	40,991	1.90	1.000	6800	2
LL-2	2.77	7.90	4.92	1121.53	144.1	5.23	6.03	27,624	1.89	1.000	4580	2
LL-2 (B)	1.79	3.30	2.67	256.45	145.4	3.03	2.52	13,154	1.69	0.975	5100	3
#7-1	2.77	7.30	4.97	1128.90	143.6	5.24	6.03	34,783	1.89	1.000	5770	4
#7-2	2.77	3.50	2.95	699.10	149.8	3.31	6.03	57,876	1.19	0.916	8800	2
#7-3	2.77	7.80	4.91	1150.62	148.1	5.17	6.03	47,796	1.87	1.000	7930	2
#7-4	2.77	4.30	3.44	802.88	147.5	3.73	6.03	46,327	1.35	0.942	7240	2
Average											6400	


Note 1 - Fractures types are per ASTM C39-21.

Note 2 - The ends of the core samples were wet sawed on 9/16/24. When samples were visibly dry the samples were weighed, ends capped on 9/16/24, and sealed in plastic bag until time of testing on 9/18/24.

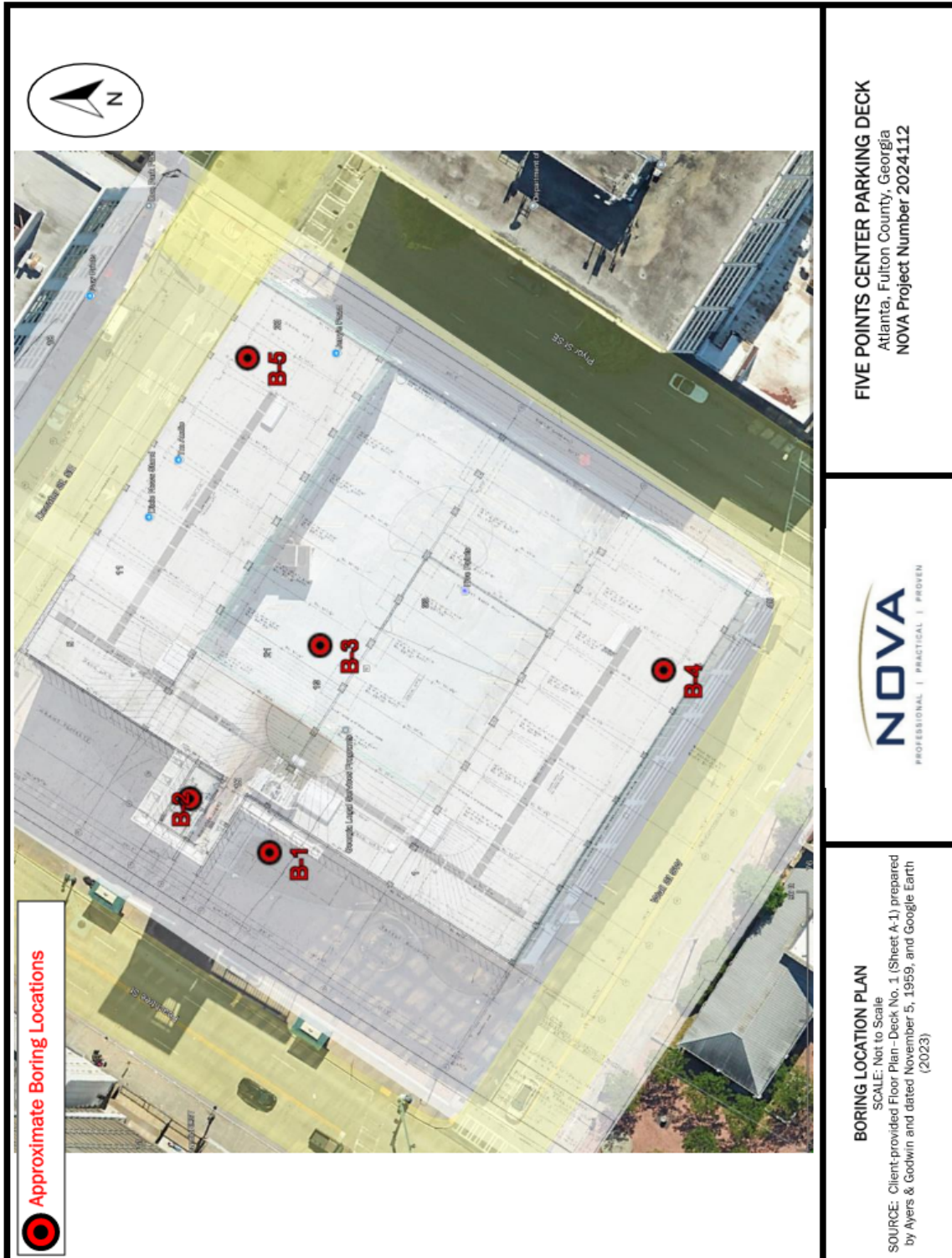


The test results presented only pertain to the samples tested. We appreciate the opportunity to provide our services to you on this project. If you have any questions regarding this report please feel free to contact the undersigned.

Tested By: 
 Michael Burpo
 Senior Technician
 ACI Certified Lab Technician

Reviewed By: 
 Brian J. Wolfe, PE
 Principal Engineer
 GA Registration No. 38133

Appendix E: Soil Boring Locations and Logs





 TEST BORING RECORD B-1		PROJECT NAME: <u>Five Points Center Parking Deck</u>		PROJECT NO.: <u>10102-2024112</u>	
		CLIENT: <u>Walker Parking Consultants</u>		LATITUDE: <u>33.753900°</u>	
