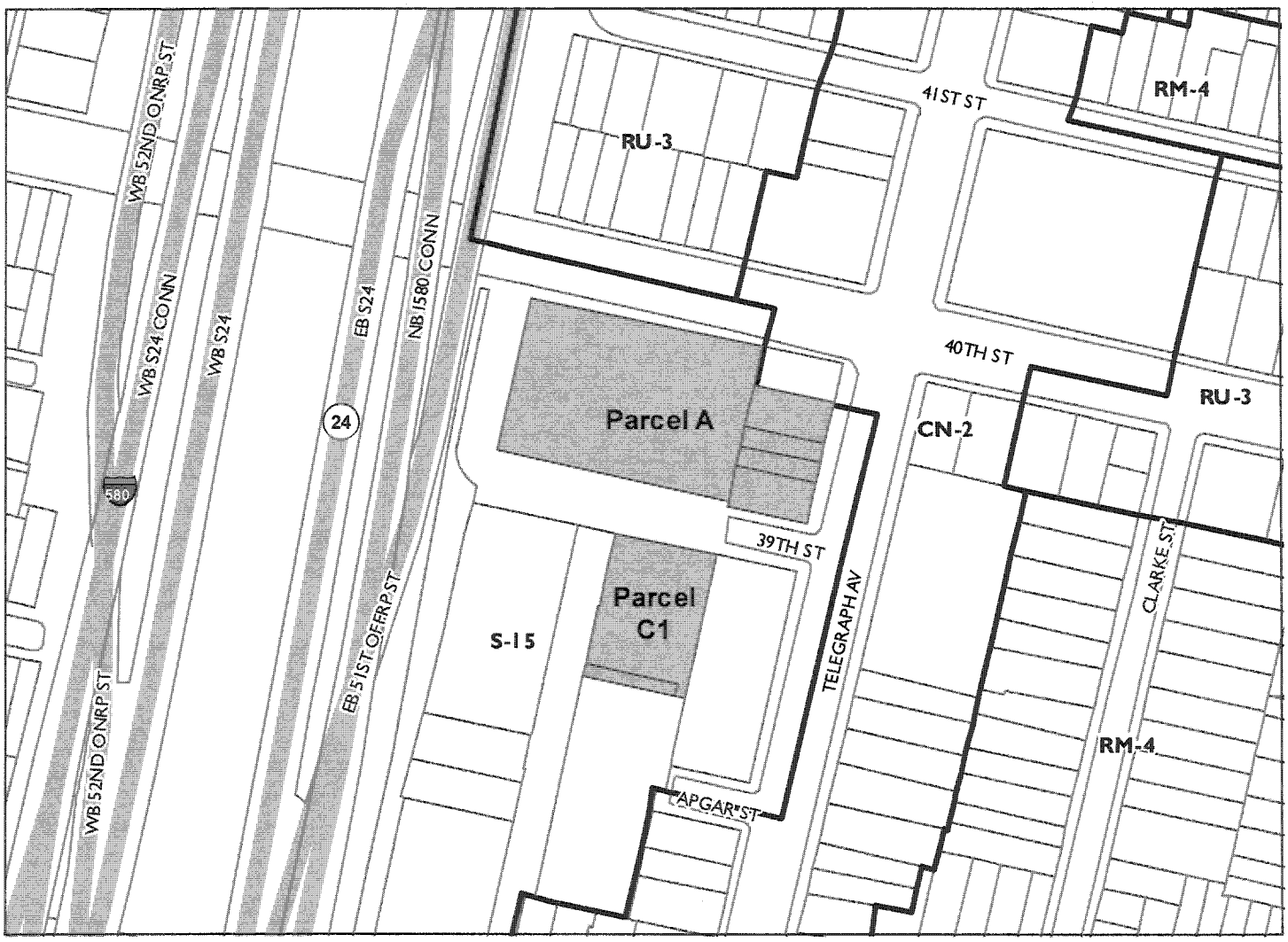
| | |
|---|---|
| Property Location & Assessor's Parcel Numbers: | **532 39th Street (APNs: 012-0969-053-05 and 012-0968-055-03) (also referenced as 585 40th Street)** |
| Proposal: | Construct Phases 3 and 4 of the MacArthur Station Project which includes: (1) Development of Block A with either: 287 residential units, 22,287 square feet of ground-floor commercial space and 254 parking spaces or 292 residential units, 33,983 square feet of ground-floor commercial space, which may include a 22,085-square-foot grocery store, and 355 parking spaces; and (2) Development of Block C1 with 96 residential units, 1,202 square feet of ground-floor commercial space, and 69 parking spaces. The applicant currently seeks approval of Design Review and a Final Development Plan for the project, as well as a Minor Variance for reducing required off-street loading berths. |
| Applicant: Phone Number: | Joe McCarthy / BRIDGE Housing Corporation 415-321-3553 |
| Property Owner: | MacArthur Transit Community Partners, LLC |
| Case File Number: | **PUDF08/ER01** |
| Planning Permits Required: | Design Review and Final Development Plan for Phases 3 and 4 of the MacArthur Station Project; Minor Variance for off-street loading berths proposing one to be on-street when off-street required. |
| General Plan: | Neighborhood Center Mixed Use |
| Zoning: | S-15 Transit-Oriented Development Zone |
| Environmental Determination Exemptions: | An Environmental Impact Report (EIR) was certified in June 2008. Pursuant to Sections 15162-15164 of the CEQA Guidelines, no additional environmental review is necessary as described in the CEQA Addendum Memorandum. |
| Property Historic Status: | There are no Potential Designated Historic Properties located on the project site. |
| Service Delivery District: | 2 |
| City Council District: | 1 |
| Date Filed: | October 16, 2014 (revised plans received on March 23, 2015) |
| Action to be Taken: | Recommendation to the City Council |
| Finality of Decision: | N/A; Recommendation to City Council |
| For Further Information: | Contact the case planner, **Elois A. Thornton at (510) 238-6284,** or by e-mail at **eathorton@oaklandnet.com** |

# CITY OF OAKLAND PLANNING COMMISSION




Case File: PUDF08 / ER01
Applicant: Joe McCarthy / BRIDGE Housing Corporation
Address: 532 39th Street
Zone: S-15

## PROJECT SUMMARY

The applicant, BRIDGE Housing Corporation, seeks approval of Final Development Plan (FDP), and Design Review for Parcel A/Phase 3 and Parcel C-1/Phase 4 of the MacArthur Station (MS) Project for the construction of two multi-level mixed-use buildings that will contain ground floor retail and residential units above. Some community space is also proposed. A Minor Variance is also requested for Parcel A/Phase 3 related to on-site loading requirements. The MS Project Planned Unit Development/Preliminary Development Plan (PUD/PDP) approved in 2008 authorizes the development of up to 675 residential units, 49,000 square feet of commercial space, 5,000 square feet of community space, a parking structure for BART patrons, and various infrastructure improvements. Construction of the parking structure on Phase 1/Parcel E is complete and the infrastructure improvements for the Master Plan are under construction. Phase 2/Parcel D, which includes 90 below- market rate apartments, is under construction and will be completed August 2015.

The Parcel A/Phase 3 portion of the FDP is located within the block bounded by 40th Street, Telegraph Avenue, 39th Street and the Frontage Road, adjacent to the BART Station; a portion of the site that is currently developed with surface parking and some one-story commercial buildings that front Telegraph Avenue. The building located on the southwest corner of Telegraph Avenue and 40th Street is not proposed for demolition and is not part of the project. The proposed Parcel A portion of the FDP proposes 287 apartment residential units and 22,287 square feet of ground-floor retail. An alternative development program for Parcel A, which would accommodate a grocery store is also proposed. The alternative plan includes 292 residential units, 33,983 square feet of ground-floor commercial space including approximately 22,287 square feet for a grocery store. The applicant is requesting approval of both alternatives which would allow them to proceed with either plan.

The Parcel C-1/Phase 4 component of the FDP is located on the portion of the MacArthur Station site south of 39th Street and east of Internal Drive just north of Parcel D/Phase 2, and supports an affordable residential project that is currently under construction. The proposed Parcel C-1 portion of the FDP proposes 96 apartment residential units and 1,202 square feet of ground-floor retail.

The proposed FDP application requires a recommendation by the Planning Commission. Pursuant to the MacArthur BART Station Development Agreement, the FDP requires approval by the City Council, which is atypical for review of an FDP as the Planning Commission typically considers and renders a decision on FDP applications and the Commission's decision would normally only be referred to the City Council if that decision is appealed. Approval of the project will facilitate the buildout of the MacArthur Station PUD/PDP. Staff believes the proposed FDP is in substantial conformance with the PUD/PDP and that development of it will help the City achieve its objective of redeveloping the area with a vibrant mix of residential and commercial uses that will result in an active, pedestrian-oriented urban development that will complement the neighborhood and meet the City's General Plan goals and objectives. Additionally, if the applicant is successful in securing a grocer and is able to proceed with the alternate plan for Parcel A/Phase 3, a significant community need for a local grocer will be met. Staff recommends approval of the project subject to the required Findings (Attachment A) and Conditions of Approval (Attachment B).

## BACKGROUND

The City has granted several approvals for the MS Project. The PUD/PDP approved in 2008 authorizes the development of up to 675 residential units, 49,000 square feet of commercial, 5,000 square feet of community space, a parking structure for BART patrons, and various infrastructure improvements. The PUD/PDP also establishes the approved land uses, density, bulk, massing and design guidelines for the site.

The approvals to date for the MS Project are described below:

**(a) 2008 - 2009 PUD/PDP and Associated Approvals**

- **EIR**: The City certified an EIR for the MS Project (SCH No. 2006022075) on July 1, 2008.
- **S-15 Text Amendment and Rezoning:** The City approved Ordinance No. 12883 C.M.S. amending Section 17.97.170 of the Oakland Planning Code related to the minimum usable open space requirements in the S-15 Zone and rezoning the MS Project site to S-15 Transit-Oriented Development Zone on July 1, 2008.
- **PUD/PDP**: The City approved a PUD/PDP permit on July 1, 2008 that guides development of the site in five phases.
- **Major Conditional Use Permit**: The City approved a Major Conditional Use Permit to allow the S-15 parking requirements to be exceeded and to allow off-street parking for non-residential uses on July 1, 2008.
- **Design Review**: The City approved preliminary Design Review for the PUD/PDP on July 1, 2008.
- **Development Agreement**: The City approved Ordinance No. 12959 C.M.S on July 21, 2009 enacting a Development Agreement for this project.
- **Owner Participation Agreement**: The City approved an Owner Participation Agreement on July 7, 2009 that sets forth the terms and conditions under which the then Redevelopment Agency will provide financial assistance to the project in conformance with the Broadway/MacArthur/San Pablo Redevelopment Plan.

**(b) 2011 FDP Approvals for Phases 1 and 2**

- **Parking Structure/Phase 1 FDP and Vesting Tentative Map:** On April 5, 2011, the City approved the Parking Structure/Phase 1 FDP to construct the new BART parking structure and all backbone infrastructure improvements (including streets and sidewalks) and the Vesting Tentative Tract Map (VTTM). This approval allowed an increase in the garage footprint to accommodate additional parking as required by the MS Project Conditions of Approval (COA) and adjustments to the plans for Internal Street and 39th Street (previously called Village Drive), and modified the PUD/PDP Illustrative Plan. The City relied on the 2008 certified EIR for the MS Project and determined that no new information or changes in the project or project circumstances required subsequent or supplemental environmental review.

- **Parcel D/Phase 2 FDP:** On May 17, 2011, the City approved the Parcel D/Phase 2 FDP for the development of Parcel D with 90 residential units and 90 parking spaces. The City relied on the 2008 certified EIR for the MS Project and determined that no new

information or changes in the project or project circumstances required subsequent or supplemental environmental review.

The approved PUD/PDP and the Phase 1 FDP and related VTTM for the project, approved the demolition of the BART surface parking lots and all existing buildings on the project site to allow for the construction of a new mixed-use, transit village development project that includes five new blocks that will be developed in up to five phases. Phases 1 and 2 are under construction. The Phase 1 FDP and VTTM improvements, which are currently under construction, include creation of two new streets: (1) 39th Street (previously referred to as Village Drive) will provide an east/west connection between Telegraph Avenue and the BART Plaza and 40th Street, and (2) Internal Street will provide a north/south connection from Village Drive to the southern edge of the project. The existing Frontage Road will also be reconfigured to allow continued access by shuttle operators and renamed to Walter Miles Way. New sidewalks, bicycle paths, and streetscape improvements would also be constructed.

## PROPERTY DESCRIPTION

The development proposal is located within the 8.2-acre (35,670 square feet) MacArthur Station site bounded by 40th Street, Telegraph Avenue, MacArthur Boulevard, and Frontage Road/State Route 24. The MS Station site includes the BART parking lot, the BART plaza, Walter Miles Way (formerly known as Frontage Road) between West MacArthur Boulevard and 40th Street, and seven privately owned parcels. The majority of the block on Telegraph Avenue between West Macarthur Boulevard and 40th Street, however, contains several parcels that are not included within the project site. The southwest corner of the MS project site is developed with the Parking Structure (Phase 1) that includes 480 parking spaces and 5,200 square feet of ground floor commercial. Additionally the Mural (Phase 2), a 90 unit affordable family building, is under construction and nearly complete in the central portion of the site east of Internal Drive and south of Parcel C-1. As part of the Phase 1 FDP, the existing access road that connects 40th Street and MacArthur Boulevard are being improved and two new roads are being added to the project site as part of the Phase 1 FDP. The existing BART entry plaza will be renovated and a new intermodal area is also being created as part of the Phase 1 FDP along with a new public plaza adjacent to the commercial space.

The site for the Parcel A/Phase 3 portion of the FDP is 1.63 acres (71,003 square feet) of the larger 8.2 acre MacArthur Station site and is within the block bounded by 40th Street, Telegraph Avenue, 39th Street and the Frontage Road, adjacent to the BART Station. This portion of the MacArthur Station site is currently developed with surface parking and some one-story commercial buildings that front Telegraph Avenue. The building located on southwest corner of the Telegraph Avenue and 40th Street is not proposed for demolition and is not part of the project.

The site for the Parcel C-1/Phase 4 portion of the FDP is 0.55 acres (23,958 square feet) of the larger 8.2 acre MacArthur Station site and is south of 39th Street and east of Internal Drive just north of the Parcel D/Phase 2 site where the Mural 90-unit affordable project is under construction. Parcel C was reconfigured and split into two parcels (C-1 and C-2) as part of the

Phase 1 FDP because the developer was not able to acquire the Surgery Center parcel. This FDP is limited to C-1 and does not include C-2.

## PROJECT DESCRIPTION

The project applicant proposes to construct a mixed-use residential and commercial development comprised of three buildings on two of the five parcels ("blocks") that comprise the MacArthur Station Project. One of the buildings would be located on Parcel A (note that the building appears as two buildings but technically is one as the above ground portions will be built on one podium structure with below grade parking), and one building on Parcel C-1. In total, the FDP includes a total of 383 apartment residential units; 23,489 square feet of ground-floor retail space; 35,320 square feet of open space; and 323 underground and surface garage parking spaces consisting of compact, standard, intermediate, ADA compliant and parking lifts. The development proposed on each parcel is detailed below.

### Parcel A

The Parcel A/Phase 3 portion of the FDP proposes 287 apartment residential units and 22,287 square feet of commercial ground-floor retail (Sheets A2.01 to A2.07 of Attachment C Revised Design Plans). The PUD/PDP allows and the EIR evaluated up to 240 residential units and 26,000 square feet of commercial space on Parcel A and a total of 675 units and 49,000 of commercial square feet for the entire MS site.

The proposed building for Parcel A appears as two buildings, but technically is one building as the two above-ground vertical building forms will be constructed above one concrete podium structure and one level of below grade parking area (Parcel A Parking Level, Sheet A 2.00) containing 175 parking spaces. The two vertical building forms are separated by a north-south running public alleyway, or "mews" as it is labeled in the FDP (Sheet L1.01). The larger of the two building forms, located on the east side of Parcel A and fronting Telegraph Avenue, 39$^{th}$ and 40$^{th}$ streets, will be a mixed-use building with three to five stories above the ground-floor podium level and will be built around an interior residential courtyard. The building heights range from $\pm$50 to 75 feet at the corner of Telegraph Avenue and 39$^{th}$ Street. The building height and form steps down towards the existing building located at Telegraph and 40$^{th}$ Street consistent with the MS Project Design Guidelines and to minimize the impact on the existing building (Sheet A0.30 and A0.31). This portion of the building contains 196 residential units above a ground floor containing up to 7 commercial retail units and 78 interior parking stalls (Sheet A2.01).

The smaller Parcel A building form, located on the west side of Parcel A and fronting Frontage Road and 39$^{th}$ and 40$^{th}$ streets, will be a mixed-use building with four to five stories above the ground-floor podium level. The building heights range from $\pm$65 to 85 feet at the corners of Frontage Road. The building height and form steps down towards the mews (Sheet A0.30 and A0.31). This portion of the building contains 91 residential units above a ground floor containing up to 3 commercial retail units.

In total, Parcel A will contain 287 residential units totaling 255,340 square feet of floor area; 22,287 square feet of retail space; and 254 parking spaces. There will be 27,760 square feet of

public and private open space on Parcel A, distributed among the mews, residential courtyard, roof top amenities, and residential decks.

Vehicular entry to the garage on Parcel A will be from 39th Street. Two driveways will be located toward the center of the south side of the larger building, on the north side of 39th Street. The 24-foot wide east driveway will lead to the 78-stall ground level parking garage, in which one retail loading berth and one residential loading berth are located. According to codes 17.116.120 and 17.116.140, the 255,340 square feet of residential space in Parcel A require 2 residential loading berths. Thus the FDP will require a minor variance related to residential loading. The 24-foot wide west driveway will lead to the 175-stall, underground parking garage. Metal garage doors on both driveways will remain open during business hours for commercial tenants. The driveways will be separated by a 20-foot section of non-transparent building façade, and flanked on both sides by street trees. The driveways are ultimately bookended by the transparent facades of the retail spaces on the eastern and western ends of the building. Consistent with the requirements of the Final TDM, a minimum of 30 percent of the parking spaces will be unbundled and any unbundled parking not leased by residents will be made available to commercial tenants or BART patrons.

**The Parcel A Alternate Plan**

The FDP also proposes an alternate development program for Parcel A, illustrated on Sheets A4.0P1, A4.0P2, and A4.01 of Attachment C. The Parcel A Alternate Plan accommodates a grocery store in the larger of the two buildings. The Parcel A Alternate Plan together with the Parcel C-1 Plan includes a total of 388 apartment residential units; 35,185 square feet of ground-floor retail space; 30,956 square feet of open space; and 424 parking spaces. A full-size grocery store would be located at the ground level of the eastern portion of the building and include a second level of below-grade parking (Sheets A4.0P1 and P2 and A 4.01). Under this Alternative Plan, Parcel A will contain 33,983 square feet of retail space, up to 292 residential units totaling 290,947 square feet of floor area; and 355 parking spaces. The parking would include 106 spaces designated for retail and 250 residential spaces. A combination of parking lifts, compact, intermediate, standard and ADA stalls are proposed. Consistent with the requirements of the Final TDM, a minimum of 30 percent of the parking spaces will be unbundled and any unbundled parking not leased by residents will be made available to commercial tenants or BART patrons. The Parcel A Alternate Plan includes up to 23,396 square feet of open space. Building elevations for the Alternate Plan are not provided but they are not expected to vary significantly from the elevations included in the plan set.

Vehicular entry to the garage on Parcel A with the Alternate Plan will be provided from three different points: (1) 39$^{th}$ Street; (2) 40$^{th}$ Street, and (3) Telegraph Avenue. According to code 17.116.120 and 17.116.140, the 290,947 square feet of residential space in the Parcel A Alternate Plan requires two residential loading berths and the 33,983 square feet of retail requires two off-street commercial loading spaces. Thus the FDP will require a Minor Variance related to residential and commercial loading to allow one of the commercial and one of the residential loading spaces to be located on the adjacent streets. The commercial space would be located on 40$^{th}$ Street and the residential on-street loading space would be located on 39$^{th}$ Street. Consistent with the requirements of the Final TDM, a minimum of 30 percent of the parking spaces will be unbundled and any unbundled parking not leased by residents will be made available to commercial tenants or BART patrons.

**Parcel C**

The building proposed for parcel C-1 is five stories above a concrete podium structure. The portion of the building above the podium is an "L" shape to accommodate a residential courtyard on the second level of the southwest corner of the structure. The ground floor will include an open mezzanine level (Sheet A 2.20) and contain one corner retail unit totaling 1,202 square feet, 7 loft-style live/work units, and 69 parking stalls. The building will contain a total of 96 residential units (including the above live/work units) comprising 79,570 square feet of living area.

Access to the Parcel C-1 garage and ground floor parking areas will be via one entryway from Internal Street, on the south side of the Parcel C-1 building.

The 30,956 square feet of open space included in the FDP includes both private residential areas and publicly accessible community spaces. The two residential courtyards, an 8,000 square foot courtyard on Parcel A and a 4,200 square foot courtyard on Parcel C-1, contain a mix of materials, design elements, hard and soft landscaping, and amenities. Residential decks and accessible roof top open spaces are also included in the FDP. The 10,500 square foot 'mews" that separates the two buildings on Parcel A, is publicly accessible from both 39th and 40th Streets. It contains a diversity of seating, terraced decks, platform "stages," planters, bike racks, tables and lighting.

## GENERAL PLAN ANALYSIS

Consistent with the approved PUD for the site, the proposed FDP site is located in the Neighborhood Center Mixed Use (NCMU) land use designation of the Oakland General Plan, and is designated as a "Transit-Oriented Development District," as well. The intent of the NCMU designation is to "identify, create, maintain and enhance mixed use neighborhood commercial centers. These centers are typically characterized by smaller scale pedestrian oriented, continuous street frontage with a mix of retail, housing, office, active open space, eating and drinking places, personal and business services, and small-scale educational, cultural or entertainment uses. Future development within this classification should be commercial or mixed uses that are pedestrian-oriented and serve nearby neighborhoods, or urban residential with ground floor commercial" (Page 149, Land Use and Transportation Element of the General Plan). The PDP/PUD and Phases 1 and 2 were found to be consistent with the General Plan in that they each helped the City achieve the intent of the site's General Plan designation as the development will increase the amount of mixed-use neighborhood commercial with the proposed commercial and residential development and will provide smaller scale pedestrian oriented, continuous street frontage with a mix of retail, housing, office, active open space adjacent to the MacArthur BART Station on a site which was previously all surface parking. Phase 3 allows for development of neighborhood-serving commercial and urban residential uses on a portion of this site which was previously occupied by surface parking, consistent with the intent and desired character of the NCMU land use designation and the approved PUD which was found to be consistent with the General Plan. The Phase 3 FDP proposal is substantially consistent with the PUD approval and, as such, is consistent with the General Plan.

## ZONING ANALYSIS

The proposed Phase 3 FDP is a requirement of the PUD adopted in June 2008. The PUD approval included a rezone of the entire site to the S-15 Transit Oriented Development Zone (S-15 Zone), and the adoption of design guidelines specific to the PUD. The intent of the S-15 Zone is to "create, preserve and enhance areas devoted primarily to serve multiple nodes of transportation and to feature high-density residential, commercial and mixed-use development to encourage a balance of pedestrian-oriented activities, transit opportunities, and concentrated development; and encourage a safe and pleasant pedestrian environment near transit stations by allowing a mixture of residential, civic, commercial, and light industrial activities, allowing for amenities such as benches, kiosks, lighting, and outdoor cafes; and by limiting conflicts between vehicles and pedestrians, and is typically appropriate around transit centers such as BART stations, AC Transit centers and other transportation nodes (Planning Code Sec. 17.100.010). As determined in 2008, the project is consistent with the S-15 Zone. The current proposal was found to be in substantial conformance with the 2008 approval and the PUD, and is therefore in compliance with the underlying zoning (see Attachment D: June 4, 2008 Planning Commission Report and Attachment E: PUD Conformance Memo dated April 10, 2015).

The following discussions and tables detail the compliance of FDP Phases 3 and 4 with the applicable development standards. The PUD/PDP approval prescribes many of the standards, but states for those standards that are not addressed the S-15 Zone standards are applicable. Note that the City has adopted revisions to the S-15 Zone standards since the 2008 approval; however, the MS Development Agreement vested the approval and as a result the version of the S-15 Zone that was adopted in 2008 in association with the project is applicable (See 2008 Planning Commission Staff Report for specific text). The table states what standard is applicable (PUD/PDP, Development Agreement or previously adopted S-15 Zone standards).

| Standard | Requirement | Requirement Source | Parcel A FDP Proposed | Parcel A Alternate Proposed | Parcel C-1 FDP Proposed | Comment |
|---|---|---|---|---|---|---|
| **Setback to Buildings Adjacent Project Site** | | | | | | |
| Minimum Setback (feet) | 5 | Conditions of Approval (COA) | Telegraph: 6.5<br>40th St: 5 | Telegraph: 6.5<br>40th St: 5 | NA | Complies |
| **Building Height** | | | | | | |
| See Table below | | | | | | |
| **Density** | | | | | | |
| Minimum Density (units/net acre) | 106 | Development Agreement | 176 | 179 | 175 | Complies |
| **Usable Open Space** | | | | | | |
| Minimal Group Usable Open Space | 75 sq. ft. =21,525 for Parcel A =21,900 for | S-15 | 27,760 sq. ft. (95 sq. ft./unit | 23,396 sq. ft. (80 sq. ft./unit) | 7,560sq. ft. (79 sq. ft./unit) | Complies |

| Standard | Requirement | Requirement Source | Parcel A FDP Proposed | Parcel A Alternate Proposed | Parcel C-1 FDP Proposed | Comment |
|---|---|---|---|---|---|---|
| per Regular Unit | Parcel A Alternate =7,200 for Parcel C | | | | | |
| **Usable Open Space Minimum Dimensions: "area of contiguous space shall be of such size/shape that a rectangle within it shall have no dimension less than the following" (17.19.170)** | | | | | | |
| Private Usable Open Space | 10 ft. (ground floor) | S-15 | All spaces meet min. | All spaces meet min. | All spaces meet min. | Complies |
| Public Ground Floor Plaza | 10 ft. | S-15 | All spaces meet min. | All spaces meet min. | All spaces meet min. | Complies |
| Widened Sidewalk | 10 ft. (added to existing sidewalk | S-15 | NA | NA | NA | NA |
| Rooftop | 15 ft. | S-15 | All spaces meet min. | All spaces meet min. | All spaces meet min. | Complies |
| Courtyard | 15 ft. | S-15 | All spaces meet min. | All spaces meet min. | All spaces meet min. | Complies |
| **Parking Space Minimum Dimensions** | | | | | | |
| Standard Space (feet) | 18 x 8.5 | S-15 | 18 x 8.5 | 18 x 8.5 | 18 x 8.5 | Complies |
| Intermediate Space (feet) | 16.5 x 8 | S-15 | 16.5 x 8 | 16.5 x 8 | 16.5 x 8 | Complies |
| Compact Space (feet) | 15 x 7.5 | S-15 | 15 x 7.5 | 15 x 7.5 | 15 x 7.5 | Complies |
| **Loading Berth Minimum Dimensions** | | | | | | |
| Loading Berth (feet) | 33 x 12 | S-15 | 33 x 12 | 33 x 12 | 33 x 12 | Complies |
| **Number of Parking and Loading Spaces** | | | | | | |
| See Table below | | | | | | |

**Building Height**

The table below details FDP Phases 3 and 4's compliance with building height standards, as established in Condition of Approval (COA) 41 of the PUD/PDP.

Citing the City's desire for increased density at the MS Project site, COA 1 states that the MacArthur Station project is permitted to include a maximum of 675 units, an increase over the 624 units shown in the 2008 PDP plans. COA 1 also states that the permitted building heights established in COA 41 (and included in the table below) may be altered to accommodate such an

allowable increase in density. The condition requires any such height increases shall be reviewed as part of the FDP approval process, and no such increase in height shall be permitted on Telegraph Avenue without modification to the PDP.

The MS Development Agreement provision 3.4(i) states that the minimum density for the MS Project is 106 units per net acre. The proposed density for the subject parcels is much greater than that at approximately 175 units per acre. This increase in density over the minimum permitted per the 2008 PDP meets the criterion to allow some flexibility in height as described above.

| **Frontage** | **COA 41 Permitted Building Height** | **FDP Maximum Proposed Height** | **Notes** |
|---|---|---|---|
| Telegraph Avenue, north of 39th Street | 50 to 75 feet | 50 to 75 feet | Complies |
| 40th Street | 60 to 80 feet | 64 to 76 feet with up to 85' for iconic corner | Exceeds permitted height by 5 feet. Acceptable with increase in density |
| Frontage Road | 65 to 80 feet | 75 to 80 feet with up to 85 feet for iconic corner | Exceeds permitted height by 5 feet. Acceptable with increase in density |
| 39th Street, north side east of Internal Street | 70 to 85 feet | 78.5 feet | Complies |
| Internal Street, east side | 55 to 70 feet | 78.5 feet | Exceeds permitted height by 8.5 feet. Acceptable with increase in density |
| 39th Street, south side east of Internal Street | 65 to 80 feet | 78.5 feet | Complies |
| 39th Street, north side west of Internal Street | 60 to 80 feet | 77 feet with up to 85' for iconic corner | Exceeds permitted height by 5 feet. Acceptable with increase in density |

**Parking and Loading**

The Transportation Demand Management (TDM) Plan that was approved as party of the PUD/PDP states that no more than one space per residential unit shall be provided. The following table depicts the project's compliance with parking minimums established in the S-15 Zone and parking maximums established in the TDM Plan. The TDM is part of the "City Approvals" referenced in the MS Development Agreement and establishes the required parking for the project as no more than one space per unit plus an additional 31 spaces for retail in Parcel A (which is equivalent to one space per 838 square feet of retail). No minimum number of spaces is prescribed in the TDM. Further a key objective of the TDM is to reduce parking supply (see page 7 of Attachment F). The minimum required for the S-15 Zone per the City Regulations is

provided for information purposes and to provide a point of reference regarding the mix of parking stall sizes given no minimum standards were prescribed in the TDM.

| Standard | S-15 Minimum Requirement Plan A / Alt Plan | TDM Maximum Requirement Plan A / Alt Plan | Proposed FDP (A and C-1) Plan A / Alt Plan | Notes |
|---|---|---|---|---|
| **Required Parking** | | | | |
| Residential Spaces:<br>S-15 min = 0.5 space/unit<br>TDM max = 1 space/unit | 192 / 194 | 383 / 388 | 294 / 318 | Proposed number of spaces is below the maximum allowed per the TDM. It also exceeds the min standard included in the S-15. |
| Retail Spaces:<br>S-15 min = 1 space/1K sf of retail<br>TDM max = 31 spaces (= total space per 838 sf) | 24 / 36 | 28 / 42 | 28 / 106 | For Plan A, the proposed number of spaces is below the maximum allowed per the TDM. It also exceeds the min standard included in the S-15. The Alt Plan proposes a number of spaces that is higher than what was included in the TDM. However the plan the TDM was based on it did not assume a grocer. The proposed number of spaces does not conflict with the S-15 requirements as they only prescribe a minimum. Given this refinement in uses and the desire for a grocer in the North Oakland neighborhood, staff believes compliance with the S-15 is acceptable. Additionally the total number of spaces (residential and commercial) provided falls below the maximum permitted. |
| Total Parking Spaces | 216/230 | 413/433 | 322/424 | The parking spaces proposed include 106 / 194 spaces over the minimum and 91 / 9 spaces below the maximum permitted |

| Parking Space Types | Minimum Number Plan A / Alt Plan | Maximum Plan A / Alt Plan | Proposed Plan A / Alt Plan | Notes |
|---|---|---|---|---|
| Standard: S-15 min = 25% of required spaces | 54 / 58 | 413 / 433 | 86 / 124 | Complies 40% and 54%, respectively of the minimum required by S-15; TDM has no min requirement |
| Intermediate : S-15 max = 75% of required spaces If compact spaces are also provided an equal number of standard or handicapped spaces | 0 | 162 / 173 | 46 / 74 | Complies 21% and 32%, respectively of the minimum required by S-15; TDM has no min requirement |
| Compact S-15 max = 50% of required spaces Cannot be more than number of Standard spaces | -- | 108 / 115 | 48 / 148 | Complies Plan A complies—the Compact spaces represent less than 50% of the required spaces and the number is less than the number of Standard Spaces. Alt Plan - the Standard, Intermediate and Handicapped spaces provided provide 86% of the required spaces; the remaining 14% (32 spaces) can be met with compact spaces and the remaining 116 spaces are in excess of the min required. As a result, if the S-15 standards were applicable the project would comply. |
| Handicapped Spaces | -- | -- | 5 / 5 | No specific requirement in Code |
| Lifts | 0 | 0 | 137 / 67 | For Plan A, the parking space types listed above provide the 185 of the 216 minimum number spaces that would be required if the S-15 standards applied. As a result, the lifts |

| Parking Space Types | Minimum Number Plan A / Alt Plan | Maximum Plan A / Alt Plan | Proposed Plan A / Alt Plan | Notes |
|---|---|---|---|---|
| | | | | would provide 31 of the minimum number of spaces and the remaining 106 spaces would be above the minimum standard.<br>For the Alt Plan, the parking space types listed above provide the minimum number of spaces that would be required if the S-15 standards applied. As a result, the lifts would provide an additional 67 spaces. Neither the TDM nor the Code specifically addresses the use of parking lifts. The TDM, which per the PUD/PDP approvals regulates parking, does not include a minimum requirement for parking spaces. Further a key objective of the TDM is to reduce parking supply (see page 7 of Attachment F). As a result, staff believes the parking as proposed including the use of lifts complies with TDM and PUD/PDP. |

| Loading Requirements | Required per S-15 | Proposed sf | Proposed loading On-Site | Compliance |
|---|---|---|---|---|
| | Block A- Plan A | | | |
| Residential: 150,000-299,999 sf requires two berths on site | 2 | 255,340 | 1 | -1 |
| Commercial: 10,000-24,999 sf requires one berth on site | 1 | 22,287 | 1 | 0 |
| Total Block A –Plan A | 3 | -- | 1 | -1 |
| | Block A – Alternate Plan | | | |
| Residential: 150,000-299,999 sf requires two berths | 2 | 290,947 | 1 | -1 |
| Commercial: 25,000-49,999 sf requires | 2 | 35,185 | 2 | 0 |

| Loading Requirements | Required per S-15 | Proposed sf | Proposed loading On-Site | Compliance |
|---|---|---|---|---|
| two berths | | | | |
| Total Block A –Alternate Plan A | | | | |
| | Block C-1 | | | |
| Residential: 50k to 149,999 sf requires one berth | 1 | 79,570 | 1 | 0 |
| Commercial: less than 10k sf none required | 0 | 1,202 | 0 | 0 |
| Total Block C-1 | 1 | -- | 0 | 0 |

The applicant requests a Minor Variance to allow one of the two required residential loading spaces to be provided off-site on 39th Street. This Variance request would apply to both Plan A and the Alternate Plan. The applicant is requesting that the current approved yellow zone provided just outside the building on 39th Street be utilized as one of the loading spaces. The layout of 39th Street was approved as part of the first phase of development and will be completed in June of this year.

For the Alternate Plan A, the applicant also requests a Minor Variance to allow one of the two required commercial loading to be provided on 40th Street. The applicant is requesting that a portion of 40th Street be utilized for commercial zoning as shown on Sheet A4.01.

Staff finds that both variances support design and other objectives for the PUD and neighborhood and recommends approval.

Staff has also reviewed the plans to ensure compliance with the bicycle parking requirements detailed in the TDM and has found that the proposed FDP complies.

## COMMUNITY MEETING SPONSORED BY APPLICANT

Numerous community meetings have been held by the project applicant throughout the planning processes for the MS Project PUD/PDP and the FDPs for Phases 1 and 2.

The applicant presented the Phase 3 FDP design at a community meeting on November 6, 2014. The applicant provided updates on the phases under construction and schedule for completion followed by a presentation on the proposed FDP for Parcels A & C1. The project scope unit mix, retail space, parking and open space was presented along with building design. The potential retail options were also discussed. Involved community members are supportive of the project.

