

Feasibility Study of Adaptive Reuse for Auto Dealership Activities

East Gateway Subarea
Oakland Army Base

Prepared for and with the assistance of
Oakland Community & Economic Development Agency
by

Stephen Fee
Nancy E. Stoltz
Woodruff Minor

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I. Introduction and Summary

I. INTRODUCTION AND SUMMARY

This report has been prepared for the Oakland Community & Economic Development Agency (CEDA) to study the technological feasibility of reusing eleven historic buildings on the former Oakland Army Base (OARB) as automobile dealerships. All of the buildings are situated within the boundaries of the proposed OARB Auto Mall Project. The report is an outgrowth of the OARB Supplemental Environmental Impact Report—Auto Mall Project (November 2006), and is meant to partially satisfy Mitigation Measure 4.6-14 from the Oakland Army Base Redevelopment Plan Environmental Impact Report (2002), as it relates to the Auto Mall Project.

The report was prepared by architect Stephen Fee, who produced the conceptual reuse designs; historic architect Nancy E. Stoltz, who produced the sections on historical context and existing conditions, and contributed text to the section on cost estimates, based on her previous study, *Oakland Army Base Historic Building Reuse Alternatives Report (2002)*¹; and architectural historian Woodruff Minor, who served as project manager and contributed text to various sections of the report. Graphic designer Julie Woodburn of Fee Munson Ebert (FME) oversaw report production. Additional assistance was provided by CEDA staff, which contributed text to the Introduction and Summary section and Cost Estimates section of the report.

Description of Auto Mall Project and Adaptive Reuse Study Area

The OARB Auto Mall Project forms part of the City of Oakland's 165-acre Gateway Development Area (GDA) at the north end of the former base, within the Oakland Army Base Redevelopment Area. As proposed by the Oakland Redevelopment Agency, the project would include up to eight auto dealerships, along with associated roadway and infrastructure improvements, on two 30-acre sites. The North Gateway subarea of the GDA, which would support four or five dealerships on approximately five-acre sites, is a roughly triangular area bounded on the north by the East Bay Municipal Utility District Wastewater Treatment Plant, on the east by I-880, and on the south by West Grand Avenue. The East Gateway subarea (described as "Option B" in the Supplemental EIR), bounded on the north by West Grand Avenue and on the west by Maritime Street, is the focus of this study (see map on page 7). Under two scenarios evaluated in the Supplemental EIR, four more dealerships on approximately four-acre sites are proposed for this subarea, ranging in size from 15,000 to 20,000 square feet, together with an approximately 13-acre site that would be used for either 150,000 square feet of "big box" retail, or ancillary maritime support services (e.g., support facilities for trucks, cargo-handling equipment, etc.).

Oakland Redevelopment Agency Goals and Rationale for Development

In developing the East Gateway portion of the former Oakland Army Base, the Oakland Redevelopment Agency is seeking to achieve several goals, including local business retention and attraction, job creation, and community benefits. Currently, Oakland is facing the loss of most of its existing auto dealers in four to six years, due to rising land values, the encroachment of housing development, pressure from auto manufacturers to modernize facilities, and substandard physical conditions on Broadway Auto Row. The eleven dealerships on Auto Row account for 650 jobs and \$3.9 million per year in sales tax. Of the eleven dealerships, six have leases that will expire by 2009. If a large number of dealers leave Auto Row, there is a risk that the remaining dealers would also need to relocate, since there would no longer be a critical mass of dealerships to attract shoppers to Broadway.

In order to retain dealerships in Oakland—and to allow them to become competitive with other auto retail centers in the Bay Area—it is critical to relocate them to a freeway location. The trend in auto

¹ This study was prepared for the Oakland Base Reuse Authority by Nancy E. Stoltz, project manager; Ripley Architects, consulting architects; Rutherford & Chekene, structural engineers; Moffatt & Nichol, marine engineers; and Davis Landon Adamson, cost estimators. The study included reuse alternatives for Buildings 808 and 812, as well as a partial reuse option for Building 808. These reuse schemes did not include auto dealerships.

retail has been for a substantial number of dealerships to co-locate in a freeway auto mall that offers an attractive, high-quality shopping environment with direct freeway visibility and access.

Using the design firm of Ware Malcomb, City staff analyzed the space needs for a potential freeway auto mall. According to Ware Malcomb, each dealer would need 4–6 acres, for a total of 40–60 acres in one or more freeway locations. The 40–60 acres could be allocated between two viable freeway locations: the GDA and the Coliseum. However, some dealers are unable to consider the Coliseum area because: (1) they need to move within two to three years, while it may take more time to acquire land in the Coliseum area; and (2) they are restricted by State law from locating within ten miles of an existing dealer that carries the same car make. Thus, for many local dealers, the Oakland Army Base is the only option for relocation. For these reasons, the Agency has focused on creating a freeway auto mall within the GDA that has sufficient size, visibility, and attractiveness to serve as a long-term, viable location for auto retail.

Adaptive Reuse Options

The Oakland Army Base Memorandum of Agreement (2003) specifies which portions of the former base will be developed by the Oakland Redevelopment Agency and by the Port of Oakland, respectively. A section of the property boundary line between these two development areas passes through five of the buildings within the National Register-eligible historic district on the former base. This report has taken into account the impact of this boundary line as well as community concerns about the preservation of existing buildings in the Oakland Army Base Historic District. The OARB Historic District contains 21 contributing resources—18 buildings and three wharves—constructed during World War II or earlier, divided generally between a warehousing area east of Maritime Street and an administrative/support sector west of the street, bordering the shoreline (see map on page 8). The East Gateway subarea, located within that portion of the OARB Historic District lying east of Maritime Street, contains eleven of the district’s contributing buildings.² To varying degrees, this study assesses the adaptive reuse potential of these eleven buildings for auto dealerships, as follows:

- Buildings 802, 803, 804, 805, 806, 807 and 808, known as the “800 series” warehouses—a row of seven huge, virtually identical structures built in 1941 and 1942, each nearly 1,300 feet long and enclosing 233,640 square feet;
- Building 812, erected in 1944 as a vehicle maintenance shop;
- Buildings 821 and 822, erected in 1943 as warehouses; and
- Building 823, erected in 1942 as a box factory.

Due to jurisdictional boundaries, site constraints, and other reasons, some of these buildings are not feasible or suitable for auto dealership reuse, as itemized below:

- 1) Buildings 802 and 803 are not within Agency jurisdiction. They are situated entirely within the Port of Oakland’s portion of the former Oakland Army Base and are scheduled to be removed for construction of the Port’s new Outer Harbor Intermodal Terminal; they are therefore not available for Agency reuse.
- 2) Building 804 lies primarily within Port jurisdiction and is proposed for removal for the above-referenced Port project. The small remnant of the building within Agency jurisdiction (5,600 square feet, or 2 percent of the total floor area) would be impractical for Agency reuse.

² The other contributing resources in the OARB Historic District are situated in the Central subarea on the former base, outside the boundaries of the proposed Auto Mall Project.

- 3) Buildings 805, 806, and 807 would retain sufficient floor area within Agency jurisdiction to allow for reuse. However, they are not being considered for auto dealership reuse because they are situated within a section of the East subarea that is proposed for “big box” retail or ancillary maritime services activities.³

As a result, due to these jurisdictional and developmental constraints, only five of the structures—Buildings 808, 812, 821, 822, and 823—are viable candidates for reuse. Since these buildings have structural and compositional similarities, conceptual plans have not been prepared for all five of them. Two structures—Buildings 808 and 812—have been selected as prototypes for in-depth architectural analysis, based on existing property boundaries, proposed roadways, and the concerns of the preservation community.

In examining the technological feasibility of reusing the remnants of the “800 series” warehouses for auto-related activities, the northernmost structure (Building 808) was selected for specific design consideration. This building will retain the largest square footage of the five warehouses straddling the Agency–Port property line, thus offering the best opportunity for preservation and good potential for auto-related uses.

Buildings 812, 821, 822, and 823 are situated northeast of the 800 series warehouse row, entirely within the Agency’s property jurisdiction. As such, no portion of these structures would be subject to removal for the Port’s planned intermodal facility. All four of these buildings are of similar scale, each enclosing between 18,000 and 20,000 square feet. Building 812 was selected for primary consideration because of longstanding interest on the part of the historic preservation community. The building is notable for its dramatic interior, with high monitor, clerestory windows, trusses, and functioning overhead rolling crane. Buildings 821, 822, and 823, which have nearly identical footprints and open-truss interiors, have also been considered for reuse, though in less detail.

The chart on the following page summarizes the reuse potential for each of the eleven historic buildings within the East Gateway subarea, based solely on considerations of the site constraints imposed by jurisdictional boundaries and traffic circulation.

³ The feasibility of using the “800 series” warehouses for single- or multi-tenant warehouse use or multi-tenant retail use was demonstrated in the above-referenced 2002 Oakland Army Base Historic Building Reuse Alternatives Report. The similarity of those uses to the “big box” retail and ancillary maritime services activities currently being proposed suggests that the warehouses could also be used for these activities.

**SITE CONSTRAINTS ON THE REUSE POTENTIAL OF OARB HISTORIC BUILDINGS
IN EAST GATEWAY SUBAREA**

OARB Historic District Building	Auto Dealership Reuse Potential	Comment
1. Building 802	Infeasible	Building is located wholly within Port jurisdiction; to be removed for Port’s intermodal rail project.
2. Building 803	Infeasible	Same as Building 802
3. Building 804	Infeasible	Nearly all of building (98 percent of footprint) is located within Port jurisdiction; to be removed for Port’s intermodal rail project. Remnant within Agency jurisdiction (2 percent/5,600 square feet) is impractical for reuse, due to limited size.
4. Building 805	Unsuitable	Building remnant within Agency jurisdiction is capable of reuse for auto retail, but it would be outside of auto mall, isolated from auto mall amenities, and surrounded by industrial and other non-automotive uses. Agency is considering site for ancillary maritime services or “big box” retail.
5. Building 806	Unsuitable	Same as Building 805
6. Building 807	Unsuitable	Same as Building 805
7. Building 808	Feasible	Building can be partially retained, with largest remnant of square footage among the seven “800 series” warehouses. Conceptual design of prospective dealership included in this report.
8. Building 812	Feasible	Building can be wholly retained; not divided by Agency–Port boundary line. Conceptual design of prospective dealership included in this report.
9. Building 821	Feasible	Building can be wholly retained; not divided by Agency–Port boundary line.
10. Building 822	Feasible	Same as Building 821
11. Building 823	Feasible	Same as Building 821

Prior to the warehouse demolition and deconstruction processes, the Port of Oakland and the Oakland Redevelopment Agency (acting on behalf of the City of Oakland) are required, per previously adopted mitigation measures, to salvage architectural elements and building components of any contributing structure within the OARB Historic District (or portions thereof) that will be removed, to the maximum feasible extent. Additionally, should the Agency desire to retain its portions of the structures for reuse, the Port would deconstruct its portions of the warehouses in a manner that preserves, to the maximum feasible extent, the structural capacity of the remaining building area.

Traffic Considerations

Adaptive reuse of existing warehouses and other buildings on the former Oakland Army Base as auto dealerships will require planning for access for motor vehicles and other modes of transportation. The primary access would most likely be from Maritime Street or the proposed Bay Bridge Auto Plaza roadway. Access plans for driveways or roadways to the parcels containing the adapted buildings will require approval from the City's Transportation Services Division (TSD).

One of the primary considerations regarding motor vehicle access is the location of full-movement access points on Maritime Street. Full movement access locations would likely require traffic signals and should be located a sufficient distance from other signalized intersections (such as West Grand Avenue) to accommodate traffic queuing between intersections. A more detailed traffic study would be required to determine the precise spacing, but a general rule of thumb is a minimum of 500 feet of separation. A greater distance may be required to accommodate traffic queues due to the heavy traffic volumes anticipated at the intersection of Maritime Street with West Grand Avenue. A slightly lesser distance may be possible if a wide median is provided that would accommodate side-by-side left-turn lanes.