		PROJECT LOCATION: <u>33 Pryor St. NW, Atlanta, GA</u>		LONGITUDE: <u>-84.389852°</u>	
		LOCATION: <u>B-1</u>		ELEVATION: <u>1029.5 FT - NAVD88</u>	
		DRILLER: <u>Drew (Piedmont Environmental Drilling, Inc.)</u>		LOGGED BY: <u>E. Woods</u>	
		DRILLING METHOD: <u>Mud Rotary</u> % ENERGY: <u>96.8%</u>		DATE: <u>09/11/2024</u>	
		DEPTH TO-WATER> INITIAL: <input type="checkbox"/> N/E AFTER HOURS: <input type="checkbox"/>		CAVING> <u>C</u>	

Elevation (ft)-NAVD88	DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER (ft)	SAMPLE TYPE	BLOW COUNTS (UNCORRECTED N VALUE)	<input type="checkbox"/> N Value <input type="checkbox"/> Moisture Content (%) <input type="checkbox"/> Plastic/Liquid Limit (%) <input type="checkbox"/> Fines Content (%)
		CONCRETE: 8 INCHES	[Pattern]				
		GRADED AGGREGATE BASE (GAB): 30 INCHES	[Pattern]				
		Auger Refusal at 3.0 ft.					
1025	5						
1020	10						
1015	15						
1010	20						
1005	25						
1000	30						
995	35						
990	40						
985							

NOTES: 1) Elevations were interpolated from the 7.5-Minute USGS Topographical Map of Northwest Atlanta, 2024 and Sheet A-12 prepared by Ayers & Godwin, Atlanta dated 12/1959. 2) Concrete slab encountered at 3 feet.

Page 1 of 1

This information pertains only to this boring and should not be interpreted as being indicative of the site.