## ENVIRONMENTAL DETERMINATION

An EIR was certified by the Planning Commission for this project on June 4, 2008 (see Attachment G). The proposed FDP is, by definition, consistent with the PUD. Staff has determined through preparation of a Memo/Addendum to the EIR that no new information about the site, changes to the project or circumstances under which the project will be undertaken have occurred that would require subsequent or supplemental environmental review. The CEQA Memo/Addendum is attached to this report (see Attachment H). In sum, (a) there are no substantial changes to the project that would result in new significant environmental impacts or a substantial increase in the severity of impacts already identified in the 2008 EIR; (b) there are no substantial changes in circumstances that would result in new significant environmental impacts or a substantial increase in the severity of impacts already identified in the 2008 EIR; and (3) there is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2008 EIR was certified, which is expected to result in: (a) new significant environmental effects or a substantial increase in the severity of environmental effects already identified in the EIR; or (b) mitigation measures or alternatives which were previously determined not to be feasible would in fact be feasible, or which are considerably different from those recommended in the 2008 EIR, and which would substantially reduce significant effects of the project, but the project applicant declines to adopt them, (see CEQA Findings, Attachment I).The Standard Conditions of Approval/Mitigation Monitoring and Reporting Program included in the 2008 EIR and the subsequent 2010 Addendum for Phase 2, are included in Attachment J.

## KEY ISSUES

### Conformance with PUD

The intent of the Planned Unit Development permit is to create large types of comprehensive projects that adhere to an integrated plan on a single tract of land or on two or more tracts of lands, and that are consistent with the surrounding neighborhood development pattern. Although the current FDP proposes refinements to the PUD, these refinements are minor and conform in all major respects with the approved PUD and the applicable conditions of approval as detailed in Attachment E, PUD Conformance Memorandum.

### Parcel A

The proposed FDP would increase the total residential units on Parcel A from the 240 reflected in the approved PUD/PDP, to 286 or 292 (Parcel A Alternate Plan). This net increase of 47 or 52 units on Parcel A reflects a different allocation of units among the parcels. However, it will not increase the overall maximum of 675 units within the MacArthur Station Project because the amount of development proposed on Parcel C-1 is less than what was approved in the PDP. The shift in units from one parcel to another is not significant.

In addition, the commercial area would increase by up to 7,983 square feet if the alternate plan is implemented and the grocery store is developed. Although an increase, this proposed range of retail square footage will accommodate a grocer which is a very desired and needed use in the North Oakland neighborhood. Additionally as shown in the Project Data Table, attached to the

PUD Conformance Memorandum and due to refinements in the approved FDP for the Parking Structure/Phase 1 and the proposed reallocations between parcels (see Table), the refinements proposed will not change the total maximum units and commercial square footage approved for the MS Project, which will remain at 675 units and 49,000 square feet of commercial space.

Parcel A is consistent with all other elements of the PUD, including timing, footprint, height and parking standards. (See PUD Conformance Memo)

**Parcel C-1**

As part of the Parking Structure/Phase 1 FDP and the Vesting Tentative Map, Parcel C was reconfigured and split into two parcels (C-1 and C-2) because the developer was not able to acquire the Surgery Center parcel. The proposed FDP is limited to C-1 and does not include C-2. The Parcel C-1 portion of the FDP proposes 96 apartment residential units and 1,202 square feet of ground floor retail. A total of 51 or 46 units and 17,311 or 5,615 square feet of commercial would remain for Parcel C-2 which, if developed, would result in a total on Parcel C of up to 148 or 142 (with Phase 3 Alternate Plan) residential units and 18,513 or 6,817 (with Phase 3 Alternate Plan) square feet of commercial. The 2008 PUD allows up to 195 (47 or 53 units more than proposed) for-sale residential units and 12,500 (6,013 square feet more or 5,683 square feet less than proposed) square feet of commercial space on the entirety of Parcel C. The change from ownership to rental units reflects market conditions and will allow the units to be available to a broader range of potential occupants.

**Community Space**

The MS Owner Participation Agreement requires the project to include a 5,000 square feet space for community purposes. The terms state use of the space shall be determined by the Developer in consultation with the then Redevelopment Agency prior to the approval by the City of the Final Development Plan for the applicable Phase of the Project, but was anticipated to be a 5,000 square foot child care facility. The operator of the community space shall be selected by the Developer in consultation with the Agency.

The PUD/PDP Plan had included a 5,000 square foot child care facility on the C2 site (Surgery Center). The site allowed for the accommodation of the building space and the open space that is critical for a child care facility. To date, the project applicant has not been successful in acquiring the C2 site. As a result, providing the contiguous space along with the required open space is challenging. Due to this challenge, the Applicant has proposed breaking the space up into separate locations throughout the development and has proposed offering the community room at Mural for community purposes.

Staff has reviewed this proposal and is supportive of breaking up the 5,000 square feet into different areas and for different uses. Based on the uses proposed by the applicant, staff is also supportive of community use of the community space at Mural but is less supportive of counting the use of the mews and other ground floor retail space by local Oakland retailers as a community use. Staff's recommendation is to require the project applicant to provide a final community space plan that will be subject to review and approval by City staff to ensure compliance with the requirements of the Owner Participation Agreement.

**Revised Project Phasing**

The FDP results in Parcel C-1 being developed before Parcel B. Both the Development Agreement (§3.4) and COA 2(c) allow the buildings associated with Phases 3, 4 and 5 to be built in any order, provided that the FDP submittal dates for these phases are met. This condition allows the Developer to move ahead with Parcel C-1, ahead of Parcel B (which was listed as Phase 4 in the COAs and Development Agreement), but it requires Parcel C-1 to be subject to the timing requirement of Phase 4 instead of Phase 5. The Development Agreement terms prevail over the COAs and require submittal of Phase 4 by July 21, 2017. The FDP complies with this requirement.

**Minor Variance for Loading**

Parcel A in the proposed FDP does not provide the required number of on-site residential or commercial loading berths, as per codes 17.116.120 and 17.116.140. Per the code, the total residential square footage of Parcel A (and Parcel A Alternate) requires 2 loading berths and the total commercial space under the Alternative Plan requires two loading berths. A variance to this requirement to allow one of the two residential berths to be located off-site on 39th Street and one of the two commercial berths for the Alternative Plan to be located off-site on 40th Street is requested as discussed above. Staff recommends approval of this Minor Variance request.

**Building Design**

Conformance with the Design Guidelines

The Conditions of Approval for the project require consistency with the MacArthur Transit Village Design Guidelines. Sheets A0.30, A0.31, and A0.32 detail the FDP's consistency with the Guidelines. Additionally, the portions of the Design Guidelines that are most relevant to the Phase 3 FDP are cited and analyzed in the Findings, at the end of this report. Essentially, the project is within the height, bulk and massing envelope described in the PUD/PDP and includes the same affordable housing land use also envisioned in the PUD/PDP.

**Design Review Committee Consideration**

The Design Review Committee of the Planning Commission (DRC) reviewed the FDP application at their regularly scheduled meeting on November 12, 2014 (see Attachment K). The DRC was generally supportive of the Phase 3 FDP but requested more detail regarding the building design. Particularly, the Committee requested a better understanding of the context of the surrounding development both on-site and immediately adjacent, and a finer grain of detail on the building elevations to understand the building materials and the transition between building forms and materials. A more detailed materials board and model were also requested.
The revised plans provided by the project applicant and attached to this staff report address the Planning Commission's request for additional information. A more detailed material sample board and model will be available at the Planning Commission hearing

## Affordability

The Owner Participation Agreement requires 20 percent of all market rate units to be affordable/below market rate. The Mural project, which is 100 percent affordable and includes 90 units of affordable housing and is currently under construction on the project site, counts towards the projects compliance with this requirement the following table shows how this requirement is being met on Parcels A and C-1.

| Description | Total Units | Mural Affordable Credit | Market Rate Units | Total Affordable requirement | Net affordable to be provided onsite | Total Affordable % |
|---|---|---|---|---|---|---|
| Parcel A | 292.00 | 48.00 | 283.00 | 57.00 | 9.00 | 20% |
| Parcel C1 | 96.00 | 17.00 | 94.00 | 19.00 | 2.00 | 20% |
| Total | 388.00 | 65.00 | 377.00 | 76.00 | 11.00 | |

## CONCLUSION

In summary, staff believes that the proposed project meets the primary goal of providing new housing units and ground-floor retail uses on an underused vacant buildings and lots. The proposal conforms to the City's General Plan policies and S-15 Zone standards by creating and concentrating high density, mixed-use facilities near transit stations and multiple transit nodes, and creating a safe, active pedestrian environment. The Planned Unit Development (PUD) and Regular Design Review permits are warranted and are not anticipated to create adverse impacts. Staff determines that the application meets the required findings (see Attachment A), and recommends approval by the Planning Commission, subject to the Conditions of Approval (see Attachment B).

## RECOMMENDATIONS:

1. Affirm staff's Environmental Determination that no additional environmental review is needed.

2. Recommend approval of the Design Review, Final Development Plan for proposed Phases 3 and 4, and Minor Variances to the City Council, subject to the attached Findings and Conditions of Approval.

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Approved by:

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Approved for forwarding to the
City Planning Commission:

for
Darin Ranelletti, Deputy Director
Bureau of Planning

**ATTACHMENTS**

A. Project Findings
B. Conditions of Approval
C. Revised Design Plans, submitted on April 9, 2015
D. June 4, 2008 Planning Commission Report without attachments (complete report available here:
http://ec2-54-235-79-104.compute-1.amazonaws.com/oak/groups/ceda/documents/webcontent/oak036126.pdf)
E. April 10, 2015 PUD Conformance Memorandum
F. Final Transportation Demand Management Plan
G. MacArthur Transit Village Project Environmental Impact Report (SCH No.2006022075) (available here:
http://www2.oaklandnet.com/Government/o/PBN/OurOrganization/PlanningZoning/DOWD 008406)
H, April 10, 2015 CEQA Memorandum
I. CEQA Findings
J. PUD CONDITIONS OF APPROVAL and Standard Conditions of Approval / Mitigation Monitoring and Reporting Program
K. November 12, 2014 Design Review Committee Report (without attachments)

# ATTACHMENT A

## Findings for Approval

The findings required for granting approval for this application for Planned Unit Development and Regular Design Review are (shown in bold) found in Sections 17.136.050(A), 17.136.050(B), and 17.140.080 and the reasons this proposal satisfy these findings, are as follows:

**SECTION 17.136.050(A)-REGULAR DESIGN REVIEW FINDINGS**
**For Residential Facilities**

1. **That proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and texture.**

The proposed Phases 3 and 4 FDP includes the construction of two 6-story mixed-use buildings on Blocks A and C1. The design includes a variety of architectural styles and building materials. Block A would contain the larger structure of the two Blocks, with 286 residential units and ground-floor commercial and building amenity space. Block A is one structure although it is designed to look like two separate buildings separated by a landscaped mews as to break up the bulk and keep with the scale of relatable to the other buildings in the area. The design of the Block A west building, which is adjacent to the BART platform, is decidedly urban and bold given its visibility from the BART platform and Highway 24. Proposed building materials for Block A west include: metal panels in dark colors with a bold accent color, neutral-colored stucco, and glass solar shades. The height of the Block A east building steps down toward the immediately adjacent building at the corner of 40th Street and Telegraph Avenue, aligning height and articulation in order to relate well to the existing corner. Building materials for Block A east include: stucco, wood composite panels, aluminum composite panels, and architectural masonry units. The Block C1 building would include 93 residential units and ground-floor commercial space and is located more internal to the overall development, with the Surgery Center immediately east of the building between the Block C1 and Telegraph Avenue Building materials for Block C1 include: cementitious composite panels, stucco, board formed concrete, and perforated metal solar shades. Residential balconies and architectural features are included on the Building C1 facades along the internal streets while the facade facing the Surgery Center features more covering by cementitious composite panels and less by residentially-oriented architectural features.

2. **That the proposed design will protect, preserve, or enhance desirable neighborhood characteristics.**

The proposal will enhance the neighborhood setting by creating well-designed multi-story mixed-use buildings in a dense and transit-oriented development adjacent to the MacArthur BART station and bounded by 40$^{th}$ Street, Telegraph Avenue and MacArthur Boulevard. The project would provide housing as well as commercial spaces, with the possible inclusion of a

grocery tenant, bringing activity and amenities to the existing neighborhood through its design. The proposed design contains interesting architectural elements that transition appropriately from features utilized to create iconic corners and facades near the BART station to neighborhood-scale elements along Telegraph Avenue and 39th Street. Architecture along Telegraph Avenue incorporates clean lines and bold color accents which lend to a contemporary, urban feel at a neighborhood scale.

**3. The proposed design will be sensitive to the topography and landscape.**

The project site is approximately 8 acres, relatively flat and occupied by the existing, sub-grade BART parking lot, which has an elevation difference across the lot of one foot or less. The proposed design includes the construction of two buildings on Blocks A and C1. The development of a multi-level parking garage, internal streets and project site-wide infrastructure was approved in prior FDP approvals. The buildings would be up to 85 feet in height with a single sublevel of parking garages for which the proposed project will require grading. The project will be sensitive to the surrounding topography and the site will remain relatively flat. Additionally, the proposed design includes a variety of new landscaping along the streets and within the site, specifically within the MEWS on Block A, which will provide 10,500 of public open space and will include lighting, landscaping and seating areas. Street trees would be added around the perimeter of each building.

**4. If situated on a hill, the design and massing of the proposed building relates to the grade of the hill.**

The proposal is not located on a hill site.

**5. The proposed design conforms in all significant respects with the Oakland General Plan and with any applicable district plan or development control map which has been adopted by the City Council.**

As described in the body of this report, the proposal conforms in all respects to the Oakland General Plan and is consistent with the City's policy framework for providing development of infill sites along major corridors, facilitating housing construction, and encouraging transit-oriented development.

**SECTION 17.136.050(B)-REGULAR DESIGN REVIEW FINDINGS**
**For Non-Residential Facilities**

**1. That the proposal will help achieve or maintain a group of facilities which are well related to one another and which, when taken together, will result in a well-composed design, with consideration given to site, landscape, bulk, height, arrangement, texture,**

**materials, colors, and appurtenances; the relation of these factors to other facilities in the vicinity; and the relation of the proposal to the total setting as seen from key points in the surrounding area. Only elements of design which have some significant relationship to outside appearance shall be considered, except as otherwise provided in Section 17.136.060.**

The proposal includes ground-floor commercial area of two multi-level mixed-use buildings fronting 40th Street, Telegraph Avenue, and 39th Street, and contains high proportion of glazing surfaces for the storefronts. The ground floors of the Block A building fronting Telegraph Avenue and 40th Street are exclusively retail with 18-foot heights. The ground floors are distinctly defined as retail area through articulation in the building façade and unique materials, including floor-to-ceiling windows interspersed with "high quality and durable masonry." The design features canopies over the glass storefront windows at the corner of 40th Street and Telegraph Avenue. Canopies and landscaping at the ground floor level, and varied façade materials, architectural details, and articulation throughout the upper levels (including glass-railed balconies; metal and wood paneling; and stucco in varied, light colors) created visual interest and complexity.

2. **That the proposed design will be of a quality and character which harmonizes with, and serves to protect the value of, private and public investments in the area.**

The proposal for the ground-floor commercial area contains interesting architectural features and quality materials that result with an attractive design suitable for a commercial corridor. The project design will improve the area by replacing this underutilized property with a large commercial storefront along multiple street frontages that will help to increase the value of private and public investment in this thriving neighborhood. Additionally, a grocery store tenant may occupy a portion of this commercial space, adding additional value to private and public investments in the area.

3. **That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.**

As described in the body of this report, the proposal will conform to the policies and objectives of the City's General Plan, and the Design Guidelines for corridors and commercial areas.

**Section 17.148.050 (Minor Variance from Zoning Limitations and Additional Criteria**

**1. That strict compliance with the regulations would deprive the applicant of privileges enjoyed by owners of similarly zoned property; or, as an alternative in the case of a minor variance, that such strict compliance would preclude an effective**

**design solution fulfilling the basic intent of the applicable regulation.**

The proposed project is part of a planned transit village intended to enhance the surrounding neighborhood. The project includes two minor variances: from on-site loading requirements with a provision for residential loading from 39th Street fronting the project and for commercial loading from 40th Street fronting the project (only applicable to the Alternate Plan for Parcel A).

Loading Variance: Allowing off-site loading supports design and other objectives for the PUD and neighborhood and staff recommends approval.

**2. That the minor variance, if granted, will not adversely affect the character, livability ty, or appropriate development of abutting properties or the surrounding area, and will not be detrimental to the public welfare or contrary to adopted plans or development policy.**

The proposed variance supports increased parking and garage accessibility in a constrained area.

# ATTACHMENT B

## CONDITIONS OF APPROVAL

The proposal is hereby approved subject to the following Conditions of Approval:

1. **Approved Use**
   ***Ongoing***
   a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, and the *revised* design plans dated **April 9, 2015,** and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall require prior written approval from the Director of City Planning or designee.
   b) This action by the **City Council** ("this Approval") includes the approvals set forth below. This Approval is for the construction of a mixed-use residential and commercial development of Phases 3 & 4 of the MacArthur Station project.

2. **Effective Date, Expiration, Extensions and Extinguishment**
   ***Ongoing***
   Unless a different termination date is prescribed, this Approval shall expire **within two (2) years** from the approval date, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired.

3. **Scope of This Approval; Major and Minor Changes**
   ***Ongoing***
   The project is approved pursuant to the **Planning Code** only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

**4. Conditions of Approval for Project (Case File No. PUD060058)**

***Ongoing***

All Conditions of Approval, Standard Conditions of Approval, and Mitigation Measures for the Project (Case File No. PUD060058), including the Mitigation Monitoring and Reporting Program ("Previous Conditions"), are hereby incorporated herein by reference as if fully set forth herein, (See Attachment I, PUD Conditions of Approval with Standard Conditions of Approval and Mitigation Monitoring and Reporting Program which lists all the Previous Conditions and Mitigation Measures) except that to the extent there are any conflicts between the conditions imposed by this approval and the Previous Conditions, the conditions imposed by this approval shall control.

**5. The following conditions were voluntarily agreed to by the project sponsor as part of the Stage 2 FDP approval. The applicant is also committed to implementing the same measures as part of the Stage 3 FDP.**

*Excerpted from the Stage 2 FDP Conditions of Approval for reference.*

The following conditions have been voluntarily agreed to by the project sponsor pursuant to discussions with the representatives of the Alta Bates Summit Surgery Center and are not intended to be, nor are they, mitigation measures for any element of the MacArthur Transit Village Project under the California Environmental Quality Act. Rather, these additional conditions will further reduce the construction related impacts that the Project EIR describes as less than significant for purposes of the California Environmental Quality Act. These conditions shall apply only for so long as the Alta Bates Summit Surgery Center is in operation at its current location on Telegraph Avenue between Apgar and 39th Streets.

A. The following updated and additional City Standard Conditions of Approval ("SCA") shall apply to each Final Development Plan for the MacArthur Transit Village Project:

**1) Construction-Related Air Pollution Controls (Dust and Equipment Emissions)**

***Ongoing throughout demolition, grading, and/or construction***

During construction, the project applicant shall require the construction contractor to implement all of the following applicable measures recommended by the Bay Area Air Quality Management District (BAAQMD):

**BASIC**

a) Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.

b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
d) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
e) Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
f) Limit vehicle speeds on unpaved roads to 15 miles per hour.
g) Idling times shall be minimized either by shutting equipment off when not is use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations. Clear signage to this effect shall be provided for construction workers at all access points.
h) All construction equipment shall be maintained 0.and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
i) Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage.

**ENHANCED: All "Basic" controls listed above plus the following controls:**

j) All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
k) All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
l) Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
m) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
n) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.
o) Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity.
p) Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.

q) The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
r) All trucks and equipment, including tires, shall be washed off prior to leaving the site.
s) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
t) Minimize the idling time of diesel-powered construction equipment to two minutes.
u) The project applicant shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate matter (PM) reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as they become available.
v) Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).
w) All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.
x) Off-road heavy diesel engines shall meet the CARB's most recent certification standard.

**2) Operational Noise-General**

***Ongoing.***

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

**B. The following Project Specific Conditions of Approval shall apply to each Final Development Plan for the MacArthur Village Project:**

1) The project applicant shall implement all of the plans and recommendations described in the following reports prepared for the project attached as Attachment H (CEQA Memo) to the City Council's Agenda Report dated April 5, 2011, copies of which are on file with the City Planning Department: (i) LSA Associates, Inc. dated March 11, 2011 regarding air quality, (ii) LSA Associates, Inc. dated March 11, 2011 regarding noise, and (iii) Wilson Ihrig & Associates dated March 10, 2011 regarding vibration. To the extent this section B.1 conflicts with section B.4 below, the provisions of section B.4 shall be controlling. The recommendations in these reports include without limitation:

Vibration

(a) The contractors shall implement the Construction Equipment Schedule elements described in the March 10, 2011 letter report prepared by Wilson Ihrig & Associates, attached as Exhibit H to the March 14, 2011 Memorandum from Urban Planning Partners to Eric

Angstadt and Catherine Payne and included in the Agenda Report for the April 5, 2011 City Council hearing on the Stage 1 FDP (PUDF10097) and VTTM (8047).

(b) Vibration monitoring shall be conducted at the Surgery Center to document the baseline conditions during operations prior to construction and to monitor the vibration at the facilities during the key periods of construction that are subject to vibration to verify that construction-related vibration is not exceeding the FTA category 1 criterion. The key periods of construction would occur when the vibrating roller compactors, vibrating plate compactors, jumping jack, or other equipment that generates vibration are in operation adjacent to the Surgery Center.

Noise

(c) Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot high temporary sound barrier shall be erected along the project property line abutting the residential sensitive land sues that are adjacent to the construction site on MacArthur Boulevard and Telegraph Avenue.

(d) Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot high temporary sound barrier shall be erected along the project property line abutting the Surgery Center that is adjacent to the construction site on Telegraph Avenue.

(e) The temporary sound barriers shall be constructed with a minimum surface weight of 4 pounds per square foot and shall be constructed so that vertical or horizontal gaps are eliminated; these temporary barriers shall remain in place through the construction phase in which heavy equipment, such as excavators, dozers, scrapers, loaders, rollers, pavers, and dump trucks are operating within 150 feet of the edge of the construction site by adjacent sensitive land uses.

(f) Whenever feasible, the project contractor shall encourage implementation of the following strategies throughout all phases of construction: use of smaller or quieter equipment; use of electric equipment in lieu of gasoline or diesel powered equipment; turn off all idling equipment when anticipated to not be in use for more than 5 minutes; minimize drop height when loading excavated materials onto trucks; minimize drop height when unloading or moving materials on-site; and sequence noisy activities to coincide with noisiest ambient hours.

(g) Noise monitoring is required for all construction activities that would be considered extreme noise generators, activities that would result in noise levels in excess of 90 dBA $L_{max}$ as measured at the receiving property. Construction activities could exceed these levels at the residential land uses that border the construction site on MacArthur Boulevard and Telegraph Avenue. Pursuant to SCA NOI-5(e), noise monitoring to measure the effectiveness of noise attenuation measures shall be conducted as follows:

Noise measurements shall be conducted on a weekly basis during the phases associated with the anticipated activities for the months of May, June, and September and shall be conducted by a qualified acoustical consultant.

These measurements shall be taken during mid-morning and mid-afternoon hours when background noise levels are anticipated to be lowest so as to try to capture noise from only construction noise sources.

These measurements shall be taken at distances greater than 10 feet from the temporary sound barriers on the receptor property in order to determine the effectiveness of the sound barrier.

If exceedances are identified, then the on-site construction manager shall be

notified and the equipment use shall be adjusted so that noise levels are reduced.

2) The temporary sound barrier to be erected by the project applicant along the project property line abutting the adjacent surgery center property shall be a minimum of 8 feet high.

3) *Prior to issuance of a demolition, grading or building permit.* The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage buildings adjacent to the project site and design means and methods of construction that shall be utilized to not exceed the thresholds.

4) The noise and vibration reduction plan for each phase of the project prepared pursuant to SCA NOI-5 shall also:
   (i) include documentation of the following:
   - existing baseline conditions at the anticipated construction monitoring locations near the adjacent surgery center, supported by measurements of ambient noise and vibration levels near the adjacent surgery center over a 6-day continuous period (Monday-Saturday);
   - characterization of the existing vibration environment within representative vibration sensitive spaces at the adjacent surgery center to confirm whether the FTA Category 1 criterion is applicable for these interior spaces, or whether a higher threshold is more appropriate. This characterization will be supported by measurements of the existing ambient vibration levels over a 48-hour continuous period measured during the work week (M-F). If the existing environment is comparable or less than the FTA Category 1 threshold, then the construction work will be limited by the FTA Category 1 criterion. If it is determined that the existing ambient environment exceeds the FTA Category 1 criterion, then site specific criteria will be developed based on the characteristics of the measured environment, including the maximum vibration levels and the measured frequency of occurrence of vibration levels;
   - vibration testing to determine how groundborne vibration will propagate from the construction area (based upon simulated construction activities testing) to the surgery center building and anticipated construction monitoring locations. This information will be used to determine the vibration level offset between outdoor construction monitoring locations and the vibration experienced at the interior of the building, to refine the calculations previously done to determine the site-specific vibration from construction, to determine the types of construction activity for which monitoring is required and to determine applicable distances

for monitoring purposes pursuant to item (v) below; and

- All such noise and vibration testing and determinations of baselines and monitoring locations near the adjacent surgery center shall be coordinated with the surgery center or its designee.

(ii) include appropriate measures to ensure that the project construction and operations comply with the City's noise and vibration performance standards in Section 17.120.050 of the Oakland Planning Code, the City's vibration performance standards in Section 17.120.060 of the Oakland Planning Code, and the vibration criteria confirmed above, as measured at the monitoring locations specified in (v);

(iii) provide that all noise and vibration compliance monitoring be performed by one or more qualified consultants;

(iv) prohibit the use of pile driving as part of the construction of the BART Parking Garage and construction on Parcel D;

(v) require noise and vibration measurements, for compliance purposes, to be performed for a minimum of 48 hours during a continuous period each week during the conduct of construction activities for which monitoring is required as identified pursuant to the pre-vibration testing protocol under item (i) above within applicable distances from the façade of the surgery center building nearest to the construction activity as such distances are identified as part of such testing protocol.. Such measurements shall be made at the nearest façade or at an equivalent distance from the construction activity to the nearest façade as determined appropriate by the qualified acoustical consultant in order to accurately determine noise and vibration levels at the nearest façade of the surgery center from project-related construction activities; and

(vi) require a copy of the City approved noise and vibration plan to be provided to the designated representative of the adjacent surgery center.

5) The special inspection deposit required pursuant to SCA Noise-5 shall also include an amount sufficient to ensure compliance with project conditions of approval governing air quality.

6) Prior to the start of construction activities, the project applicant shall designate an on-site complaint and enforcement manager, with supervisory authority with respect to construction activity, who shall immediately respond to any complaints or concerns raised by the designated representative of the adjacent surgery center related to air quality, noise, vibration, or any other aspect of project construction activities, and provide to the surgery center representative the contact information for such complaint and enforcement manager.

7) Project applicant shall promptly provide to the designated representative of the

adjacent surgery center copies of all noise, vibration and air quality monitoring reports required by all project conditions of approval, including, without limitation, all monitoring reports required pursuant to project specific condition 4 above, and the recommendations in the following reports: (i) LSA Associates, Inc. dated March 11, 2011 regarding air quality, (ii) LSA Associates, Inc. dated March 11, 2011 regarding noise, and (iii) Wilson Ihrig & Associates dated March 10, 2011 regarding vibration. If any such report indicates that the project is not in compliance with any such mitigation measures or conditions of approval or if the project is otherwise not in compliance therewith, the project applicant shall immediately cease the activity causing such non-compliance and take such other measures that may be necessary to prevent the recurrence of such non-compliance.

8) The project applicant shall not restrict, block, relocate, modify, or otherwise hinder vehicular and pedestrian access (ingress and egress) to the adjacent surgery center property from its existing driveways and sidewalks access points on Apgar Street and 39th Street both during and after construction of the project without 48 hours advance notice to the surgery center. In no event shall such access be disrupted for more than two days in any M-F period, except for improvements to Apgar Street or 39th Street. For any period during which the 39the Street parking areas in the Surgery Center property are rendered inaccessible, project applicant shall provide an equal number of substitute parking spaces in the BART parking lot area, and/or the new BART parking garage, as close as feasible to the Surgery Center and at no cost to the Surgery Center. The applicant shall coordinate temporary disruptions to the surgery center's vehicular and pedestrian access points and shall maintain one point of access via Apgar Street or Telegraph Street at all times.

9) The applicant's contractors will limit idling, loading or staging on Apgar Street, 39th Street, and Telegraph Avenue adjacent to the property and provide the surgery center at least 48 hours' notice of such planned activity.

**APPROVED BY:**

City Planning Commission:_____(date)_____(vote)

**Applicant and/or Contractor Statement**
I have read and accept responsibility for the Conditions of Approval, as approved by Planning Commission action on _____. I agree to abide by and conform to these conditions, as well as to all provisions of the Oakland Zoning Code and Municipal Code pertaining to the project PUDF08/ER01.

Signature of Owner/Applicant: _____(date)

Signature of Contractor _____(date)

# MACARTHUR STATION

BRIDGE HOUSING

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| A 0.10 | DATA |
| CIVIL | |
| C 0.10 | TOPOGRAPHIC SURVEY |
| C 2.01 | GRADING AND DRAINAGE PLAN |
| C 4.01 | UTILITY PLAN |
| ARCHITECTURAL | |
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| A 2.01 | PARCEL A GROUND LEVEL |
| A 2.02 | PARCEL A LEVEL 2 |
| A 2.03 | PARCEL A LEVEL 3 |
| A 2.04 | PARCEL A LEVEL 4 |
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| A 2.21 | PARCEL C1 LEVELS 2 & 3-5 |
| A 2.22 | PARCEL C1 LEVEL 6 & ROOF |
| A 3.00 | PARCEL A ELEVATIONS |
| A 3.01 | PARCEL A ELEVATIONS |
| A 3.02 | PARCEL A ELEVATIONS |
| A 3.04 | PARCEL C1 ELEVATIONS |
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| A 3.41 | PARCEL A SIGNAGE ELEVATION DIAGRAMS |
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| A 3.43 | PARCEL A NAVYS SIGNAGE ELEVATION DIAGRAMS |
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| A 3.50 | PARCELS A AND C1 LIGHTING GUIDELINES |
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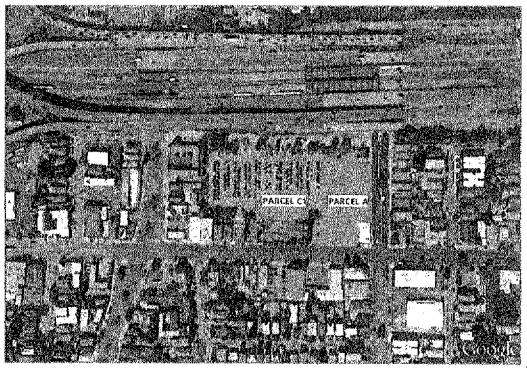


VICINITY MAP


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LANDSCAPE
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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH, OAKLAND, CA

BRIDGE HOUSING

COVER

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | SHEET NUMBER A 0.00 |
| SCALE 12" = 1'-0" | |

**ATTACHMENT C**

# ZONING AND PROGRAM SUMMARY

CITY OF OAKLAND

## DEVELOPMENT INFORMATION

| DESCRIPTION | PARCEL A | PARCEL A ALT | PARCEL C1 |
|---|---|---|---|
| TOTAL PARCEL AREA (ACRES) | 1.61 | 1.61 | 0.99 |
| NET TOTAL PARCEL AREA WITHOUT STREETS (SF): | 70,006 | 70,006 | 43,085 |
| TOTAL BUILDING FOOTPRINT AREA (SF) | 56,041 | 56,041 | 29,040 |
| TOTAL FLOOR AREA LIVING SPACE | 755,142 | 755,142 | 415,570 |
| TOTAL FLOOR AREA PARKING (SF | 80,000 | 62,340 | 28,600 |
| BUILDING HEIGHT | SEE CONDITIONS OF APPROVAL ITEM 41 | | |
| NUMBER OF DWELLING UNITS | 497 | 497 | 46 |
| NUMBER OF LIVE/WORK UNITS | 0 | 0 | 0 |
| DENSITY (UNITS PER GROSS ACRE) | 176 | 176 | 175 |
| DENSITY (UNITS PER NET ACRE) | 176 | 176 | 175 |
| NUMBER OF PARKING SPACES | 254 | 333 | 76 |
| TOTAL BASE OPEN SPACE REQUIREMENTS SF (1/UNIT) | 24,870 | 24,870 | 7,360 |
| TOTAL SITE OPEN SPACE PROVIDED (SF) | 27,825 | 24,870 | 7,360 |
| TOTAL RETAIL (SF) | 27,287 | 33,783 | 3,000 |
| PUBLIC PARK/OPEN SPACE (SF) | 0 | 0 | 0 |
| GRADING - PROPOSED CUT (CY) | 15,000 | 28,000 | 5,360 |
| GRADING - PROPOSED FILL (CY) | 0 | 0 | 0 |
| GRADING - NET EXPORT (CY) | 15,000 | 28,000 | 5,360 |

## CITY OF OAKLAND ZONING SUMMARY

| SECTION NO. | SECTION TITLE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.97.070 | MINIMUM PARCEL AREA, WIDTH AND FRONTAGE | | | | | | | | | | |
| | | PARCEL A | | | PARCEL A ALTERNATE | | | PARCEL C1 | | | |
| | | PERMITTED | PROVIDED | | PERMITTED | PROVIDED | | PERMITTED | PROVIDED | | |
| | MINIMUM PARCEL AREA (SF) | 4,000 | 70,006 | | 4,000 | 70,006 | | 4,000 | 43,085 | | |
| | MINIMUM PARCEL WIDTH (FEET) | 25 | 701 | | 25 | 701 | | 25 | 170 | | |
| | MINIMUM FRONTAGE (FEET) | 25 | 190 | | 25 | 190 | | 25 | 170 | | |
| 17.97.150 | HEIGHT, FLOOR AREA RATIO (FAR), DENSITY, AND OPEN SPACE | | | | | | | | | | |
| | | PARCEL A | | | PARCEL A ALTERNATE | | | PARCEL C1 | | | |
| | | PERMITTED | PROVIDED | | PERMITTED | PROVIDED | | PERMITTED | PROVIDED | | |
| | MAXIMUM HEIGHT (FEET) | SEE CONDITIONS OF APPROVAL ITEM 41 | | | SEE CONDITIONS OF APPROVAL ITEM 41 | | | | | | |
| | MAXIMUM NUMBER OF STORIES ABOVE GRADE | 7 | 6 | | 7 | 6 | | 7 | 6 | | |
| | MAXIMUM RESIDENTIAL DENSITY (SF OF LOT USE / UNIT) | 275/325 | 247 | | 275/325 | 241 | | 175/205 | 241 | | |
| | S-7 GROUP USABLE OPEN SPACE PER RESIDENTIAL UNIT (SF) | 21,450 | 24,870 | | 21,450 | 24,870 | | 9,905 | 7,360 | | |
| | S-15 COMPATIBLE OPEN SPACE PER REGULAR UNIT (SF) | | | | | | | | | | |
| | PRIVATE OPEN SPACE ELIGIBLE (SF) | 3,300 | 24,870 | | 3,300 | 24,870 | | 2,520 | 7,360 | | |
| 17.97.210 | OTHER ZONING PROVISIONS | | | | | | | | | | |
| 17.116 | PARKING | | | | | | | | | | |
| | | PARCEL A | | | PARCEL A ALTERNATE | | | PARCEL C1 | | | |
| | | REQUIRED | PROVIDED | | REQUIRED | PROVIDED | | REQUIRED | PROVIDED | | |
| | | | STALLS | VISTA | | STALLS | VISTA | | STALLS | VISTA | |
| | MINIMUM RESIDENTIAL PARKING RATIO REQUIRED PER S-15 | 50% OF UNITS | | | 50% OF UNITS | | | 50% OF UNITS | | | |
| | MAXIMUM RESIDENTIAL PARKING SPACES REQUIRED FOR S-15 | 144 | 164 | 76 | 186 | 248 | 0 | 546 | 2 | 67 | |
| | MINIMUM RETAIL PARKING SPACES REQUIRED FOR S-15 | NONE REQ'D | | | DEMO MEDO | 306 | 0 | NONE REQ'D | | | |
| 17.116.070 | LOADING | | | | | | | | | | |
| | | PARCEL A | | | PARCEL A ALTERNATE | | | PARCEL C1 | | | |
| | | REQUIRED | PROVIDED | | REQUIRED | PROVIDED | | REQUIRED | PROVIDED | | |
| | MANUFACTURING & WHOLESALING | 2 DEPTHS | 1 DEPTHS | | 2 DEPTHS | 1 DEPTHS | | 1 DEPTH | 1 DEPTH | | |
| | WHOLESALING RETAIL | 1 DEPTH | 1 DEPTHS | | 1 DEPTH | 1 DEPTHS | | NONE | NONE | | |
| 17.117 | BICYCLE PARKING | | | | | | | | | | |
| | | PARCEL A | | | | PARCEL A ALTERNATE | | | | PARCEL C1 | | | | |
| | | LONG TERM REQUIRED | LONG-TERM PROVIDED | SHORT-TERM REQUIRED | SHORT-TERM PROVIDED | LONG TERM REQUIRED | LONG-TERM PROVIDED | SHORT-TERM REQUIRED | SHORT-TERM PROVIDED | LONG TERM REQUIRED | LONG-TERM PROVIDED | SHORT-TERM REQUIRED | SHORT-TERM PROVIDED |
| | RESIDENTIAL | 25 | 33 | 0 | 16 | 25 | 33 | 33 | 16 | 25 | 24 | 5 | 10 |
| | COMMERCIAL | 1 | 1 | 1 | 6 | 1 | 1 | 1 | 6 | 1 | 1 | 1 | 1 |
| | UNIT MIX | | | | | | | | | | | | |
| | | PARCEL A | | | | | PARCEL A ALTERNATE | | | | PARCEL C1 | | | | |
| | UNIT COUNT | STUDIOS | 1 BEDROOMS | 2 BEDROOMS | TOTAL | STUDIOS | 1 BEDROOMS | 2 BEDROOMS | TOTAL | STUDIOS | 1 BEDROOMS | 2 BEDROOMS | TOTAL |
| | | 128 | 301 | 68 | 497 | 128 | 301 | 68 | 497 | 46 | 25 | 15 | 46 |