Driveways on Maritime Street may be located between signalized intersections, but should be designed only to allow right turning movements. Access to these driveways may require U-turning movements at the signalized intersections and restrictions on right-turn-on-red-signal movements may be needed for the conflicting approach. At least one through connection from Maritime Street to the portion of Bay Bridge Auto Plaza east side of the warehouses is needed to relieve expected traffic congestion at the West Grand Avenue/Maritime Street intersection. This roadway should be designed to City standards around the parking areas of any building that is planned for adaptive reuse.⁴

Cost of Rehabilitation

This report does not address economic feasibility; cost estimates for the reuse, or partial reuse, of Buildings 808, 812, 821, 822, and 823 as auto dealerships have not been generated as part of this study. The "Cost Estimates" section of the report discusses strategies for arriving at cost estimates for rehabilitation, and also provides estimates by industry representatives of the cost of new construction for dealerships as a baseline for comparison. It is the professional opinion of one member of the consulting team, Stephen Fee, that adaptive reuse typically costs as much, if not more, than new construction, and that the cost of rehabilitating the buildings considered in this study could be considerably higher than that of new construction. However, renovation costs vary widely from building to building, and it is not possible to draw definitive conclusions about the financial feasibility of reusing historic OARB structures for auto dealerships without further study. Probable estimates based upon detailed renovation plans for each targeted building can be generated at some future date, should the Oakland Redevelopment Agency so direct.

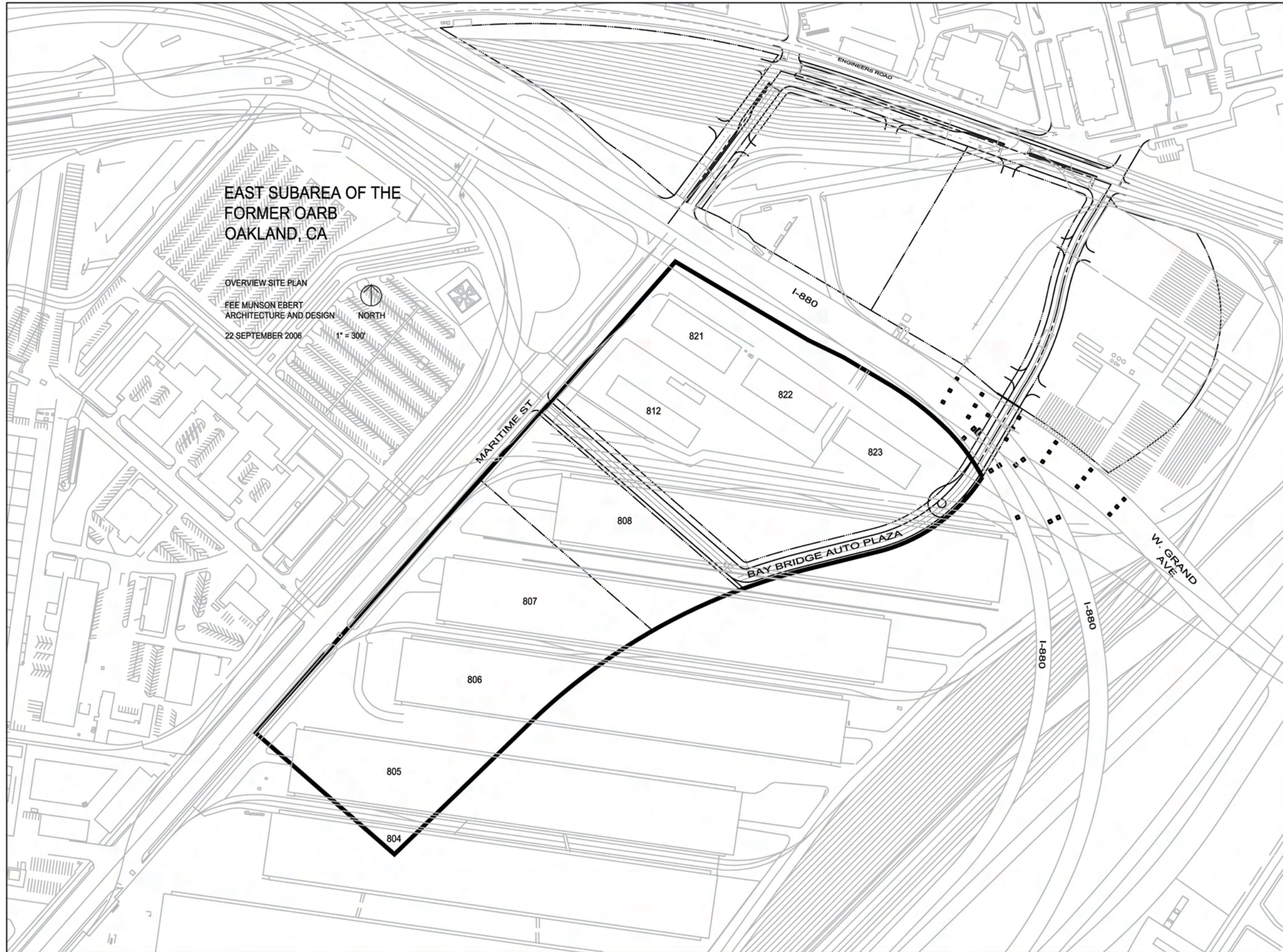
Summary of Findings

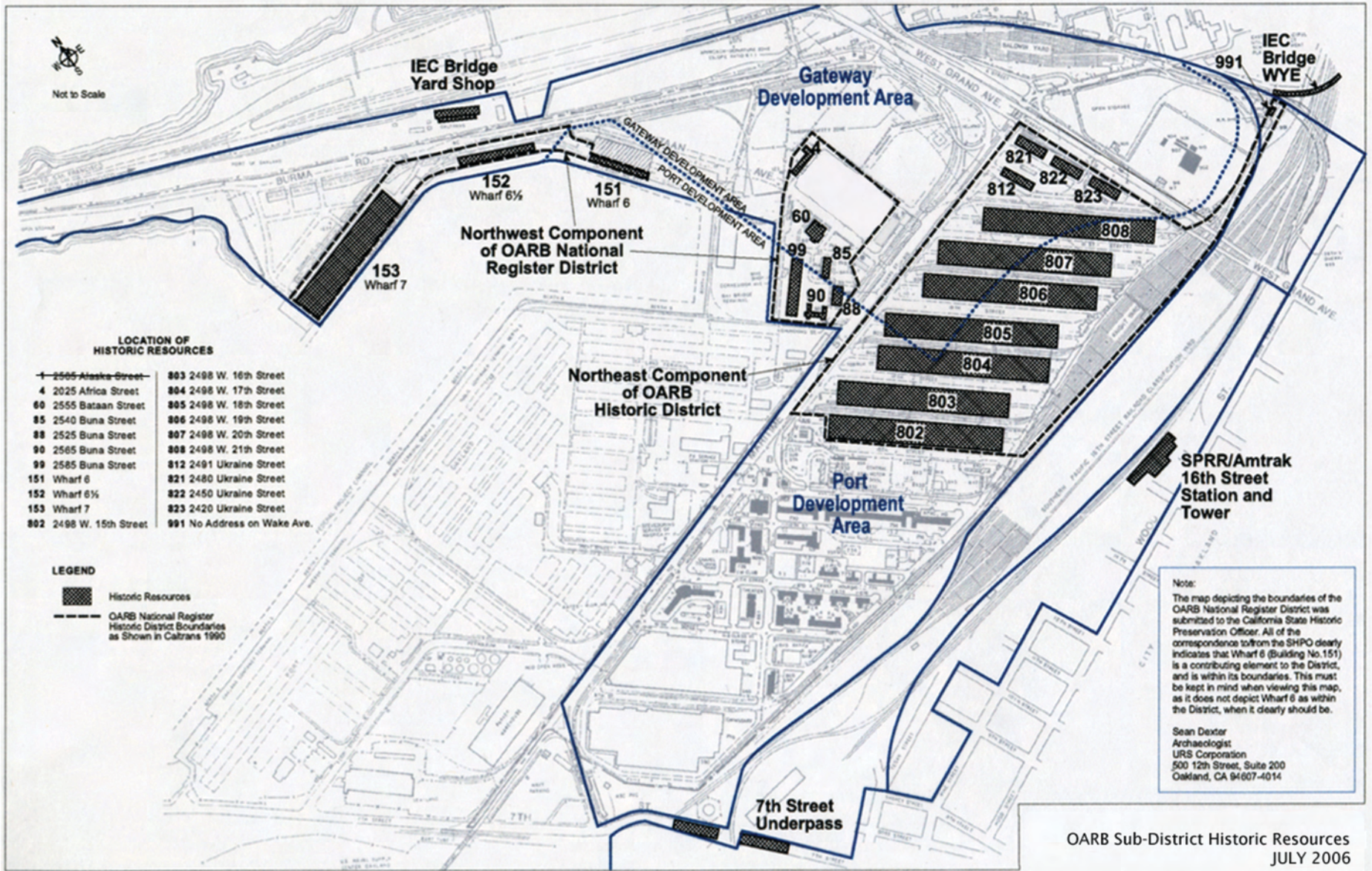
Due to considerations of construction cost, traffic circulation, and client needs, several constraints have informed the design process. One is the requirement that the buildings remain in place: a basic condition of structural and financial feasibility is that they not be moved. Another constraint is the requirement that the buildings conform to the configuration of roadways: the footprints must accommodate the rights of way, traffic-flow parameters, and sightlines of existing and proposed streets within the Auto Mall Project. The final constraint—the most complex of the three—is the requirement that the buildings meet the programmatic needs of a modern auto dealership in a competitive market.

⁴ Mark Bowman of Dowling Associates, Inc., provided the text for "Traffic Considerations."

Based on these constraints, four major findings emerge:

1. Five of the eleven contributors to the OARB Historic District that lie within the East Gateway subarea appear to be suitable for reuse as auto dealerships—Buildings 808, 812, 821, 822, and 823.
2. From an architectural design perspective, the programmatic and technological needs of a major auto dealership can be met in any one of these five historic OARB structures, including the remnant of Building 808.
3. Some, but not all, of these five historic OARB buildings can be retained for dealership use. The buildings are too closely spaced to provide them simultaneously with adequate space for roadways, parking, outdoor display of vehicles, and clearly visible logotype signage. Identifying potential groupings of two or more adaptively reused buildings will require further site analysis.
4. Auto dealership industry input concerning reuse of the OARB structures is mixed. Based upon responses from various consultations with industry representatives, it remains uncertain whether auto manufacturers would approve new franchises in historic OARB structures should they be rehabilitated.





2. Historical Context

2. HISTORICAL CONTEXT

Oakland Army Base

Development of the Oakland Army Base began in 1941, prior to the Japanese attack on Pearl Harbor. It was one of four major military facilities operated as a sub-port of the San Francisco Port of Embarkation (SFPE), headquartered at Fort Mason in San Francisco, becoming its largest single cargo terminal upon its completion in 1943. Its facilities integrated various transportation modes, facilities and functions, encompassing rail marshalling yards, wharves with deepwater berths for the largest cargo ships, a dry dock and marine repair shops, wharf-side transit sheds, and immense warehouses capable of holding the stockpiles of materiel destined for the Pacific theater. The entire operation was linked by a rail system and overseen by onsite administrators and support staff operating out of a sprawling office facility. It was the only complete Army port installation of its kind in the nation.

