CITY OF LOS ANGELES

INTER-DEPARTMENTAL MEMORANDUM

Date: September 5, 2023

To: Municipal Facilities Committee

Los Angeles City Hall East – Room 1500

Attention: Matthew W. Szabo, City Administrative Officer, Chair (CAO)

From: Connie Llanos, Interim General Manager

Department of Transportation

Subject: LADOT Interim Bus Charging Facility – 411 North Vermont Avenue

SUMMARY

In response to CAO File No. 0640-01399-0129 (2023-2024 First Construction Projects Report), this report describes the proposed use of 411 North Vermont Avenue 90004 as an interim bus charging location for LADOT Transit, including an assessment of electrical and structural site suitability.

RECOMMENDATION

REVIEW and APPROVE the partial use of the Hollywood Parking Enforcement Office, 411 North Vermont Avenue, as an interim bus charging facility.

BACKGROUND

State regulation and local directives require LADOT to transition to a 100% zero-emission transit fleet by 2028. To comply with these directives, LADOT is converting its more than 350 bus fleet to battery-electric vehicles by replacing propane, compressed natural gas, and gasoline vehicles at the end of their useful life with battery-electric vehicles. LADOT put its first four alternating-current (AC) battery-electric buses into operation in 2017 and another 25 direct-current (DC) battery-electric buses into operation in 2020. In October 2019, Council authorized LADOT to enter into an agreement with BYD Motors, LLC. to procure one hundred thirty (130) electric buses (30 AC buses and 100 DC buses) (C-134342). Thirty-five buses (35) from this order have been delivered, with the remaining ninety-five (95) scheduled to be delivered through the end of 2023. In total, LADOT will have 34 AC buses and 125 DC buses by the end of the year.

At this time, LADOT's bus yards are equipped with charging capacity for 26 AC buses and 53 DC buses. LADOT expects to be able to charge 34 AC buses by January 2023, 101 DC buses by June 2024 (with interim bus chargers at 411 N. Vermont), and up to 160 DC buses by June 2025.

LADOT is in the process of retrofitting its five bus yards to support electric bus charging and maintenance. The department is behind schedule on yard upgrades due to contracting delays, COVID-related supply chain and staffing issues, and lengthy timelines for establishing new electrical service. By January 2024, LADOT will have sufficient charging infrastructure for its AC buses but needs to quickly establish additional DC charging infrastructure at interim sites for use in 2024 and 2025. The department is executing contracts that will bring online three permanent DC charging facilities in 2025 and 2026.

PROPOSED 411 N VERMONT CHARGING FACILITY

LADOT reviewed its portfolio of underutilized properties with a significant amount of power already on site. LADOT identified 411 N Vermont, a three-level 78,000 square foot building with a basement and attached parking garage, for its location near Mid-City DASH routes, size, and existing electrical service. Purchased in 1990, the Los Angeles Department of Transportation building served as the headquarters for the Parking Enforcement's Hollywood Division. In recent years, LADOT transitioned this Division out of the building to a property nearby and, as of this report, just one parking enforcement shift operates from the building. The property has been identified by the Council office and Mayor as a potential opportunity site for affordable housing development in the future but has no planned use for the next several years.

Electrical And Structural Assessments

At the request of LADOT and the Mayor's Office, BOE staff performed a preliminary electrical assessment of 411 N. Vermont for the proposed installation of EV chargers. The building has a sizable electrical service with available power to support charging as many as 48 buses from eight 180kw chargers with dual dispensers. Based on BOE's visual inspection, the general electrical distribution system appears to be in good condition and, for short term use such as that proposed for LADOT's interim charging facility, the project would be able to make use of the existing electrical equipment without concern. If this project moves forward, a more detailed analysis will be performed as part of the engineering, design, and permitting process.