## Mac Arthur Transit Village

MacArthur Transit Village

OAKLAND CALIFORNIA

June 4 2008

*Preliminary Development Plan/ Planning Commission*

**Development Information**

| Description | Existing | New |
|---|---|---|
| Total Lot Area (acres) | 7.76 | 7.76 |
| Net Total Lot Area without Streets (sf) | NA | 0.69 |
| Net Total Lot Area with BART Plaza (sf) | NA | 8.2 |
| Total Building Footprint Area (sf) | 32,500 | 220,500 |
| Total Floor Area Living Space (sf) | NA | 750,000 |
| Total Floor Area Resid. Parking (sf) | NA | 330,000 |
| Total Floor Area Retail Parking (sf) | NA | 170,000 |
| Building Height | 25' (2 stories) | 30'-85' (up to 6 stories) |
| Number of Dwelling Units | NA | 824 |
| Number of Live Work Units | NA | 8 |
| Density (units per gross acre) | NA | 89 |
| Density (units per net acre) | NA | 110 |
| Number of Parking Spaces | 600 | 1004 ** |
| Total Parking Open Spaces (sf) | NA | 54,000 (874 Units) |
| Total Site Open Space (sf) | | 72,978 |
| Total Commercial Retail (sf) | NA | 85,500 |
| Total Live/Work Space (sf) | NA | 7,900 |
| Grading - Proposed Cut (cy) | NA | 31,500 |
| Grading - Proposed Fill (cy) | NA | 11,172 |
| Grading - Net Export (cy) | NA | 20,330 |

* Height not to exceed 8 stories and not to exceed an average of 75' for the entire development.
** New garage/retail building to stand as high as 85'. *** Including on-street parking, 44 stalls

**Development Data**

| Building 1 | Unit Count | Area (sf) | Parking | Net Site Area** |
|---|---|---|---|---|
| Residential | 213 Units | | 213 | |
| Live/Work Units | | 2,000 (1 unit) | 3 | |
| Retail | | 23,000 | 46 | |
| TOTAL | 213 Units | 25,000 | 262 | 1.19 ac |

| Building 2 | Unit Count | Area (sf) | Parking | Net Site Area** |
|---|---|---|---|---|
| Residential | 198 units | | 198 | |
| Live/Work Units | | 1,500 (2 units) | 2 | |
| Retail | | 2,000 | | |
| TOTAL | 198 units | 3,500 | 198 | 1.04 ac |

| Building 3 | Unit Count | Area (sf) | Parking | Net Site Area** |
|---|---|---|---|---|
| Residential | 599 units | | 599 | |
| Community/Child Care | | 5,000 | | |
| Live/Work Units* | | 3,500 (5 units) | | |
| Retail | | 5,500 | | |
| TOTAL | 599 Units | 14,000 | 599 | 1.95 ac |

| Building 4 | Unit Count | Area (sf) | Parking | Net Site Area** |
|---|---|---|---|---|
| Residential | 80 units | | 80 | |
| TOTAL | 80 units | | 80 | 0.93 ac |

| Building 5 | Unit Count | Area (sf) | Parking | Net Site Area** |
|---|---|---|---|---|
| BART Parking | | | | |
| Commercial/Retail | | 3,000 | | |
| TOTAL | | 3,000 | 844 | 0.38 ac |

* Live/Work units are included in the residential unit count

**Applicant:**
MacArthur Transit Community Partners, LLC
360 Thirty-Eighth Street, Suite 300
Oakland, CA 94609
Contact: Chris P. Iglesias, (510) 597-3100

**Attorney for Affordable Component:**
Van Meter Williams Pollack, LLP
180 Grand Avenue, Suite 900
San Francisco, CA 94111
Contact: Fred Rubin, (415) 421-8484

**Landscape Architect:**
Peter Walker and Partners
1918 Fifth Street
Berkeley, CA 94710
Contact: Peter Walker, (510) 848-3815

**Urban Landscape and Site Architecture:**
Hood Design
1918 Fifth Street, Suite 2
Oakland, CA 94608
Contact: Walter Hood, (510) 893-0648

**Civil Engineer:**
Bkf Engineers
1731 Technology Drive, Suite 200
San Jose, CA 95110
Contact: Michael A. Rayhawk, (408) 467-9100

**Traffic Consultant:**
Dowling Associates, Inc.
180 Grand Avenue, Suite 394
Oakland, CA 94612
Contact: Mark Bowlan (510) 839-5742

**Developer:**
MacArthur Transit Community Partners, LLC
Contact: Joe McCarthy, (510) 879-3500

**Architect:**
Mc Larand Vasquez Emsiek & Partners, Inc
350 Frank Ogawa Plaza, Suite 100
Oakland, CA 94612
Contact: Chris P. Iglesias, (510) 597-3100

| | | |
|---|---|---|
| T-01 | Title Page | |
| T-02 | Neighborhood Plan | |
| T-03 | Context Photographs | |
| T-04 | Site Photographs | |
| C-00 | Existing Conditions Plan | |
| C-01 | Preliminary Grading Plan | |
| C-02 | Preliminary Utility Plan | |
| A-0 01 | Pedestrian & Site Circulation | |
| A-0 02 | Vehicular Circulation | |
| A-1 01 | Site Plan/ Ramp Level Plan | |
| A-1 0A | Garage Level Plan | |
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| A-1 04 | Building Height Diagram | |
| A-2 01a | Site Sections | |
| A-2 01b | Site Sections | |
| A-3 02 | Façade: Telegraph Avenue | |
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| L-05 | Planting Tree Selection | |
| L-06 | Planting/ Lighting Concept | |

Appendix: BART Plaza Concept

T-01 Title Page

## PDP DOCUMENT

41. Building Height.

Prior to approval of any Final Development Plan
In accordance with the Preliminary Development Plan (PDP) received by the Planning Division on May 28, 2008, buildings within the project area shall vary in height along each street frontage. Permitted building height by street frontage is shown on PDP sheet A-1.0H, and listed below:

(a) Telegraph Avenue, south of 38th Street: 55 to 60 feet
(b) Telegraph Avenue, north of 39th Street: 50 to 75 feet
(c) 39th Street, south side of street and west of Internal Street: 55 to 65 feet
(d) 39th Street, south side of street and east of Internal Street: 65 to 80 feet
(e) 39th Street, north side of street and west of Internal Street: 60 to 80 feet
(f) 39th Street, north side of street and east of Internal Street: 70 to 85 feet
(g) 40th Street: 60 to 80 feet
(h) Buildings along east edge of transit plaza: 75 to 85 feet
(i) Internal Street, east side of street: 55 to 70 feet
(j) Internal Street, west side of street: 45 to 70 feet
(k) Frontage Road: 65 to 80 feet
(l) Parking garage: 68 feet

The height above 45 feet allowed on Telegraph Avenue is contingent on the use of quality building design, exterior materials and windows.

Because the Preliminary Development Plan (PDP) received by the Planning Division on May 28, 2008, shows a total of 624 units, and per Condition No. 1 the project is permitted to include a maximum of 675 units based on the EIR analysis and the City's desire for increased density, the buildings heights shown above may be slightly altered to accommodate this permitted increase in units. However, any such increase in height shall be reviewed as part of the Final Development Plan, and no such increase in height shall be permitted on Telegraph Avenue without modification to the PDP.


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**MACARTHUR STATION BLOCKS A & C1**
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

DATA

FINAL DEVELOPMENT PACKAGE

| | |
|---|---|
| DATE | REVISION |
| 04.09.2015 | |
| PROJECT NUMBER | SHEET NUMBER |
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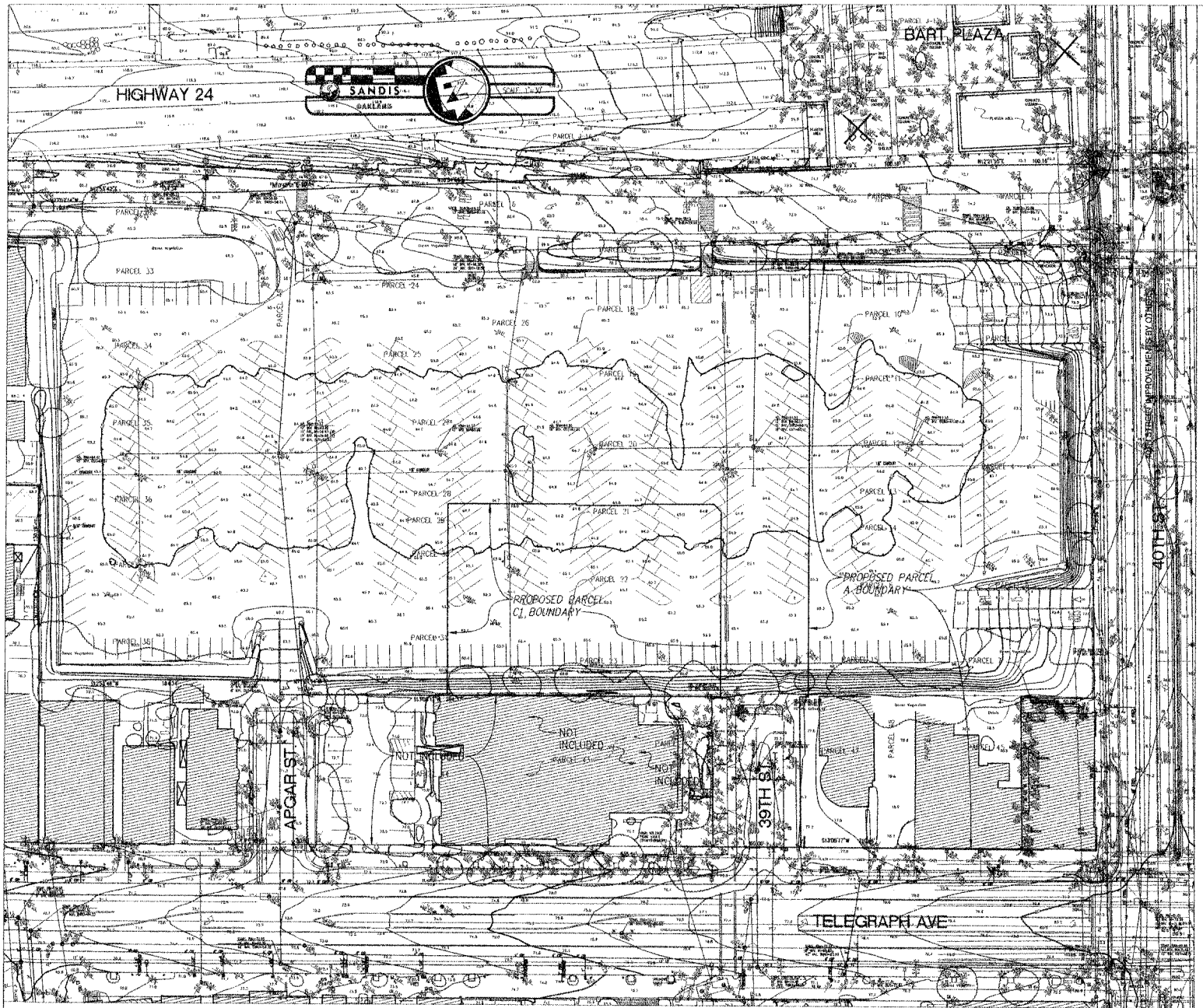


## TOPOGRAPHIC SURVEY

*TOPOGRAPHIC SURVEY BY SANDIS WITH AERIAL TOPOGRAPHIC SURVEY PERFORMED BY AERIAL PHOTOMAPPING SERVICES, 2929 LARKINS AVE, CLOMS, CA 91762, JUNE 2007. THE AERIAL SURVEY WAS SUPPLEMENTED WITH GROUND SURVEYED DATA TO DETERMINE THE TYPE AND SIZES OF UTILITY FEATURES, AND TO ACQUIRE DATA IN AREAS WHERE GREATER DETAIL IS REQUIRED.*

## EXISTING BOUNDARY

*EXISTING BOUNDARY INFORMATION FROM ALTA SURVEY BY SANDIS, DATED 09/18/2007.*


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MACARTHUR STATION PARCEL A
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING | EQUITY COMMUNITY BUILDERS

TOPOGRAPHIC SURVEY

FINAL DEVELOPMENT PACKAGE

| | |
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| DATE: 09.26.2014 | REVISION |
| PROJECT NUMBER: 142010 | SHEET NUMBER: C0.11 |
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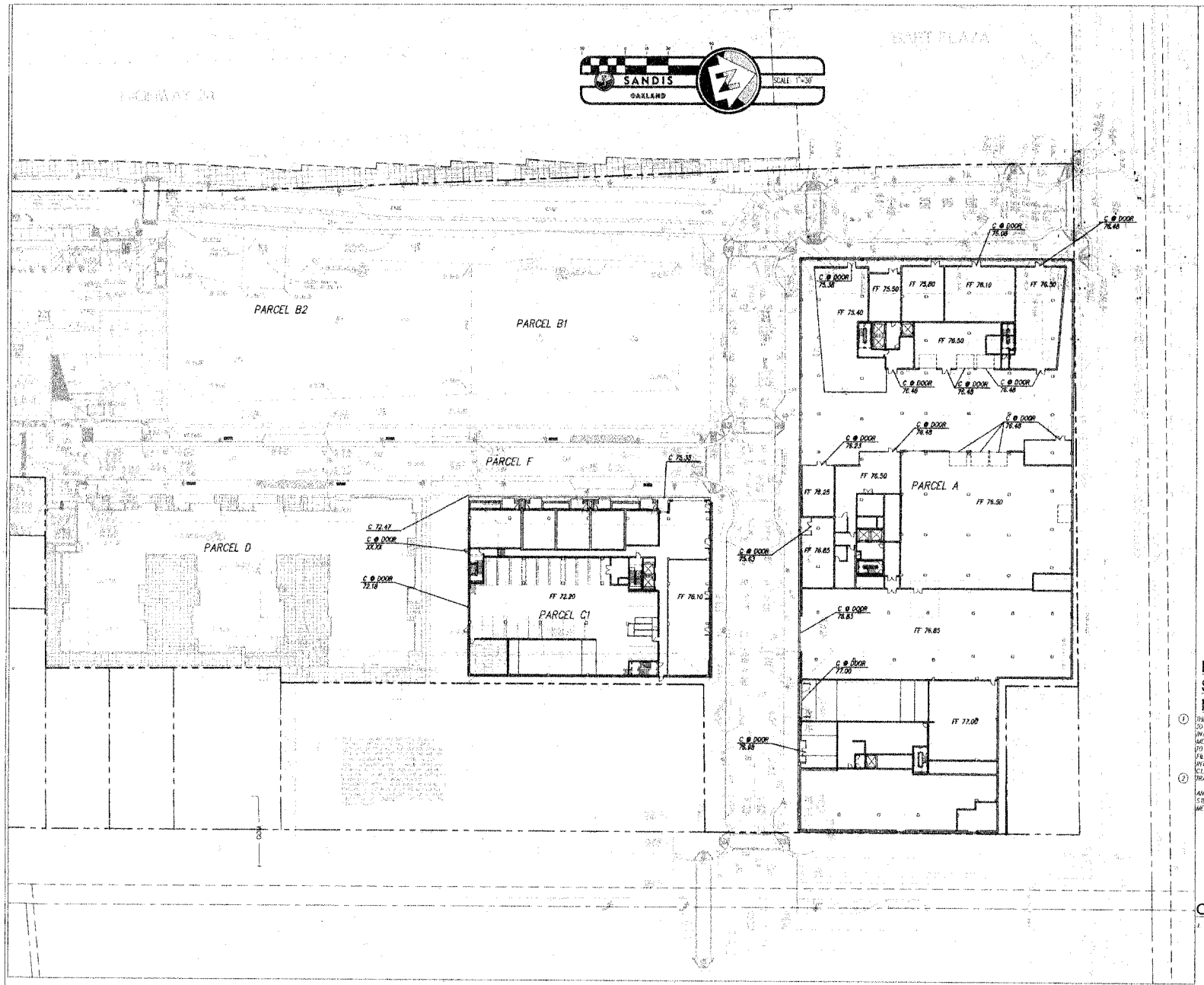


## POST CONSTRUCTION STORM WATER MANAGEMENT NOTES

1. THE INTENTION IS TO DRAIN ALL IMPERVIOUS SURFACES TO THE INTERNAL STREET DRAINAGE SYSTEM. ALL INTERNAL STREET DRAINAGE IS TO BE TREATED BY A MEDIA FILTER IN INTERNAL STREET PRIOR TO DISCHARGE TO THE MUNICIPAL STORM WATER SYSTEM. THE MEDIA FILTER HAS BEEN SIZED TO TREAT DRAINAGE FROM INTERNAL STREET AND THE ADJACENT PARCELS B1, B2, C1, AND D. DETAILS ARE SHOWN IN THE MACARTHUR TRANSIT VILLAGE SITE IMPROVEMENT PLANS.
2. ANY REMAINING DRAINAGE THAT FLOWS TO 40TH STREET WILL BE TREATED EITHER BY LANDSCAPE MEASURES OR BY MEDIA FILTER.

## GENERAL NOTES

1. WORK WITHIN 39TH STREET & PARCEL F IS UNDER A SEPARATE PROJECT. SEE MACARTHUR TRANSIT VILLAGE SITE IMPROVEMENT PLANS.


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MACARTHUR STATION PARCEL A
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING | EQUITY COMMUNITY BUILDERS

GRADING & DRAINAGE PLAN

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 09.26.2014 | |
| PROJECT NUMBER | SHEET NUMBER |
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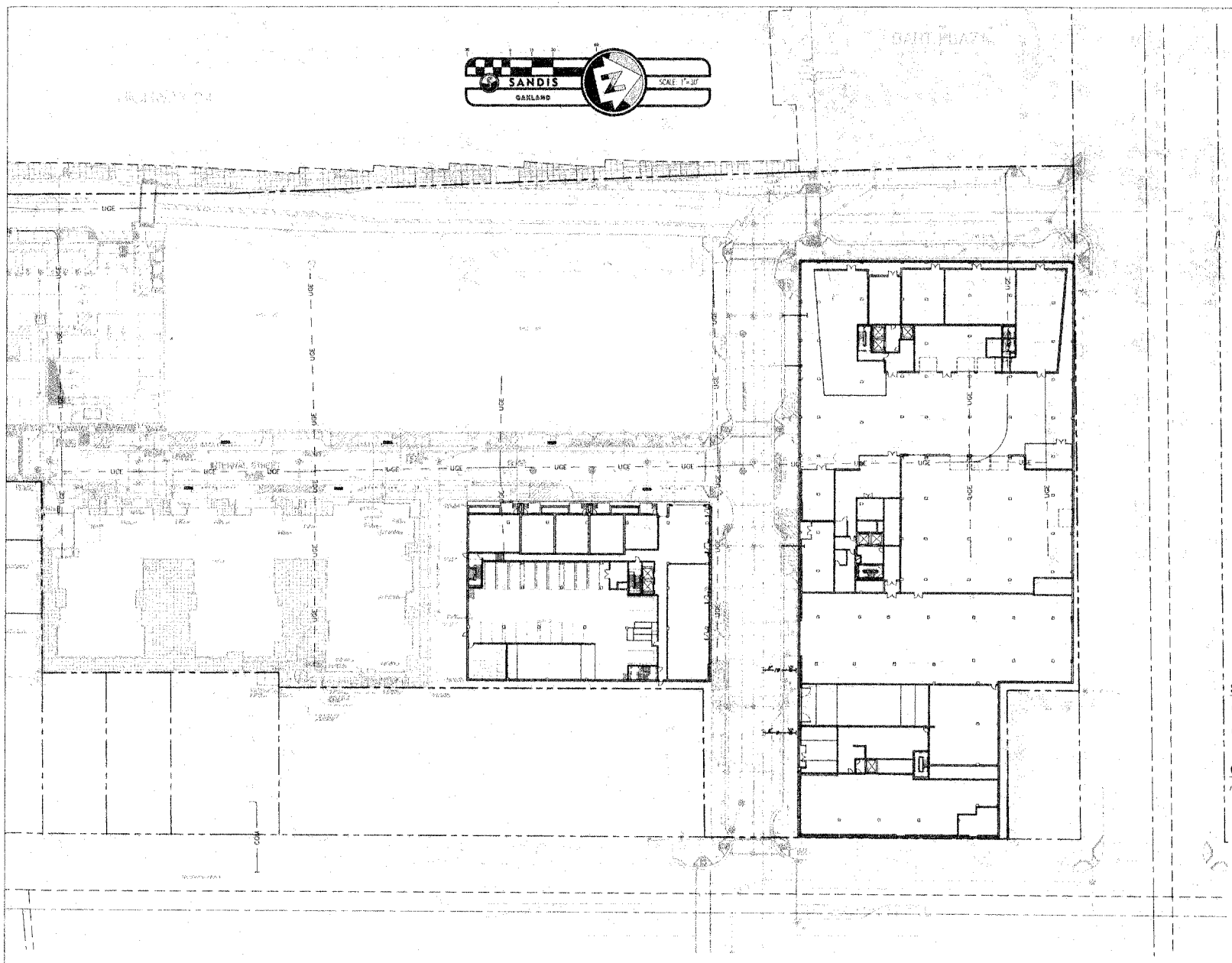


## SHEET NOTES

1. LIMIT OF WORK OF PARCEL A+C1 WORK IS AT PARCEL A+C1 PROPERTY LINES.
2. BACKFLOW PREVENTORS SHALL BE INSIDE BUILDINGS.

## GENERAL NOTES

1. WORK SHOWN OUTSIDE THE LIMIT OF WORK IS PART OF THE SITE IMPROVEMENT SET AND IS SHOWN FOR REFERENCE ONLY.

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MACARTHUR STATION PARCEL A
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING | EQUITY COMMUNITY BUILDERS

UTILITY PLAN

FINAL DEVELOPMENT PACKAGE

| | |
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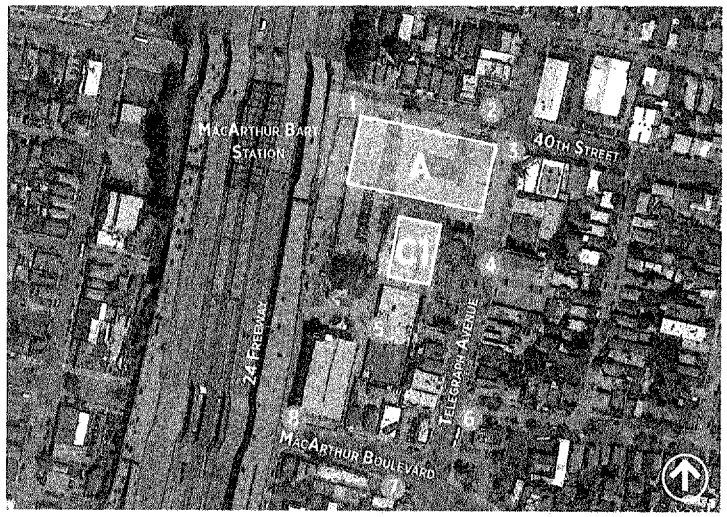
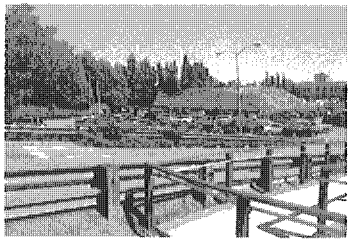
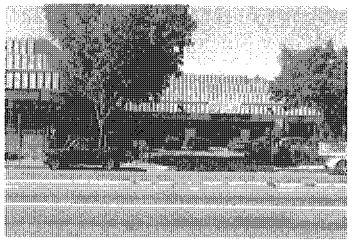


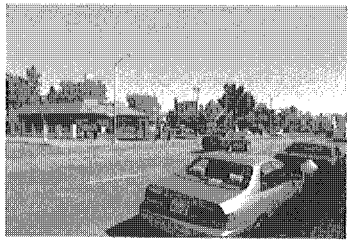


1 40th and 24 Highway Looking SE

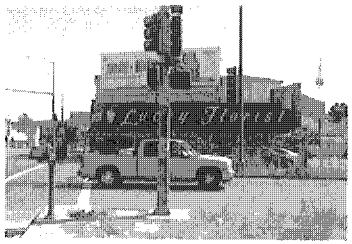

2 NW Corner of 40th and Telegraph

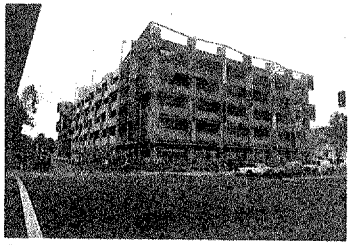
3 SW Corner of Telegraph and 40th

4 Beebe Memorial Cathedral on Telegraph

5 The Mural - 90 Affordable Family


6 Telegraph Towards MacArthur Boulevard


7 SW Corner of MacArthur and Telegraph


8 Bart Parking Structure

CONTEXT PHOTOS - SITE

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MACARTHUR STATION BLOCKS A & C1

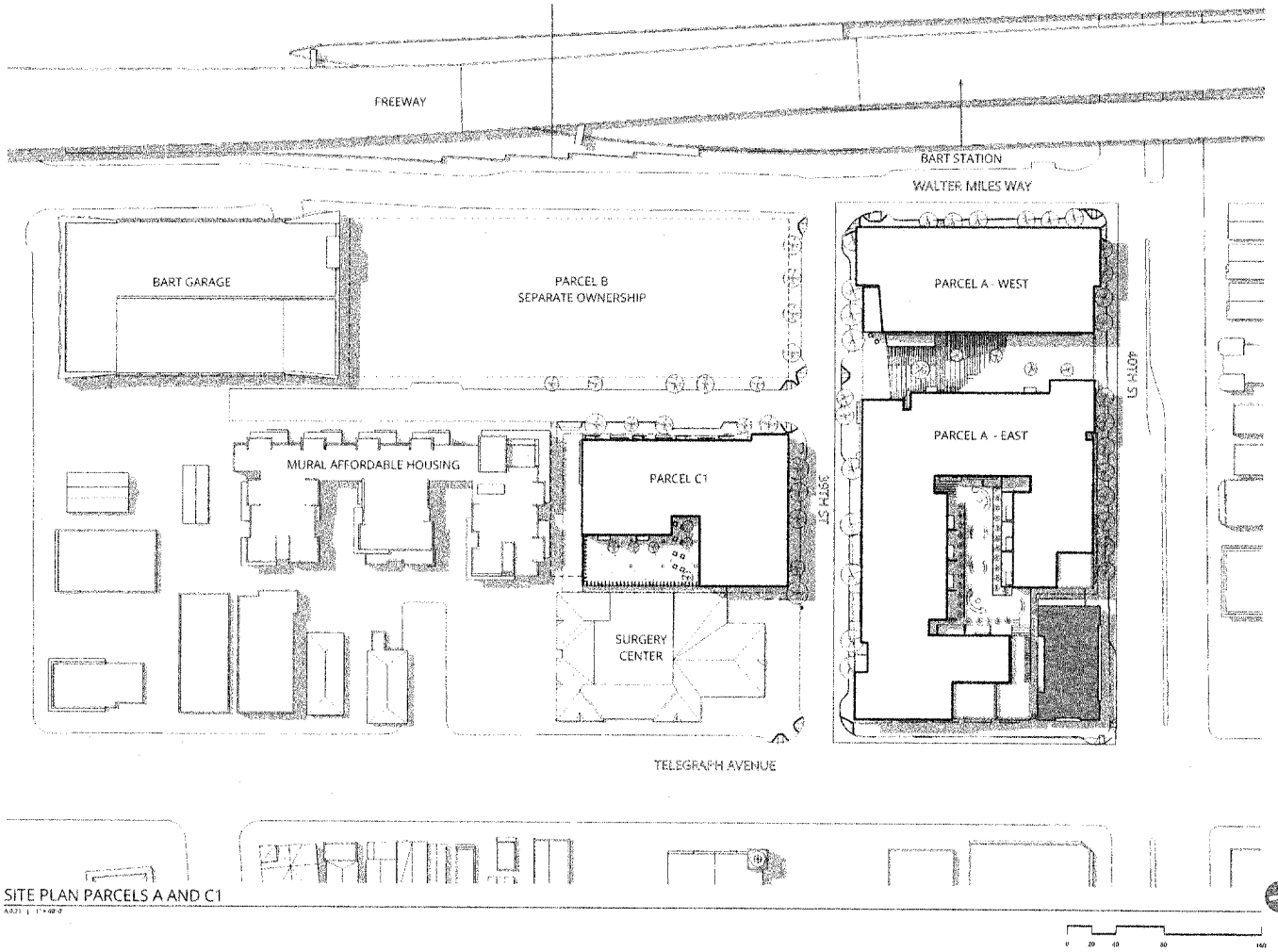
40TH AND TELEGRAPH, OAKLAND, CA

BRIDGE HOUSING

CONTEXT

FINAL DEVELOPMENT PACKAGE

| | |
|---|---|
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | A 0.20 |
| SCALE 1/2" = 1'-0" | |




1 SITE PLAN PARCELS A AND C1

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**MACARTHUR STATION BLOCKS A & C1**

40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

SITE PLAN PARCELS A & C1

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | SHEET NUMBER |
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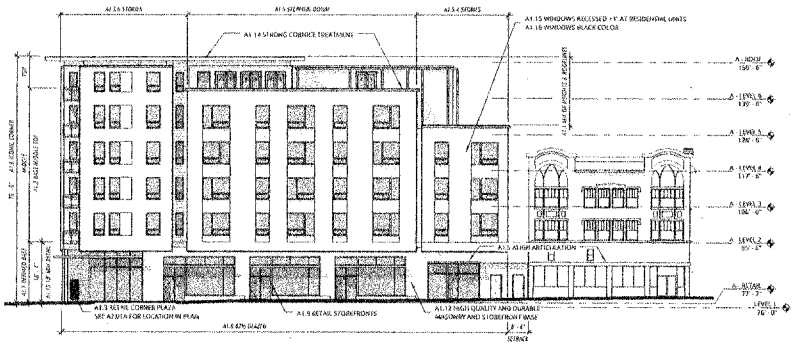
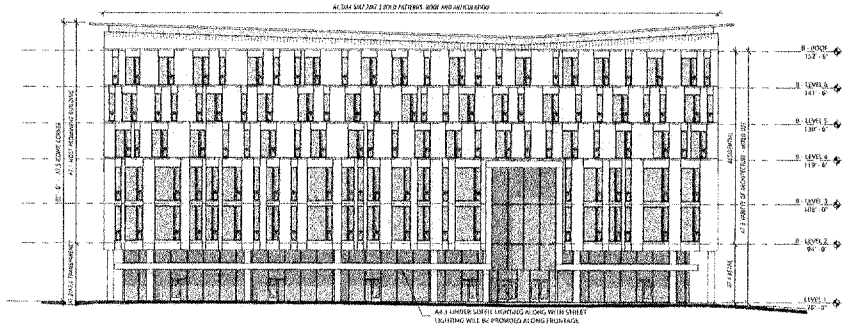

A1.13 HORIZ
A1.5 VERTICAL ROOF
A1.5 4 STORIES
A1.14 STRONG CORNICE TREATMENT
A1.15 WINDOWS RECESSED > 4" AT RESIDENTIAL UNITS
A1.16 WINDOWS BLACK COLOR
A1.3 RETAIL CORNER PLAZA
SEE A2.01A FOR LOCATION IN PLAN
A1.9 RETAIL STOREFRONTS
A1.12 HIGH QUALITY AND DURABLE MASONRY AND STOREFRONT BASE
A1.5 4TH FLOOR SETBACK
A1.5 HIGH ARTICULATION
A1.5 4TH FLOOR SETBACK
A1.5 VERTICAL ROOF
A1.13 HORIZ
A1.5 VERTICAL ROOF



## 1 PARCEL A DESIGN COMPLIANCE DIAGRAM - FRONTAGE

A 0.31 1" = 1/16" = 1'-0"

### FRONTAGE ROAD DESIGN GUIDELINES:

A4.1 PARCELS B, C, and D along the frontage road should have clearly defined, well-lit and visible frontage along the street level to promote security and safety.

A4.2 Due to visibility from the freeway and the BART platform, the architecture of each of the PARCELs along the frontage road (at street level and upper levels) shall be designed with an architectural gesture fitting with this location through bold fenestration patterns, roof forms and façade articulation.

A4.3 The buildings along this edge have the most flexibility in heights and variations (approximately 65' to 80') in form within the project. (plan sheet A-1.0H)

A4.4 Provide artistic metal grills and pedestrian scale lighting along the garage edge to provide maximum visibility to promote security. (Exhibit A-3.06)

A4.5 The architectural composition of the building areas visible to the freeway and BART platform should be designed with bold forms and building materials to promote a sense of arrival at this important civic place within the City.

### 40TH ST. GATEWAY DESIGN GUIDELINES:

A7.1 The massing and height of Building A adjacent to the BART Plaza will be the most prominent within the overall hierarchy of the site.

A7.2 The proposed architecture massing fronting the plaza should speak to its civic location with a strong façade, vibrant and transparent retail base.

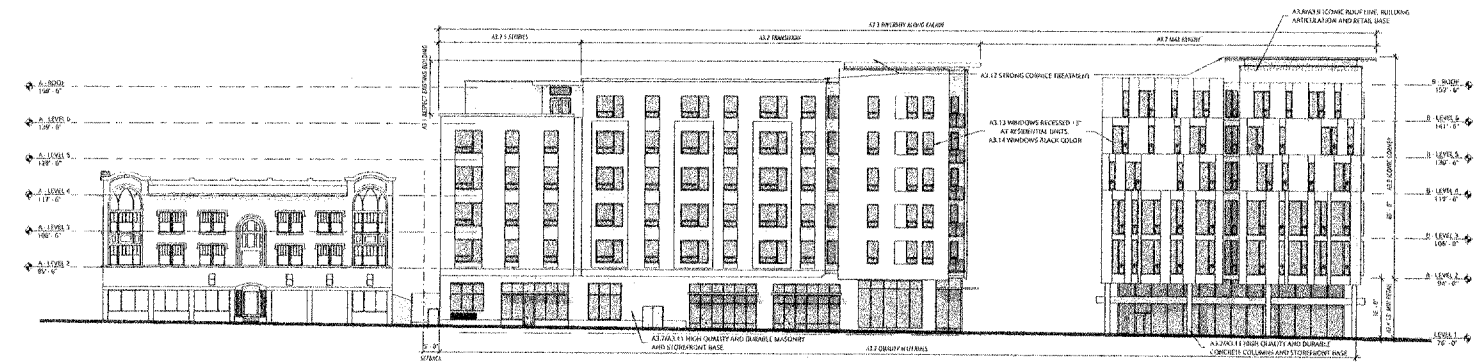
A7.3 The architectural modulation, fenestration pattern and detailing of mixed-use PARCEL A should be significantly different than that of the residential PARCEL B to provide a rich variety of architecture fronting onto the plaza.