Among the several divisions of the SFPE housed at the Base were the Oversea Supply Division, the Transportation Division, the Water Division, and the Training Division. The immense warehouses east of Maritime Street were built to house supplies of the Technical Services Division. In addition to these specialized divisions, the base included Camp John T. Knight, a support facility and training camp for troops. The camp's cantonment structures were standard designs widely employed on World War II era Army bases. More specialized structures and cargo-handling facilities were developed at the northern end of the base, while Camp Knight occupied the area generally to the south of the warehouses, on either side of Maritime Street.

The firm of Bechtel-McCone-Parsons, of Los Angeles, was selected as the Architect-Engineer for the proposed Port of Embarkation and General Depot Facilities at Oakland, working under the direction of the Office of the Constructing Quartermaster of the Army. In its Engineering Report dated December 1, 1941, Bechtel-McCone-Parsons described the principal facilities planned for the Port of Embarkation and the General Depot, which would eventually become known as the Oakland Army Base. The Port of Embarkation facilities were principally "ships' berths, apron wharves, transit sheds, storage sheds" and support services and utilities located west of Maritime Street. Distinct from these were the facilities of the General Depot, which were to consist "principally of single-story permanent warehouses for the storage of Quartermaster, Engineer, Medical, Signal, Ordnance Corps, C.W.S and other supplies." These seven warehouses, commonly referred to as the "800-series" warehouses, constituted the principal facilities of the General Depot.

The work of constructing the Base was begun under the direction of the Construction Division of the Quartermaster Corps and was overseen by the constructing quartermaster. The Quartermaster Corps was one of two construction divisions in the Army at that time and had been explicitly charged by the War Department with the bulk of barracks construction at the cantonments needed to house troops during training, as well as building facilities for the Army Air Corps. On December 1, 1941, all war construction was turned over to the Army Corps of Engineers, and the two Construction Division of the Army were essentially consolidated. Construction under the contract proceeded in three phases or "programs"—A, B and C.

Buildings 802, 803, 804, 805, 806, 807, and 808

The seven 800-series warehouses were completed in two stages, according to the Army Port Contractor's records. Construction began at the south end, with Buildings 802–805 completed as part of Programs A and B, between November 11, 1941, and February 2, 1942. The other three warehouses (Buildings 806–808), authorized under Program C-1, were completed in June of 1942, according to Army Real Property Records. The buildings were constructed by the Army Port Contractors but they were evidently designed by Bechtel-McCone-Parsons Corporation, which also designed the Administration Building and the Cafeteria on the base. These buildings were designed for use as warehouses and for the most part have remained in that use.

Building 812

The Ordnance Maintenance Shop, Building 812, was completed in May of 1944 according to the 1994 Historic American Engineering Record (HAER) documentation. The construction drawings are dated September 16, 1943, and, like the 800 series warehouses, were prepared by U.S. Engineer's Office (Army Corps of Engineers) in San Francisco. This building was not included in the Army Port Contractors' initial construction program (Programs A and B) nor was it authorized under Program C. It is not clear whether it was built later by the Army Port Contractors, by another private contractor, or perhaps the Army Corps itself. The building was used to maintain and repair weapons and ordnance of the rolling type such as tanks and other heavy artillery. Just as the nearby Marine Repair shops repaired, overhauled and outfitted oceangoing vessels, the Ordnance Repair shop maintained and repaired artillery either before it was shipped overseas or upon its return.

Buildings 821, 822, and 823

According to HAER documentation, Buildings 821 and 822 were completed in December 1943. These identical structures originally functioned as storehouses for combustible materials, and are referred to as "inflammable warehouses" on the construction drawings by the U.S. Engineer's Office (Army Corps of Engineers) in San Francisco. Both buildings later provided short-term storage for hazardous materials awaiting disposal. Building 823 was completed in July 1942 and functioned as a box factory and crate shop. Though built from the same set of construction drawings as Buildings 821 and 822, with the same overall dimensions, it differs in section and elevation.



Aerial View of the "800 Series" Warehouses in mid-1942. The warehouses shown (from right to left) are Buildings 802, 803, 804, and 805. The final three warehouses in the row (Buildings 806, 807, and 808) were completed later that year. (Source: Port of Oakland Archives)

3. Existing Conditions

3. EXISTING CONDITIONS

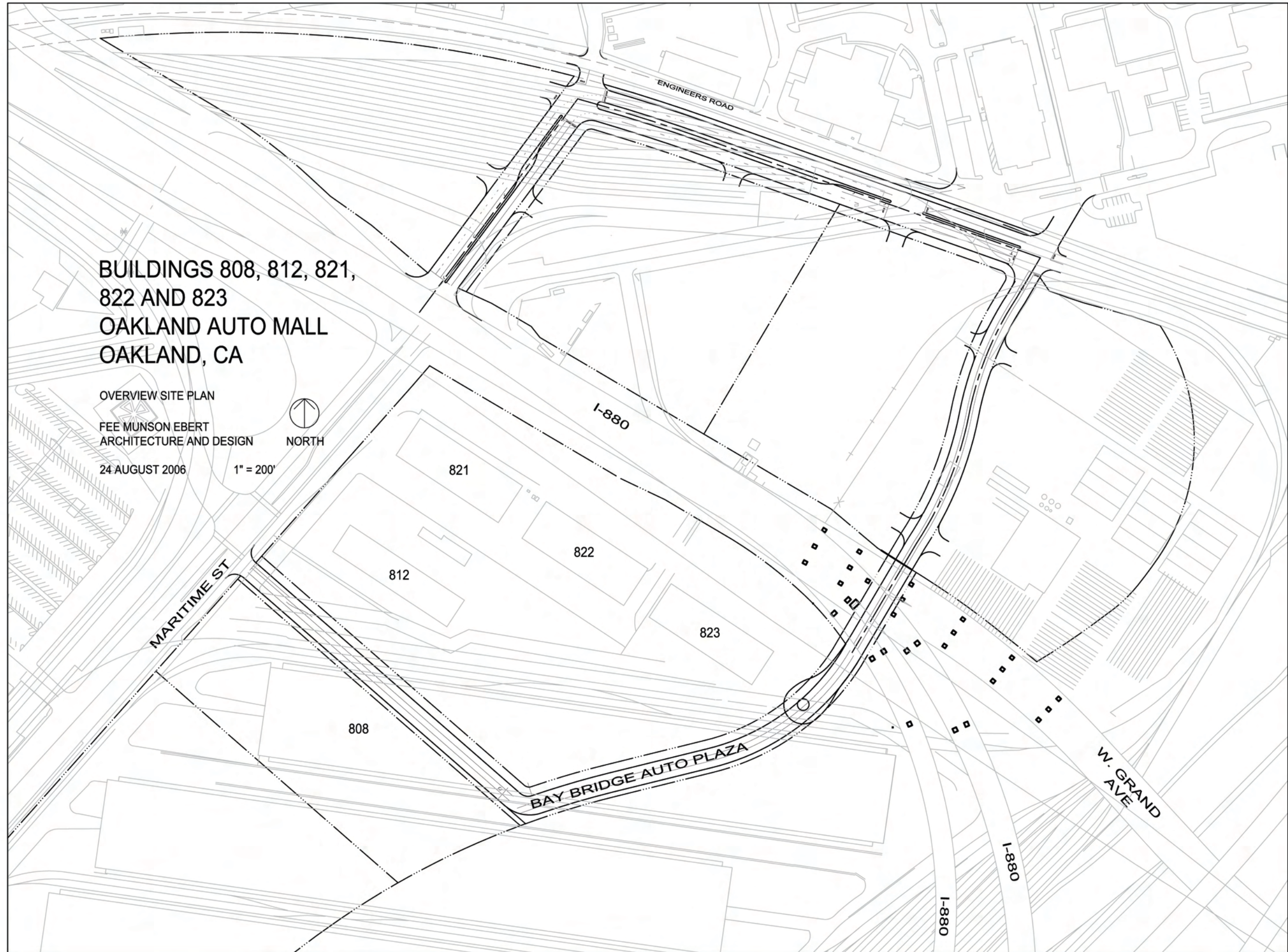
Site

Building 808 is one of seven identical or mirror-image plan warehouse buildings located east of Maritime Street and south of the West Grand Avenue intersection. The seven warehouses (Buildings 802–808) are sited parallel to one another and oriented southeast–northwest. Building 808 is the northernmost in the row, and the only one evaluated for rehabilitation and reuse in this report. Alternating warehouses in the row are identical in plan, i.e., the even-numbered warehouses (Buildings 802, 804, 806, and 808) have identical plans, while the odd-numbered warehouses (Buildings 803, 805, and 807) have a mirror-image plan. Since the standardized building design is essentially symmetrical, the buildings appear identical from the exterior.

Originally built as the Ordnance Maintenance Shop, Building 812 is located directly north of building 808, but is sited more or less perpendicular to Maritime Street, rather than parallel to Building 808. Its orientation is roughly south–north. The rail yard is located immediately to the east with the track alignment running parallel to Maritime Street. At the present time, West Grand Avenue and Maritime Street are the only public roads serving this area. However, a north–south arterial road would be developed along the western edge of the rail yard and across West Grand Avenue to serve the proposed auto mall. It would terminate at one of two new cross streets planned to connect it to Maritime Street.

Buildings 821, 822, and 823 form a row at the northerly end of the East Gateway Development Subarea. The row is adjoined on the northeast by West Grand Avenue and an elevated section of the I-880 freeway. The three buildings are oriented roughly south–north, parallel to Building 812, which occupies an adjacent site to the south. Buildings 821 and 822 were originally built as warehouses for inflammable materials; Building 823 was a box factory. All three structures are identical in size, though Building 823 differs in design.

See Overview site plan on following page



Building 808

This structure is nearly 1,300 feet long, just short of a quarter-mile, and encloses 233,640 gross square feet of space, providing over 5.3 acres of protected storage area. The 800-series warehouses were the largest structures built at the original sub-port. All were built from a single set of drawings. They were designed symmetrically about both axes. Raised loading docks were provided along each side, providing access to a raised concrete floor at the same height. A set of sliding doors provides access at either end of the building. Access along the length of the building is provided on both sides by pairs of exterior mounted sliding doors. Originally, rail access was provided on one side and truck access on the opposite, but the rail spurs are no longer in use. The locations of the truck and rail docks were reversed at alternate buildings so that they could be paired to group and segregate rail spurs from truck-loading docks and maneuvering areas. Projecting overhead canopies provide shelter at both docks.

The +/- 32 foot tall single-story building is divided internally into five transverse sections. The two sections at either end of the building have twelve bays each, while the central section is only eleven bays in length. These internal divisions are expressed externally on the building by the firewalls that project through the roof. A wide central bay extends down the length of each structure and is expressed on the exterior by the line of continuous clerestory windows that bring light into the 52-foot wide central bay. The flanking side "aisles" of the building are each composed of two bays, each measuring 32 feet across, giving the building an overall width of approximately 180 feet, exclusive of the loading docks. Vertical clearance from the floor is approximately 18 feet at the side bays, allowing for stacking of goods within.

The horizontal siding appears to be redwood, as does the original window sash. The high, central clerestory windows form a continuous band, while those above the freight doors and at the east and west elevations are paired. At ground floor level, only the offices originally located at the west end of each building were provided with windows, which were operable. They were double hung sash; all other windows were fixed sash. A small mezzanine was added at the west end of the building above the offices, utilizing the upper windows for light and air. The drawings indicate that the framing and structural members used are select structural grade Douglas fir.

Other alterations to Building 808 include the removal of some of the upper wood sash windows and replacement with aluminum sliding sash. Some of the other buildings have had the sash and glazing in the south side clerestory windows removed or covered with translucent corrugated plastic panels. However, they are intact in Building 808. There have been no significant changes to the building form, exterior materials, basic loading dock configuration and overhanging canopies. Most of the large freight doors appear to be intact and functional. Few changes have been made to the interior, which still conveys a strong sense of the vastness and openness of each building. Even the original fire doors that separate the five areas within are still present and functional if needed.