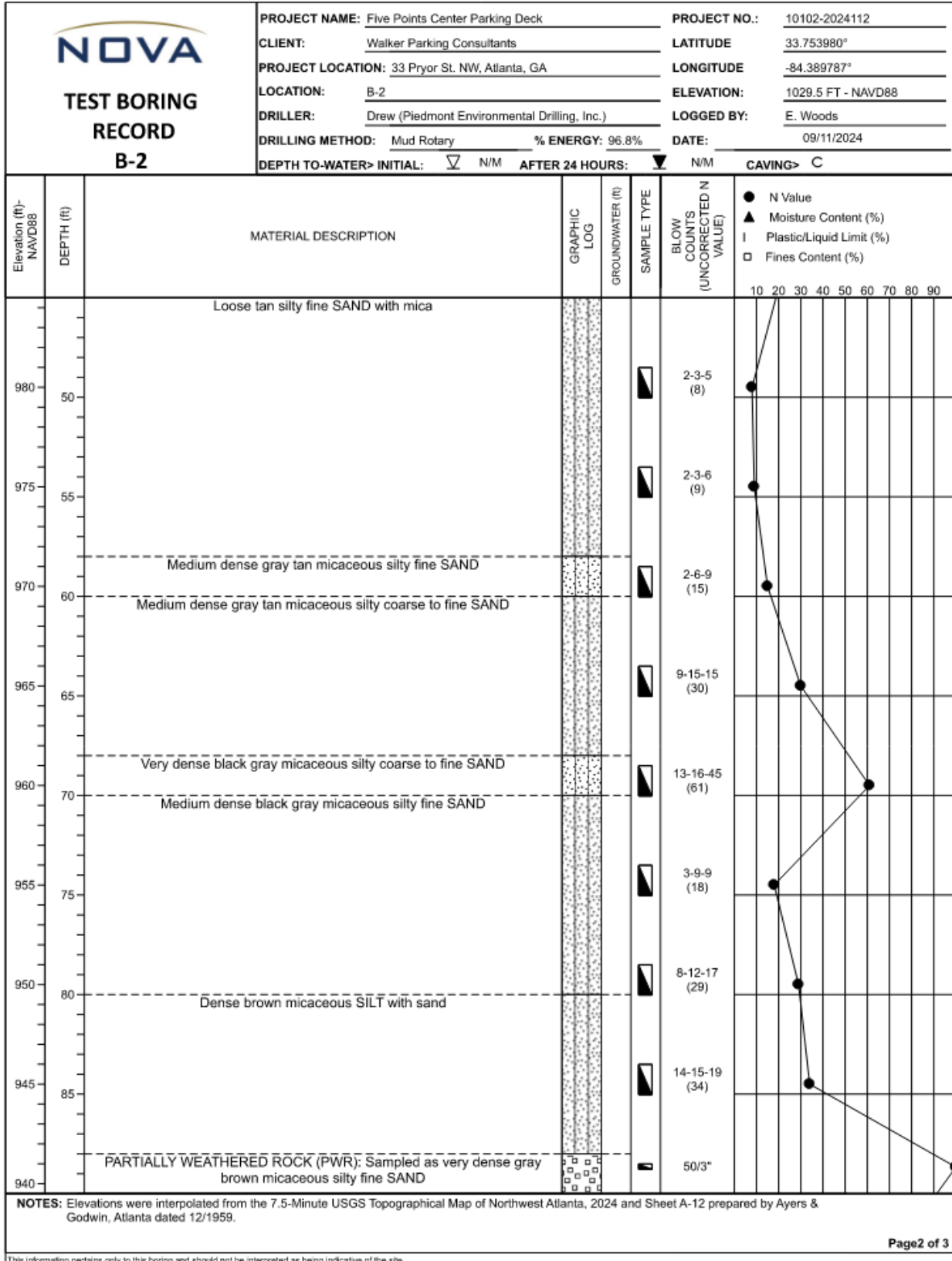


NOVA		PROJECT NAME: Five Points Center Parking Deck		PROJECT NO.: 10102-2024112			
TEST BORING RECORD		CLIENT: Walker Parking Consultants		LATITUDE: 33.753980°			
B-2		PROJECT LOCATION: 33 Pryor St. NW, Atlanta, GA		LONGITUDE: -84.389787°			
		LOCATION: B-2		ELEVATION: 1029.5 FT - NAVD88			
		DRILLER: Drew (Piedmont Environmental Drilling, Inc.)		LOGGED BY: E. Woods			
		DRILLING METHOD: Mud Rotary % ENERGY: 96.8%		DATE: 09/11/2024			
		DEPTH TO-WATER> INITIAL: ▽ N/M AFTER 24 HOURS: ▼ N/M		CAVING> C			
Elevation (ft)-NAVD88	DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER (ft)	SAMPLE TYPE	BLOW COUNTS (UNCORRECTED N VALUE)	<ul style="list-style-type: none"> ● N Value ▲ Moisture Content (%) I Plastic/Liquid Limit (%) □ Fines Content (%)
		CONCRETE: 8 INCHES					10 20 30 40 50 60 70 80 90
		GRADED AGGREGARE BASE (GAB): 54 INCHES					
1025	5	RESIDUUM: Soft purple brown micaceous sandy SILT				4-8-9 (17)	
		Loose purple brown micaceous silty medium to fine SAND				2-2-2 (4)	
1020	10					1-3-4 (7)	
		Medium dense brown gray micaceous silty medium to fine SAND				1-4-7 (11)	
1015	15					2-3-4 (7)	
		Loose gray black micaceous silty medium to fine SAND				3-4-7 (11)	
1010	20					3-5-6 (11)	
		Medium dense gray white micaceous silty coarse to fine SAND				1-3-3 (6)	
1005	25					3-4-5 (9)	
		Loose gray black micaceous silty coarse to fine SAND				5-7-13 (20)	
1000	30						
		Medium dense brown gray micaceous silty coarse to fine SAND with quartz fragments					
995	35						
990	40						
985							