A7.4 The proposed buildings fronting the plaza must have retail frontage at the ground level with reasonable lease depth (40' to 60').

A7.5 Create an iconic corner at the transit plaza to highlight the prominent public plaza, retail node and gateway into the BART station, both from the neighborhood and to the fast moving traffic at the freeway level.

A7.6 Provide transparent glazing at the retail level to provide maximum visibility and contemporary details to complement the civic character of the transit plaza.

A7.7 All outdoor amenities, signage and fixtures shall be selected and designed as complementary public art features.



## 2 PARCEL A DESIGN COMPLIANCE DIAGRAM - 40TH

A 0.31 1" = 1/16" = 1'-0"

### 40TH STREET DESIGN GUIDELINES:

A3.1 The proposed architecture massing and scale must respect the transition from the existing, modest four story building on the corner of Telegraph Avenue to the grand scale of the freeway infrastructure overpass and BART station with a mix of building height and articulation. (plan sheets A-1.0H, A-3.03)

A3.2 The proposed buildings along 40th Street transition from five stories adjacent to Existing building at Telegraph Avenue to a six story maximum adjacent to the BART station (approximately 60' to 80'). (plan sheet A-1.0H)

A3.3 The architecture along the length of 40th Street should be modulated to create a diversity of architectural scales and characters. (plan sheet A-3.03)

A3.4 Consistent with Telegraph Avenue, the distinctive commercial/retail floor to floor ground level height of 18' should be carried along the 40th Street elevation. (plan sheet A-3.03)

A3.5 The placement and style of openings and windows should contribute to a coherent and appealing composition to a façade. Details such as mullions, grillework, prominent sills and trim can also provide visual interest to openings.

A3.6 The proposed buildings fronting on 40th Street must have commercial/retail storefronts at the ground level with commercial/retail uses fronting on the BART station plaza and flex space that supports potential future commercial/retail uses along the 40th Street frontage.

A3.7 Provide a substantial building base with quality materials to enhance the retail frontage and provide distinctive attractive signage and canopy opportunities for potential retail tenants and flex space tenants.

A3.8 Provide an architectural character and style along 40th Street that has an authentic contemporary urban feel. (plan sheet A-3.02 – 3.08 and A-6.01 – 6.02)

A3.9 Creating an iconic corner at the BART Transit plaza will highlight the prominent public plaza, retail node and gateway into the BART station, both from the neighborhood and freeway/platform levels.

A3.10 Use a variety of architectural details such as decorative railings, pot shelves, canopies, and decorative lighting to reinforce the human scale elements of the proposed mixed use development.

A3.11 Use high quality durable materials, especially at the base of the buildings, to create a strong relationship of the building to the pedestrian realm and to enhance the neighborhood retain frontage along 40th Street.

A3.12 Strong cornice treatment should be emphasized regardless of the architectural style or character.

A3.13 Provide a minimum window recess of 2-3 inches for all windows at the ground floor and upper levels, and consider other means for embellishment on the ground floor, such as columns, to further provide interest to the ground level of commercial/retail frontages.

A3.14 Avoid white or beige window frames. Dark colors result in a more urban character that is appropriate to this location.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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

DESIGN COMPLIANCE PARCEL A

FINAL DEVELOPMENT PACKAGE

| | |
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| DATE | REVISION |
| 04.09.2015 | |
| PROJECT NUMBER | SHEET NUMBER |
| 142010 | A 0.31 |
| SCALE | |
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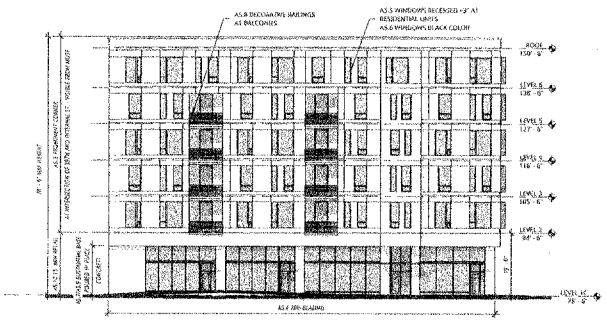
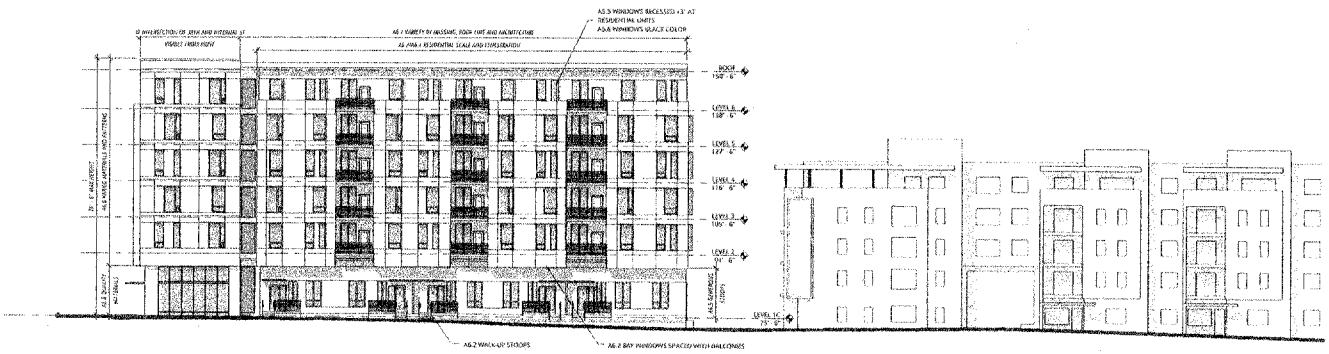



1 PARCEL C1 DESIGN COMPLIANCE DIAGRAM - 39TH

A0.32 | 1/16" = 1'-0"




2 V C1 DESIGN COMPLIANCE DIAGRAM - INTERNAL

A0.32 | 1/16" = 1'-0"

## 39th STREET (VILLAGE DR) DESIGN GUIDELINES:

A5.1 The scale of architecture along 39th Street should transition from the more contextual neighborhood scale along Telegraph Avenue building to the larger, more regional scale of the highway and BART station.

A5.2 Building height shall transition from the more contextual neighborhood scale along Telegraph Avenue to more regional scale toward the Highway 24 and the MacArthur BART Station.

A5.3 Each of the corners of the buildings should respond architecturally to their unique position on the site.

A5.4 Any ground floor uses fronting on 39th Street must have commercial/retail storefronts at the ground level. Façade transparency of the groundfloor space should range from 50% to 75%.

A5.5 Provide a minimum window recess of 2-3 inches for all storefront and residential windows at the groundfloor and upper levels.

A5.6 Avoid white or beige window frames. Dark colors result in a more urban character that is appropriate to this location.

A5.7 Provide a substantial building base with quality materials to enhance the retail frontage and provide distinctive attractive signage and canopies for the retail tenants, and building lobby locations.

A5.8 Use a variety of architectural details such as decorative railings, pot shelves, canopies, and decorative lighting to reinforce the human scale elements of the proposed mixed use development.

A5.9 Use high quality durable materials, especially at the base of the buildings, to create a strong connection for where the building meets the street, a strong connection to the pedestrian realm and to enhance the neighborhood retail frontage along 39th Street.

A5.10 The retail space must be a minimum of 15' floor to floor at PARCEL C to accommodate in-line retail tenants, and minimum of 18' floor to floor at PARCEL A to accommodate a major retail tenant.

## INTERNAL RESIDENTIAL STREET DESIGN GUIDELINES:

A6.1 Consistent with and in response to smaller residential PARCELS, the architecture of buildings facing the internal street (PARCEL B, C and D) should address the internal street with a variety of massing, roof line and architecture.

A6.2 Building frontages should relate to one another through the use of residential scale elements and articulation such as bay windows, balconies, stoops, as well as narrow vertical modulations – similar to urban row houses.

A6.3 The proposed roof form should be more varied and articulated than the mixed use building along Telegraph Avenue and 40th Street to respond to the residential nature of this street.

A6.4 The pattern of fenestration should also designed to reflect a more residential scale.

A6.5 Provide generously sized stoops and balconies at the ground level units to create a transition from the public street to the private realm of the residence and to enhance the sense of pedestrian activity on the street, support residential character and safety. These stoops can be designed uniquely to suit each architectural variation along the frontage.

A6.6 Provide variety of color and materials to further reinforce the finer grain residential scale and articulations

A6.7 Provide clearly defined residential lobbies, entries into residential courtyards and public uses by providing special canopies, signage, lighting and graphics. Where possible, group entrances together to create a community activity node.

A6.8 Provide quality durable material at all stoops, landscape walls and lobby entrances. Ground floor units shall have swinging front doors or French doors with some transparency rather than sliding patio doors.

A6.9 Provide a minimum window recess of 2-3 inches for all windows at the groundfloor and upper levels.

A6.10 Decorative lighting shall be incorporated seamlessly in the building design to enhance the architecture, promote pedestrian safety and support neighborhood security.

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MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

DESIGN COMPLIANCE PARCEL C1

FINAL DEVELOPMENT PACKAGE

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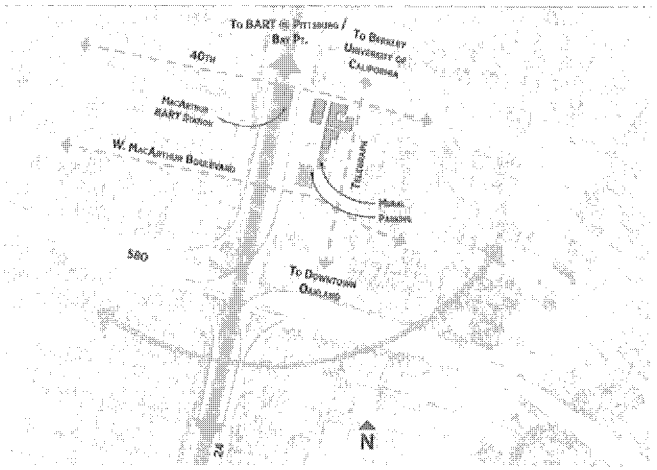
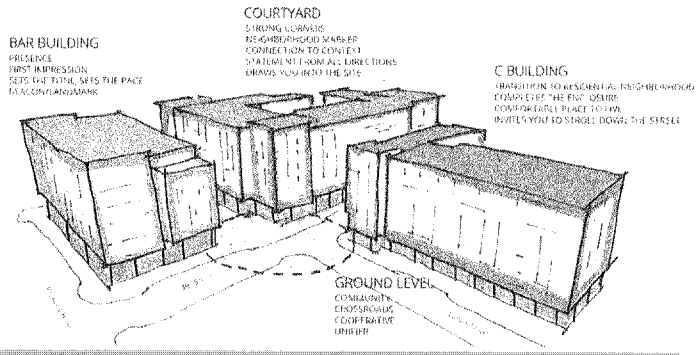
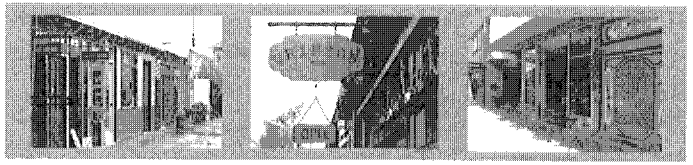
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET NUMBER A 0.32 |
| SCALE As indicated | |

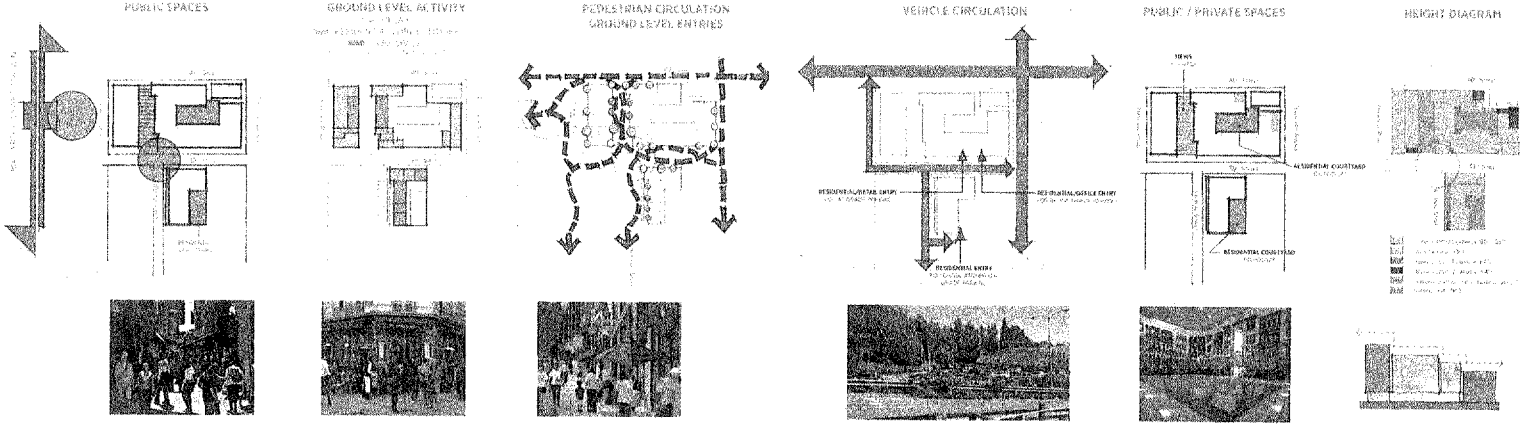



VERTICAL COMMUNITY



PEDESTRIAN GROUND LEVEL




URBAN DESIGN CONCEPTS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MILLER COMPANY LANDSCAPE
LANDSCAPE
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T. 415.252.7266


MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

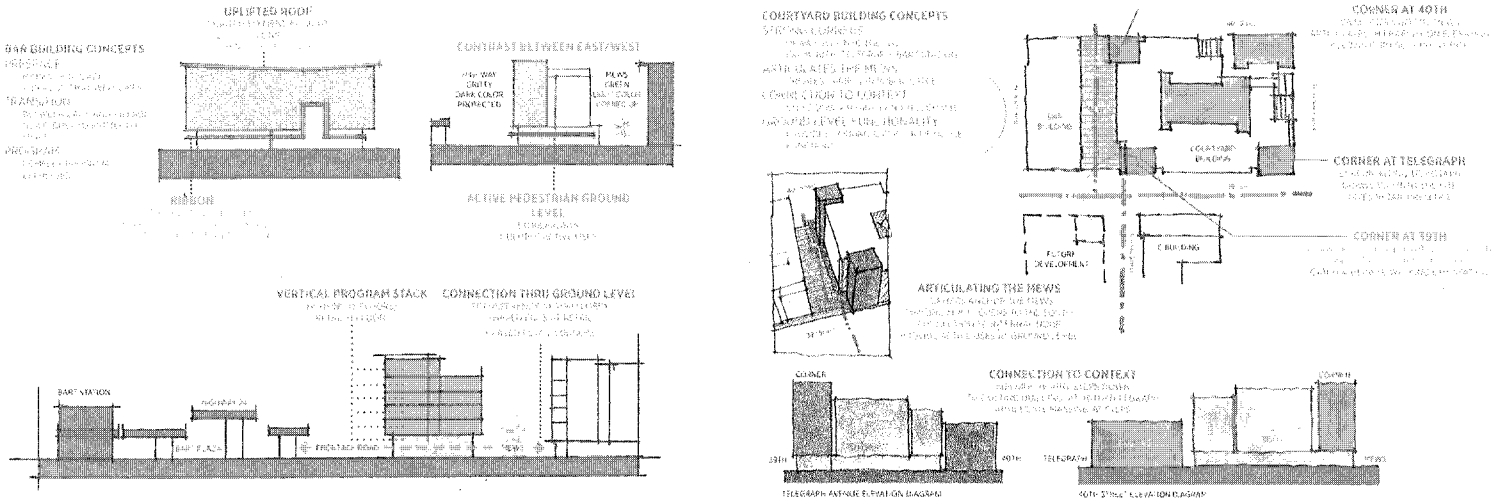
BRIDGE HOUSING

URBAN DESIGN CONCEPT DIAGRAMS

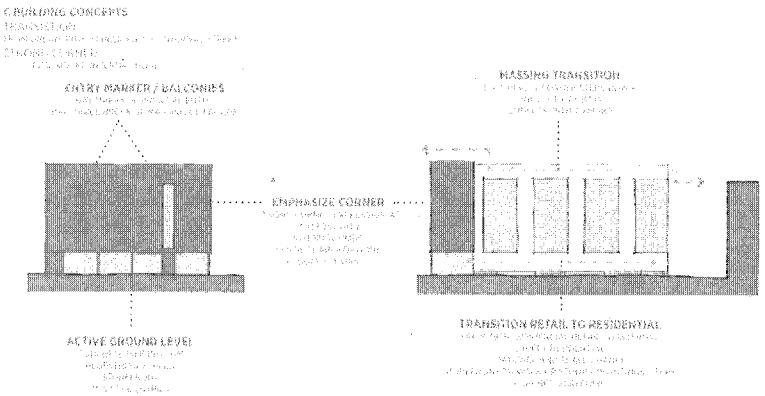
FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | |
| 142010 | |
| SCALE | |
| 12" = 1'-0" | |

A 0.40




## 1 PARCEL A - DESIGN CONCEPTS




## 3 PARCEL C1 - DESIGN CONCEPTS

Ankrom Moisan

6720 SW MACADAM AVENUE, SUITE 100
PORTLAND, OR 97219
T 503.245.7100

117 SOUTH MAIN STREET, SUITE 400
SEATTLE, WA 98104
T 206.576.1600

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OAKLAND, CA 94607
T 510.588.3455

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MACARTHUR STATION BLOCKS A & C1

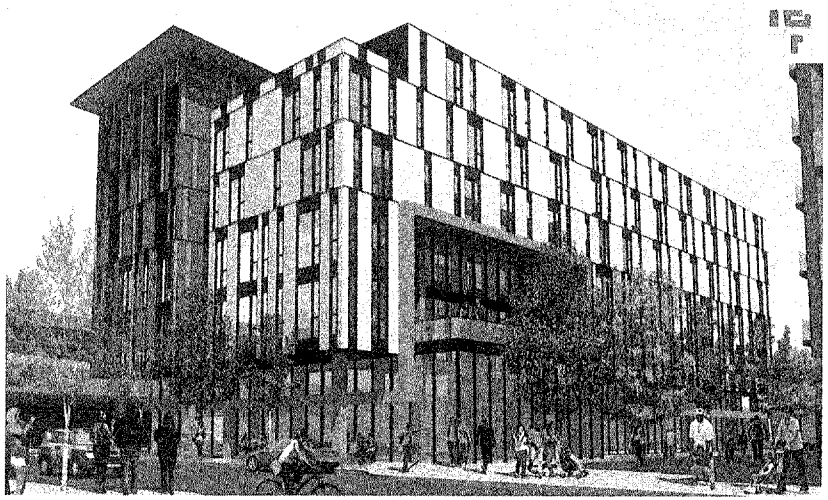
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

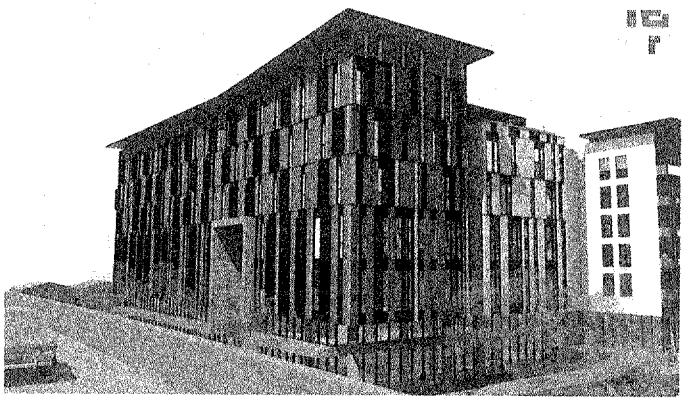
BUILDING DESIGN CONCEPT DIAGRAMS

FINAL DEVELOPMENT PACKAGE

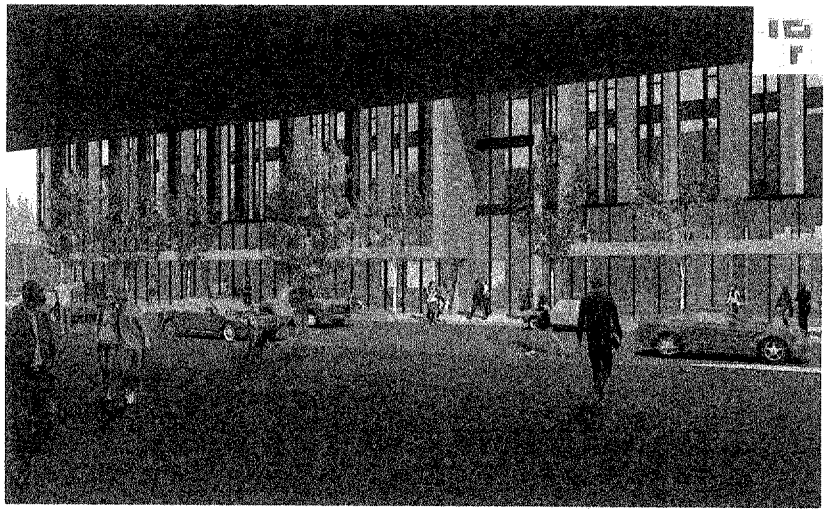
| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | |
| SCALE 12" = 1'-0" | A 0.41 |



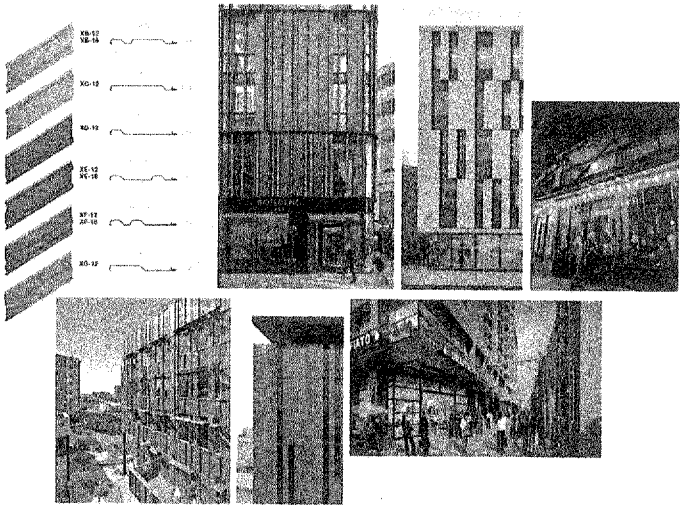
VIEW FROM INTERNAL STREET



VIEW FROM HIGHWAY OFF-RAMP



VIEW FROM BART PLAZA



INSPIRATION IMAGERY

PARCEL A - WEST BUILDING


Arkrom Moisan

6720 SW MACADAM AVENUE, SUITE 100
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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PERSPECTIVE VIEWS

FINAL DEVELOPMENT PACKAGE

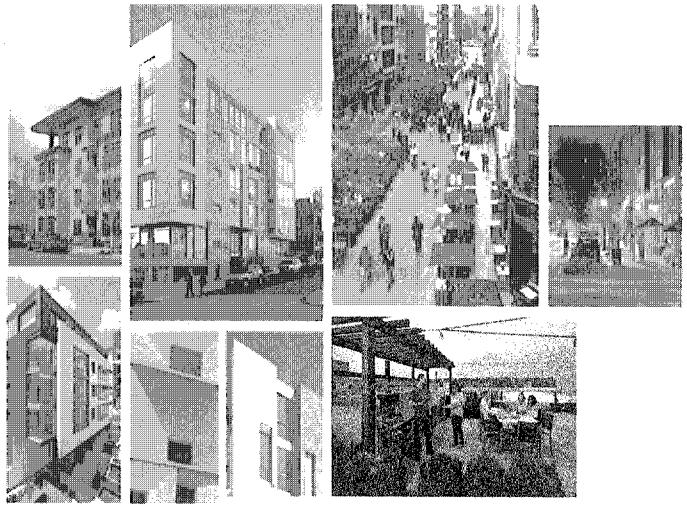
| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | |
| 142010 | |
| SCALE | |
| 12" = 1'-0" | |

A 0.50

VIEW FROM 39TH STREET

VIEW FROM TELEGRAPH AVENUE

VIEW FROM 40TH STREET



INSPIRATION IMAGERY

PARCEL A - EAST BUILDING


Ankrom Moisan

4720 SW MACADAM AVENUE, SUITE 100
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OAKLAND, CA 94607
T 510.990.3415

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1585 FOLSOM ST
SAN FRANCISCO, CA 94103
T 415.252.7386


MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

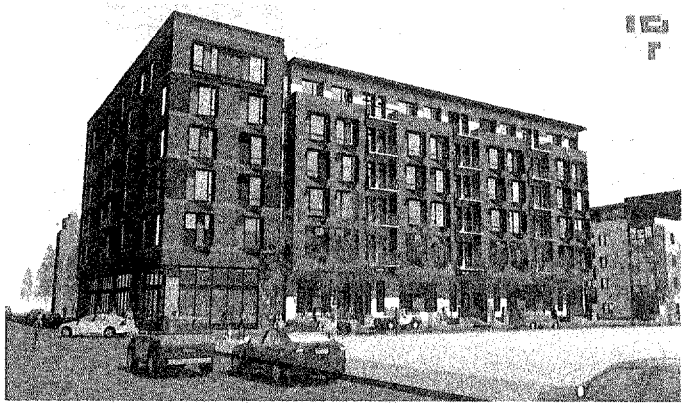
BRIDGE HOUSING

PERSPECTIVE VIEWS

FINAL DEVELOPMENT PACKAGE

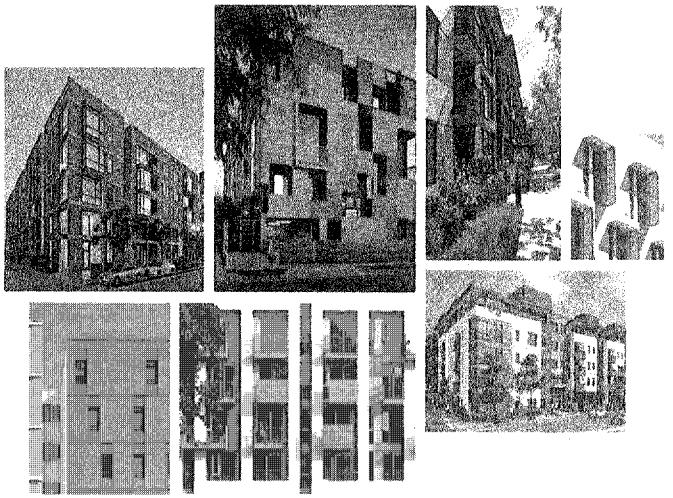
| | |
|---|---|
| DATE: 04.09.2015 | REVISION: |
| PROJECT NUMBER: 142010 | SHEET: A 0.51 |
| SCALE: 1/2" = 1'-0" | |

VIEW FROM MEWS



VIEW FROM 39TH STREET

VIEW FROM INTERNAL STREET



INSPIRATION IMAGERY

PARCEL C1


Ankrom Moisan

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MILLER COMPANY LANDSCAPE

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1585 FOLSOM ST
SAN FRANCISCO, CA 94103
T 415.252.7200


MACARTHUR STATION BLOCKS A & C1

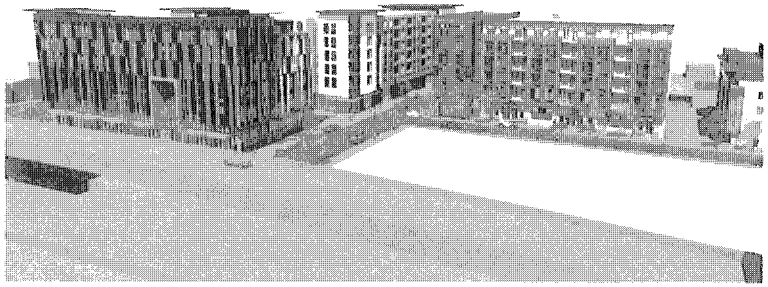
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

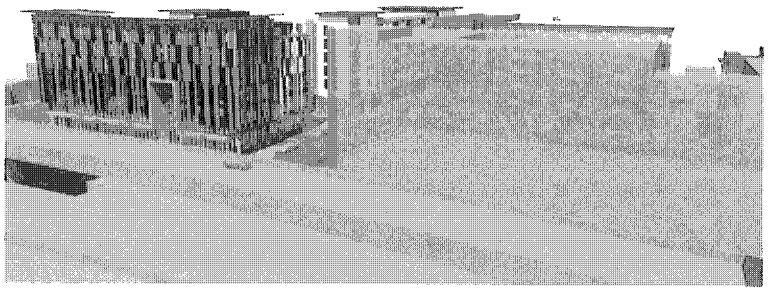
PERSPECTIVE VIEWS

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | |
| 142010 | |
| SCALE | SHEET NUMBER |
| 12" = 1'-0" | A 0.52 |

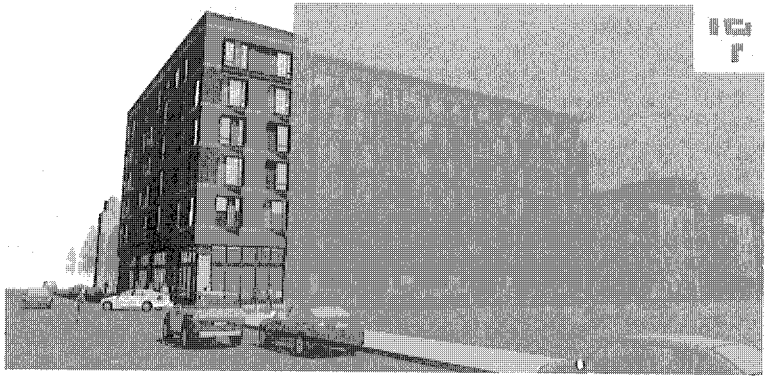


OVERALL DEVELOPMENT



OVERALL DEVELOPMENT WITH APPROVED BUILDING MASSING OF FUTURE PARCEL B

VIEW FROM 39TH STREET



VIEW FROM 39TH STREET WITH APPROVED BUILDING MASSING OF FUTURE PARCEL B

## OVERALL DEVELOPMENT - PARCEL B MASSING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MACARTHUR STATION BLOCKS A & C1

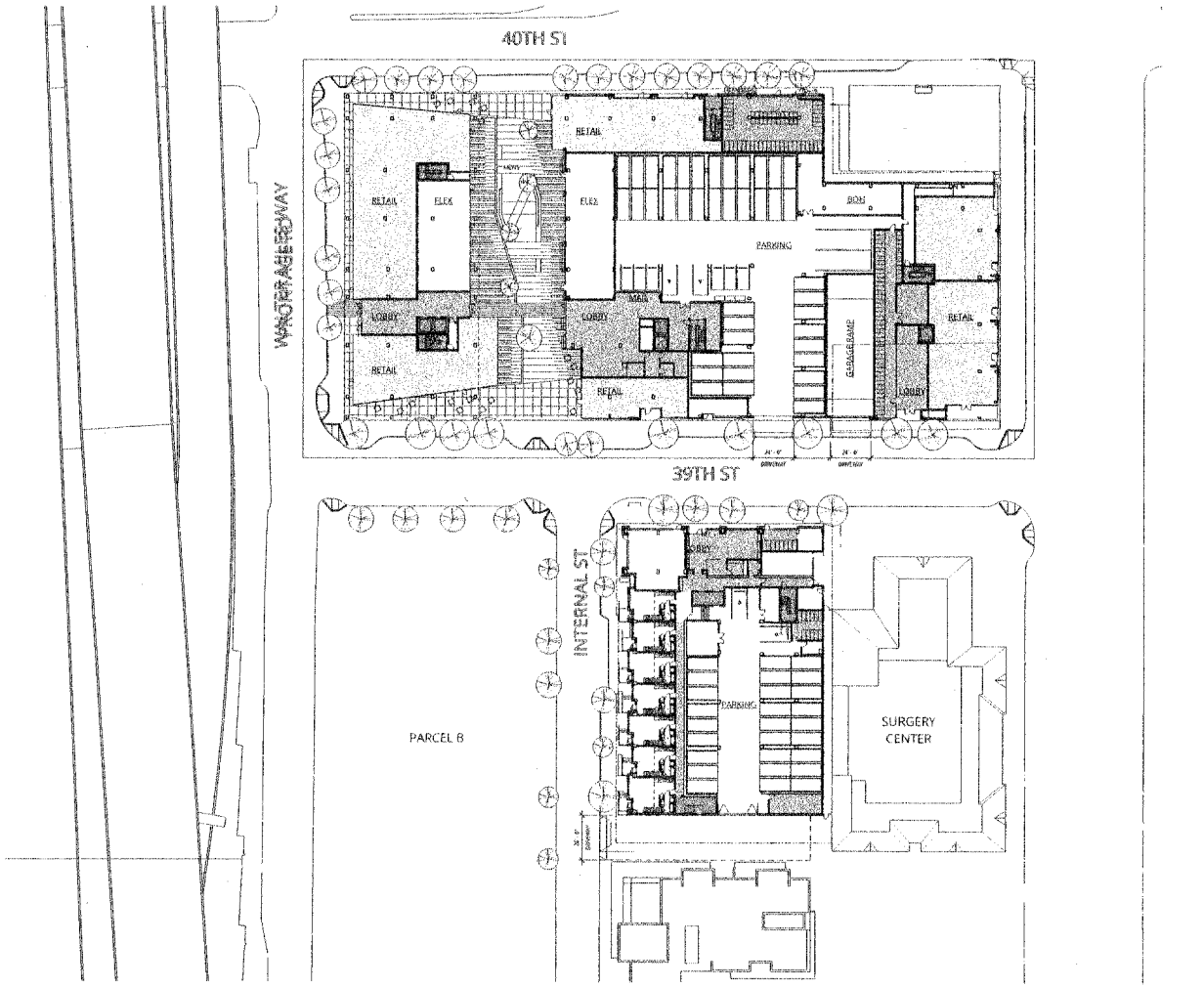
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PERSPECTIVE VIEWS

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 14.2010 | |
| SCALE 12" = 1'-0" | A0.53 |




1 LEVEL 1 OVERVIEW
A 1.00 | 1" = 30'-0"

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LANDSCAPE
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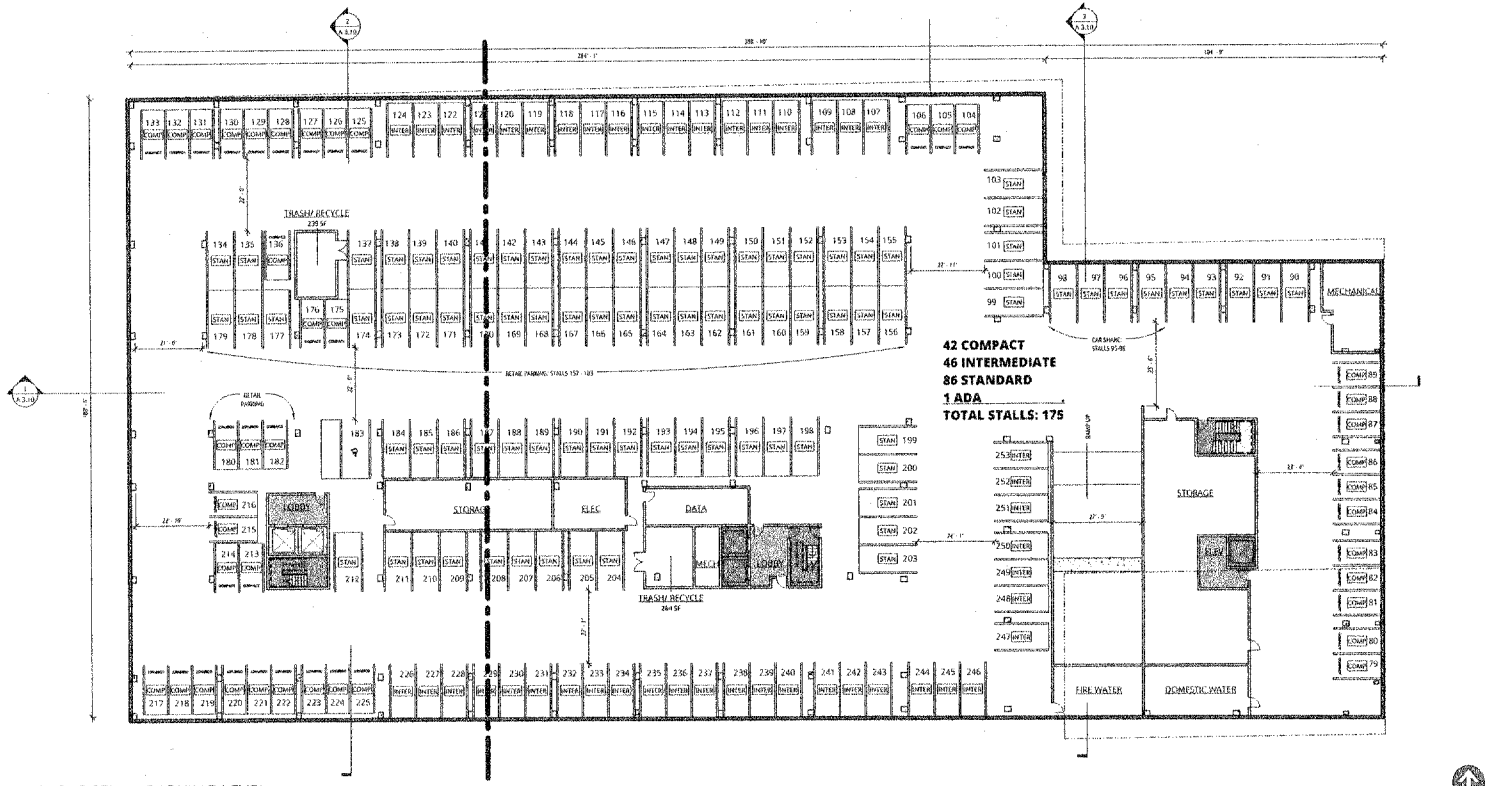
SAN FRANCISCO, CA 94103
T 415.752.7388

MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

OVERVIEW PARCELS A & C1

FINAL DEVELOPMENT PACKAGE

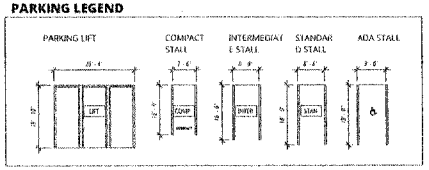
| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | SHEET NUMBER A 1.00 |
| SCALE 1" = 30'-0" | |




1 PARCEL A - PARKING LEVEL

A 2.00 | 1/16" = 1'-0"

**PARKING LEGEND**





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T 503.245.7400

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OAKLAND, CA 94607
F 510.590.3415

MILLER COMPANY LANDSCAPE

LANDSCAPE
1343 FOLSOM ST
SAN FRANCISCO, CA 94103
T 415.252.7700


MACARTHUR STATION BLOCKS A & C1

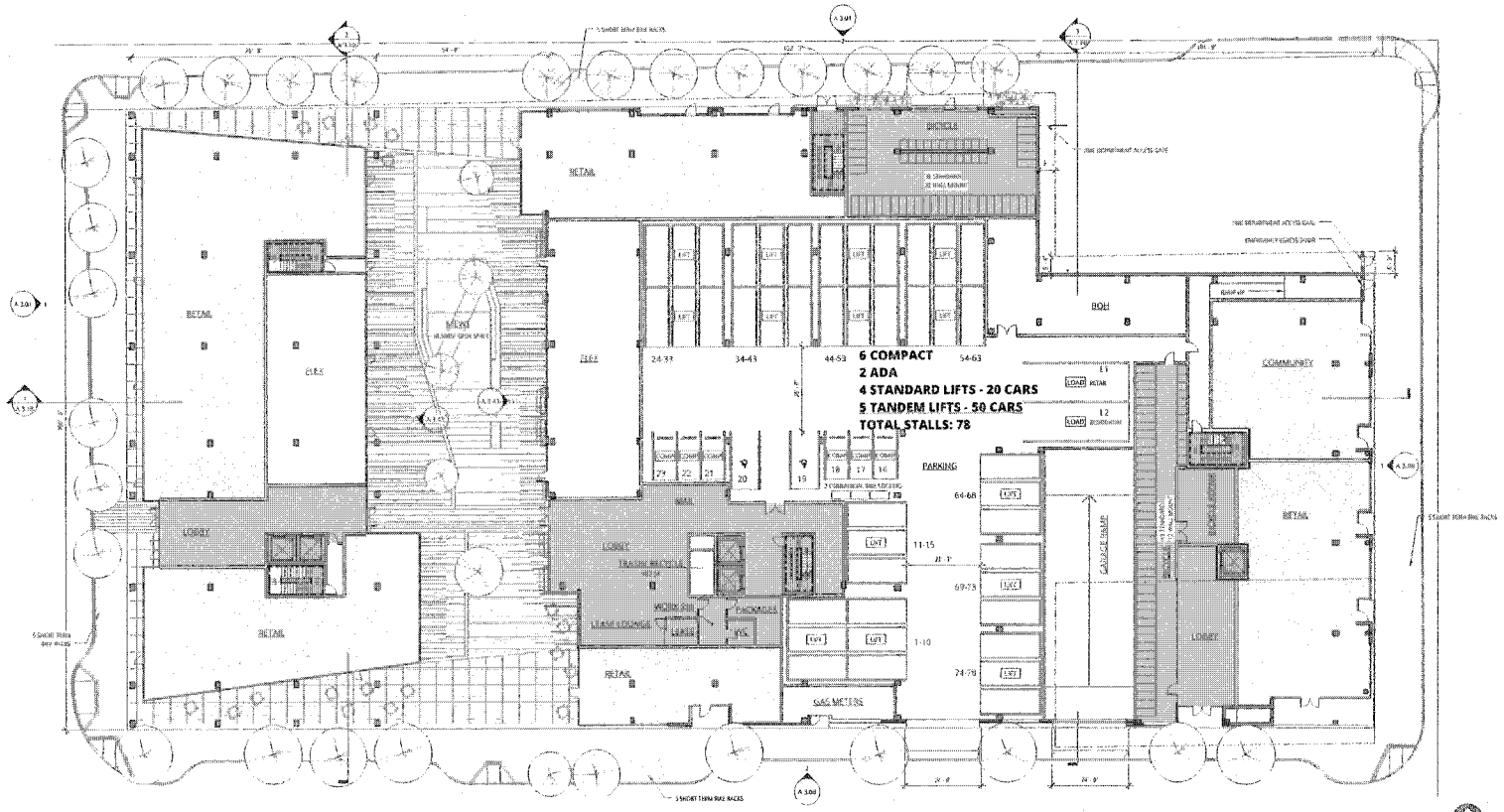
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A PARKING LEVEL

FINAL DEVELOPMENT PACKAGE

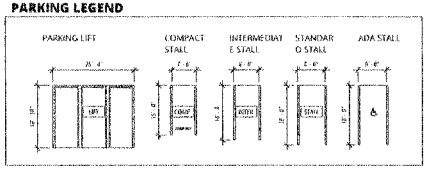
| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | SHEET NUMBER A 2.00 |
| SCALE 1/16" = 1'-0" | |




1 PARCEL A LEVEL 1

A 2.01 1/16" = 1'-0"

**PARKING LEGEND**





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SAN FRANCISCO, CA 94103
T 415.957.1269


MACARTHUR STATION BLOCKS A & C1

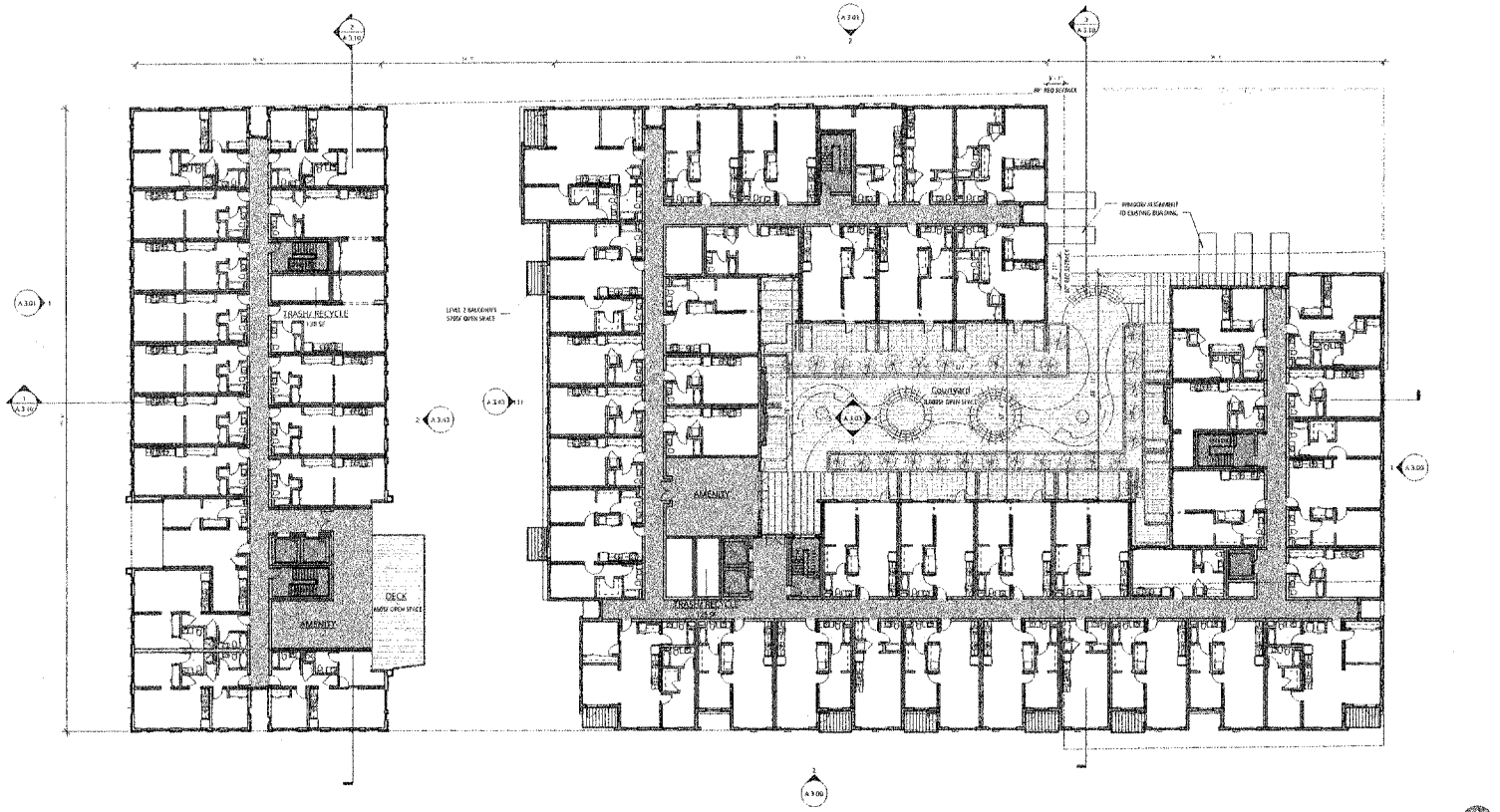
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A GROUND LEVEL

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | SHEET NUMBER |
| 142010 | A 2.01 |
| SCALE | |
| 1/16" = 1'-0" | |




1 PARCEL A LEVEL 2

A 2.02 | 1/16" = 1'-0"

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MACARTHUR STATION BLOCKS A & C1

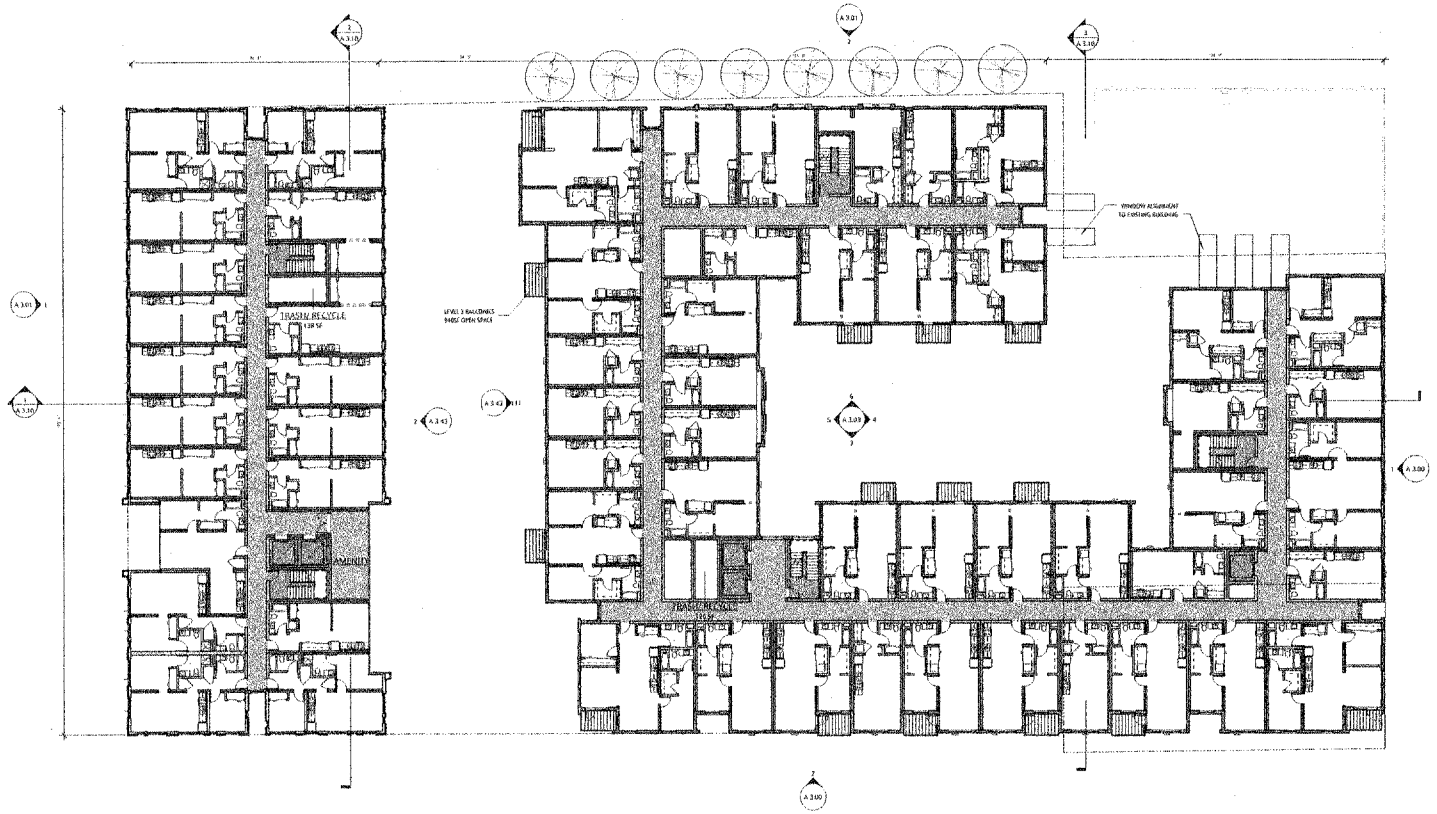
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A LEVEL 2

FINAL DEVELOPMENT PACKAGE

| | |
|---|---|
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET NUMBER A 2.02 |
| SCALE 1/16" = 1'-0" | |




1 PARCEL A LEVEL 3

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1916 PERSHING
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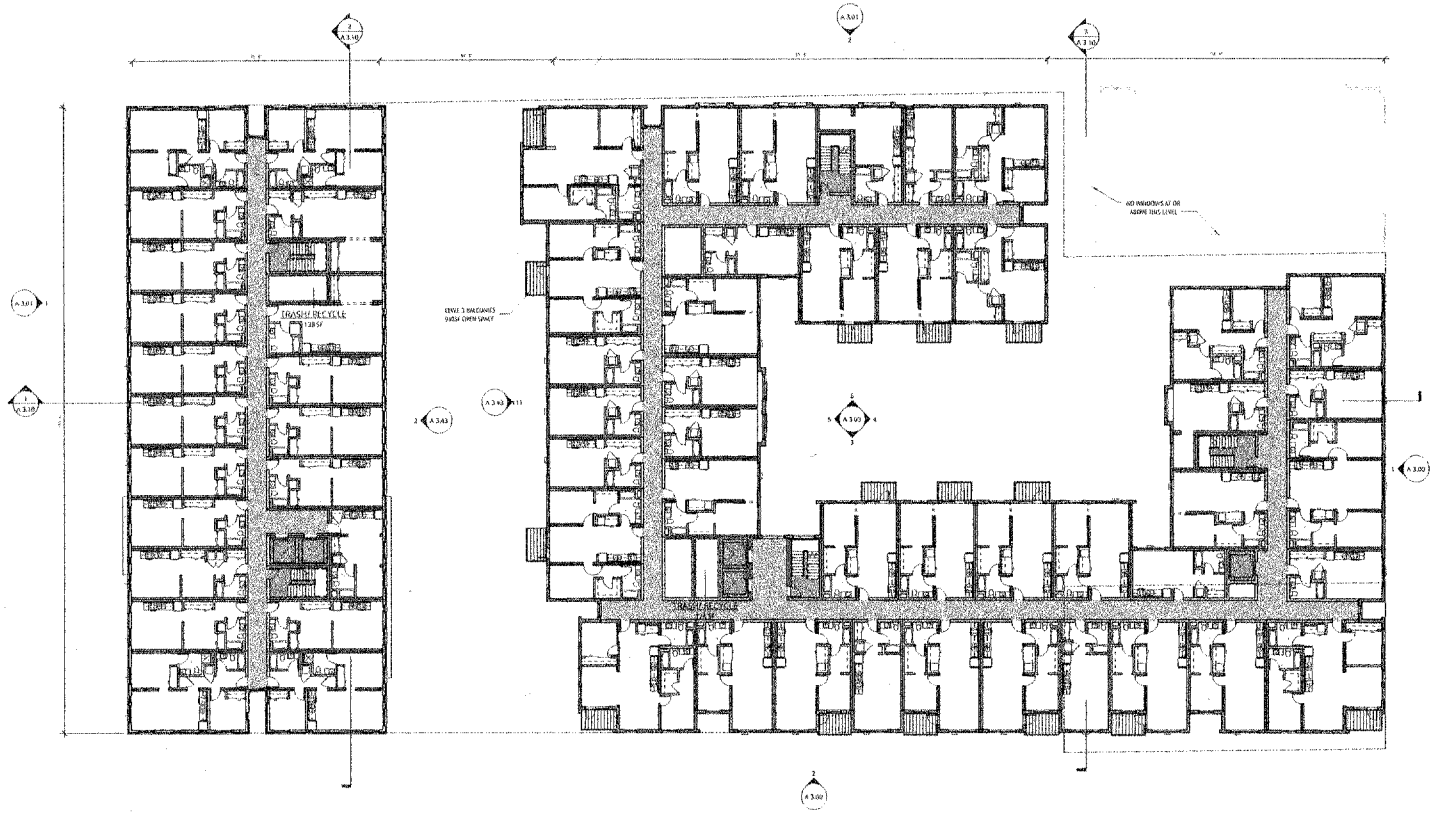
MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH, OAKLAND, CA
BRIDGE HOUSING

PARCEL A LEVEL 3

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | |
| SCALE 1/16" = 1'-0" | A 2.03 |




1 PARCEL A LEVEL 4

A 2.04 1/16" = 1'-0"

PROJECT

0 8 16 32 64

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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

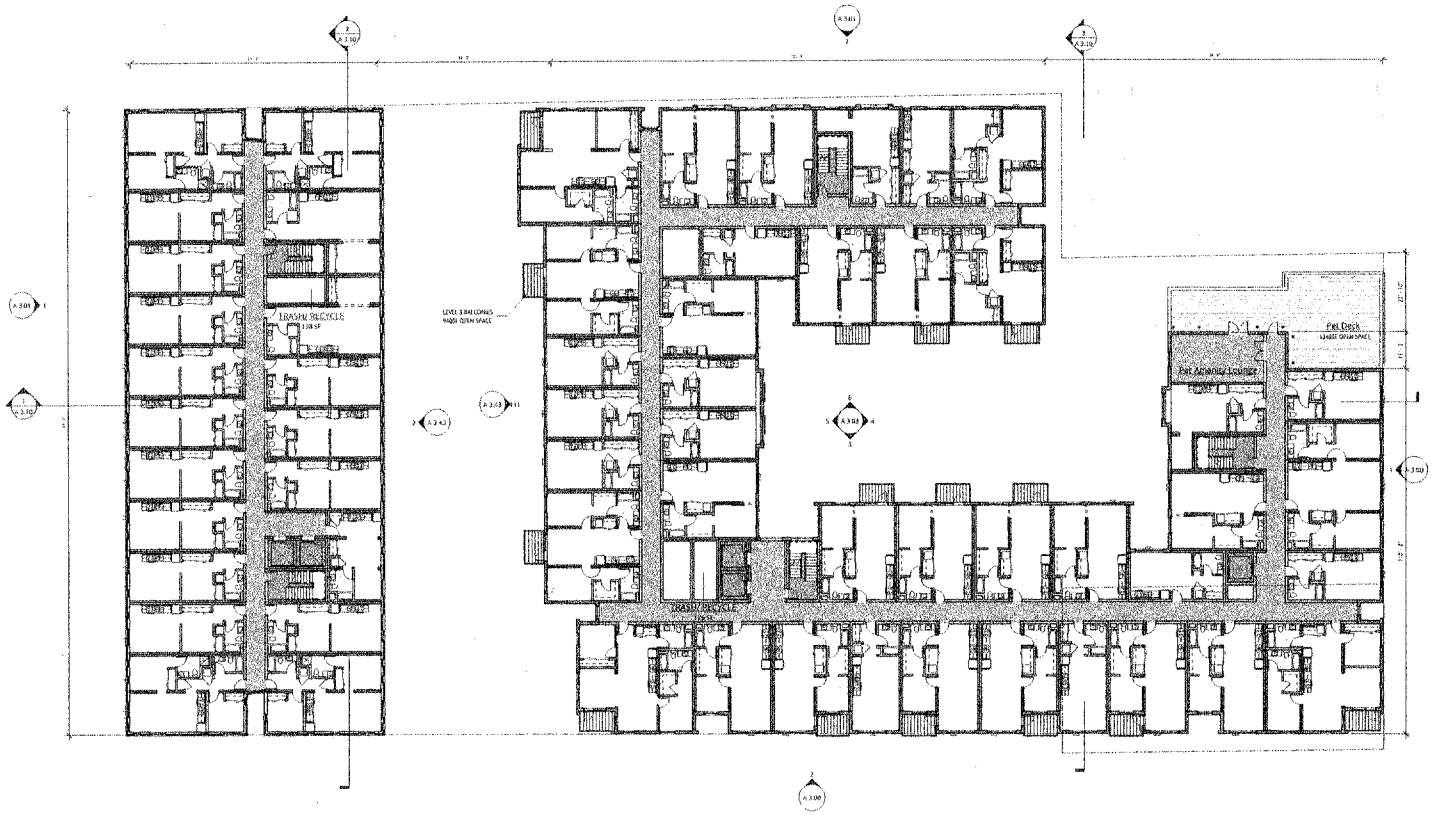
BRIDGE HOUSING

PARCEL A LEVEL 4

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | |
| 142010 | |
| SCALE | |
| 1/16" = 1'-0" | |

A 2.04




1 PARCEL A LEVEL 5

A 2.05 | 1/16" = 1'-0"

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MACARTHUR STATION BLOCKS A & C1

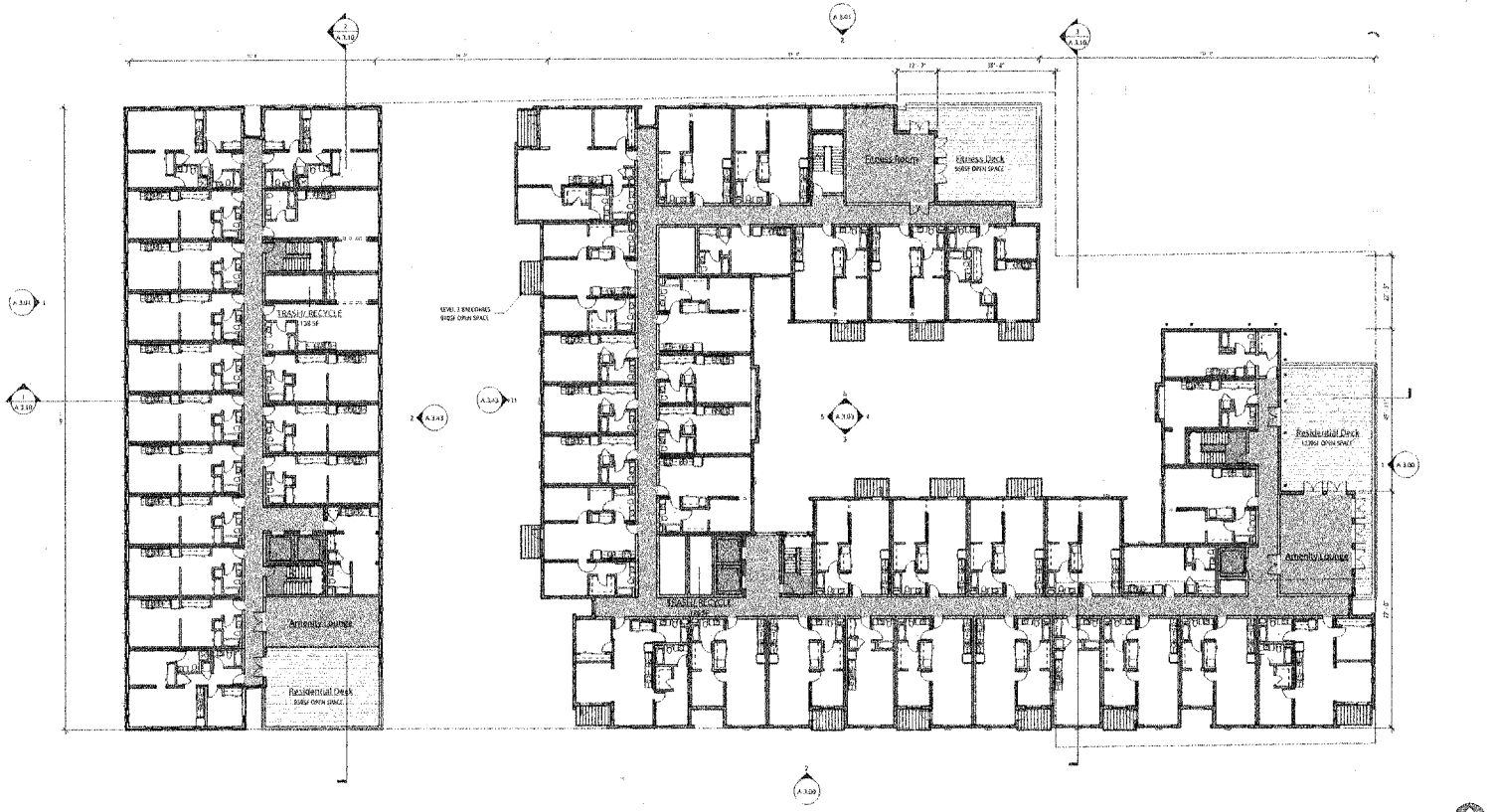
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A LEVEL 5

FINAL DEVELOPMENT PACKAGE

| DATE | BY VERSION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | SHEET NUMBER A 2.05 |
| SCALE 1/16" = 1'-0" | |




1 PARCEL A LEVEL 6
A2.06 | 1/16" = 1'-0"

Ankrom Moisan

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SAN FRANCISCO, CA 94103
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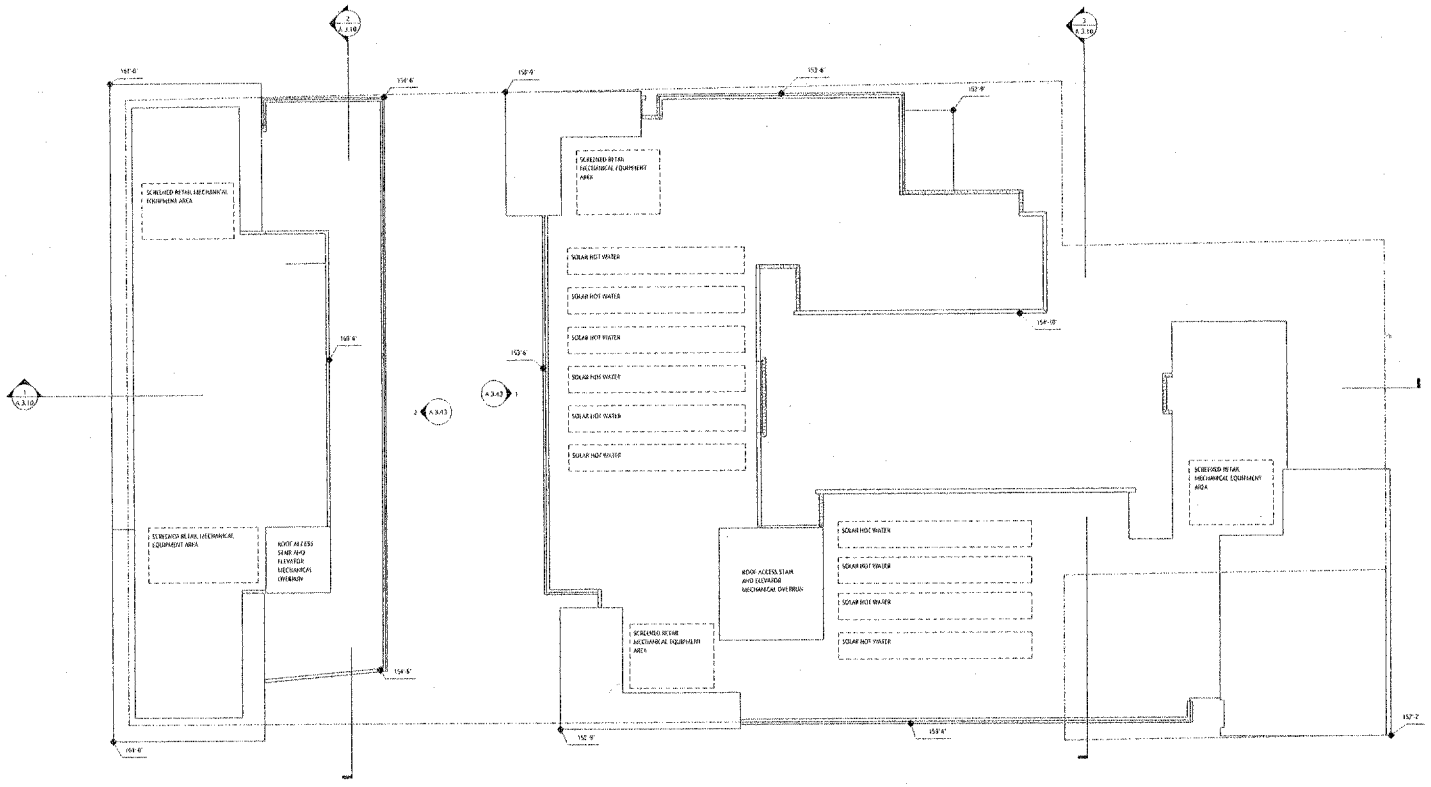
MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

PARCEL A LEVEL 6

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | SHEET NUMBER |
| 142010 | A 2.06 |
| SCALE | |
| 1/16" = 1'-0" | |




## 1 PARCEL A ROOF PLAN

A 2.07 1/16" = 1'-0"

0 8 16 32 64

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# MACARTHUR STATION BLOCKS A & C1

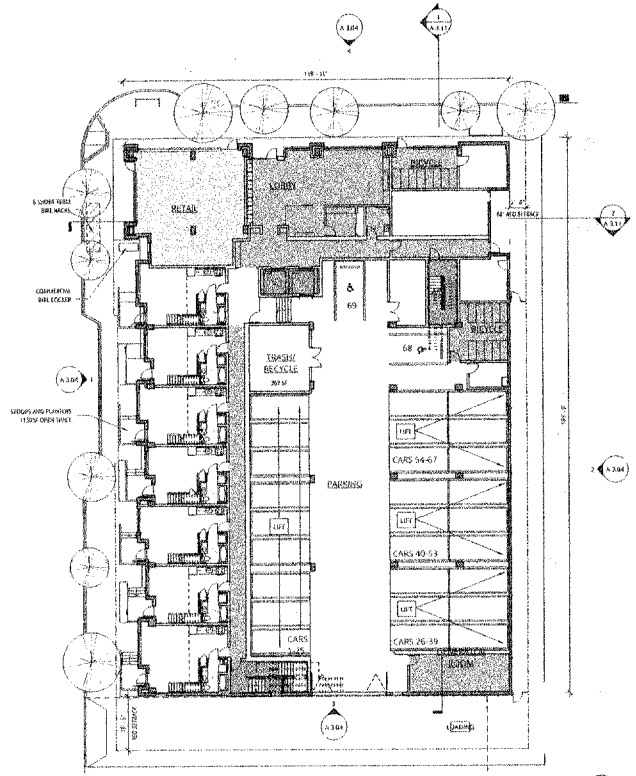
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A ROOF PLAN

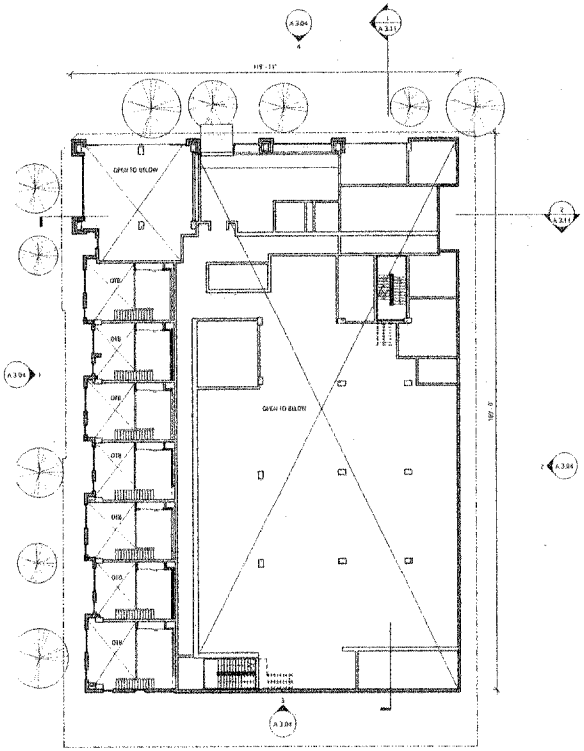
FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | SHEET NUMBER |
| 142010 | A 2.07 |
| SCALE | |
| 1/16" = 1'-0" | |




1 PARCEL C1 LEVEL 1

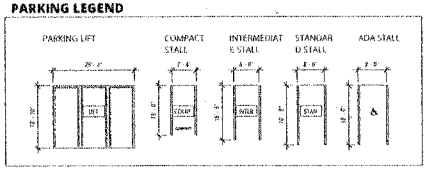
A 2.20 | 1/16" = 1'-0"




2 BLOCK C1 LOFT LEVEL

A 2.20 | 1/16" = 1'-0"

**PARKING LEGEND**





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MACARTHUR STATION BLOCKS A & C1

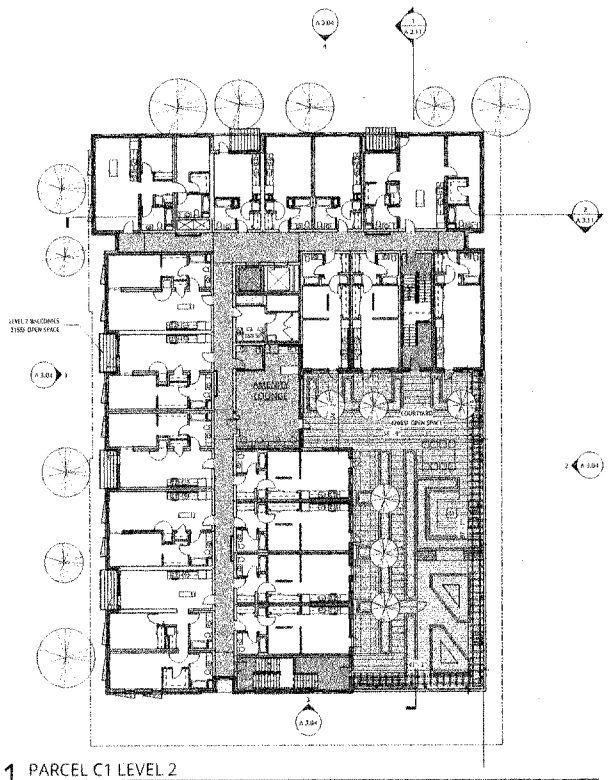
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