Building 812

At 64 feet wide by 280 feet long, the 18,345 sq. ft. rectangular form of Building 812 is dwarfed by the scale of the neighboring 800-series warehouses. The building was used to maintain and repair weapons and ordnance of the rolling type such as tanks and other heavy artillery. It was originally equipped with an overhead rolling crane with a 10-ton capacity, mounted on a pair of massive heavy timber crane rails that run unobstructed down the length of the building at the tall central bay. The load of the crane is supported by an independent heavy-timber framework, so there is a double row of built up timber posts down either side of the tall central bay. The building is currently equipped with an operational 5-ton Shepard Niles crane (as the original construction drawings called for a 10-ton crane, it is presumably not original).

The building was constructed to a standard Army Corps of Engineers design, with one principal difference: Building 812 employs horizontal wood siding, while the standard design called for vertical

siding. The standard plans called for a center aisle of approximately 32 feet and two side aisles 16 feet wide, for an overall width of 64 feet. Building 812 has these same overall width and bay dimensions. The columns delineating the aisles are spaced 14 feet on center the length of the building. Though the standard drawings show a building length of 98 feet, the plan was designed to be increased or decreased to any length in 28-ft. increments, which encompasses one door bay and one window bay. In the case of Building 812, an additional thirteen bays were added to the seven-bay base plan, achieving an overall length of 280 feet.

The Maintenance Shop's form is similar to that of the adjoining warehouses, being long and linear with a tall projecting monitor running down the central spine of the building. In this case, the purpose of the increased roof height is primarily to accommodate a traveling overhead crane, and secondarily to provide additional light by means of the monitor window units. The roof profile of the monitor bay is essentially flat, whereas the flanking bays are sloping shed roofs with composition shingles. A distinctive design feature of the building is the slightly projecting line of the façade above the window and door headers. There the profile has been extended so that the siding forms a continuous eyebrow above the door and windows. This feature served to conceal and protect the hardware for the exterior mounted rolling freight doors.

The building as originally designed did not strictly adhere to the alternation of door and window bays as called for in the standard drawings. Two or three window bays are found occurring in sequence to accommodate interior offices or other particular needs of the Army Base. A mezzanine has been included at the west end of the building to house an air conditioned optical repair room. Drawing notes called for the installation of four tall, double hung window units at this level rather than the pair of stacked, fixed 12 over 12 light windows shown on the standard plans. Aside from this change, the doors and windows for building 812 were the same as those for the standard design.

The exterior-mounted, paired rolling freight doors had two stacked, fixed window units, each with 8 lights. The lower door panel was of wood boards with a diagonal brace. The standard window was a four-sash unit, stacked and paired; each sash had 12 lights, configured four over three. Both tiers of the ground floor sash were designed to slide horizontally on fixed interior rails, unobstructed by interior wall finishes. The upper level monitor windows were identical in appearance, but had pivoting sash at the upper tier and fixed sash at the lower one.

Although Building 812 has undergone a number of alterations, its essential design is still intact. A number of the original ground floor wood sash windows have been replaced with aluminum ones, but most of those that remain are still operational. The most jarring and obvious alteration is the installation of transite (asbestos cement siding) panels over the horizontal board siding at the monitor walls on both the north and south sides of the building. These flat gray panels alternate with corrugated fiberglass panels that cover the original window openings. Unfortunately the window sash units have been removed entirely and would need to be replaced. Another major change that has occurred to the building was the removal of the exterior sliding freight doors and their replacement with metal overhead rolling doors.

The building's interior is remarkably intact. The overhead rolling crane (though probably a replacement) was still functioning in 2002, and clearly conveyed a sense of the original design. Apart from the installation of some partial height partitions that are not original, there are few changes to the interior. Most importantly, it maintains its high open central bay unobstructed and undivided by interior partitions, which is a key design feature of the building.

Buildings 821 and 822

These warehouses were built according to a standard Army Corps of Engineers design, and a single set of drawings was used for both buildings. Each gable-roofed, rectangular structure is 250 feet long and 80 feet wide, enclosing 20,000 square feet of storage space (less than one-tenth the size of the "800

series” warehouses). Five loading bays with sliding wood doors are set at regular intervals into each long side. Fenestration is limited to double-hung windows at the office end of each building; ventilation is provided by metal vents along the ridge of the roof. Alterations are minimal, and the buildings appear little changed.

The buildings are of heavy timber construction. The structural system incorporates two longitudinal rows of wood columns, 20 feet 10 inches on center, which support series of flat trusses as well as transverse triangular trusses. Walls are composed of wood stud framing sheathed with diagonal boards overlain with horizontal wood siding on the exterior. Concrete footings support a perimeter concrete foundation wall, and compacted fill within this wall underlies the asphaltic concrete floor, which is approximately four feet above grade. A concrete loading dock 10 feet wide, served by a ramp and sheltered by a canopy, extends along the north side of each building. Concrete stairs serve the office entries.

Each building is divided internally into two equal sections by a central transverse firewall. Bays are formed by the column grids. Each section is 6 bays in length, and each bay is 20 feet 10 inches wide. The rows of columns are 40 feet apart, creating a longitudinal bay 40 feet wide down the center of each section, flanked by side “aisles” 20 feet wide. An office and bathroom is situated in one corner of each building—in the southeast corner of Building 821, and in the southwest corner of Building 822, such that the offices face one other.

Building 823

Building 823 has the same overall size and structure as Buildings 821 and 822, though the façades, roof treatment, and floor plan are different. It was built from the same set of drawings (which were modified for the warehouses). It is largely intact, except for the replacement of clerestory windows with translucent plastic panels and the 1948 addition of a mezzanine floor.

Like Buildings 821 and 822, Building 823 is 250 feet long and 80 feet wide, enclosing 20,000 square feet. It employs heavy timber construction, with the same arrangement of columns, 20 feet 10 inches on center, and the same type of foundation and walls. In exterior appearance, the principal difference is the roof, which incorporates a wide monitor with clerestory windows. The façades also are less regular, combining a variety of window types with loading bays served by sliding wood doors. As in the warehouses, the floor is approximately four feet above grade. Stairs and ramps serve the entries and loading bays; there is no loading dock.

The building is divided internally into three sections by transverse partitions. The largest section (originally the “box making room”) occupies six bays at the center of the building. The former workshop occupies four bays at the west end; the former storeroom, three bays at the east end. Additional partitions within these sections create smaller rooms, including a former paint room in the storage area and a former stockroom in the workshop area. The asphalt-concrete floor is built up in some sections with several layers of floorboards. As in Buildings 821 and 822, the rows of columns are 40 feet apart, creating a longitudinal bay 40 feet wide down the center of the building, flanked by side “aisles” 20 feet wide. The columns support longitudinal series of flat trusses as well as transverse flat trusses for the monitor. The mezzanine addition, at the west end of the building, incorporates offices at both levels.

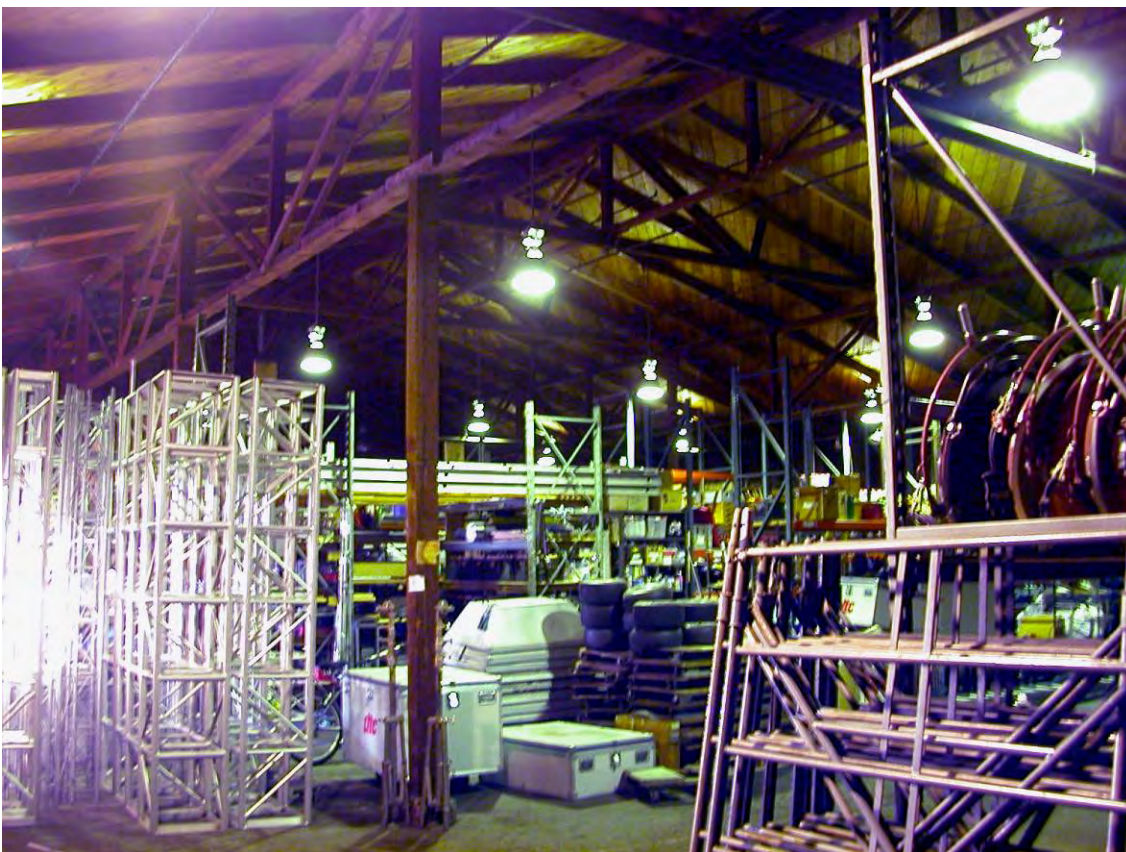
Photographs on following pages













4. Adaptive Reuse Descriptions

4. ADAPTIVE REUSE DESCRIPTIONS

Building 808

Site Plan

Building 808 now straddles the new Auto Mall property line and access road. As a result, with necessary building code and parking clearances, only 353 feet of the building's length—a little more than a quarter of the total—is available for adaptive reuse. Because the existing building is so large, this remnant (63,540 square feet) still leaves room for at least two good-size dealerships.

At first glance, the angled orientation of the building to the street frontage might seem awkward, but it actually provides excellent visibility for southbound traffic on Maritime Street, including vehicles taking the West Grand Avenue exit from the Bay Bridge (the first East Bay exit for westbound vehicles). The angled west end of the building is also clearly visible to northbound traffic on Maritime Street.

Floor Plan

The building remnant (180 feet wide by 353 feet long) includes two dealerships: the smaller (25,830 square feet) is located at the west end of the building; the larger (37,710 square feet), at the east end. The longitudinal column spacing (22 feet) is somewhat tight in this building, but in the transverse direction the general column spacing (32 feet) works well for service bays—often the major portion of the 'store' in larger dealerships.

The showrooms are the most visually prominent components of the dealerships, and hence require the most conspicuous placement: at the corners of the building. Sales offices adjoin the showrooms, and immediately adjacent are administrative offices and restrooms. The service bays usually comprise the largest amount of the floor area in dealerships, and that is the case here. The service customer lounges are adjoined by restrooms, vending machines, and display cases for accessory products. Located nearby are the sales advisors' and cashiers' offices. Adjacent to the service area is the parts department, equally accessible both to the service bays and the customer lounge.