NOTES: Elevations were interpolated from the 7.5-Minute USGS Topographical Map of Northwest Atlanta, 2024 and Sheet A-12 prepared by Ayers & Godwin, Atlanta dated 12/1959.

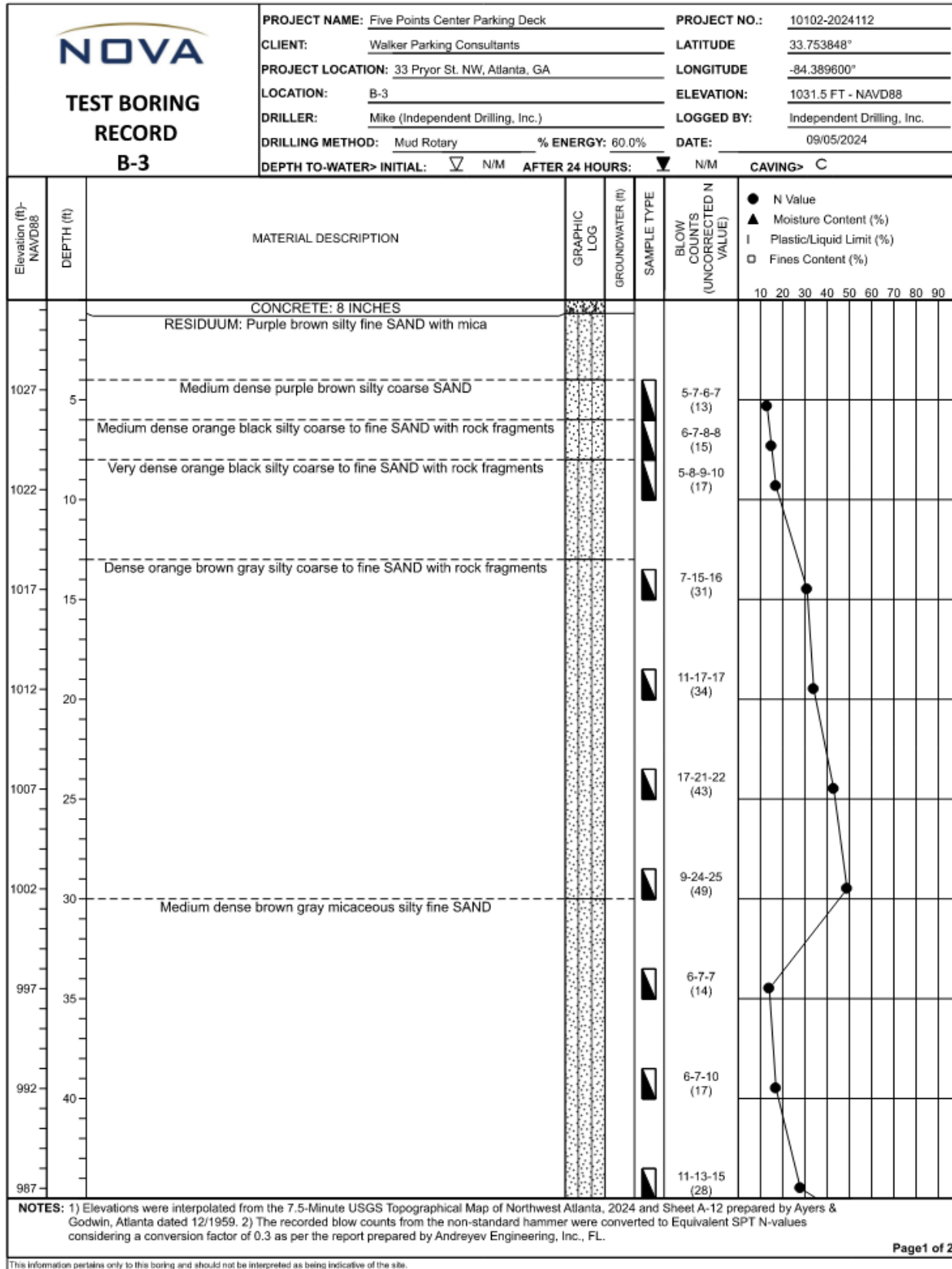
Page 1 of 3

This information pertains only to this boring and should not be interpreted as being indicative of the site.





<p>TEST BORING RECORD B-2</p>		PROJECT NAME: Five Points Center Parking Deck		PROJECT NO.: 10102-2024112			
		CLIENT: Walker Parking Consultants		LATITUDE: 33.753980°			
		PROJECT LOCATION: 33 Pryor St. NW, Atlanta, GA		LONGITUDE: -84.389787°			
		LOCATION: B-2		ELEVATION: 1029.5 FT - NAVD88			
		DRILLER: Drew (Piedmont Environmental Drilling, Inc.)		LOGGED BY: E. Woods			
		DRILLING METHOD: Mud Rotary % ENERGY: 96.8%		DATE: 09/11/2024			
		DEPTH TO-WATER> INITIAL: ∇ N/M AFTER 24 HOURS: ▼ N/M		CAVING> C			
Elevation (ft)- NAVD88	DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER (ft)	SAMPLE TYPE	BLOW COUNTS (UNCORRECTED N VALUE)	<ul style="list-style-type: none"> ● N Value ▲ Moisture Content (%) I Plastic/Liquid Limit (%) □ Fines Content (%)
							10 20 30 40 50 60 70 80 90
935	95	PARTIALLY WEATHERED ROCK (PWR): Sampled as very dense gray brown micaceous silty fine SAND				11-12-50 (62)	●
930	100	Auger Refusal at 97.0 ft.					
925	105						
920	110						
915	115						
910	120						
905	125						
900	130						
895							