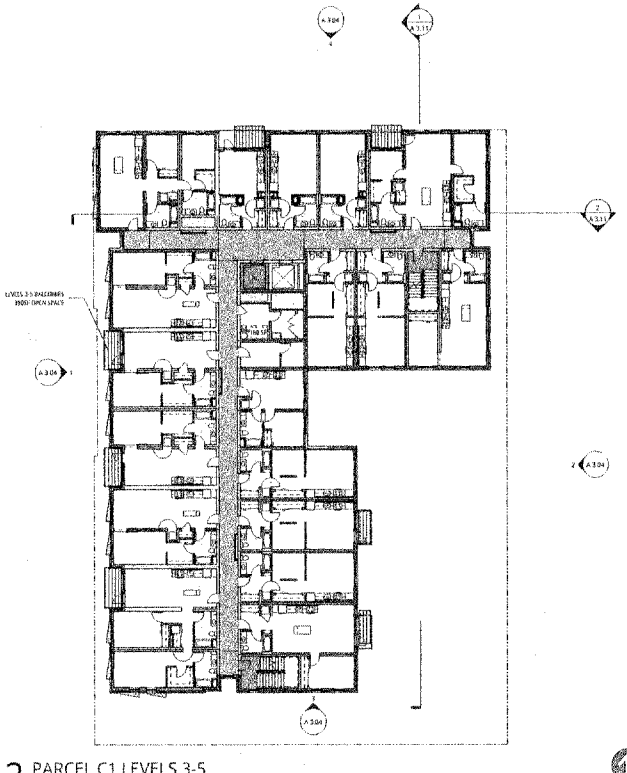
PARCEL C1 GROUND & MEZZANINE LEVELS

FINAL DEVELOPMENT PACKAGE

| | |
|---|---|
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET NUMBER A 2.20 |
| SCALE 1/16" = 1'-0" | |



1 PARCEL C1 LEVEL 2
A 2.21 | 1/16" = 1'-0"



2 PARCEL C1 LEVELS 3-5
A 2.21 | 1/16" = 1'-0"

0 8 16 32 64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MACARTHUR STATION BLOCKS A & C1

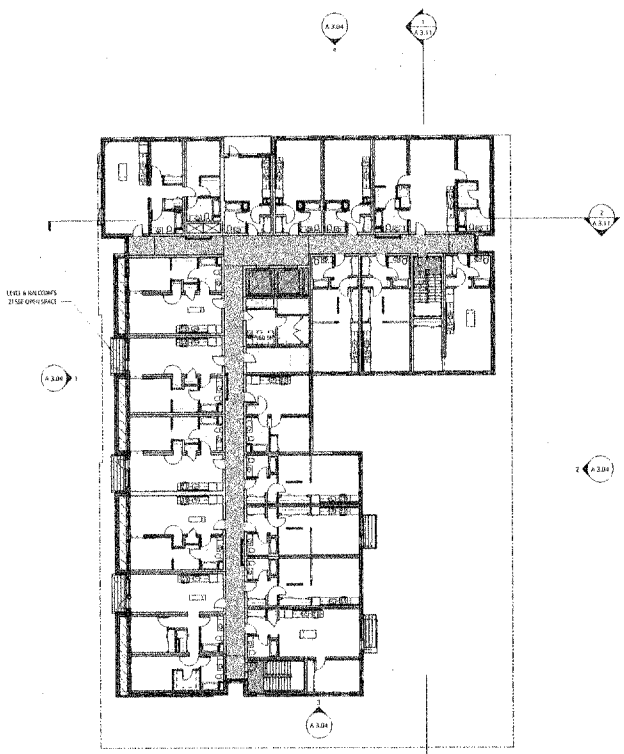
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL C1 LEVELS 2 & 3-5

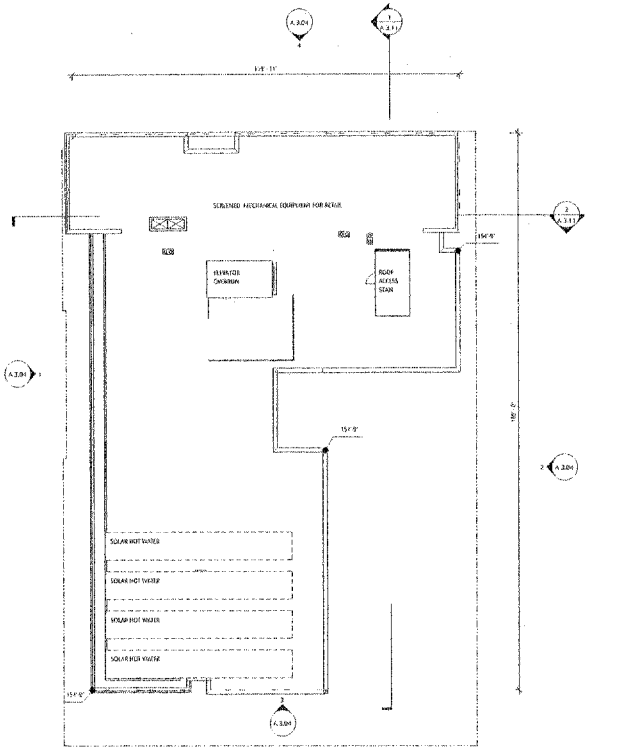
FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | SHEET NUMBER A 2.21 |
| SCALE 1/16" = 1'-0" | |




1 PARCEL C1 LEVEL 6

A 2.22 | 1/16" = 1'-0"




2 PARCEL C1 ROOF PLAN

A 2.22 | 1/16" = 1'-0"

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MACARTHUR STATION BLOCKS A & C1

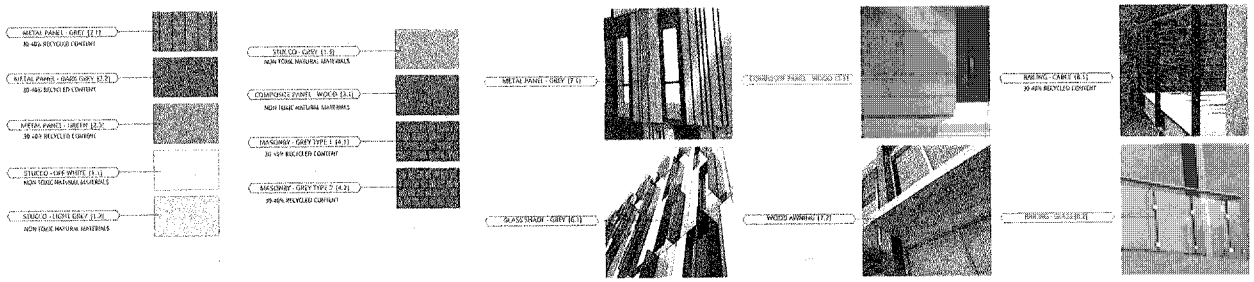
40TH AND TELEGRAPH OAKLAND, CA

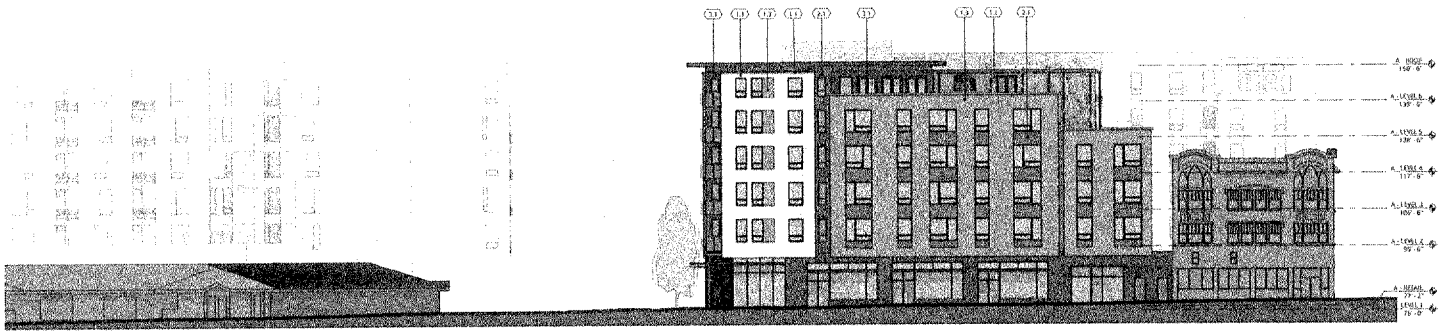
BRIDGE HOUSING

PARCEL C1 LEVEL 6 & ROOF

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | SHEET NUMBER |
| 142010 | A 2.22 |
| SCALE | |
| 1/16" = 1'-0" | |



1 BUILDING A EAST ELEVATION - TELEGRAPH

A 3.00 | 1/16" = 1'-0"

2 PARCEL A SOUTH ELEVATION - 39TH ST

A 3.00 | 1/16" = 1'-0"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MACARTHUR STATION BLOCKS A & C1

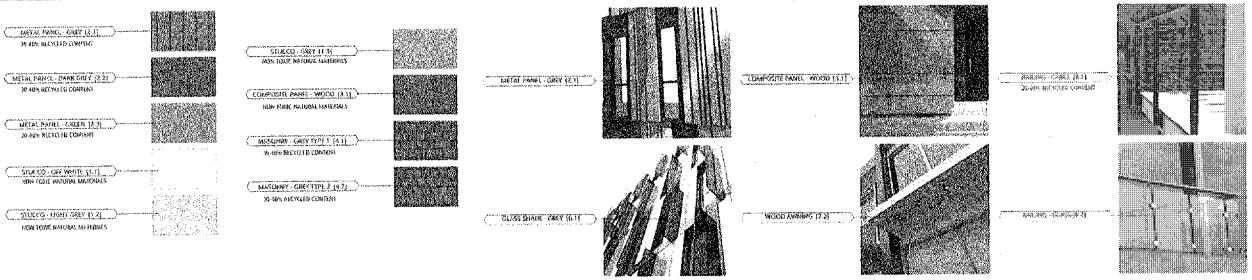
40TH AND TELEGRAPH OAKLAND, CA

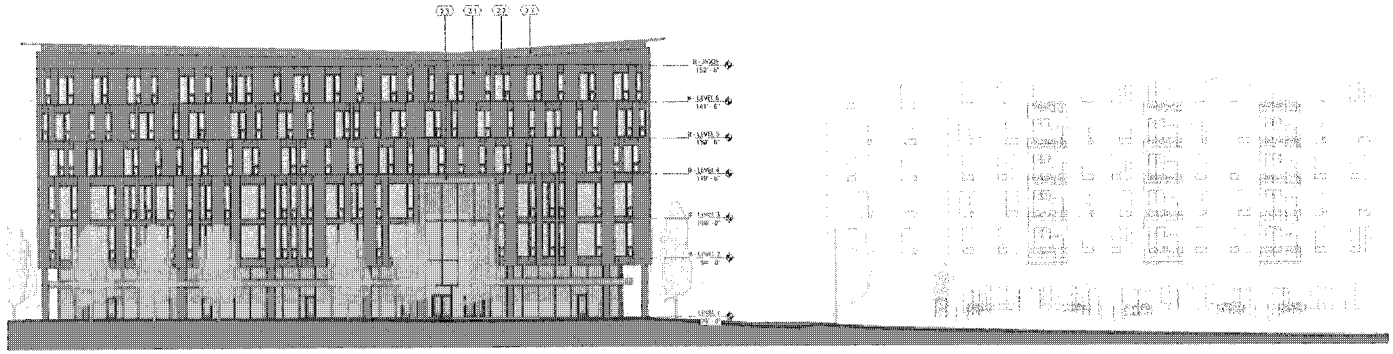
BRIDGE HOUSING

PARCEL A ELEVATIONS

FINAL DEVELOPMENT PACKAGE

| | |
|---|---|
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET NUMBER A 3.00 |
| SCALE As indicated | |



1 BUILDING B WEST ELEVATION - FRONTAGE

A 3.01 | 1/16" = 1'-0"

2 PARCEL A NORTH ELEVATION - 40TH ST

A 3.01 | 1/16" = 1'-0"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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

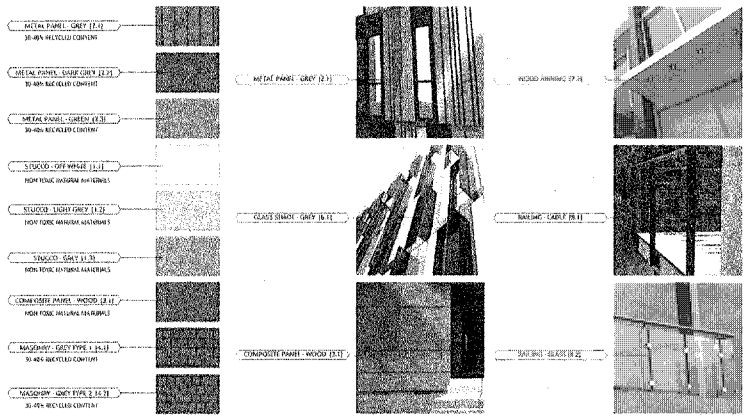
BRIDGE HOUSING

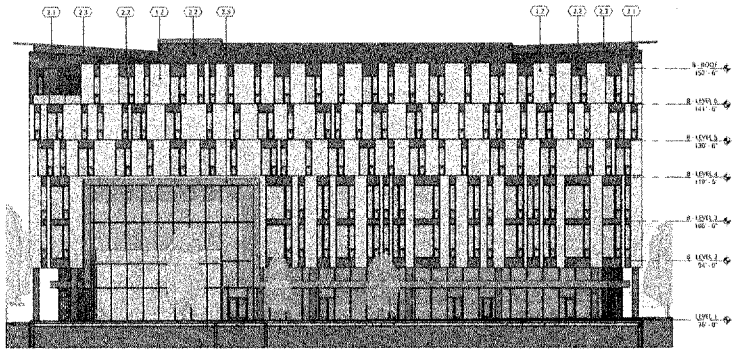
PARCEL A ELEVATIONS

FINAL DEVELOPMENT PACKAGE

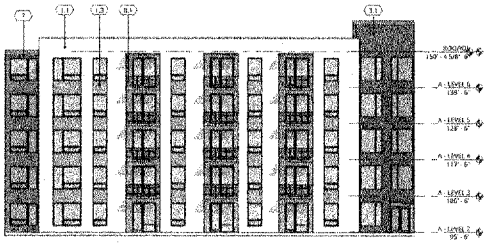
| | |
|---|---|
| DATE | 04.09.2015 |
| PROJECT NUMBER | 142010 |
| SCALE | As indicated |
| DIVISION | |
| SHEET NUMBER | A 3.01 |

1 BUILDING A WEST ELEVATION - MEWS

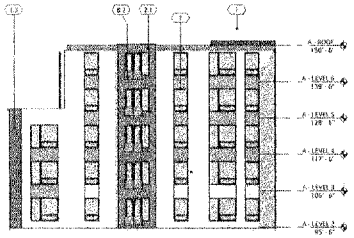


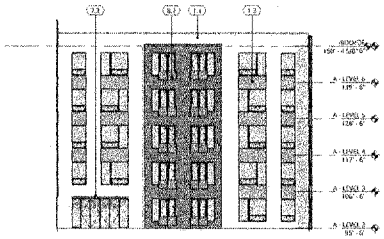
2 BUILDING B EAST ELEVATION - MEWS



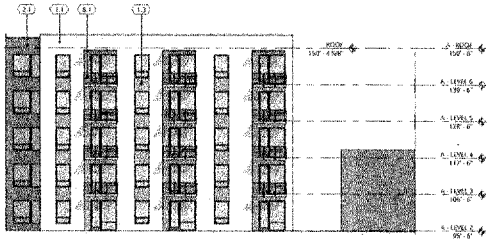
3 BUILDING A COURT NORTH ELEVATION



4 BUILDING A COURT WEST ELEVATION



5 BUILDING A COURT EAST ELEVATION



6 BUILDING A COURT SOUTH ELEVATION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# MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

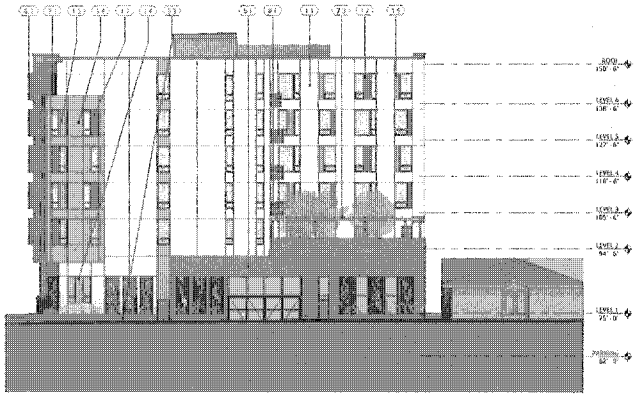
PARCEL A ELEVATIONS

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | |
| SCALE As indicated | A 3.03 |

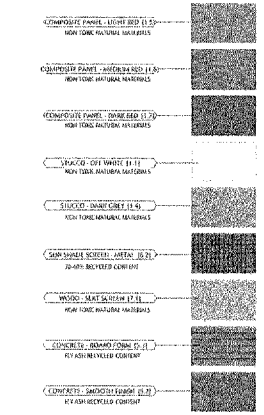
1 BUILDING C WEST ELEVATION - INTERNAL ST

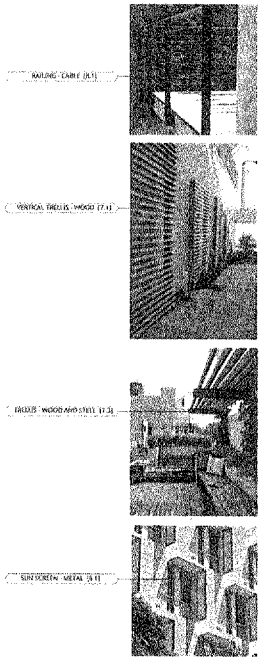
2 PARCEL C EAST ELEVATION - SURGERY



3 PARCEL C SOUTH ELEVATION - MURAL

4 PARCEL C NORTH ELEVATION - 39TH



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MACARTHUR STATION BLOCKS A & C1

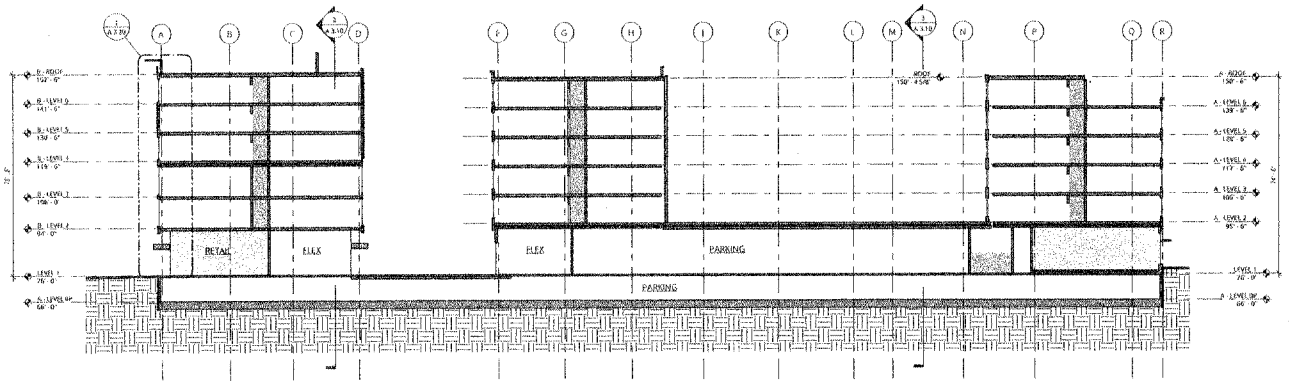
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

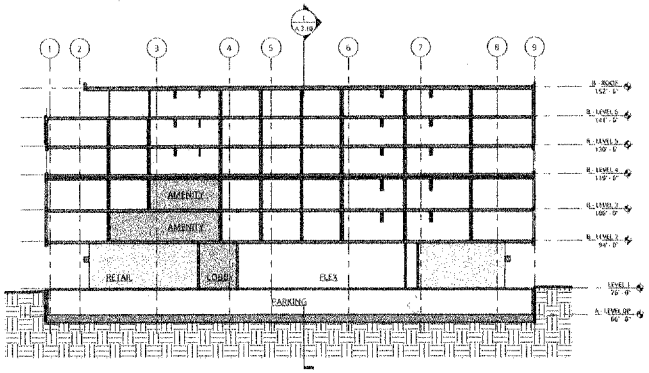
PARCEL C1
ELEVATIONS

FINAL DEVELOPMENT PACKAGE

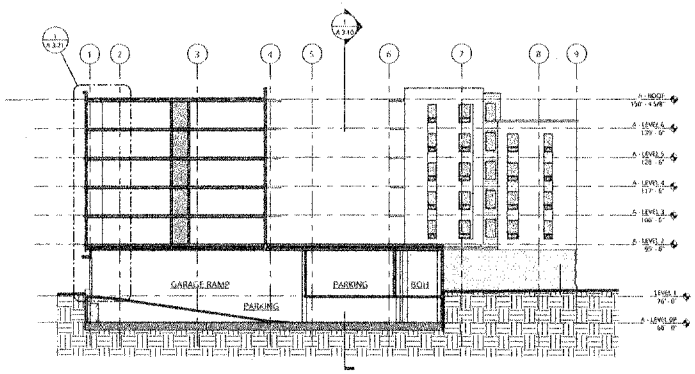
| | |
|---|---|
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET NUMBER A 3.04 |
| SCALE As indicated | |




1 BUILDING SECTION GRID 5 - OPTION 2
A3.10 | 1" = 20'-0"




2 BUILDING SECTION GRID C.5 - OPTION 2
A3.10 | 1" = 20'-0"




3 BUILDING SECTION GRID M.5 - OPTION 2
A3.10 | 1" = 20'-0"

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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH, OAKLAND, CA

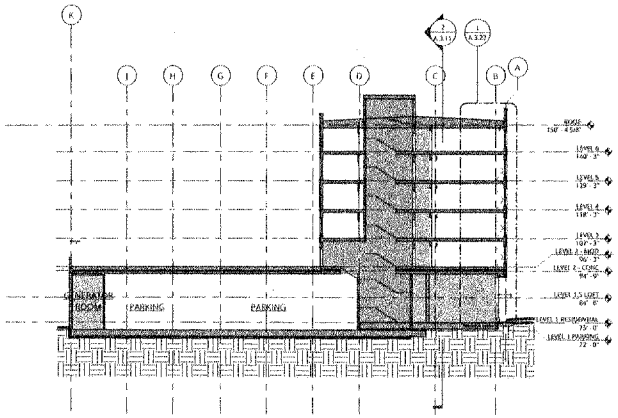
BRIDGE HOUSING

PARCEL A SECTIONS

FINAL DEVELOPMENT PACKAGE

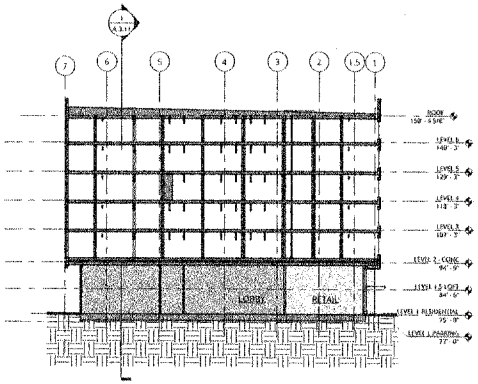
| | |
|---|---|
| DATE | REVISION |
| 04.09.2015 | |
| PROJECT NUMBER | |
| 142010 | |
| SCALE | |
| 1" = 20'-0" | |

A3.10




1 BUILDING SECTION - C LONGITUDINAL

A3.11 | 1" = 20'-0"




2 BUILDING SECTION - C1

A3.11 | 1" = 20'-0"

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MACARTHUR STATION BLOCKS A & C1

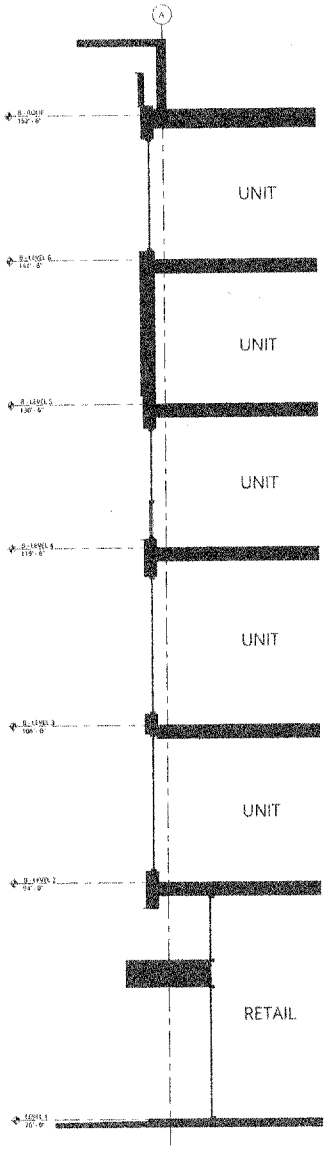
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

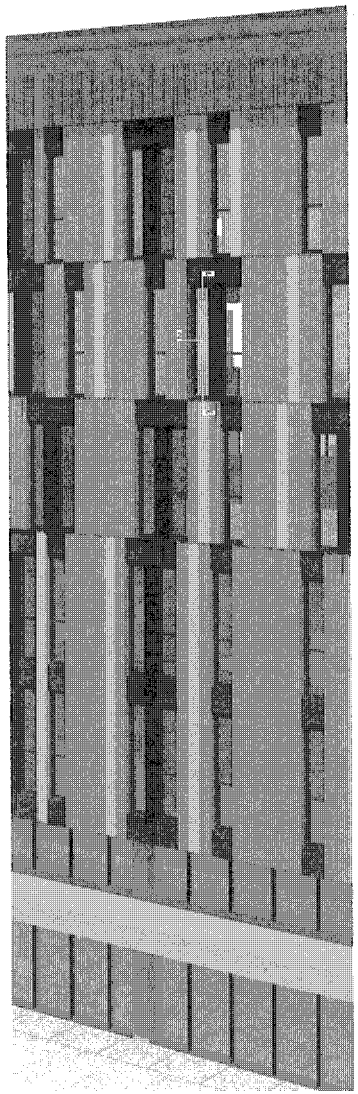
PARCEL C1 SECTIONS

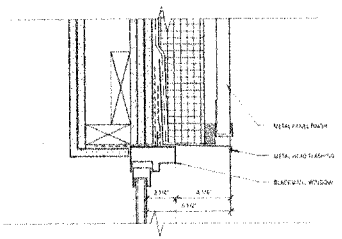
FINAL DEVELOPMENT PACKAGE

| | |
|---|---|
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET A3.11 |
| SCALE 1" = 20'-0" | |

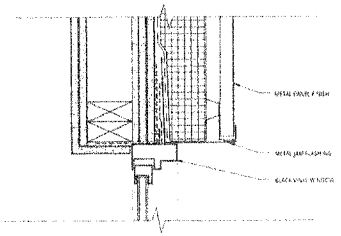



1 PARCEL A - WEST - ENLARGED SECTION AND WINDOW DETAILS

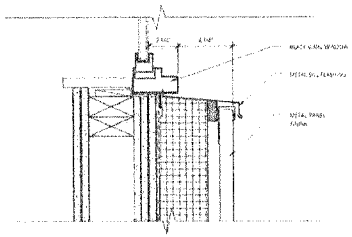




1 - WINDOW HEAD AT METAL SIDING - 3" = 1'-0"



2 - WINDOW JAMB AT METAL SIDING - 3" = 1'-0"



3 - WINDOW SILL AT METAL SIDING - 3" = 1'-0"

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MACARTHUR STATION BLOCKS A & C1

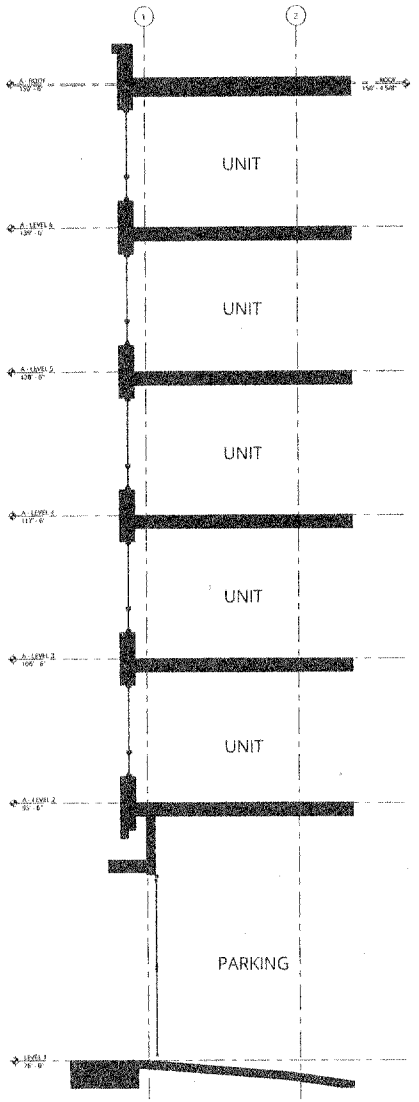
40TH AND TELEGRAPH, OAKLAND, CA

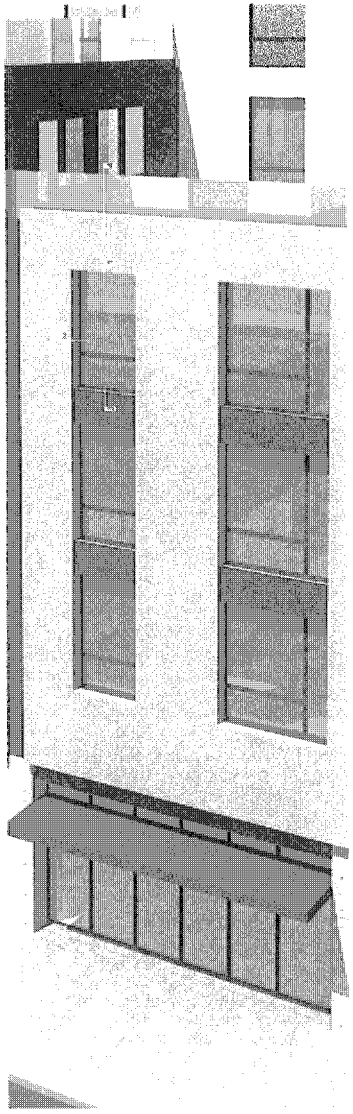
BRIDGE HOUSING

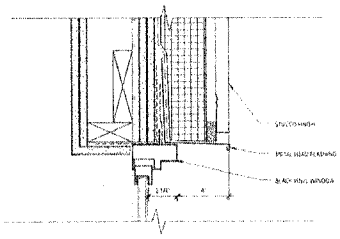
PARCEL A ENLARGED SECTION / DETAILS

FINAL DEVELOPMENT PACKAGE

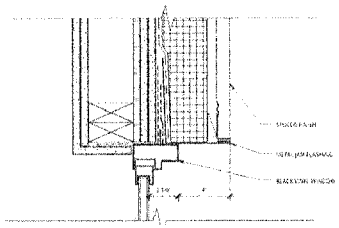
| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | |
| SCALE As indicated | A 3.20 |



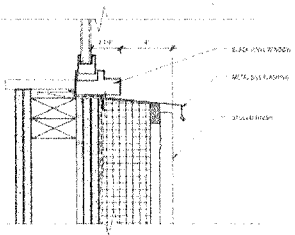





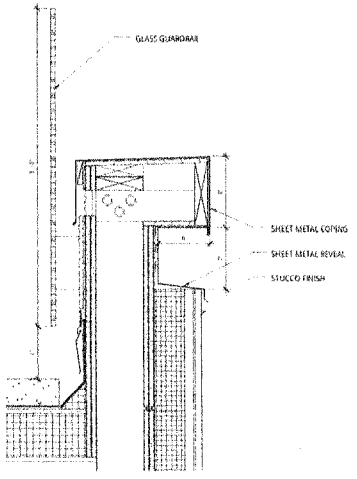

1 - WINDOW HEAD AT STUCCO - 3" = 1'-0"




2 - WINDOW JAMB AT STUCCO - 3" = 1'-0"




3 - WINDOW SILL AT STUCCO - 3" = 1'-0"




4 - STUCCO PARAPET AT ROOF DECK - 3" = 1'-0"

1 PARCEL A - EAST - ENLARGED SECTION AND WINDOW DETAILS
A 3.21 | 1/4" = 1'-0"

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MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

PARCEL A ENLARGED SECTION / DETAILS

FINAL DEVELOPMENT PACKAGE

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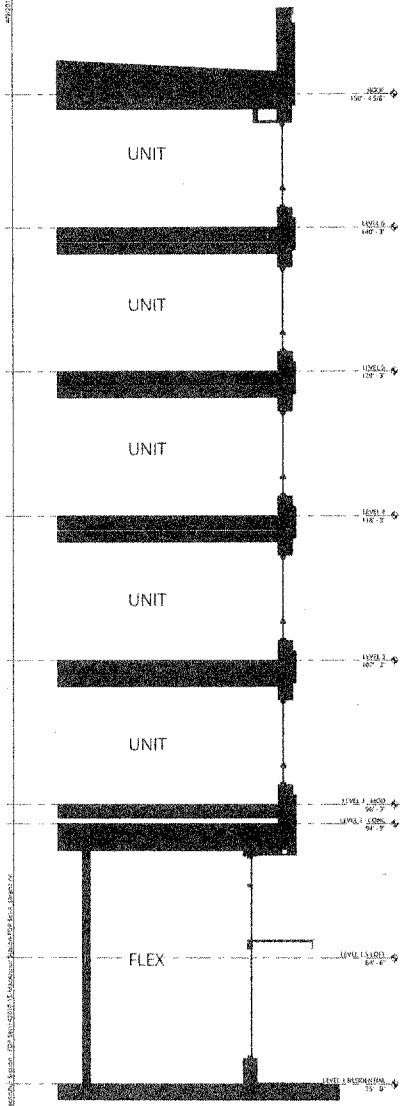
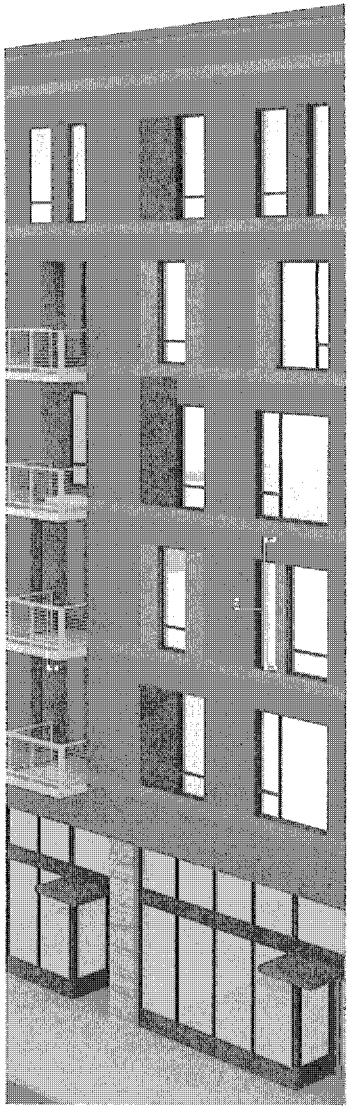
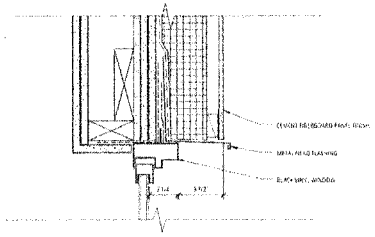
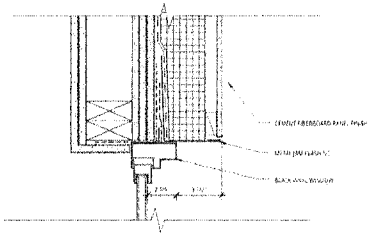
|---|---|
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET NUMBER A 3.21 |
| SCALE As indicated | |