The existing building is a "dock-high" structure with a dock 12 feet wide and four feet high along the longitudinal sides. This poses challenges. Some newer auto dealerships in the Bay Area have incorporated similar docks to display new models. The adaptive reuse scheme takes advantage of the docks, widening them to 36 feet at the front and rear corners while adding new docks 30 feet wide at both ends. New models will be displayed outside on these docks. Pairs of auto-access ramps have been added to the longitudinal docks, and stairs and disabled ramps are cut into the new docks at the ends of the building.

Elevations

The plan components of the dealerships lay out well, and have the potential for good visibility for showrooms with the insertion of storefront glazing in those locations. Though elevations for Building 808 are not included in this study, the contemporary aesthetic would be similar to that shown for Building 812. This aesthetic respects the strength and spatial qualities of the original design. Dealer identity elements, as well as logotype signage, would also be added to the façades to brand the building.

The chart below summarizes the principal features of the adaptively reused building.

Building 808: Adaptive Reuse Summary Chart

Location	Southeast of the intersection of West Grand Avenue and Maritime Street, approximately 542 feet along Maritime from the future corner property line.
Primary Access	New transverse street south of West Grand Avenue
Secondary Access	New transverse street south of Building 808
Original Use	Warehouse
Orientation	Parallel to West Grand Avenue
Existing Size	180 feet wide by approximately 1,300 feet long. 233,640 square feet
Projected Size	180 feet wide by 353 feet long 63,540 square feet Two stores/ dealerships: <ul style="list-style-type: none"> • 25,830 s.f. w/ +/- 4250 s.f. showroom and 21 service bays • 37,710 s.f. w/ +/- 5030 s.f. showroom and 31 service bays
Column Spacing	Center aisle: 52 feet wide Side bays: two on each side at 32 feet wide by 22 feet deep
Existing Features	Raised loading docks, 12 feet wide by +/- 4 feet high on both sides. Interior floor elevated to dock height. Continuous light monitor at central bay on both sides. Distinctive heavy timber framing.

Project area site plan, building site plan, and floor plan on following pages

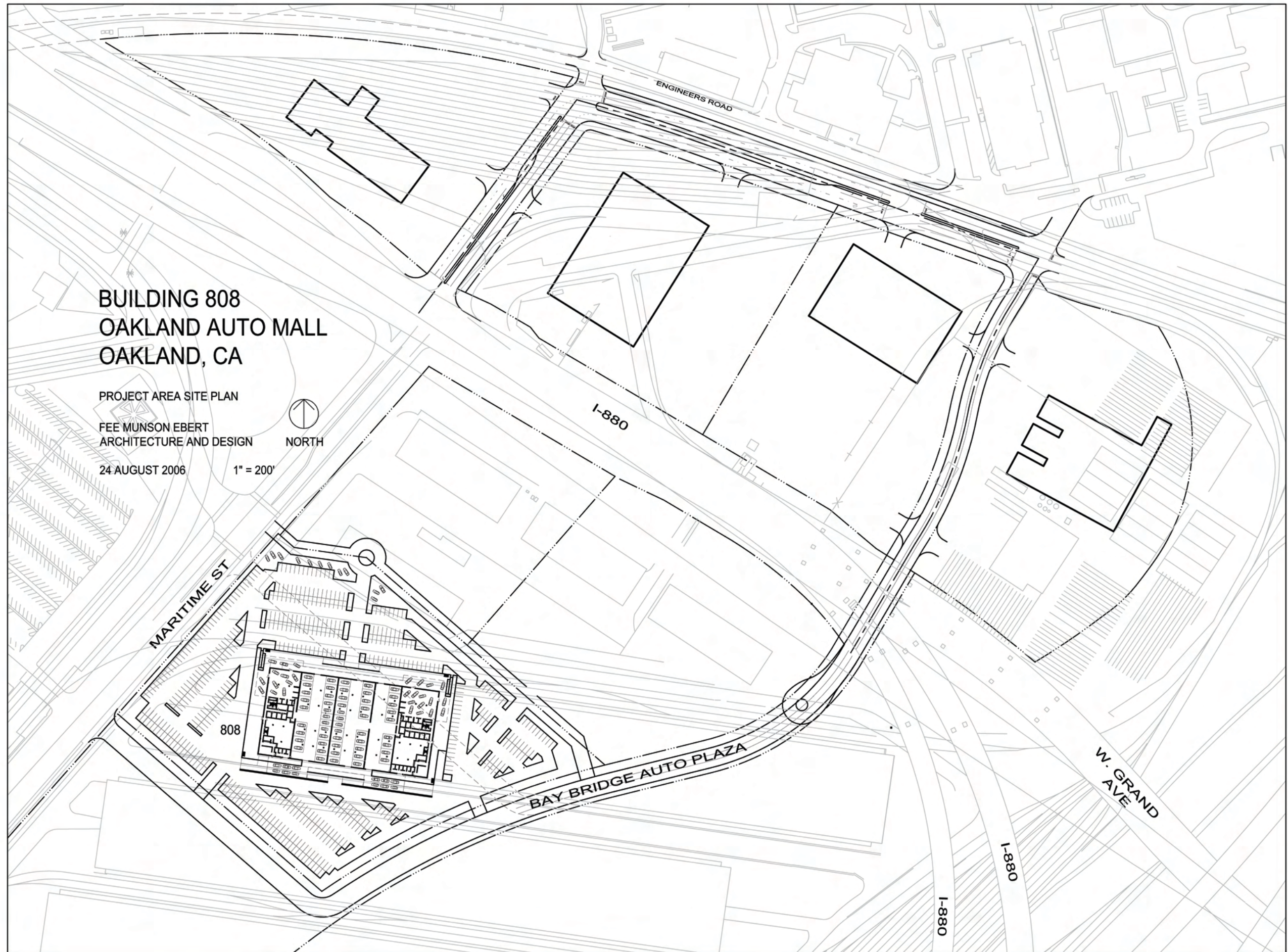
**BUILDING 808
OAKLAND AUTO MALL
OAKLAND, CA**

PROJECT AREA SITE PLAN

FEE MUNSON EBERT
ARCHITECTURE AND DESIGN

24 AUGUST 2006

1" = 200'



**BUILDING 808
OAKLAND AUTO MALL
OAKLAND, CA**

SITE PLAN

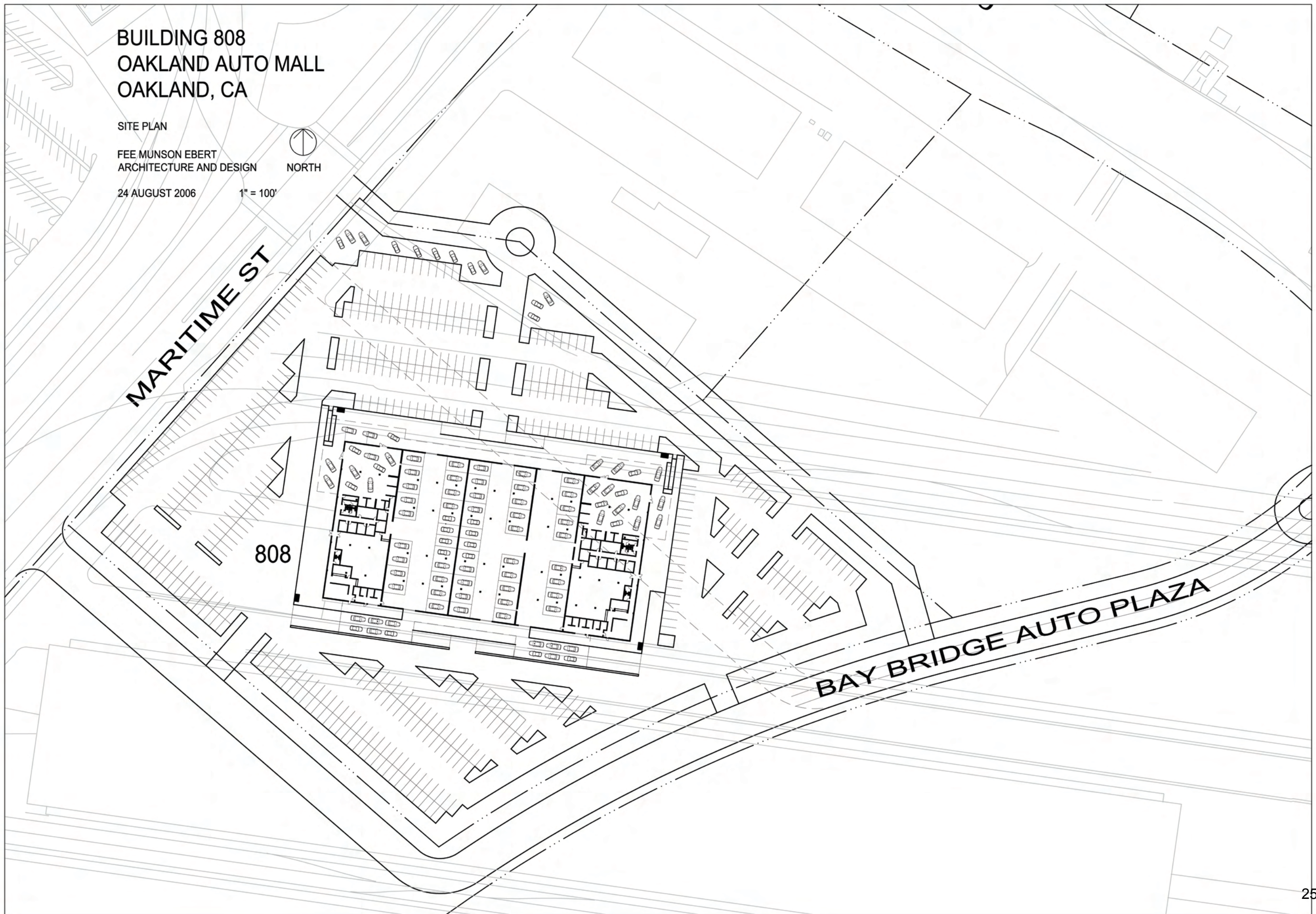
FEE MUNSON EBERT
ARCHITECTURE AND DESIGN

