Kirkland Yard Electrification Project Update

SFMTA Citizen’s Advisory Council (CAC)
Engineering, Maintenance, and Safety Committee (EMSC)
Kirkland Yard
2301 Stockton Street, San Francisco, CA 94133

Project Status:
• Pre-Development Phase (Planning Phase): completed August 2023
• Preliminary Engineering Phase: next phase (mid-late September 2023)
• Public Outreach and Engagement (POE): initiate with SFMTA POET Team
Kirkland Yard in Fisherman’s Wharf
Kirkland Yard – the Facility Today
Kirkland Yard – the Facility Yesterday c.1976
Kirkland Yard - Project Description

Location: 2301 Stockton Street in the Fisherman’s Wharf and Pier 39 neighborhood.

Purpose: Upgrade facilities and electrification to store, maintain and charge approx. 111 40-ft battery electric buses (BEB) at the existing Kirkland Yard.

- Kirkland Yard will convert from a diesel-hybrid bus fleet to BEB fleet. Kirkland is the first yard of 6.
- SFMTA is mandated to meet California Air Resources Board (CARB) Innovative Clean Transit (ICT) regulation to operate 100% zero emission buses by 2040.
- Kirkland Yard Electrification Project will align with SFMTA’s Zero-Emission Bus Roll-Out Plan

General Scope:

New Work: New pavement for BEBs, new site drainage, new bus wash, dedicated outdoor maintenance bays, new overhead gates at Stockton Street (bus pull-outs), new yard lighting and infill perimeter fencing to match existing.

Demolished/Removed: Operations Building and temporary trailer.

Remain in Place: maintenance bays, tire shop, parts offices and fueling island.
Kirkland Yard - Design Scope Elements

1. **Outdoor Maintenance Workspace**
   - Workspace *for lifting buses & scaffolding.*
   - Canopy Covering *at outdoor maintenance lifts and body shop*

2. **Yard Pavement**

3. **Bus Wash**

4. **Maintenance Office Space**

5. **Number of Buses**
   - Maybe 111 BEB charging spaces
   - Caveat: space-proof yard layout for wider islands, bio-swales, wider BEB lanes, bus wash reclamation equipment

6. **Bus Operations**
   - Remain the same with “pull-outs” onto Stockton Street
   - Buses circulate in counter-clockwise pattern in the yard
Concrete pad extends into Track 16 for the weight of the lift when the bus is in the air.
* Extra room is needed to remove and install the lifts

Yellow striping is where the scaffolds would be positioned on Track 16 to service the exterior and top of the buses.

**Maintenance Workspaces**
- Outdoor maintenance *workspaces at Tracks 16 & 17 remain*
- **New canopy cover over the maintenance** work areas - *to shelter from elements*
- **New canopy cover over the body shop** work area
Kirkland: Yard Drainage & Pavement

Yard Drainage
• Provide on-site stormwater retention bio-swales, and cistern for bus wash

Yard Pavement
• Provide concrete pavement to support heavier BEB buses, maintenance workspaces, and tolerances for pantograph charging
Kirkland: New Bus Wash

Replace existing bus wash

- Relocate from existing location to corner of yard.
- Provide new bus wash with reclamation system and cistern.
- Space-proof location with bus circulation, turning radius and yard layout configuration.
Kirkland: Operations Offices

**Operations Space** for Division Manager Office, Union Representative Office, Administrative, Dispatcher & Yard Starter “office” area and Training Office.

**Transit Operator Spaces:** Break Room, Locker & Restroom Facilities as well as yard staff personnel and Lactation Room.

**Temporary Office Trailer or Building:** develop for 15-year life cycle expectancy.
- Temporary office structure for operations staff.
- Robust, efficient and longevity.
- Potrero Project (2027) will provide additional conference and training rooms
Kirkland Yard: Number of BEB Buses

Number of Buses
13 rows x 8 columns equals **104 buses**

6 buses behind &
9 buses before
bus wash equals **15 buses**

**104 + 15 = 119 buses**
Minus 8 buses
(from outdoor maintenance)
Equals **111 Buses**

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Number of Buses: Discussed a bus fleet size count of **111 BEB charge positions**. Excludes the blue color-coded buses north of the pantograph charging area or in the Fueling Area. This area was kept free for circulation and additional bus storage of BEB’s not requiring complete charge or have been charged.

- Caveat - Yard to be space proofed for wider lanes for BEB buses, bio-swales (on-site storm water retention), wider equipment island, more than 1 equipment island, bus wash reclamation equipment.

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Kirkland Yard: Depot Charging of BEBs

Images of Steel-Framed Gantry Structure supporting depot pantograph charging system

Steel-Framed Gantry Structure w/overhead only depot pantographs. Charging Cabinets at grade.
# Kirkland: Project Schedule

| Activity                           | Duration (Mos) | 1Q 2023 | 2Q 2023 | 3Q 2023 | 4Q 2023 | 1Q 2024 | 2Q 2024 | 3Q 2024 | 4Q 2024 | 1Q 2025 | 2Q 2025 | 3Q 2025 | 4Q 2025 | 1Q 2026 | 2Q 2026 | 3Q 2026 | 4Q 2026 | 1Q 2027 | 2Q 2027 | 3Q 2027 | 4Q 2027 | 1Q 2028 | 2Q 2028 |
|------------------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Pre-Development                    | 9              | 9       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Bridging Documents (to PE)         | 10             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Prepare RFP & Advertise            | 9              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Award Construction Contract       | 2              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Design-Build Construction          | 31             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Final Close-Out                    | 6              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |

## Activity Details

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Thank you!