<p>NOTES: Elevations were interpolated from the 7.5-Minute USGS Topographical Map of Northwest Atlanta, 2024 and Sheet A-12 prepared by Ayers & Godwin, Atlanta dated 12/1959.</p>							
							Page3 of 3
This information pertains only to this boring and should not be interpreted as being indicative of the site.							





 TEST BORING RECORD B-3		PROJECT NAME: Five Points Center Parking Deck CLIENT: Walker Parking Consultants PROJECT LOCATION: 33 Pryor St. NW, Atlanta, GA LOCATION: B-3 DRILLER: Mike (Independent Drilling, Inc.) DRILLING METHOD: Mud Rotary % ENERGY: 60.0% DEPTH TO-WATER> INITIAL: ▽ N/M AFTER 24 HOURS: ▽ N/M CAVING> C			PROJECT NO.: 10102-2024112 LATITUDE: 33.753848° LONGITUDE: -84.389600° ELEVATION: 1031.5 FT - NAVD88 LOGGED BY: Independent Drilling, Inc. DATE: 09/05/2024															
		Elevation (ft)- NAVD88	DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER (ft)	SAMPLE TYPE	BLOW COUNTS (UNCORRECTED N VALUE)	● N Value ▲ Moisture Content (%) Plastic/Liquid Limit (%) □ Fines Content (%)											
10	20								30	40	50	60	70	80	90					
		Medium dense brown gray micaceous silty fine SAND																		
982	50	PARTIALLY WEATHERED ROCK (PWR): Sampled as very dense gray brown micaceous silty fine SAND				19-46-63 (109)														N=109
977	55	Auger Refusal at 55.0 ft.				67/3"														N=134
972	60																			
967	65																			
962	70																			
957	75																			
952	80																			
947	85																			
942																				