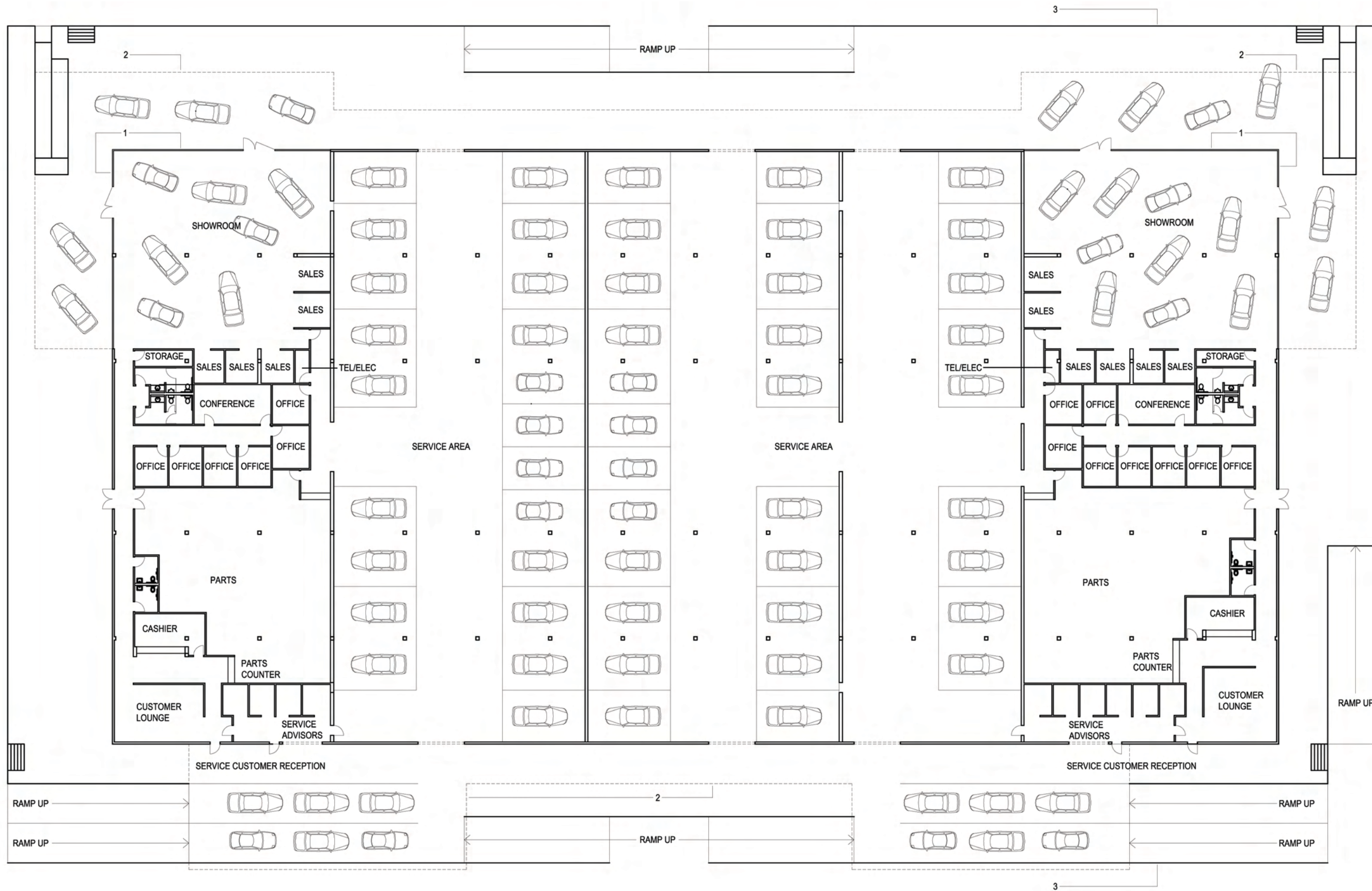
24 AUGUST 2006

1" = 100'



NORTH





**BUILDING 808
OAKLAND AUTO MALL
OAKLAND, CA**

FLOOR PLAN
FEE MUNSON EBERT
ARCHITECTURE AND DESIGN
24 AUGUST 2006 1" = 30'

- 1 NEW GLASS STOREFRONT, TYP
- 2 NEW CANOPY, TYP
- 3 NEW EXTENDED PLATFORM, TYP

Building 812

Site Plan

Building 812 can be left intact; no demolition to accommodate the Agency–Port boundary line is required. The showroom at the west end of the building takes advantage of clear sightlines along Maritime Street in both directions. The building would also be easily visible from the proposed Bay Bridge Auto Plaza roadway.

Floor Plan

The proposed building—64 feet wide by 280 feet long, enclosing 18,700 square feet (including a small addition)—is a good size for a single dealership.⁵ The longitudinal column spacing of 14 feet on center should work well for the service bays. By industry standards, service bays should be approximately 24 feet deep, with a 24-ft. access and back-up width for the center drive aisle. The building lacks eight feet of width to provide three full 24-ft. bays (which would total 72 feet), so a small addition is proposed to the bays on the west side, 780 square feet in total. An alternative approach that would not require an addition would be to utilize individual roll-up doors at each service bay on the exterior, with a 10-ft. mechanics' aisle down the center.

The showroom is the most prominent component of this dealership, occupying the entire west end of the building facing Maritime Street, with glass on three sides. Sales offices, administrative offices, and restrooms adjoin this area. The service customer lounge, sales advisors' offices, cashier, and parts department are to the rear of the showroom, accessible by entrances at the side of the building. The service area occupies the east end of the building, which incorporates a small pop-out addition to provide additional width needed for the service bays.

Elevations

The chosen aesthetic is contemporary to house today's contemporary automobiles, but this aesthetic respects the strength and spatial qualities of the original design. Because there's no denying the industrial past of this building, wherever new materials are replacing existing, they too are industrial. Standing seam metal roofing replaces the existing asphalt shingles. Wherever possible, the existing wood siding is repaired and repainted. Many of the existing window opening sizes and proportions are brought back, but the frames and glazing are replaced. The new frames are galvanized steel with vertical fins. The glazing in the monitor is vertical fluted glass and at ground level the glazing is clear low 'E' glass. The expanded service bay area is the same clear low 'E' glass set in galvanized frames to showcase the service bays. The canopies at the showroom and at service reception are painted exposed steel wide flange columns with painted steel panels above. Dealer identity elements, as well as logotype signage, are added to the façades to brand the building.

The chart below summarizes the principal features of the adaptively reused building.

⁵ According to several manufacturers' representatives—Erika Ridolfi (Toyota), Kevin Rustadt (BMW), and Gordon Walton (Acura)—service bay widths typically range from 10 feet to 20 feet. An average width of 14 feet was used in the conceptual plans in this study. In addition, George Avanesian, a prolific dealership architect, has stated that 14 feet is a standard width for service bays in auto dealerships.

Building 812: Adaptive Reuse Summary Chart

Location	Southeast of the intersection of West Grand Avenue and Maritime Street, approximately 541 feet along Maritime from the future corner property line.
Primary Access	Maritime Street
Secondary Access	New transverse street south of West Grand Avenue
Original Use	Vehicle Maintenance Shop
Orientation	Parallel to West Grand Avenue
Existing Size	64 feet wide by 280 feet long. 18,345 square feet
Projected Size	64 - 73 feet wide by 280 feet long 18,700 square feet One store/ dealership: 4520 s.f. showroom w/ 13 service bays
Column Spacing	Center aisle: 27.5 feet wide Side aisles: 16 feet wide Column spacing: 14 feet on center, longitudinally
Existing Features	Distinctive heavy timber trusswork. Traveling overhead rail-mounted crane at center aisle. Raised central bay with clerestory windows along building length.

Project area site plan, building site plan, floor plan, and elevations on following pages

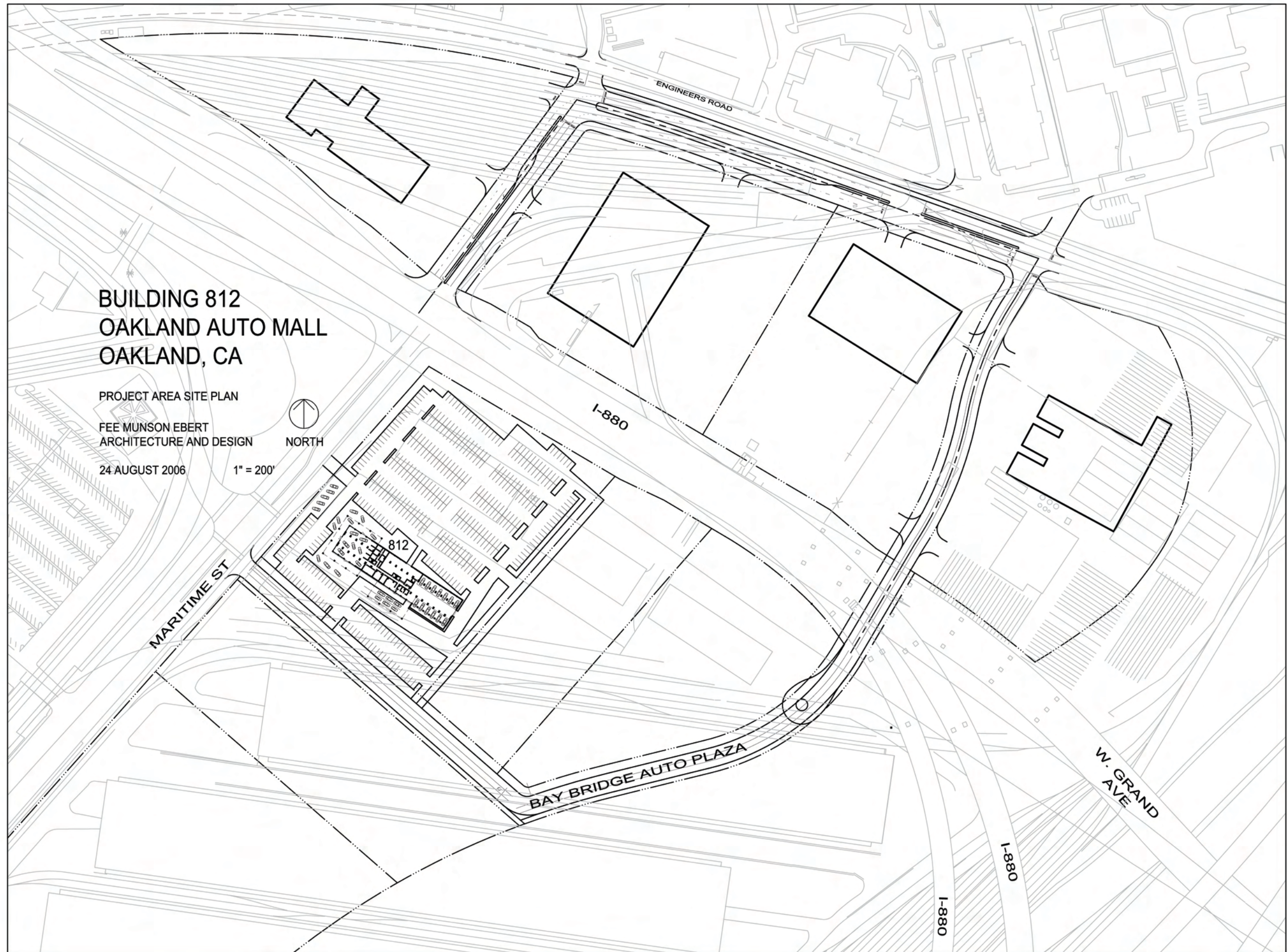
**BUILDING 812
OAKLAND AUTO MALL
OAKLAND, CA**

PROJECT AREA SITE PLAN

FEE MUNSON EBERT
ARCHITECTURE AND DESIGN

24 AUGUST 2006

1" = 200'