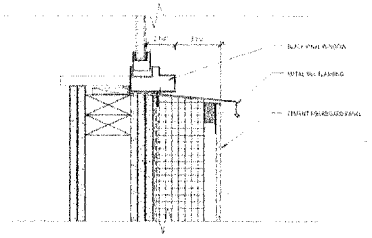





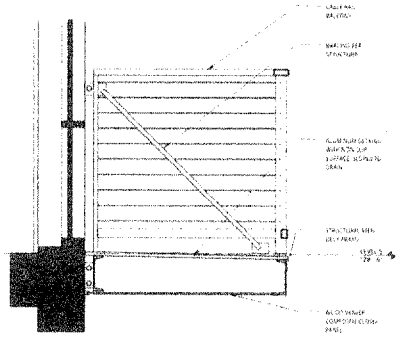
1 - WINDOW HEAD AT CEMENT FIBERBOARD PANEL - 3" = 1'-0"



2 - WINDOW JAMB AT CEMENT FIBERBOARD PANEL - 3" = 1'-0"



3 - WINDOW SILL AT CEMENT FIBERBOARD PANEL - 3" = 1'-0"



4 - CABLE RAIL AT CANTILEVERED DECK - 1" = 1'-0"

1 PARCEL C1 - ENLARGED SECTION AND WINDOW DETAILS
A3.22 | 1/8" = 1'-0"

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MACARTHUR STATION BLOCKS A & C1
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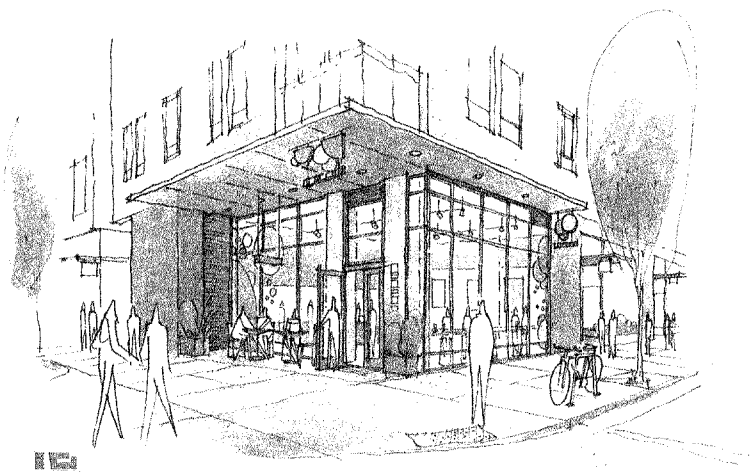
PARCEL C1 ENLARGED SECTION / DETAILS

FINAL DEVELOPMENT PACKAGE

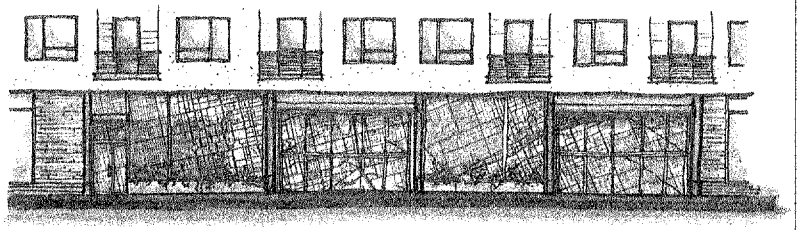
| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | SHEET NUMBER A 3.22 |
| SCALE As indicated | |

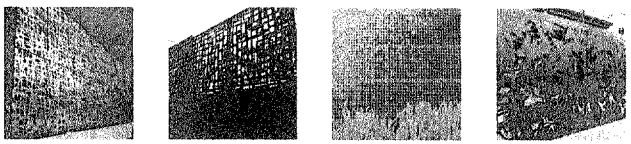
VIEW OF PARCEL A RETAIL AT INTERSECTION OF FRONTAGE RD AND 39TH



VIEW OF PARCEL A RETAIL AT INTERSECTION OF TELEGRAPH AVE AND 39TH

VIEW OF PARCEL C1 RETAIL AT INTERSECTINO OF 39TH AND INTERNAL ST





ART SCREEN EXAMPLES

VIEW OF PARCEL A 39TH ST GARAGE ART SCREENING

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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

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PARCELS A AND C1 GROUND LEVEL VIGNETTES

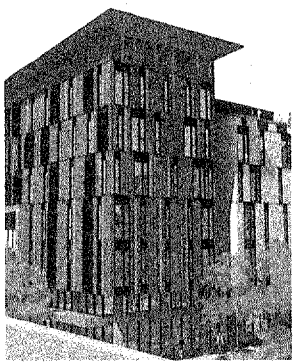
FINAL DEVELOPMENT PACKAGE

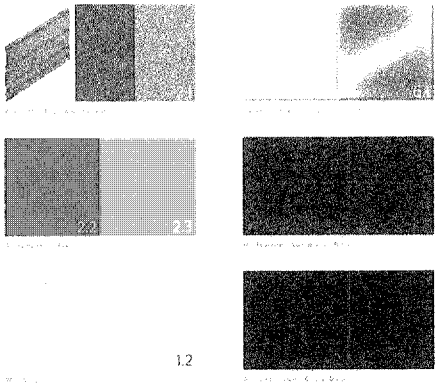
DATE 04.09.2015

PROJECT NUMBER 142010

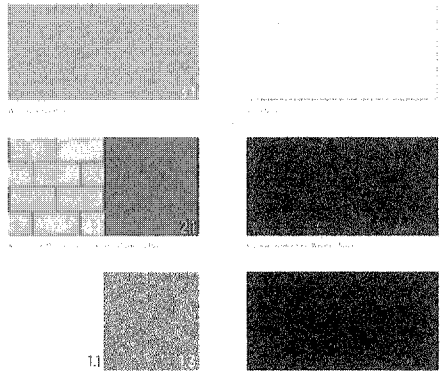
SCALE 12" = 1'-0"

A 3.30

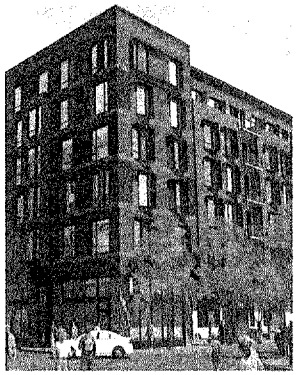


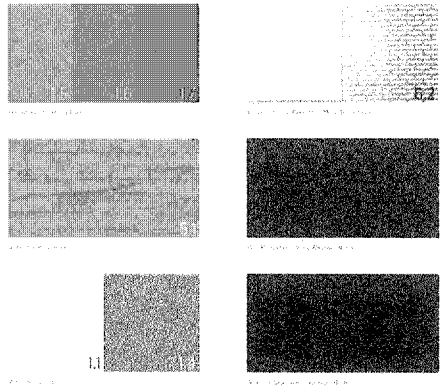



1 EXTERIOR MATERIAL PALETTE - BLOCK A - WEST




2 EXTERIOR MATERIAL PALETTE - BLOCK A - EAST






3 EXTERIOR MATERIAL PALETTE - BLOCK C1

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PARCELS A AND C1
MATERIALS BOARD

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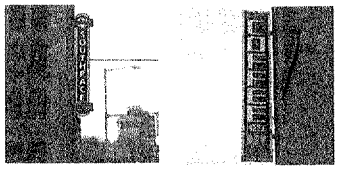
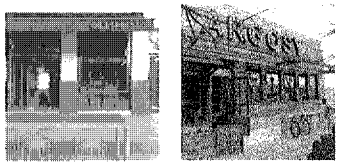
| DATE 04.09.2015 | REVISION |
| PROJECT NUMBER 142010 | SHEET NUMBER A 3.40 |
| SCALE 1/2" = 1'-0" | |

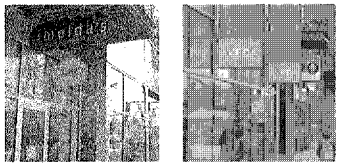
## SIGNAGE KEY



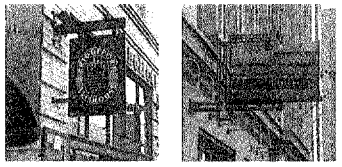
ICONIC SIGNAGE: 28" WIDE x 20" TALL MAXIMUM



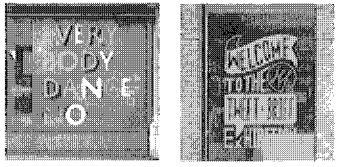
AWNING SIGNAGE: 20" TALL x 20' LONG MAXIMUM



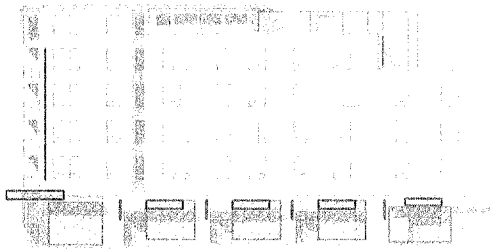
UNDER AWNING SIGNAGE: 24" TALL x 36" WIDE MAXIMUM



IN ADE SIGNAGE: 36" TALL x 36" WIDE MAXIMUM

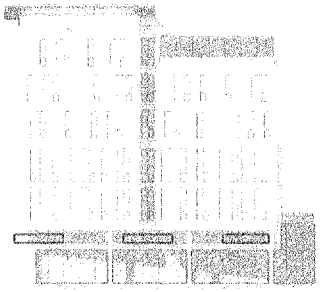


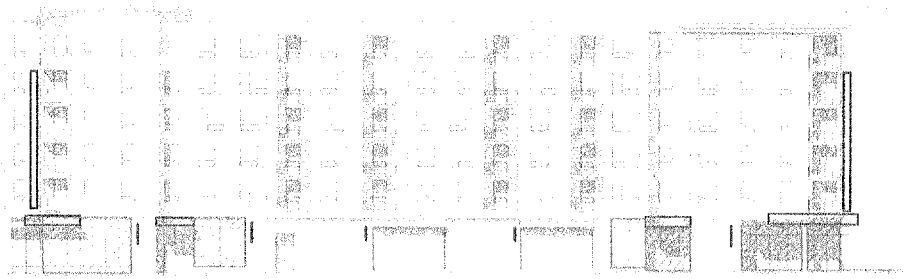

WINDOW GRAPHICS: 40% COVERAGE AND 50% TOTAL LENGTH MAXIMUM



1 PARCEL A SIGNAGE DIAGRAM - TELEGRAPH

A3.41 | 1/16" = 1'-0"





2 PARCEL A SIGNAGE DIAGRAM - 39TH

A3.41 | 1/16" = 1'-0"

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PARCEL A SIGNAGE ELEVATION DIAGRAMS

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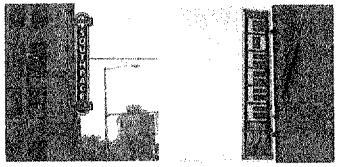
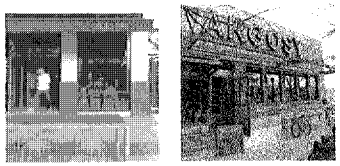
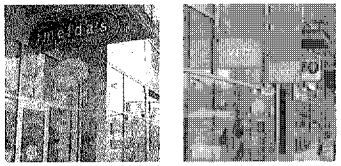
## SIGNAGE KEY



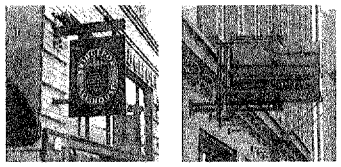
ICONIC SIGNAGE: 28" WIDE x 20' TALL MAXIMUM



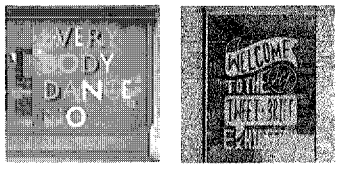
AWNING SIGNAGE: 20" TALL x 20' LONG MAXIMUM



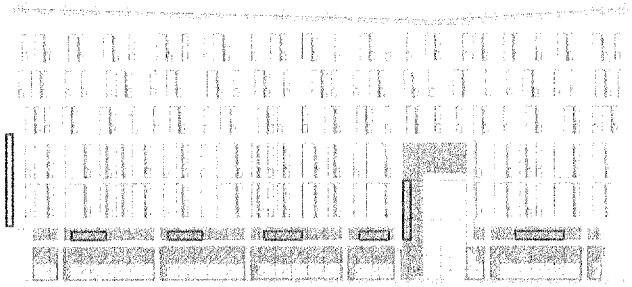
UNDER AWNING SIGNAGE: 24" TALL x 36" WIDE MAXIMUM



BLADE SIGNAGE: 36" TALL x 36" WIDE MAXIMUM

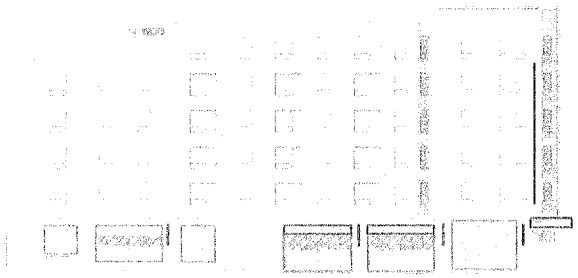


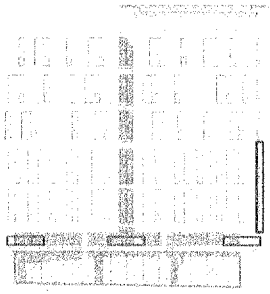

WINDOW GRAPHICS: 40% COVERAGE AND 50% TOTAL LENGTH MAXIMUM



1 PARCEL A SIGNAGE DIAGRAM - FRONTAGE

A 3.42 | 1/16" = 1'-0"





2 PARCEL A SIGNAGE DIAGRAM - 40TH

A 3.42 | 1/16" = 1'-0"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BRIDGE HOUSING

PARCEL A SIGNAGE ELEVATION DIAGRAMS

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|---|---|
| DATE 04.09.2015 | REVISION |
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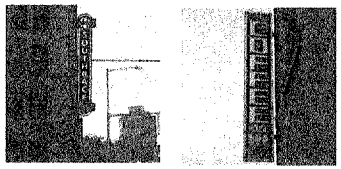
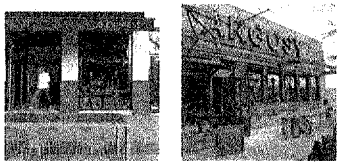
| SCALE As indicated | |

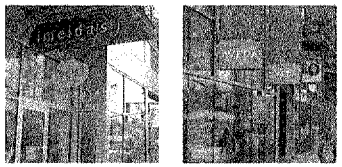
## SIGNAGE KEY



ICONIC SIGNAGE: 28" WIDE x 20' TALL MAXIMUM

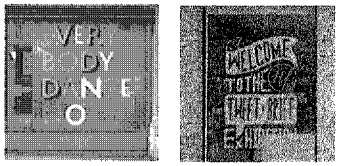


AWNING SIGNAGE: 20" TALL x 20' LONG MAXIMUM

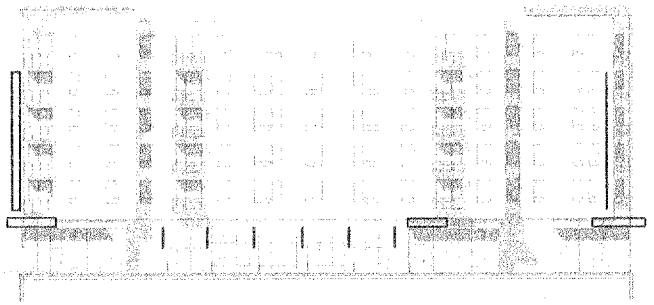


UNDER AWNING SIGNAGE: 24" TALL x 36" WIDE MAXIMUM

BLADE SIGNAGE: 36" TALL x 36" WIDE MAXIMUM

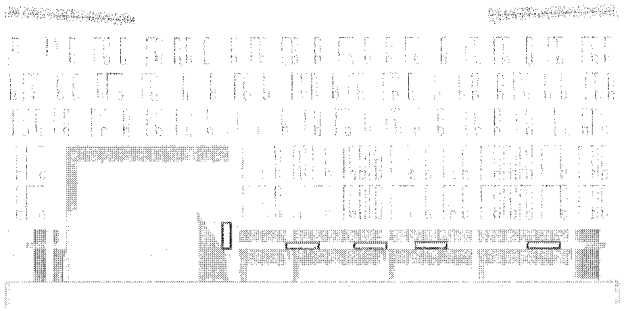


WINDOW GRAPHICS: 40% COVERAGE AND 50% TOTAL LENGTH MAXIMUM



1 PARCEL A SIGNAGE DIAGRAM - MEWS EAST

A 3.43 | 1/16" = 1'-0"



2 PARCEL A SIGNAGE DIAGRAM - MEWS WEST

A 3.43 | 1/16" = 1'-0"


Aakron Mosan

6200 SW MACADAM AVENUE, SUITE 200
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E aaronmosan@aaronmosanarchitects.com

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SEMIAHMOO, CA 92029
T 360.549.1909

SANDIS

GMA
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LANDSCAPE
1585 FOLSOM ST
SAN FRANCISCO, CA 94103
T 415.252.9988


MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A MEWS SIGNAGE ELEVATION DIAGRAMS

FINAL DEVELOPMENT PACKAGE

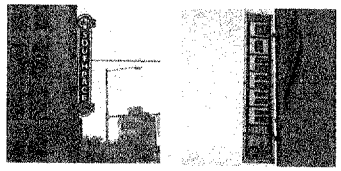
DATE
08.09.2015

PROJECT NUMBER
142010

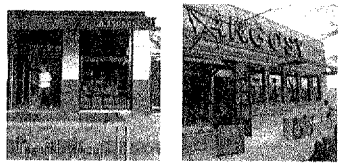
SCALE
As indicated

A 3.43

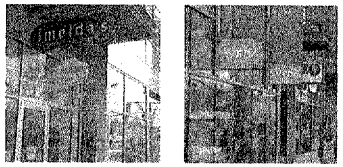
## SIGNAGE KEY



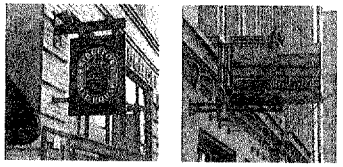
ICONIC SIGNAGE: 28' WIDE x 20' TALL MAXIMUM



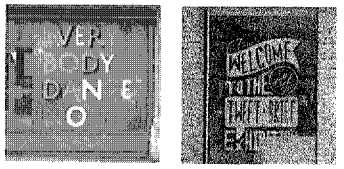
AWNING SIGNAGE: 20' TALL x 20' LONG MAXIMUM



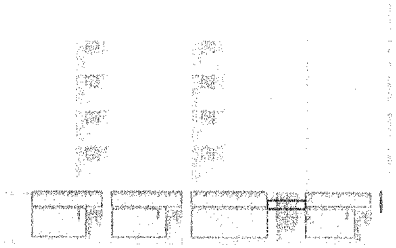
UNDER AWNING SIGNAGE: 24" TALL x 36" WIDE MAXIMUM



BLADE SIGNAGE: 36" TALL x 36" WIDE MAXIMUM

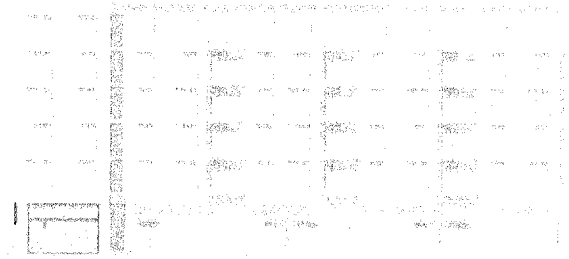



WINDOW GRAPHICS: 40% COVERAGE AND 50% TOTAL LENGTH MAXIMUM



1 PARCEL C1 SIGNAGE DIAGRAM - 39TH

A3.44 | 1/16" = 1'-0"



2 PARCEL C1 SIGNAGE DIAGRAM - INTERNAL

A3.44 | 1/16" = 1'-0"

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3220 SW MACADAM AVENUE, SUITE 100
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T 206.576.1600

a dovetail partnership architects, inc

MAPPING MAP

BUILDINGS
1900 FRUITVALE AVE
BERKELEY, CA 94707
T 510.541.4866

CIVIL

STRUCTURAL

MILLER COMPANY LANDSCAPE

LANDSCAPE
1848 15TH STREET
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MACARTHUR STATION BLOCKS A & C1

40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL C1 SIGNAGE ELEVATION DIAGRAMS

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | |
| 142910 | |
| SCALE | |
| As indicated | A 3.44 |

## LIGHTING FIXTURES SELECTIONS

### PARCEL A WEST BUILDING FIXTURES

RETAIL ENTRY LIGHT



RECESSED LINEAR CANOPY DOWNLIGHT

VERTICAL SURFACE RIBBON FLOODLIGHT

### ALL BUILDINGS

COVE LIGHTING AT ROOF OVERHANGS

### PARCEL A EAST BUILDING FIXTURES

RECESSED CANOPY LIGHT

WALL SCONCE - STREET FRONTAGE

WALL SCONCE - PEDESTRIAN MEWS

RETAIL SIGNAGE LIGHT

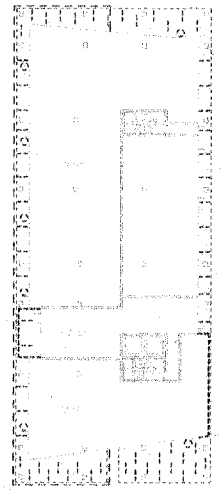
### PARCEL C1 FIXTURES

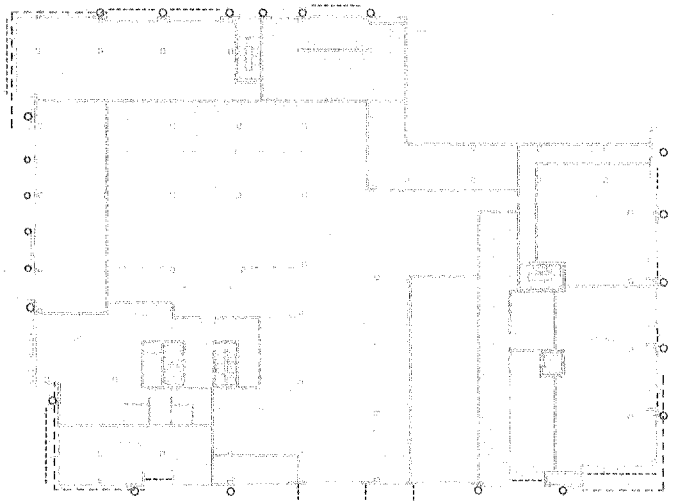
CANOPY DOWNLIGHT

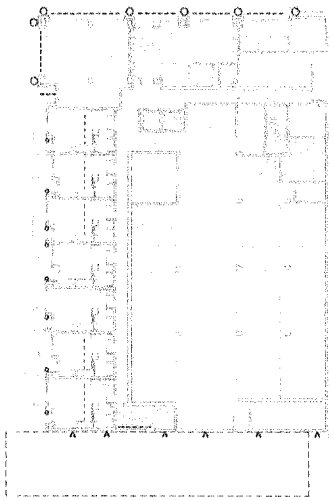
RETAIL WALL SCONCE

RESIDENTIAL WALL SCONCE

EASEMENT AND GARAGE ACCESS DOWNLIGHT







LEVEL 1 LIGHTING DIAGRAM


Ankrom Moisan

TEMPLATE MAP

SANBORN

MEEKER COMPANY LANDSCAPE


MACARTHUR STATION BLOCKS A & C1

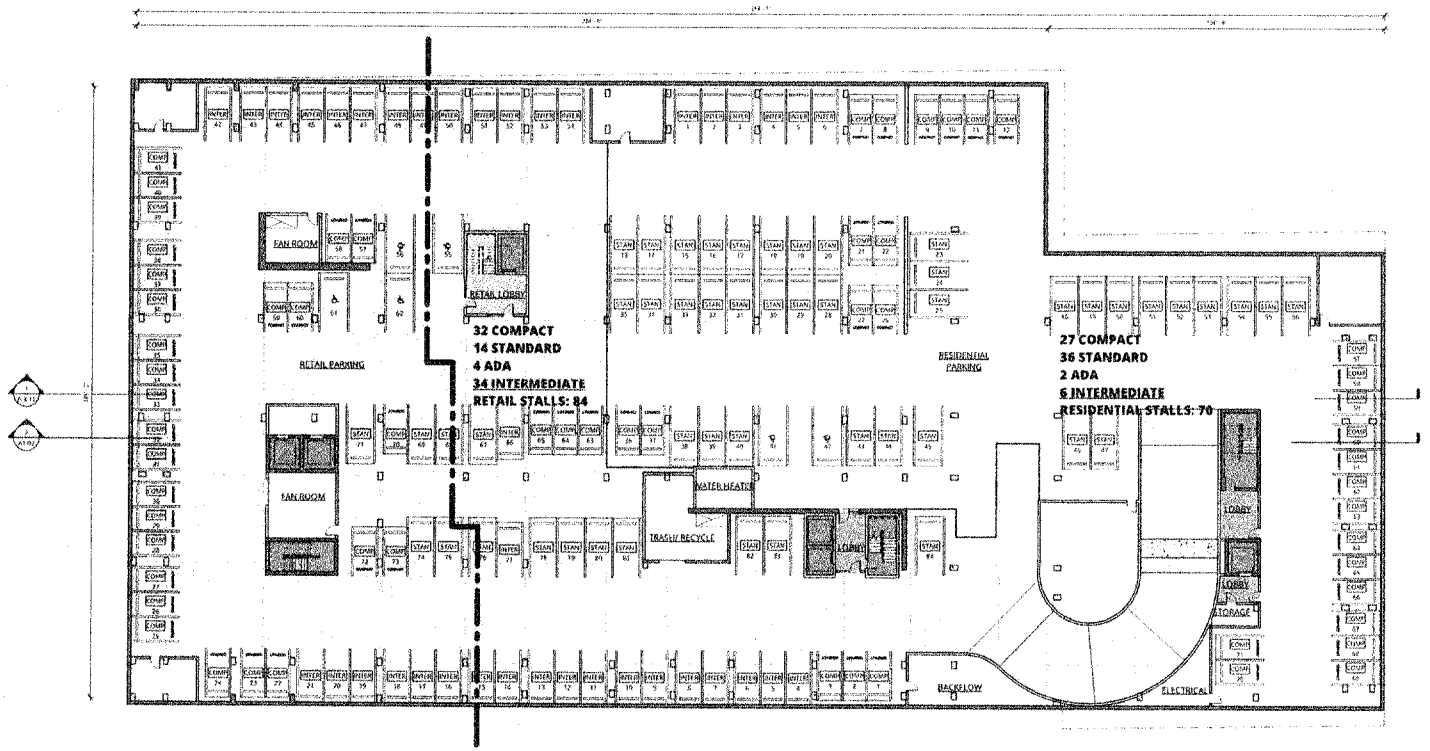
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCELS A AND C1 LIGHTING GUIDELINES

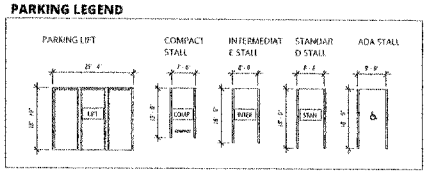
FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | SHEET NUMBER A 3.50 |
| SCALE As indicated | |




1 PARCEL A - PARKING LEVEL 01

**PARKING LEGEND**



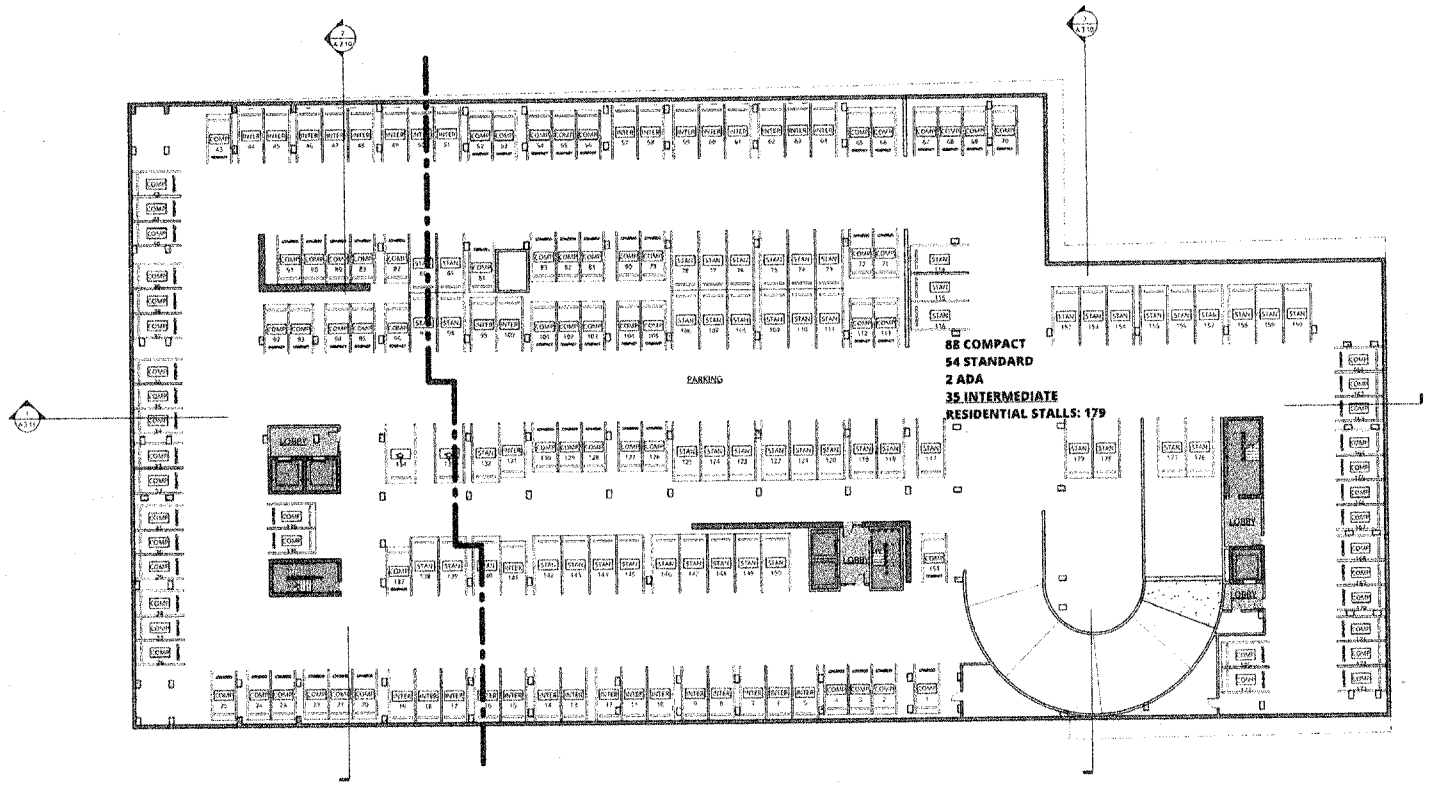

Arkrom Moisan

MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

PARCEL A PARKING ALTERNATE PLAN

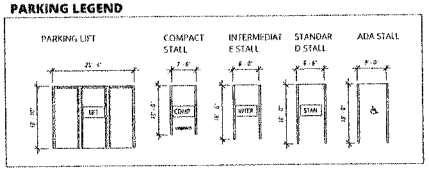
FINAL DEVELOPMENT PACKAGE

DATE 04.09.2015
REVISION
PROJECT NUMBER 1420.13
SCALE As indicated
A 4.0P1




1 PARCEL A - PARKING LEVEL 02

**PARKING LEGEND**




Arkom Molsan

TOPPINGS MAP

CANNONS

MILLER COMPANY LANDSCAPE

MACARTHUR STATION BLOCKS A & C1

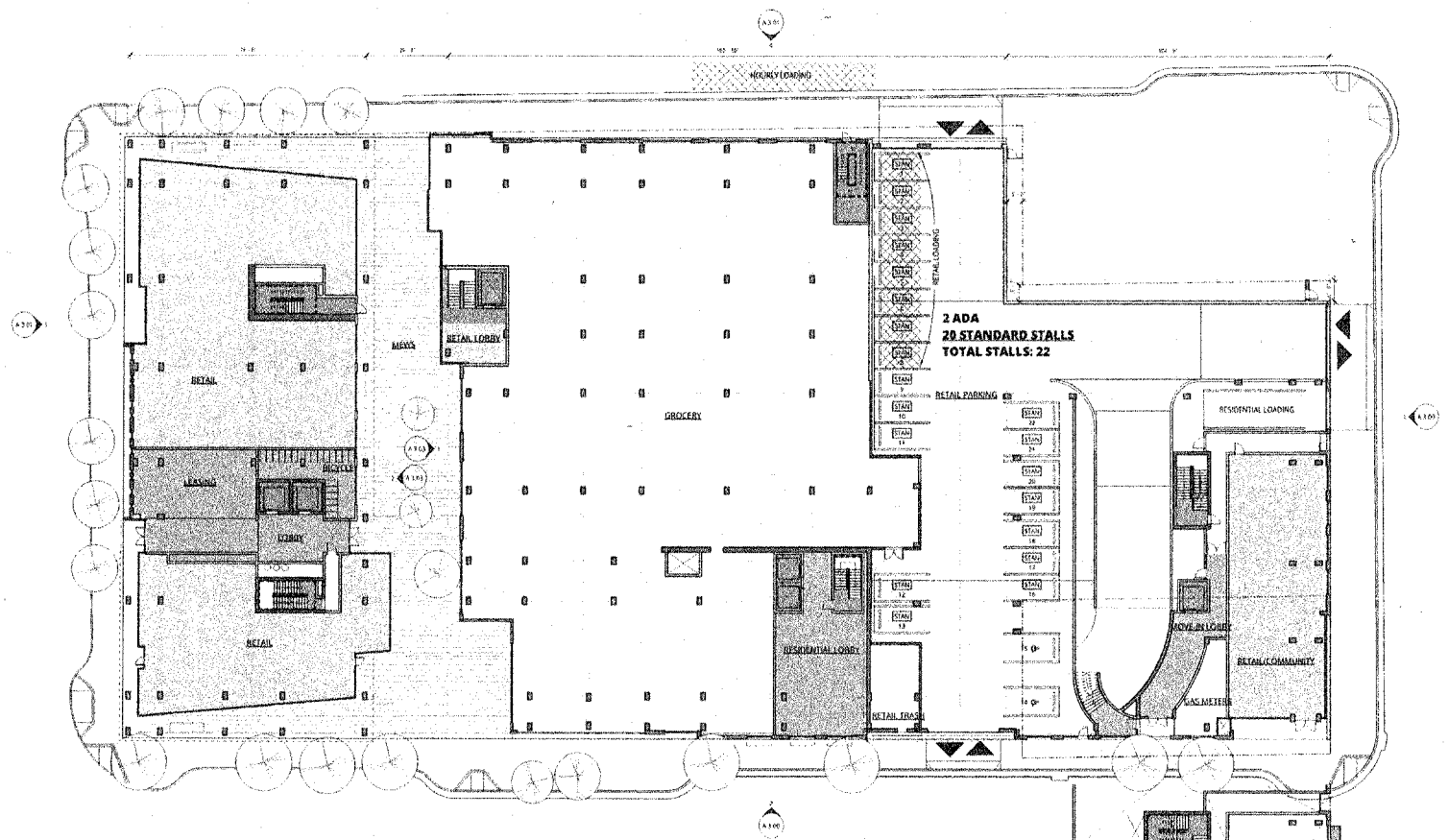
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A PARKING ALTERNATE PLAN

FINAL DEVELOPMENT PACKAGE

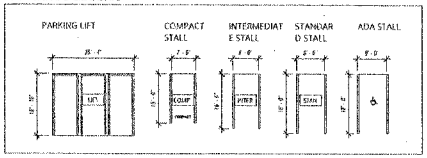
| | |
|---|---|
| DATE | 04.09.2015 |
| PROJECT NUMBER | 142070 |
| SCALE | As indicated |
| SHEET NUMBER | A 4.0P2 |