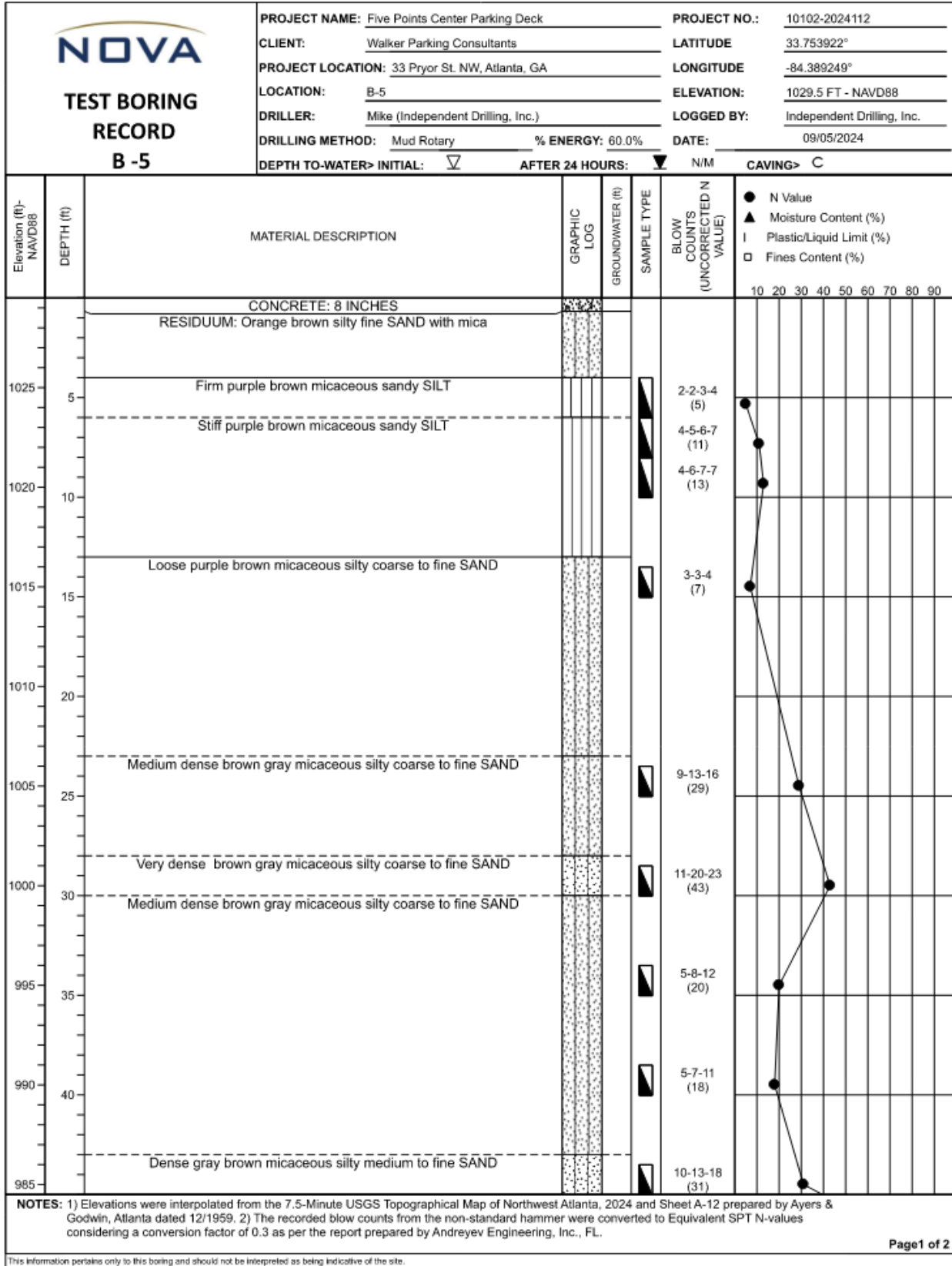
NOTES: 1) Elevations were interpolated from the 7.5-Minute USGS Topographical Map of Northwest Atlanta, 2024 and Sheet A-12 prepared by Ayers & Godwin, Atlanta dated 12/1959. 2) The recorded blow counts from the non-standard hammer were converted to Equivalent SPT N-values considering a conversion factor of 0.3 as per the report prepared by Andreyev Engineering, Inc., FL.