BOE's Structural Engineering Division (SED) completed a structural assessment of 411 N. Vermont for the proposed interim bus charging use. The report recommends that buses be parked only on the asphalt-on-grade areas of the parking garage, and that no bus parking should occur on the elevated concrete slabs or above the underground diesel tank. The proposed charging installation will require sixteen total bus parking spaces, which can be created from the available parking area. If the project moves forward, LADOT will comply with BOE's recommendation to clearly mark and/or block off restricted areas for bus parking. The building is subject to the Mandatory Earthquake Hazard Reduction in Existing Non-Ductile Concrete Buildings Ordinance and, accordingly, will need to be retrofitted or demolished before 2042 but is seismically sound for the proposed short-term use. Additional information and diagrams can be found in Attachment 1 - Summary of Available Bus Parking at 411 N. Vermont Ave Parking Structure.

Interim Installation

LADOT proposes using the General Services Department's Construction Forces Division for all project construction work. This includes pulling permits, installing chargers and associated electrical equipment, and clearing inspections. To expedite the install, and given its temporary nature, GSD will use minimally invasive construction techniques. They will also skid-mount the equipment so that the chargers and other higher-cost electrical equipment can be easily disconnected and moved to a permanent location in one of LADOT's bus yards when this facility is no longer needed.

<u>Budget</u>

The project will cost an estimated \$1.5 million. Approximately eighty percent (\$1.2 million) of this preliminary budget estimate is charging equipment that, as noted above, LADOT will relocate once the interim charging facility is no longer needed. The project budget is expected to adjust once engineering design is complete. There is no anticipated General Fund impact. Costs will be funded by Proposition A and a State Transit and Intercity Rail Capital Program (TIRCP) grant.

Attachment 1

SUMMARY OF AVAILABLE BUS PARKING AT 411 N VERMONT AVE PARKING STRUCTURE

1) New Hampshire Ave Entrance

- New Hampshire Ave is at a lower grade than Vermont Avenue.
- There are two entrances from New Hampshire Avenue.
- The northern entrance is a ramp going up to the 2nd floor and the roof. This entrance will not be used for the buses. See site plan
- The southern entrance leads to a level surface and is asphalt-on-grade. Buses can be parked on all the available space here. See plan-1 and photo-1.
- See plan-1 for approximate dimensions showing the square footage of available parking.

2) Vermont Ave Entrance

- Vermont Ave is at a higher grade than New Hampshire Avenue.
- There is only one entrance from Vermont avenue. The parking area is partially asphalt-on-grade and partially elevated concrete floor. See plan-2 and photo-3.
- The eastern side (Vermont Ave) is asphalt-on-grade and the west side (New Hampshire Ave) is elevated concrete slab. See photo-3.
- The west side becomes the 2nd floor above the 1st floor of New Hampshire Avenue.
- Buses can be parked only on the eastern side on asphalt.
- There is an underground diesel tank located right at the entrance from Vermont Avenue. This is evident by a visible sign on a bollard and also by the rectangular concrete slab (approx. 42' x 47') see photo-2.
- Buses should not be staged or parked over this concrete slab at the entrance. They can pass over it.
- See plan-2 for approximate dimensions showing the square footage of available parking.

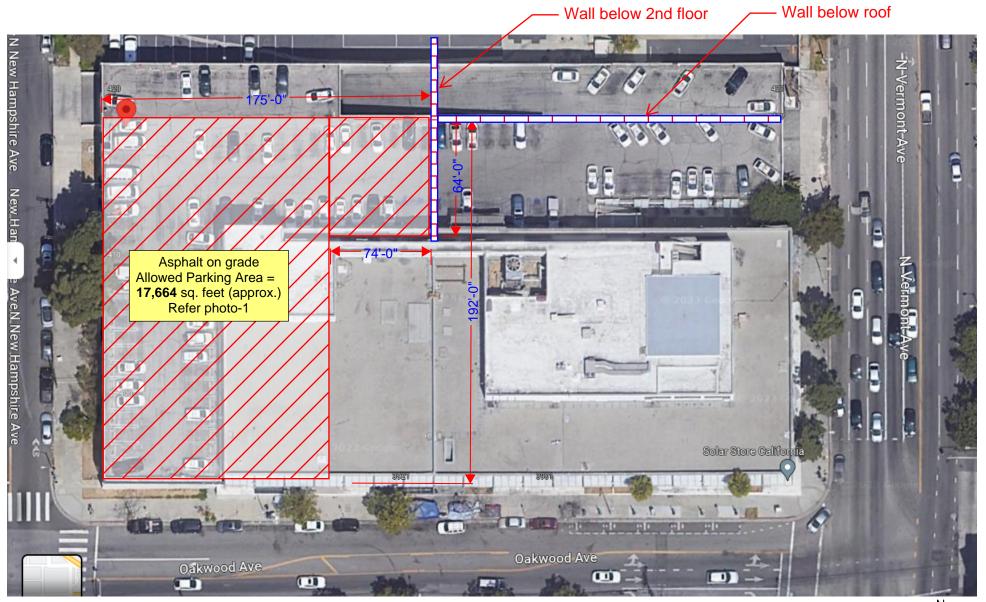
Recommendations:

- Buses should be parked only on the asphalt-on-grade areas as noted above and on the plans. No bus parking on elevated concrete slabs or above underground diesel tank is allowed.
- Other areas shall clearly marked and/or be blocked off with k-rail (or other means) to prevent the bus parking on elevated concrete slabs and above the diesel storage tank.



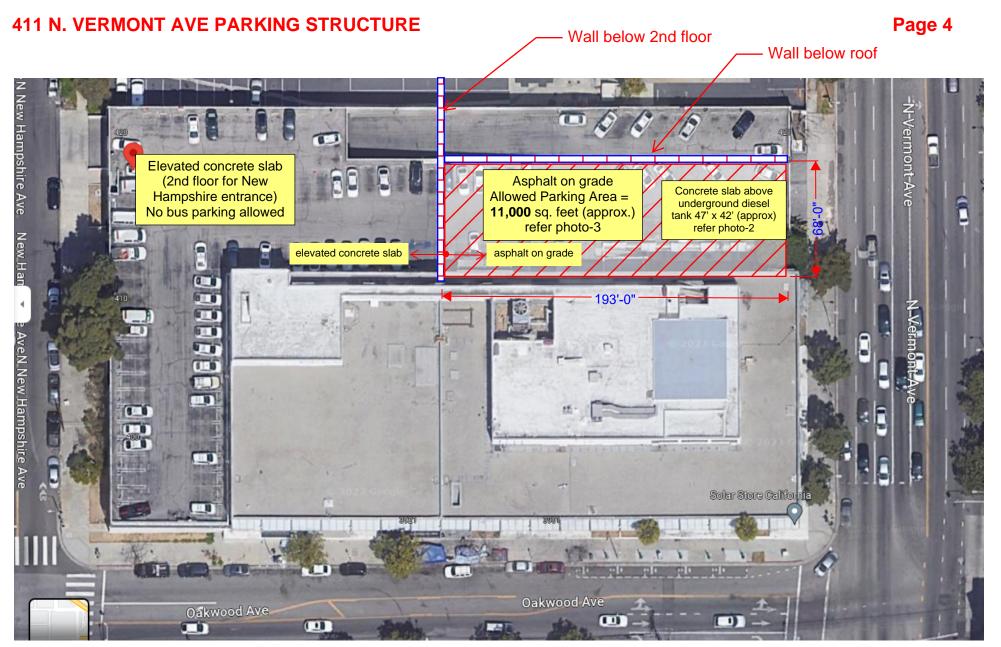
SITE PLAN





PLAN-1: AVAILABLE PARKING AT 1ST FLOOR FROM NEW HAMPSHIRE AVE ENTRANCE





PLAN-2: AVAILABLE PARKING AT 1ST FLOOR FROM VERMONT AVE ENTRANCE





PHOTO-1: 1ST FLOOR FROM NEW HAMPSHIRE AVE ENTRANCE



PHOTO-2: VERMONT AVE ENTRANCE



PHOTO-3: 1ST FLOOR FROM VERMONT AVE ENTRANCE