**BUILDING 812
OAKLAND AUTO MALL
OAKLAND, CA**

SITE PLAN

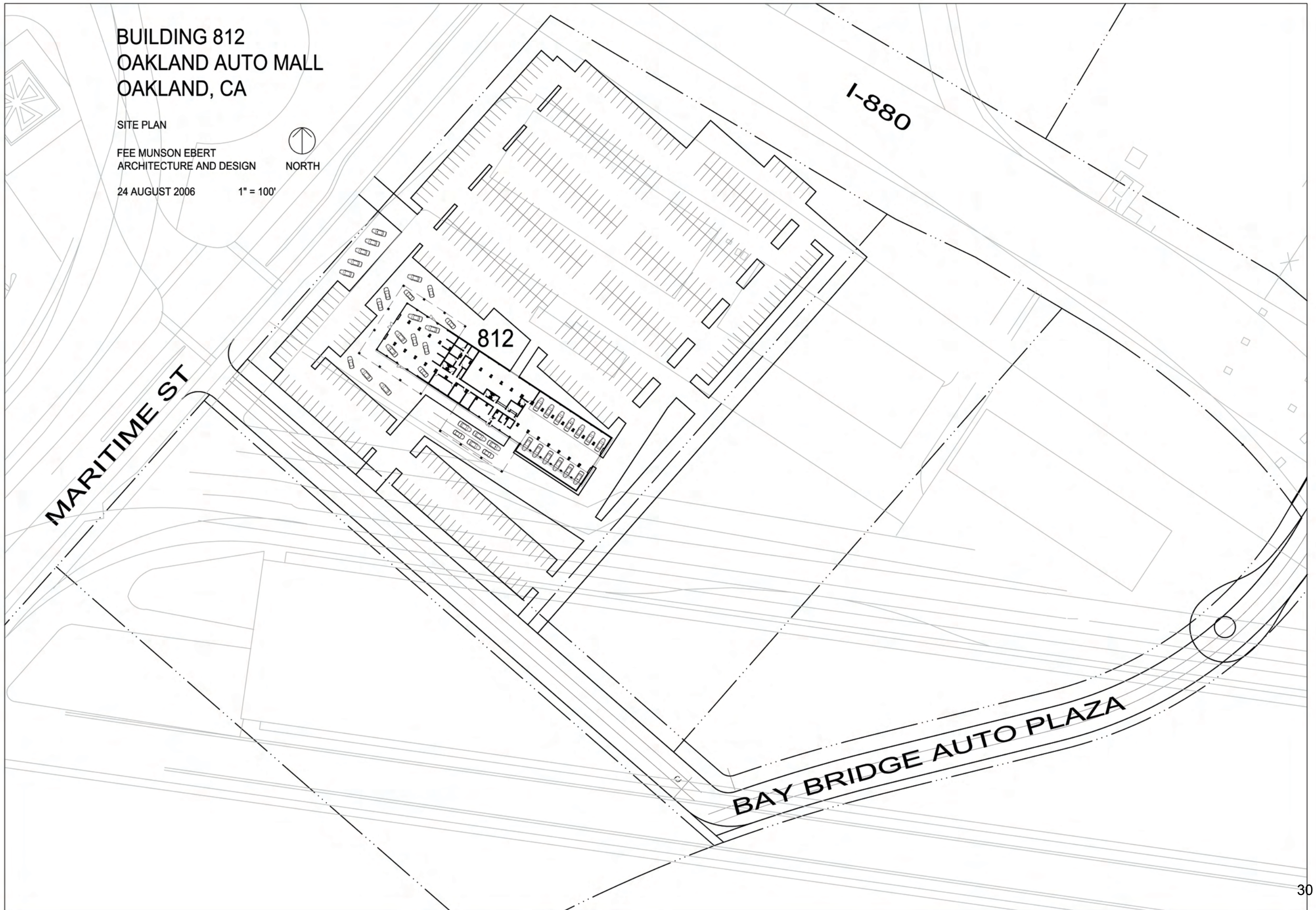
FEE MUNSON EBERT
ARCHITECTURE AND DESIGN

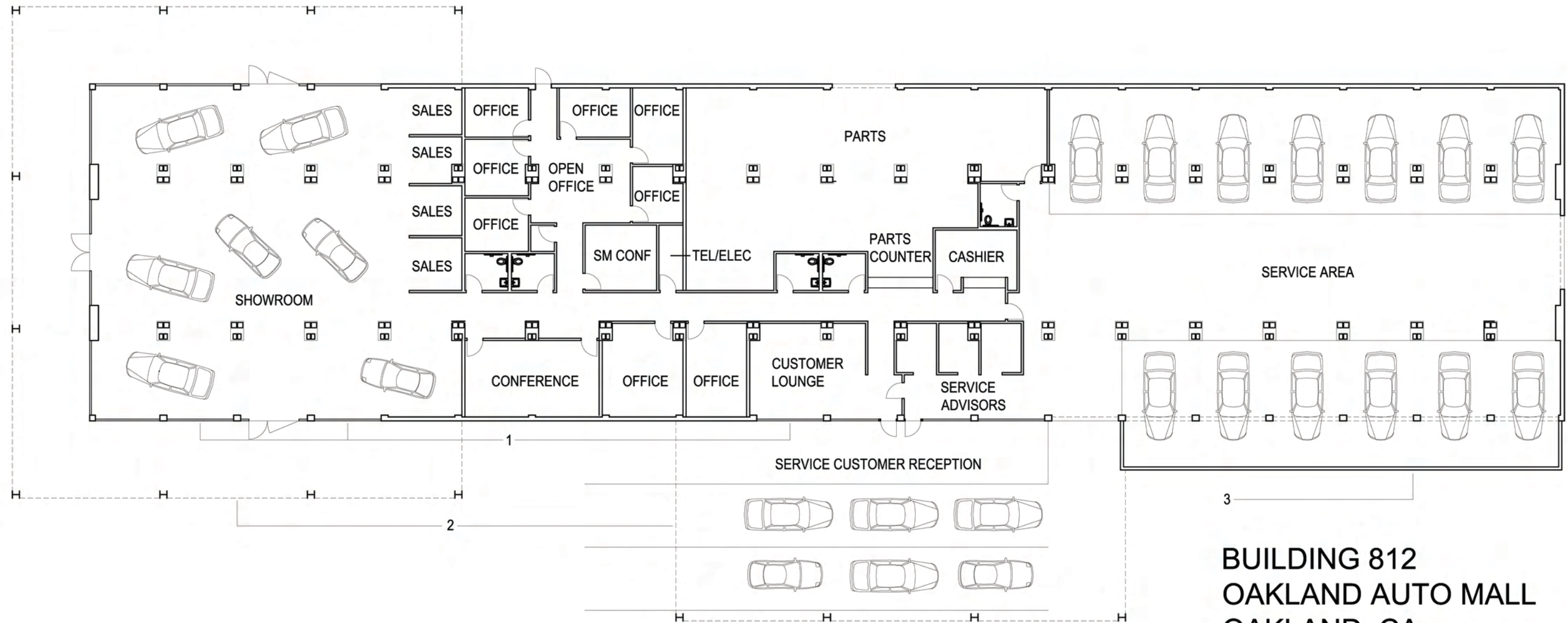
24 AUGUST 2006

1" = 100'



NORTH





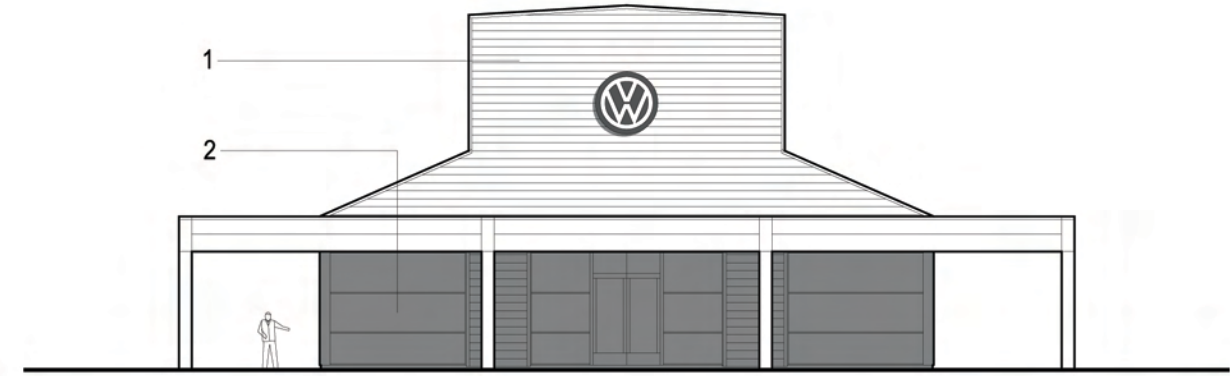
- 1 NEW GLASS STOREFRONT, TYP
- 2 NEW CANOPY
- 3 NEW GLASS ADDITION

**BUILDING 812
OAKLAND AUTO MALL
OAKLAND, CA**

FLOOR PLAN

FEE MUNSON EBERT
ARCHITECTURE AND DESIGN

24 AUGUST 2006 1" = 20'



WEST ELEVATION



SOUTH ELEVATION

- | | |
|--|---|
| 1 (E) HORIZONTAL WOOD SIDING,
REPAIRED, STRIPPED AND REPAINTED, TYP | 5 NEW STANDING SEAM GALVALUME
METAL ROOFING, TYP |
| 2 NEW CLEAR ANODIZED ALUMINUM STOREFRONT
WITH CLEAR LOW 'E' GLASS, TYP | 6 NEW PAINTED STEEL WIDE FLANGE
CANOPY COLUMNS, TYP |
| 3 NEW GALVANIZED STEEL FRAMES WITH
VERTICAL FINS AND FLUTED GLASS, TYP | 7 NEW PAINTED STEEL PANELS, TYP |
| 4 NEW GALVANIZED STEEL FRAMES WITH
VERTICAL FINS AND CLEAR LOW 'E' GLASS, TYP | 8 NEW ADDITION: CLEAR ANODIZED ALUMINUM
FRAMING WITH CLEAR LOW 'E' GLASS |

**BUILDING 812
OAKLAND AUTO MALL
OAKLAND, CA**

ELEVATIONS

FEE MUNSON EBERT
ARCHITECTURE AND DESIGN

24 AUGUST 2006 1" = 20'

Buildings 821, 822, and 823

These three buildings are virtually identical in plan, measuring 80 feet wide by 250 feet long, with a column spacing of 20 feet 10 inches on center. Each building encloses 20,000 square feet. The primary difference in the design of Building 823 is the roof, which incorporates a wide monitor, in contrast to the gable roofs of Buildings 821 and 822. All three buildings are “dock high” structures, i.e., the floor is approximately 4 feet above grade. The buildings form a row adjacent to West Grand Avenue, aligned end to end, with a separation of approximately 60 feet between each building.

The primary test as to whether or not an existing building can be adapted for reuse as an automobile dealership is column spacing, which determines the width of the service bays. In the case of all three buildings, the column spacing of 20 feet 10 inches would work, but would be inefficient for most dealers. While some dealers use 20-ft. service bays, the majority would find that width excessive. A service bay width of 14 feet is much more common.

The ideal lateral width of the overall service area within a dealership is 72 feet. This includes a 24-ft. driveway aisle down the center and service bays 24 feet wide to either side. In the case of Buildings 821–823, the overall structural width of 80 feet would work, but it would be inefficient. The enclosed floor area of each building (20,000 square feet) is a good, feasible size for a single dealership, one that would suit a number of manufacturers.

The fact that all three buildings are “dock high” presents some challenges, but could be overcome with the same approach that has been suggested for Building 808. An elevated floor has pros and cons; it makes the site less efficient, but also allows cars to be staged on a platform. The latter possibility may be appealing to some dealers who feel that new models are better presented outside of the showroom.

In terms of traffic, Building 821 and possibly Building 822 present some access challenges because they are so close to the intersection of West Grand Avenue and Maritime Street. Building 821 does not achieve (and building 822 may not achieve) the 500-ft. distance from the intersection recommended by traffic engineers as a minimum distance for access points to dealerships. Building 823 does not pose such a problem.

In conclusion, Buildings 821, 822, and 823 can be adapted for reuse as automobile dealerships, but are less efficient spatially than either Building 808 or Building 812. Buildings 821 and 822 are also more severely constrained by considerations of traffic engineering.

5. Cost Estimates

5. COST ESTIMATES

As noted in the Introduction and Summary, specific cost estimates for rehabilitation and reuse, or partial reuse, of Buildings 808, 812, 821, 822, and 823 as auto dealerships were not generated as part of this study, but they can be generated at a later date upon Redevelopment Agency request. To determine these cost estimates, building plans more detailed than the conceptual designs for Buildings 808 and 812 presented in this report may be required, particularly in the case of Building 808, for which elevations have not yet been developed. With additional input from the architect and others regarding the quality and quantity of the specific materials and finishes desired, the conceptual designs for those buildings could then be evaluated by a reputable cost-estimating firm. The underlying assumptions about pre-existing conditions in Buildings 808 and 812 could be extrapolated from the analysis contained in the previously referenced OARB Historic Buildings Reuse Alternatives Report (2002), as both of these buildings were evaluated in detail in that study. Though Buildings 821, 822 and 823 were not evaluated in the earlier study, they are similar in construction to Buildings 808 and 812. For this reason, it may be possible for a cost estimator to provide a probable cost range for rehabilitation and reuse for these three buildings, based on the estimates developed for the other two buildings.