This information pertains only to this boring and should not be interpreted as being indicative of the site.



NOVA		PROJECT NAME: Five Points Center Parking Deck		PROJECT NO.: 10102-2024112			
TEST BORING RECORD		CLIENT: Walker Parking Consultants		LATITUDE: 33.753500°			
B-4		PROJECT LOCATION: 33 Pryor St. NW, Atlanta, GA		LONGITUDE: -84.389630°			
		LOCATION: B-4		ELEVATION: 1029.5 FT - NAVD88			
		DRILLER: Mike (Independent Drilling, Inc.)		LOGGED BY: Independent Drilling, Inc.			
		DRILLING METHOD: Mud Rotary % ENERGY: 60.0%		DATE: 09/04/2024			
		DEPTH TO-WATER> INITIAL: ∇ N/M AFTER 24 HOURS: ∇ N/M		CAVING> C			
Elevation (ft)-NAVD88	DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER (ft)	SAMPLE TYPE	BLOW COUNTS (UNCORRECTED N VALUE)	● N Value ▲ Moisture Content (%) Plastic/Liquid Limit (%) □ Fines Content (%)
		CONCRETE: 8 INCHES					10 20 30 40 50 60 70 80 90
		RESIDUUM: Orange brown CLAY with sand					
		Purple brown micaceous sandy SILT					
1025	5	Very loose purple brown micaceous silty coarse to fine SAND			1-1-2-2 (3)	●	
		Firm purple brown micaceous sandy SILT			2-2-3-3 (5)	●	
1020	10	Loose purple brown micaceous silty fine SAND			4-5-4-4 (9)	●	
		Very loose purple brown micaceous silty fine SAND					
1015	15				2-2-2 (4)	●	
		Loose gray brown micaceous silty fine SAND					
1010	20				6-4-5 (9)	●	
1005	25				3-3-3 (6)	●	
1000	30				3-3-4 (7)	●	
995	35	Loose green gray micaceous silty fine SAND with rock fragments			4-4-6 (10)	●	
990	40	PARTIALLY WEATHERED ROCK (PWR): Sampled as very dense gray micaceous silty fine SAND			67/2"		N=134
		Auger Refusal at 40.0 ft.					
985							

NOTES: 1) Elevations were interpolated from the 7.5-Minute USGS Topographical Map of Northwest Atlanta, 2024 and Sheet A-12 prepared by Ayers & Godwin, Atlanta dated 12/1959. 2) The recorded blow counts from the non-standard hammer were converted to Equivalent SPT N-values considering a conversion factor of 0.3 as per the report prepared by Andreyev Engineering, Inc., FL.





 TEST BORING RECORD B-5		PROJECT NAME: Five Points Center Parking Deck CLIENT: Walker Parking Consultants PROJECT LOCATION: 33 Pryor St. NW, Atlanta, GA LOCATION: B-5 DRILLER: Mike (Independent Drilling, Inc.) DRILLING METHOD: Mud Rotary % ENERGY: 60.0% DEPTH TO-WATER> INITIAL: ∇ AFTER 24 HOURS: ▼ N/M CAVING> C		PROJECT NO.: 10102-2024112 LATITUDE: 33.753922° LONGITUDE: -84.389249° ELEVATION: 1029.5 FT - NAVD88 LOGGED BY: Independent Drilling, Inc. DATE: 09/05/2024																	
Elevation (ft)- NAVD88	DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER (ft)	SAMPLE TYPE	BLOW COUNTS (UNCORRECTED N VALUE)	● N Value ▲ Moisture Content (%) Plastic/Liquid Limit (%) □ Fines Content (%)														
		Dense gray brown micaceous silty medium to fine SAND					10 20 30 40 50 60 70 80 90														
980	50	PARTIALLY WEATHERED ROCK (PWR): Sampled as very dense gray silty coarse to fine SAND with rock fragments			-	67/1"															N=134
		Auger Refusal at 50.0 ft.																			
975	55																				
970	60																				
965	65																				
960	70																				
955	75																				
950	80																				
945	85																				
940																					

NOTES: 1) Elevations were interpolated from the 7.5-Minute USGS Topographical Map of Northwest Atlanta, 2024 and Sheet A-12 prepared by Ayers & Godwin, Atlanta dated 12/1959. 2) The recorded blow counts from the non-standard hammer were converted to Equivalent SPT N-values considering a conversion factor of 0.3 as per the report prepared by Andreyev Engineering, Inc., FL.

Page 2 of 2

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Appendix F: Reinforcing Properties

Load at Yield (0.2% offset)	5,954 lbs
Peak Load	8,639 lbs
Yield Stress (0.2% offset)	54,100 psi
Peak Stress	78,500 psi
Modulus of Elasticity	30,443,600 psi

The results for the reinforcing material testing are consistent with Grade 40 reinforcing which was anticipated for the 1950's.

Appendix G: Opinion of Probable Costs

DIVISION		ITEM COST
01 00 00	General Conditions.....	\$1,330,000.00
02 00 00	Site Work.....	\$3,275,000.00
03 00 00	Concrete.....	\$825,000.00
04 00 00	Masonry.....	\$36,800.00
05 00 00	Metals.....	\$2,203,000.00
09 00 00	Finishes.....	\$126,500.00
21 00 00 & 22 00 00	Mechanical.....	\$61,300.00
26 00 00	Electrical.....	\$122,500.00
OPINION OF PROBABLE CONSTRUCTION COST		\$7,980,100.00

The above Opinion of Probable Costs consider the following:

- Site work includes demolition
- Removal of roof top equipment and enclosures
- Capping of utilities, electrical, water, sanitary sewer, below Level Number 7
- Removal of the existing façade enclosing the office space at the top of the structure
- Demolition of the current Level Numbers 8, 9, and roof
- Saw cut and removal of an approximate 20'-0" by 15'-2" area of the existing concrete slab near Grid E-10 at Level Numbers 1 through 7 for the addition of a second egress stair
- The new levels added for parking will be constructed with structural steel. The structural steel will have a cementitious fireproofing applied to achieve the 2-hour rating.
- The added stair will be metal pan with pipe and tube guardrails and handrails
- The concrete slab will span between Grids A-B, B-C, C-D, and D-E to minimize the slab thickness. The concrete slab will be placed on metal deck which will only be used as a form. The concrete slab will be reinforced, top and bottom, to resist the applied loads.
- Reinforced concrete shearwalls will be incorporated. The sizes considered in the opinion of probable costs are:
 - 30'-0 long x 12" thick along Grid 10
 - (3) 16'-4" x 12" thick along Grid C
- Foundation modifications will be required for support/stability of the shearwalls. 200 cubic yards of concrete was assumed.
- The shearwall sizes and locations will need to be confirmed with the final design. The foundation modifications will also require confirmation.
- The vehicular barrier system for the added levels will be (11) ½" diameter barrier cables. A spandrel system or façade is not currently considered.
- The MEP/FP system considered includes standpipe, storm drainage, and lighting for Level Number 8 and 9 only.

The following items are not considered in the Opinion of Probable Costs:

- Providing a spandrel or façade system at the two added levels
- Upgrading the electrical system to include standby power for the elevators
- Modifying the MEP/FP systems below Level Number 7
- Upgrading the existing stair guardrails for the increased loads in IBC 2018
- Upgrading the vehicular barrier systems at the parking perimeter or vehicular ramps
- The increased loads along Grid C are assumed to be within the column capacities when comparing sizes to that at Grids B and D. Structural strengthening of these columns will require confirmation during the final design.
- The State of Georgia will be adopting IBC 2024 in January 2026. Updates to the code, such as sprinkling requirements, have not been considered.

Reference meeting notes with the City of Atlanta dated November 5, 2024, for additional clarification on what systems warrant upgrading to current standards. This Opinion of Probable Costs does not account for all potential code upgrade requirements.