Comparison to New Construction

To provide a future baseline for comparing the cost of rehabilitation to that of new construction, and determining the economic feasibility of reusing OARB buildings, several auto industry representatives as well as an architect experienced in dealership design were consulted. The representatives indicated that the typical cost of constructing new auto dealerships is estimated to be between \$120 and \$150 per square foot of building area. These figures do not necessarily take into account the specific site conditions of the proposed OARB Auto Mall Project. To note one condition, the project site is located entirely on filled land. Existing buildings, including Building 812, are constructed on wood pilings driven to a depth of 70 feet, according to the Army's construction records.⁶ It is not known whether the estimated cost ranges cited for new construction includes the cost of constructing such a pile foundation.

The responses of the industry representatives are presented in the following chart:

Estimated Costs, New Construction of Auto Dealerships

Commentor ⁷	General Comments
A	"We do use RSMMeans ⁸ as a base line but some of the projects coming in are running even higher, say \$130-\$150psf . It depends on a lot of factors including what additional amenities a Dealer wants to include in his facility i.e., beauty shops, gyms, etc..."
B	"The cost per square foot depends on several issues such as number of stories, storing cars inside vs. outside and number of service bays. The service bays are the cheapest component...for [Dealer X] it might be \$120/SF and for [Dealer Y] it could be \$150/SF... "
C	"...numbers are as low as \$200/SF and as high as \$500/SF including equipment. This probably includes land as well as soft costs..."

⁶ U.S. Engineers Office. *Building Foundation and Floor Plan*. San Francisco, Cal., September 16, 194, as cited in "Structural Assessment – Buildings 1, 60, 88 & 812" by Rutherford & CHekene, Structural Engineers, Oakland, CA. October 6, 2000.

⁷ Names of commentators and dealers have been omitted for confidentiality.

⁸ RSMMeans is a company that offers construction cost-estimating information and services.

Stephen Fee, an architect and one of the authors of this study, has stated that it has been his experience that the adaptive reuse of buildings costs as much, if not more, than new construction. For the OARB buildings considered in this study, it is his opinion that the cost of adaptive reuse could be considerably higher than that of new construction. It should be noted, however, that rehabilitation costs vary widely from building to building, and that it is not possible to draw definitive conclusions about the financial feasibility of reusing historic OARB structures for auto dealerships without further study.

6. Auto Dealership Industry Input

6. AUTO DEALERSHIP INDUSTRY INPUT

To provide a real-world perspective about the feasibility of adaptive reuse schemes for auto dealerships, the project team consulted with industry representatives and an architect knowledgeable about dealerships. Identified by City staff through prior communications regarding the Auto Mall project, these industry representatives are as follows:

- David W. Frederickson, Regional Manager, General Motors Corporation EDES—Worldwide Real Estate (Western Region);
- Erika Ridolfi, Regional Market Representation Manager, Toyota Motor Sales (San Francisco Region);
- Gordon Walton, a manager with Acura;
- Kevin Rustadt, a BMW manufacturer representative; and
- George Avnessian, an architect based in South San Francisco whose firm has had extensive experience in auto dealership design

The following comments are summaries of phone conversations, except in the case of Ms. Ridolfi, which was adapted from email communication.

David W. Frederickson

Regional Manager, General Motors Corporation EDES—Worldwide Real Estate (Western Region)

Mr. Frederickson reviewed the conceptual drawings for the adaptive reuse of Building 812. He found the concept “interesting” but stated concerns about the layout: “There is insufficient service operations capacity. I counted 13 service bays in your drawing. At least for our operation, we would be looking for 30–40 bays, if not more. The single showroom will not meet GM [General Motors] image standards for this dealership, as we will be offering multiple brands and would need at least three distinct showroom identities. Administrative space and parts appear undersized as well. Overall, there does not seem to be enough building to work with for a multi-line GM dealership, or any high-volume dealership.”

Mr. Frederickson also posed several questions and made suggestions for improving the feasibility of adaptively reusing Building 812: “In an adaptive reuse, could you design additions to the historic building and still meet preservation standards? For this to work for GM, we would have to design at least two additional showroom areas, most likely off of the north-facing side of the building. We would also require expansion of the service area to the south-facing side of the building. Would the existing structure accommodate/support mezzanine construction above the proposed administrative and parts area to increase useable floor space and add parts storage? In your detailed building summary you indicate that Building 812 was designed to support a 10-ton crane. Is there any chance that the roof structure, or at least a portion of the roof, could be reinforced to support some rooftop parking?”

Erika Ridolfi

Regional Market Representation Manager for Toyota Motor Sales (San Francisco Region)

Ms. Ridolfi stated that adaptive reuse “would not work” for Toyota now, though she did not consider the concept to be without merit. Toyota has a few signature elements, e.g., a lit portico with a courtyard beyond, as well as preferred design features such as 20-ft. wide service bays and glass-paned roll-up doors at auto entries and exits in the service area. Beyond these signature elements and design standards, individual dealers have substantial say in dealership design. Ms. Ridolfi indicated that she would be pleased to comment on other OARB adaptive reuse schemes.

Gordon Walton
Manager with Acura

Mr. Walton stated that his company might accept adaptive reuse dealerships under special circumstances. Like Toyota, Acura requires certain design/image elements to "brand" its dealerships. The company also has guidelines re: number of service bays and offices, size of showroom and parts department, etc. The widths of service bays may vary. Also like Toyota, individual Acura dealers are given considerable leeway in the design of their facilities.

Kevin Rustadt
BMW manufacturer representative

Mr. Rustadt stated that BMW has and would consider adaptive reuse. He cited Weatherford's current location in Berkeley as an example. Like Toyota and Acura dealers, BMW dealers provide input for the design of their dealerships, but they must work closely with a BMW architect. The dealer either works directly with BMW's architect, or the dealer retains an architect who in turn works closely with BMW's architect. Mr. Rustadt also stated that standard service bay dimensions for BMW dealerships are 12 feet wide by 24 feet long.

George Avanesian
Auto Dealership Architect based in South San Francisco

Avanesian Associates has extensive experience designing and implementing auto-sales facilities, ranging from individual dealerships to clusters of dealerships ("auto centers") and master-planned developments ("auto malls"). Mr. Avanesian reviewed the conceptual designs in this report and agreed that it is physically and programmatically possible to adapt Building 808 and Building 812 for reuse as automobile dealerships. In particular, the buildings' size and spatial configuration, including column spacing, were found to be adaptable to dealership use.

Yet Mr. Avanesian also expressed reservations about the feasibility of such an undertaking. He stated repeatedly that car dealers prefer to invest in new buildings, ideally within auto centers or auto malls because of the enhanced visual exposure and the advantages of collaborative marketing. New buildings are preferred, he says, because dealers typically own their buildings, seeing them as long-term investments with the potential for future lease. He thinks it unlikely that a dealer would agree to acquire an old building and adapt it for reuse unless there are incentives to do so—e.g., deferred taxes and fees. Similarly, he thinks multi-dealer occupancy, as proposed in Building 808, is problematic because it is standard practice for one dealer to own the entire physical plant comprising the dealership, rather than entering into a contract for shared ownership or tenancy.

Mr. Avanesian suggested two alternative schemes for adaptive reuse at the OARB Auto Mall which he considers more feasible than dealership uses. For the remnant of Building 808, he proposes auto storage and parking. In this reuse scenario, the warehouse remnant would contain stalls for dealers' overflow inventory and for employees' parking. If the Agency retained ownership and operational control of the building, free auto storage and parking could be offered as an incentive to dealers in the OARB Auto Mall. For Building 812, Mr. Avanesian suggests multi-tenant occupancy under private ownership. In this case, the tenants would provide support services for the Auto Mall, such as food vending, car rental, accessories, and repairs. In summary, though he acknowledges that it would be possible to reuse Building 808 and 812 as auto dealerships, he believes that it will be difficult to find a dealer willing to acquire such a building; rather, he believes that parking, storage, and support services are more feasible adaptive reuse solutions.

7. Conclusion – The Potential of Adaptive Reuse

7. CONCLUSION: THE POTENTIAL OF ADAPTIVE REUSE

To recapitulate, the major findings of this study are as follows:

1. Five of the eleven contributors to the OARB Historic District that lie within the East Gateway subarea appear to be suitable for reuse as auto dealerships, due to jurisdictional and site constraints—Buildings 808, 812, 821, 822, and 823.
2. From an architectural design perspective, the programmatic and technological needs of a major auto dealership can be met in any one of these five historic OARB structures, including the remnant of Building 808.
3. Some, but not all, of these five historic OARB buildings can be retained for dealership use. The buildings are too closely spaced to provide all of them simultaneously with adequate space for roadways, parking, outdoor display of vehicles, and clearly visible logotype signage. Identifying potential groupings of two or more adaptively reused buildings will require further analysis.
4. Auto dealership industry input concerning reuse of the OARB structures is mixed. Based upon responses from various consultations with industry representatives, it remains uncertain whether any auto manufacturers would approve a new franchise in one of the OARB structures should they be rehabilitated.

The five historic OARB buildings that are the focus of this report (in particular, Buildings 808 and 812) have potential for adaptive reuse. They possess lofty interior spaces with exposed heavy timber structural elements, providing an industrial/loft aesthetic that could appeal to prospective auto sellers and purchasers. Examples of recent rehabilitation projects in the Bay Area, Los Angeles, and Canada are included at the end of this section, showing the potential of reusing older industrial buildings in a way that combines historic ambience with contemporary style. Adaptive reuse is also a form of sustainable or “green” design, and such an approach to auto dealership design could conceivably be promoted as a marketing asset to manufacturers and sellers of cars with a “green” cachet, e.g., hybrids and minis. The reuse of historic buildings for dealerships might also appeal to dealers of vintage cars. Views of the following three recent reuse projects of former industrial buildings serve as examples of the adaptive reuse possibilities of the OARB warehouses.



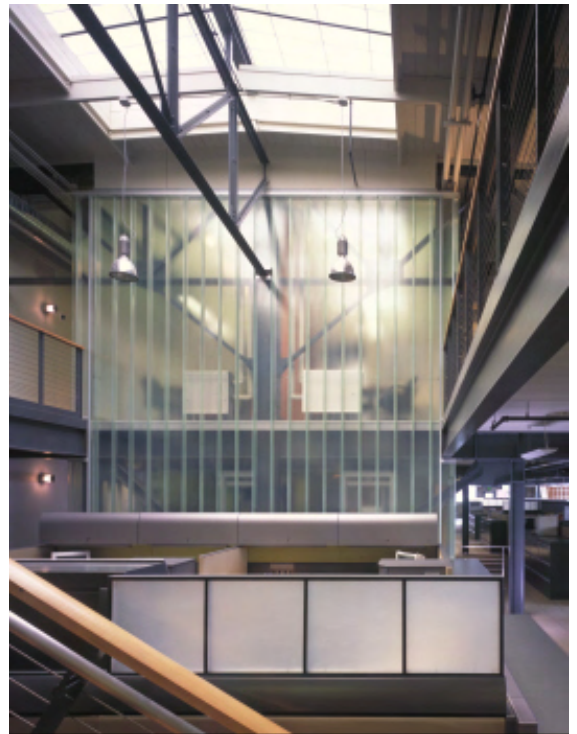
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RAD Clothing Company, Los Angeles, CA
Koning Eizenberg Architecture
Industrial Spaces - Vol. I, 2003





Before



After

Corkin Shipland Gallery
Toronto, Ontario, Canada
Shim-Sutcliffe Architects
Architecture May 2006