1 PARCEL A LEVEL 1

2 BLOCK A MEZZ LEVEL

**PARKING LEGEND**




Arkitekt Malsan

TIPTING, MAAS
STRUCTURAL

SANGES
LMB

MILLER COMPANY | LANDSCAPE
LANDSCAPE

MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

PARCEL A GROUND LEVEL ALTERNATE PLAN

FINAL DEVELOPMENT PACKAGE

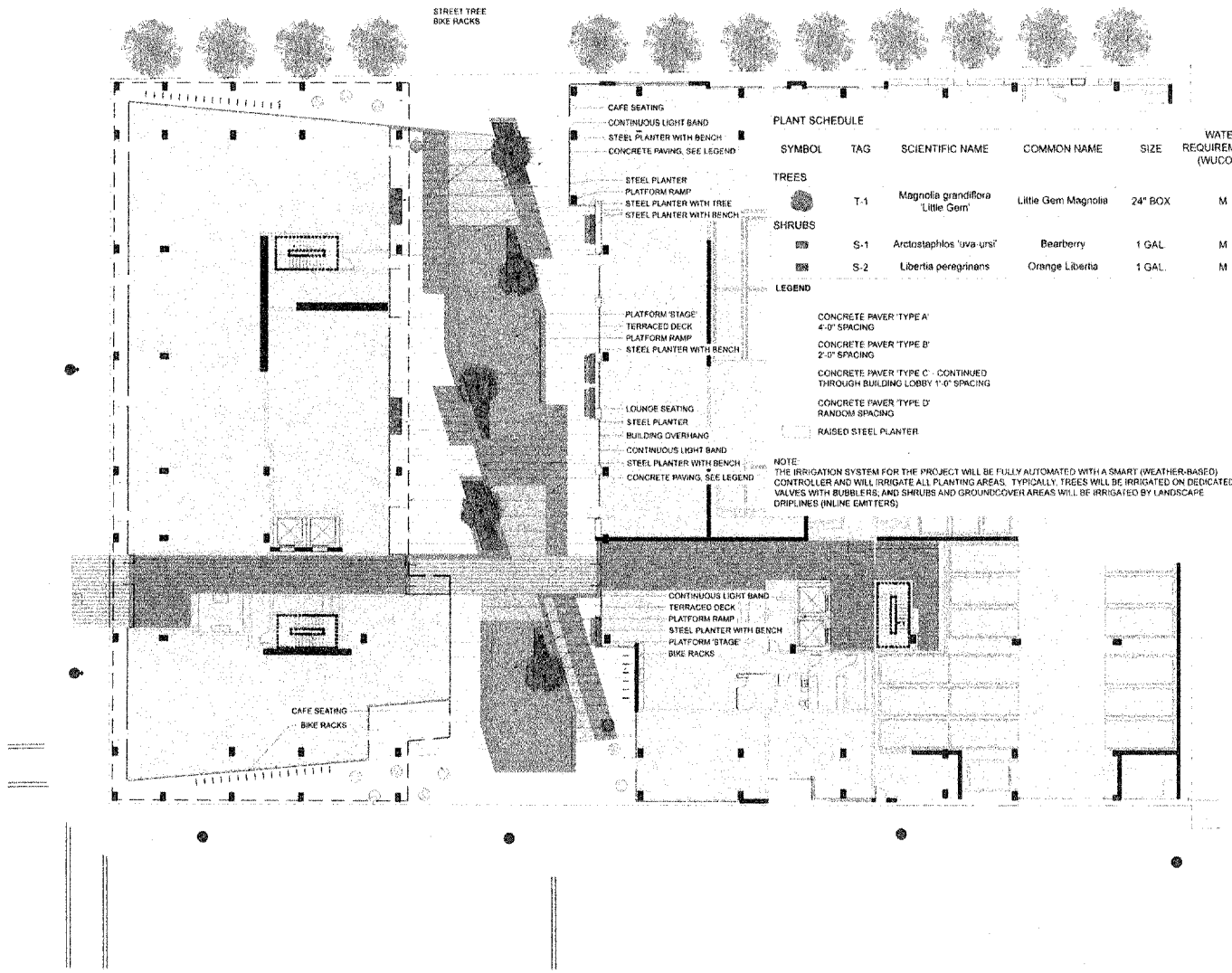
DATE
04.24.2015

REVISION

PROJECT NUMBER
142010

SCALE
As indicated

A 4.01




PLANT SCHEDULE

| SYMBOL | TAG | SCIENTIFIC NAME | COMMON NAME | SIZE | WATER REQUIREMENTS (WUCOLS) | QUANTITY |
|---|---|---|---|---|---|---|
| TREES | | | | | | |
| | T-1 | Magnolia grandiflora 'Little Gem' | Little Gem Magnolia | 24" BOX | M | 5 |
| SHRUBS | | | | | | |
| | S-1 | Arctostaphlos 'uva-ursi' | Bearberry | 1 GAL | M | 6 |
| | S-2 | Libertia peregrinans | Orange Libertia | 1 GAL. | M | 100 |

LEGEND

CONCRETE PAVER 'TYPE A'
4'-0" SPACING

CONCRETE PAVER 'TYPE B'
2'-0" SPACING

CONCRETE PAVER 'TYPE C' - CONTINUED THROUGH BUILDING LOBBY 1'-0" SPACING

CONCRETE PAVER 'TYPE D'
RANDOM SPACING

RAISED STEEL PLANTER

NOTE:
THE IRRIGATION SYSTEM FOR THE PROJECT WILL BE FULLY AUTOMATED WITH A SMART (WEATHER-BASED) CONTROLLER AND WILL IRRIGATE ALL PLANTING AREAS. TYPICALLY, TREES WILL BE IRRIGATED ON DEDICATED VALVES WITH BUBBLERS, AND SHRUBS AND GROUNDCOVER AREAS WILL BE IRRIGATED BY LANDSCAPE DRIPLINES (INLINE EMITTERS)

1 MEWS PLAN
1/8" = 1'-0"

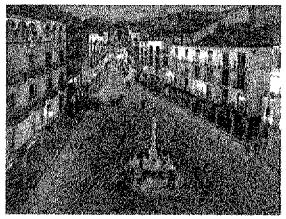
Arkrom Moosa

MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

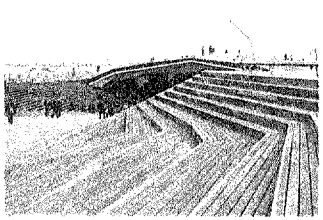
PARCEL A MEWS PLAN

FINAL DEVELOPMENT PACKAGE

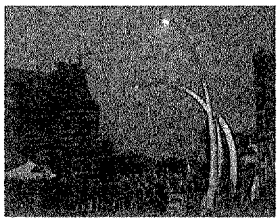
DATE 04.09.2015
PROJECT NUMBER 142010
SCALE 1/2" = 1'-0"
REVISION
L 1.01



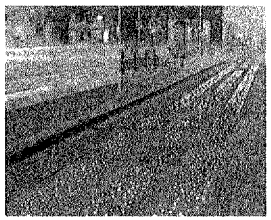
ACCENT LIGHTING IN PAVING



TERRACED DECK



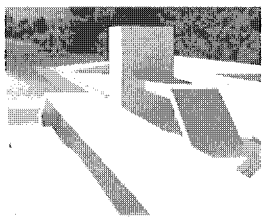
SCULPTURAL LIGHT POLES - HIGH



CONTINUOUS LIGHT 'RIBBON'

CAFE SEATING

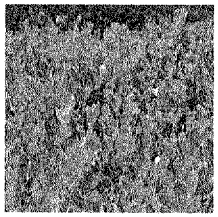
SCULPTURAL LIGHT POLES - LOW



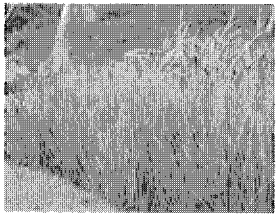
LOUNGE SEATING

## MATERIAL PRECEDENTS

MAGNOLIA GRANDIFLORA 'LITTLE GEM'



ARCTOSTAPHLOS UVA URSI



LIBERTIA PEREGRINANS

## PROPOSED PLANTING

VIEW FROM MEWS

1 MEWS IMAGERY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GMB
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T 510.839.2415

MILLER COMPANY LANDSCAPE

LANDSCAPE
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MACARTHUR STATION BLOCKS A & C1

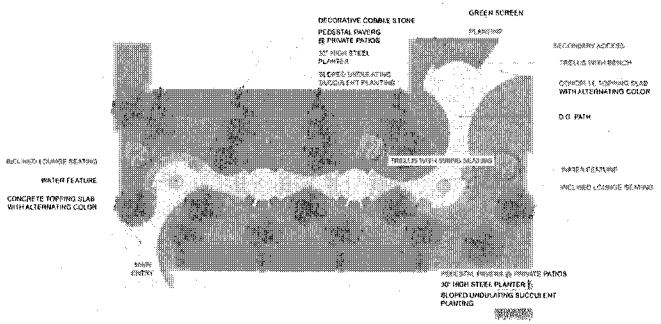
40TH AND TELEGRAPH OAKLAND, CA

BRIDGE HOUSING

PARCEL A MEWS IMAGES

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER 142010 | |
| SCALE 12" = 1'-0" | L1.02 |




PLANT SCHEDULE

| SYMBOL | TAG | SCIENTIFIC NAME | COMMON NAME | SIZE | WATER REQUIREMENTS (WUCOLS) | QUANTITY |
|---|---|---|---|---|---|---|
| TREES | | | | | | |
| | T-1 | Acer palmatum 'Sango Kaku' | Japanese Maple | 24" BOX | M | 2 |
| | T-2 | Dicksonia antarctica | Antarctic Tree Fern | 24" BOX | M | 9 |
| | T-3 | Laburnum x watereri | Blue Tree | 24" BOX | M | 8 |
| SHRUBS | | | | | | |
| | S-1 | Bambusa multiplex 'Golden Goddess' | Golden Goddess Bamboo | 15 GAL | M | 16 |
| | S-2 | Bilbergia nutans | Queens Tears | 1 GAL | M | |
| | S-3 | Clivia miniata | Bush Lily | 1 GAL | M | |
| | S-4 | Fascicularia bicolor subsp. bicolor | Wood Sponge | 5 GAL | M | |
| | S-5 | Hakonechloa macra 'Aureola' | Hakone Grass | 5 GAL | M | |
| | S-6 | Nephrolepis cordifolia | Sword Fern | 5 GAL | M | |

HOST PLANTING

LEGEND

CONCRETE TOPPING SLAB W/ ALTERNATING COLOR

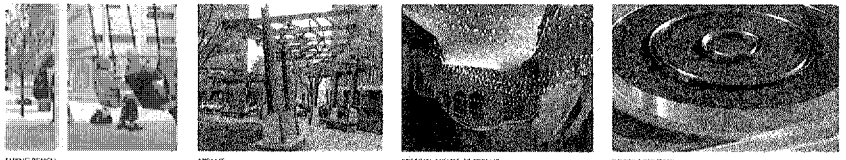
PRIVATE PATIO WITH PEDESTAL PAVERS

STEEL PLANTER WITH SCREEN PLANTING @ PRIVATE PATIOS

6'-0" DECORATIVE COBBLE STONE

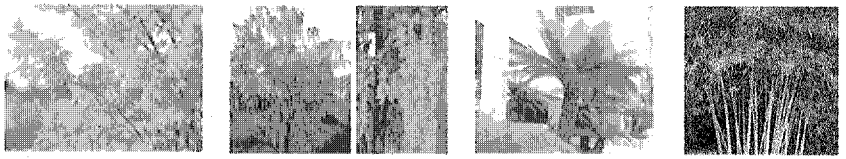
INCLINED LOUNGE SEATING

NOTE:
ALL TREES THAT ARE EITHER ON THE PROJECT WILL BE HAND PLANTED IN DECORATIVE COBBLE AND ALL GROUNDCOVER PLANTING AREAS TYPICALLY THERE ARE NO TREES. ALL TREES ARE WITHIN RAISED PLANTERS AND THEREFORE ARE NOT IMPACTED BY ANY UNDERGROUND UTILITIES.

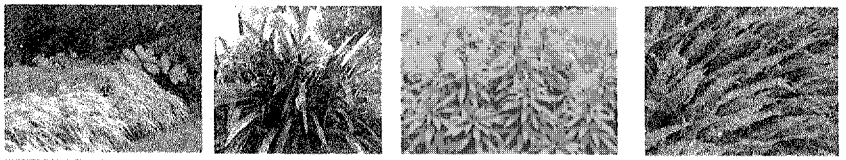


SWING BENCH | TRELLIS | FESTIVE LIGHTS AT TRELLIS | WATER FOUNTAIN

## MATERIAL PRECEDENTS



ACER PALMATUM 'SANGO KAKU' | LABURNUM X WATERERI | DICKSONIA ANTARCTICA | BAMBUSA GOLDEN GODDESS



HAKONECHLOA MACRA 'AUREOLA' | BILLBERGIA NUTANS / CLIVIA MINIATA | EUPHORBIA AMYGDALOIDES 'PURPUREA' & LASH | NEPHROLEPIS CORDIFOLIA

## PROPOSED PLANTING

1 BLOCK A COURTYARD
L1.10 1/2" = 1'-0"


Ankrom Moisan

6720 SW MACADAM AVENUE, SUITE 450
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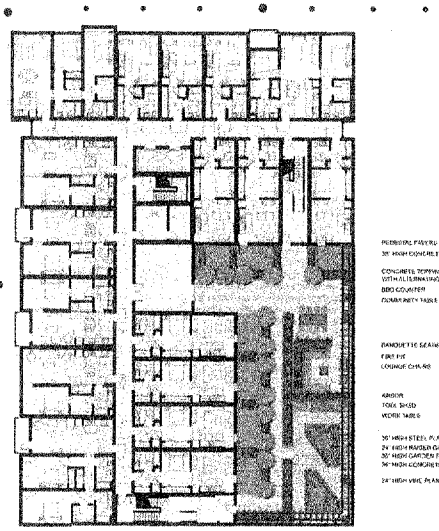
LANDSCAPE
ADDRESS
CITY, STATE ZIP
T PHONE


MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

PARCEL A COURTYARD PLAN & IMAGERY

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.04.2019 | |
| PROJECT NUMBER | |
| 142010 | |
| SCALE | L1.10 |
| 1/2" = 1'-0" | |



PERVIOUS PAVERS @ PRIVATE PATIOS
36" HIGH CONCRETE PLANTER

CONCRETE TOPPING SLAB WITH ALL RUNNING COLOR
BBQ COUNTER
COMMUNITY TABLE

BANQUETTE SEATING
FIRE PIT
LOUNGE CHAIRS

ARBOR
TOKA SHADE
WORK TABLES

36" HIGH STEEL PLANTER
24" HIGH RAISED GARDEN BED
36" HIGH GARDEN FENCE
36" HIGH CONCRETE PLANTER

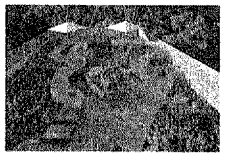
24" HIGH VINE PLANTING BOXES

PLANT SCHEDULE

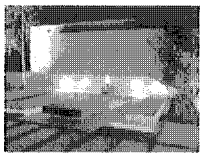
| SYMBOL | TAG | SCIENTIFIC NAME | COMMON NAME | SIZE | WATER REQUIREMENTS (VERY LOW, LOW, MOD, HIGH) | QUANTITY |
|---|---|---|---|---|---|---|
| TREES | | | | | | |
| | T-1 | Citrus meyeri 'Improved Meyer' | Meyer Lemon Tree | 24" BOX | M | 6 |
| SHRUBS | | | | | | |
| | S-1 | Arbutus unedo | Strawberry Tree | 5 GAL | M | - |
| | S-2 | Carex tumulicola | Foothill Sedge | 1 GAL | M | - |
| | S-3 | Lavandula stoechas | French Lavender | 5 GAL | M | - |
| | S-4 | Rosmarinus officinalis 'Prostratus' | Creeping Rosemary | 5 GAL | M | - |
| | S-5 | Salvanda 'Bossier Gallica' | Cretan Sunshine | 5 GAL | M | - |
| | S-6 | Teucrium lucidrys 'Prostratus' | Germander | 5 GAL | M | - |
| GROUNDCOVERS | | | | | | |
| | GC-1 | Fragaria chiloensis | Beach Strawberry | 5 GAL | M | - |
| VINES | | | | | | |
| | V-1 | Distictis buccinatoria | Red Trumpet Vine | 5 GAL | M | - |

LEGEND

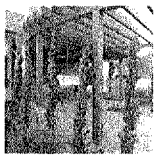
NOTE
THE IRRIGATION SYSTEM FOR THIS PROJECT WILL BE FULLY AUTOMATIC WITH SMART WATER BASED CONTROLLER AND ALL ORIGINAL PLANTING AREAS, INCLUDING TREES, WILL BE IRRIGATED. PROPOSED PLANTS, WITH SIMILAR WATER AND SUNLIGHT REQUIREMENTS, WILL BE GROUPED IN LANDSCAPE DISPLINES, WHERE POSSIBLE.



RAISED GARDEN BED



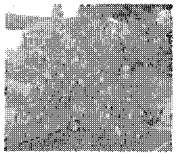
BANQUETTE SEATING



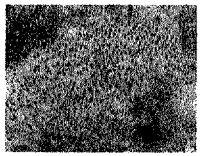
TRELLIS

BBQ COUNTER

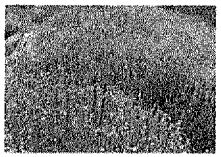
## MATERIAL PRECEDENTS



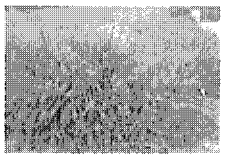
CITRUS MEYERI 'IMPROVED MEYER'



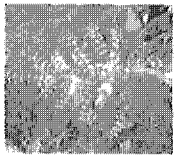
LAVANDULA STOECHAS



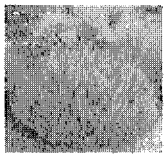
SANTOLINA ROSMARINIFACEUS



ROSMARINUS OFFICINALIS PROSTRATA

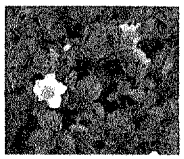


ALOYSIA CITRIODORA



TEUCRIUM LUCIDRYS PROSTRATA

CAREX TESTACEA



FRAGARIA CHILOENSIS

DISTICTIS BUCCINATORIA

## PROPOSED PLANTING

1 BLOCK C1 COURTYARD
1 1:20 | 12" = 1'-0"


Ankrom Moisan

5720 SW MACADAM AVENUE, SUITE 220
PORTLAND, OR 97239
T 503 245 7100

111 SECOND AVENUE, SUITE 500
SEATTLE, WA 98104
T 206 576 1600

© ANKROM MOISAN ARCHITECTS INC

KPFF CONSULTING ENGINEERS
STRUCTURAL
1300 SW FIFTH AVE
PORTLAND, OR 97201
T 503 227 3251

SANDIS
CIVIL
2811 EXPOSITION WAY
SACRAMENTO, CA 95815
T 916 568 1920

MILLER COMPANY LANDSCAPE ARCHITECTS
LANDSCAPE
1970 FOLSOM ST
SAN FRANCISCO, CA 94103
T 415 252 0788


MACARTHUR STATION BLOCKS A & C1
40TH AND TELEGRAPH OAKLAND, CA
BRIDGE HOUSING

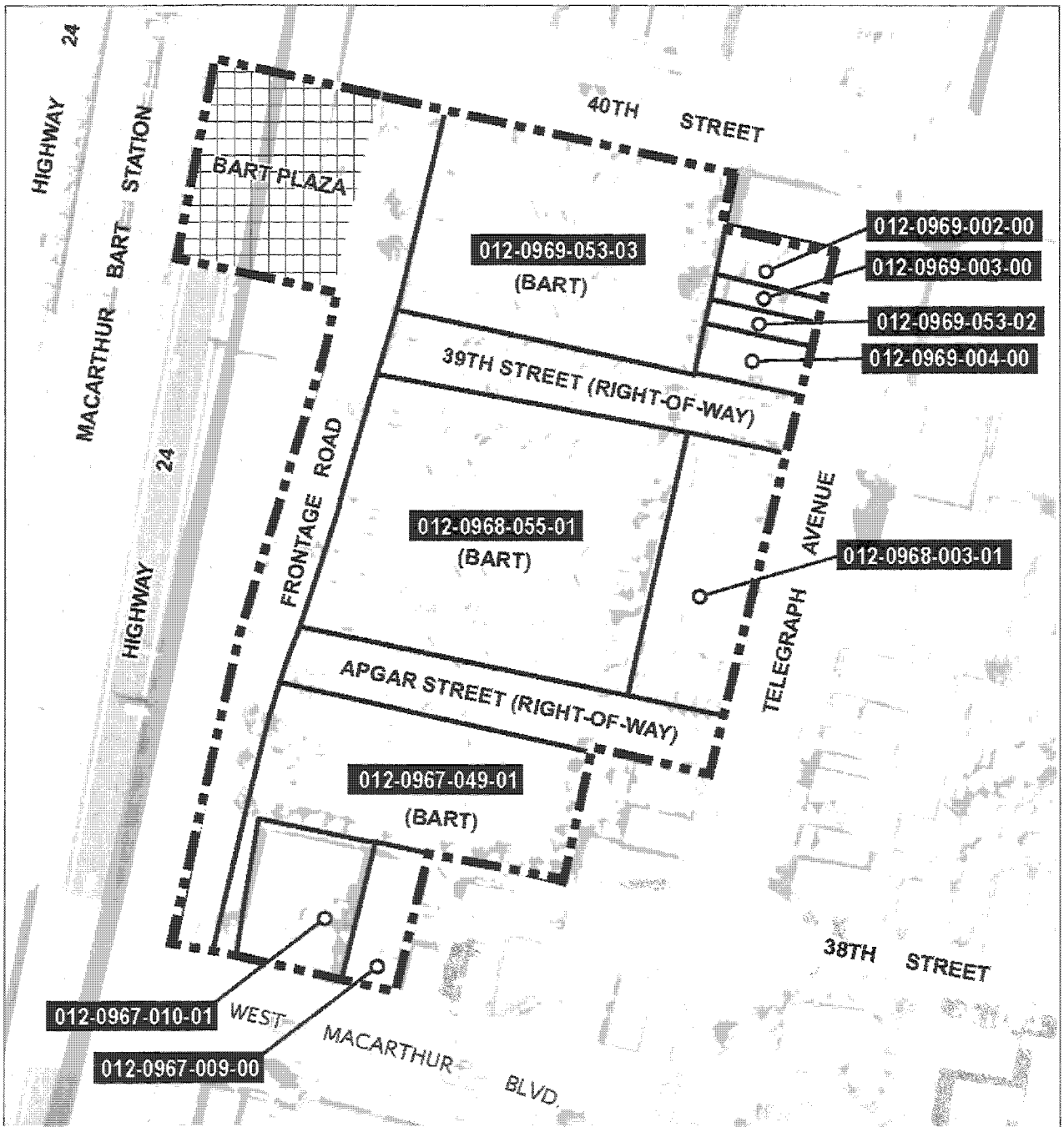
PARCEL C1
COURTYARD PLAN & IMAGERY

FINAL DEVELOPMENT PACKAGE

| DATE | REVISION |
|---|---|
| 04.09.2015 | |
| PROJECT NUMBER | |
| 142010 | |
| SCALE | |
| 12" = 1'-0" | L 1.20 |

**Case File Number: ER06-0004, RZ06-0059, PUD06-0058** **June 4, 2008**

| | |
|---|---|
| **Location:** | **Multiple parcels immediately adjacent to the MacArthur BART Station; on the west side of Telegraph Avenue Street between 40th Street and West MacArthur Boulevard (see map on reverse and Table 2 below)** |
| **Assessors Parcel Numbers:** | 012-0969-053-03, 012-0968-055-01, 012-0967-049-01, 012-0969-002-00, 012-0969-003-00, 012-0969-053-02, 012-0969-004-00, 012-0968-003-01, 012-0967-009-00 & 012-0967-010-00 |
| **Proposal:** | Demolition of existing structures and construction of the MacArthur Transit Village project: 5 new buildings containing 624 residential units, 42,500 square feet of commercial space (including 7,000 square feet of live/work and flex space), 5,000 square feet of child care/community space, a 300-space replacement parking garage for BART patrons, and approximately 680 parking spaces for the residential and commercial units (residential parking provided at a 1:1 ratio, 26 commercial spaces in building A parking garage and on-street parking spaces). |
| **Applicant:** | MacArthur Transit Community Partners (MTCP) |
| **Contact Person** | Joseph McCarthy (510) 273-2009 |
| **Owner:** | Multiple property owners |
| **Planning Permits Required:** | Rezone (from C-28, Commercial Shopping Zone and R-70, High Density Residential Zone to S-15, Transit-Oriented Development Zone), Zoning Text Amendment relating to S-15 Open Space Requirements, Planned Unit Development (PUD) Permit, Design Review, Conditional Use Permit (CUP) to exceed parking requirements for residential uses and to allow off-street parking to serve non-residential land uses, and Tree Removal Permits for removal of 67 protected trees. |
| **General Plan:** | Neighborhood Center Mixed Use |
| **Zoning:** | C-28 (parcels on Telegraph Avenue and West MacArthur Boulevard), R-70 (BART parking lot parcels) and S-18 Mediated Design Review Combining Zone (entire site) |
| **Environmental Determination:** | A Draft Environmental Impact Report (EIR) was published on January 31, 2008; Final EIR published on May 23, 2008 |
| **Historic Status:** | No CEQA historic resources are affected by the project; none of the existing buildings on-site are considered CEQA historic resources and none of the buildings on the project site are within, or are contributors to, a historic district. |
| **Service Delivery District:** | Service District 2 |
| **City Council District:** | 1 |
| **Date Filed:** | October 5, 2007 (revised submittal; original submittal February 5, 2006) |
| **Status:** | Pending. |
| **Action to be Taken:** | Take public testimony and issue decisions/recommendations. |
| **Staff Recommendation:** | Approval subject to attached findings and conditions of approval |
| **Finality of Decision:** | Favorable (for approval) decisions/recommendations are automatically forwarded to the City Council for hearing and action. Unfavorable (for denial) decisions may be appealed to the City Council within ten (10) days. |
| **For Further Information:** | Contact the case planner, **Charity Wagner**, at **(415) 730-6718** or by e-mail at **clwagner@rrmdesign.com** |


HIGHWAY 24
MACARTHUR BART STATION
BART PLAZA
40TH STREET
012-0969-053-03
(BART)
012-0969-002-00
012-0969-003-00
012-0969-053-02
012-0969-004-00
39TH STREET (RIGHT-OF-WAY)
FRONTAGE ROAD
012-0968-055-01
(BART)
012-0968-003-01
TELEGRAPH AVENUE
HIGHWAY 24
APGAR STREET (RIGHT-OF-WAY)
012-0967-049-01
(BART)
38TH STREET
012-0967-010-01
012-0967-009-00
WEST MACARTHUR BLVD.

**SUMMARY**

The project applicant, MacArthur Transit Community Partners (MTCP) proposes to demolish the existing BART surface parking lots and all existing buildings within the project site to allow for the construction of a new mixed-use, transit village development project. The transit village includes five new buildings that would accommodate 624 residential units, 42,500 square feet of neighborhood-serving retail and commercial uses (including 7,000 square feet of live/work units) a 5,000 square feet community center use and 300-space parking garage for BART patrons. The project requires certification of the MacArthur Transit Village Final EIR and approval of rezoning, text amendment to the S-15 Zone, a planned unit development (PUD) permit, a major conditional use permit, and design review.

The purpose of this meeting is to consider the application submitted by MTCP to the City in October 5, 2007 for the project summarized above. Based on public comments, the results of numerous public meetings with the community, the Design Review Committee and the Planning Commission hearings, staff has now prepared recommended actions for the Planning Commission to review and consider. These actions are listed below:

(1) Certification of the Final Environmental Report including the adoption of required findings under the California Environmental Quality Act and the approval of the Mitigation Monitoring and Reporting Program.

(2) Amendment to the S-15, Transit Oriented Development Zone. This is a staff-initiated Zoning Text Amendment to modify the minimum open space requirement in the S-15 Zone.

(3) Rezoning of the project site from Commercial Shopping (C-28), High Density Residential (R-70) and Mediated Design Review Overlay (S-18) to Transit Oriented Development (S-15).

(4) Approval of the Planned Unit Development Permit to allow development of more than 100,000 sq.ft. at a BART station. The PUD Permit also includes approval of the Preliminary Development Plan dated May 28, 2008, and the MacArthur Transit Village Design Guidelines.

(5) Approval of a Major Conditional Use Permit to allow the proposed project to exceed the S-15 parking requirements for residential land uses and to provide off-street parking for non-residential land uses.

(6) Approval of Preliminary Design Review of the Preliminary Development Plan.

Staff recommends approval of the project subject to the attached findings and conditions. The Commission's approval of these items is considered to be a recommendation to the City Council; if approved, the decisions/recommendations of the Planning Commission would be automatically forwarded to the City Council and Redevelopment Agency for hearing and action. These actions are currently scheduled for review by the CED Committee on June 24, 2008 and it is expected that the City Council will hold public hearings to consider the items on July 1, 2008 (first reading of ordinance) and July 15, 2008 (second reading of ordinance).

**BACKGROUND**

Since 1993, the City has been working with BART and the MacArthur BART Citizens Planning Committee ("CPC"), comprised of community residents and representatives of neighborhood organizations, in a planning process for the development of the MacArthur Transit Village. After the previously selected project developer, Creative Housing Associates, failed to perform under their Exclusive Negotiating Agreement ("ENA") with the Agency in 2003, the Agency and BART selected a new development team for this project in April 2004 through a competitive Request for Proposals

process. This development team, MacArthur Transit Community Partners, LLC (MTCP), is a limited liability company that consists of a partnership between McGrath Properties (formerly known as Aegis Equity Partners) and BUILD (BRIDGE Urban Infill Land Development, LLC).

The MacArthur BART Citizen's Planning Committee (CPC) was created to assist the City and BART in the development of the MacArthur BART station. The CPC is made up of community members that live in the neighborhood surrounding the BART Station. Since being chosen in April 2004, MacArthur Transit Community Partners (MTCP) has met regularly with the MacArthur BART CPC to discuss and receive comments on the development.

In early February 2006, MTCP submitted a development application to construct a mixed-use transit village including residential and commercial development with the majority of residential units located within two 20-to 22-story towers. Upon review of the application, it was determined that an Environmental Impact Report (EIR) was required. The City issued a Notice of Preparation (NOP) on February 16, 2006, for preparation of an EIR for the project including the tower development. As a result of community input, changes in market conditions and construction feasibility, MTCP re-submitted their development application in 2007 showing removal of the towers within the project. Upon review of the revised application materials, the City issued a revised NOP on June 13, 2007. Following is a partial list of both public meetings and community meetings since MTCP was selected by the Redevelopment Agency in 2004.

- November 15, 2004, MacArthur BART Citizen's Planning Committee
- May 18, 2005, MacArthur BART Citizen's Planning Committee
- November 9, 2005, MacArthur BART Citizen's Planning Committee
- February 16, 2006, Mosswood Park Neighbors
- February 22, 2006, MacArthur BART Citizen's Planning Committee
- March 15, 2006, Planning Commission EIR Scoping Meeting
- September 26, 2006, 38th Street Neighbors
- October 5, 2006, MacArthur BART Citizen's Planning Committee
- September 11, 2007, Mosswood Park Neighbors
- September 12, 2007, Beebe Memorial Church Members
- November 1, 2007, MacArthur/Broadway/San Pablo Redevelopment Project Area Committee
- November 5, 2007, 38th Street Neighbors
- November 12, 2007, West Street Watch
- December 12, 2007: Design Review Committee (review and comment on PDP)
- February 7, 2008, MacArthur BART Citizen's Planning Committee
- March 5, 2008, Planning Commission Meeting to take comments on Draft EIR
- April 17, 2008, Bicycle and Pedestrian Advisory Committee
- April 30, 2008, Planning Commission Workshop on community concerns

At the Planning Commission work shop on April 30, 2008, staff provided a brief overview of the requested project approval key community concerns (see Attachment B for the April 30, 2008 workshop staff report); the project sponsor gave a detailed overview of the project and walked the Commission through the project plans and vision for the project; and following presentations from staff and the project sponsor, six individuals provided public testimony. The majority of the public speakers were in favor of the proposed project, but several speakers expressed concerns with regard to proposed reduction in BART parking. In addition to parking, which was the most discussed topic at the workshop, the Commission and public speakers raised the following discussion topics:

- Support for increased density of residential development
- Support for increased bike access and bike parking
- Support for project expressed on behalf of Greenbelt Alliance
- Support for a strategy to encourage occupancy of ground floor commercial space at the existing building of 40th and Telegraph
- Appreciation of height adjacent to existing building at 40th and Telegraph and overall height of retail spaces
- Support for increased accessibility beyond bikes and pedestrians (i.e., increased Emery-Go-Round services)
- Concern regarding congestion of vehicles and bike safety at the intersection of West MacArthur, Frontage Road and BART Garage
- Concern for adequate parking to support proposed commercial uses, and existing commercial uses
- Concern of perceived success for transit villages

## PROPERTY DESCRIPTION

The project site is located in North Oakland, within the area bounded by 40th Street, Telegraph Avenue, West MacArthur Boulevard, and State Route 24. The project site includes the BART parking lot, the BART plaza, Frontage Road between West MacArthur Boulevard and 40th Street, and seven privately owned parcels. The project area includes the majority of the block on Telegraph Avenue between West MacArthur Boulevard and 40th Street; however, several parcels within this block are not included within the project site (see map on page 2). Table 1 shows the parcels within the project site.

**Table 1: Project Site Parcels**

| Address | Assessor Parcel Number | Current Use | Acreage (Acres) |
|---|---|---|---|
| 532 39th Street | 012-0969-053-03 | BART Parking | 1.61 |
| 516 Apgar Street | 012-0968-055-01 | BART Parking | 2.07 |
| 515 Apgar Street | 012-0967-049-01 | BART Parking | 1.12 |
| 3921 Telegraph Avenue | 012-0969-002-00 | Braids By Betty | 0.15 |
| 3915 Telegraph Avenue | 012-0969-003-00 | Chef Yu Restaurant | 0.06 |
| 3911 Telegraph Avenue | 012-0969-053-02 | Abyssinia Market | 0.06 |
| 3901 Telegraph Avenue | 012-0969-004-00 | Lee's Auto | 0.11 |
| 3875 Telegraph Avenue | 012-0968-003-01 | Medical Offices | 0.61 |
| 526 W. MacArthur Boulevard | 012-0967-009-00 | Hotel | 0.20 |
| 544 W. MacArthur Boulevard | 012-0967-010-00 | Hotel | 0.17 |
| 39th Street, between Telegraph Ave. and Frontage Rd. | -- | BART Parking | 0.62 |
| Apgar Street, between Telegraph Ave. and Frontage Rd. | -- | BART Parking | 0.60 |
| | | **Total Acres** | **7.38** |

There are a variety of land uses surrounding the site. Beebee Memorial Cathedral, commercial, and residential uses are located east across Telegraph Avenue from the project site. To the north of the project site, across 40th Street, are residential and commercial uses. Residential and commercial uses also extend further north of the project site along Telegraph Avenue. State Route 24, and the BART tracks, are located immediately west of the project site. A residential neighborhood that includes a mix of densities is located further west. The State Route 24/Interstate 580 interchange is located southwest of the project site. Commercial uses are located to the south of the project site, across West MacArthur Boulevard.

## PROJECT DESCRIPTION

The proposed project would involve demolition of the existing structures and the construction of five buildings (labeled A-E on the project drawings, see Exhibit F) on the project site, including three mixed-use buildings with ground floor retail spaces and residential units on upper floors, one entirely residential building and one parking garage. The proposed project also includes construction of two new streets (Village Drive, a new public street and Internal Street, a new private street) and maintenance of the Frontage Road within the project area. Village Drive and Internal Street would provide access to new structures within the project, and increased access to the BART station.

Increased and enhanced access to the BART station is a key component of the proposed project. Village Drive, the main pedestrian and vehicular access to the project, is envisioned as a lively pedestrian street with shops and service uses that include outdoor displays and seating areas. The project also includes a new public plaza immediately east of the BART plaza and fare gates. The transit village plaza would include outdoor seating, landscaping, and other activity to provide a sense of arrival to the project, especially for BART patrons as they enter and exit the station. Internal Street, which provides access to a majority of the residential units, is envisioned as a neighborhood street. Residential units would front onto Internal Street with stoops and front porches.

Table 2 and the text below provide a summary of the proposed buildings and uses within the project. The project drawings for the proposal are attached to this report (see Exhibit F).

**Table 2: Summary of Proposed Development**

| Building | Residential Units/Affordable Units | Live/Work Units | Retail SF[b] | Community SF | Building Height (Feet) | Number of Stories | Parking Spaces |
|---|---|---|---|---|---|---|---|
| A | 213/7 | 3 | 23,500 | -- | 50-85 | 4/6 | 242 |
| B | 132/5 | 2 | 5,000 | -- | 55-80 | 6 | 134 |
| C | 189/6 | 3 | 9,000 | 5,000 | 55-70 | 5/6 | 189 |
| D | 90/90 | -- | -- | -- | 45-65 | 5 | 91 |
| E | -- | -- | 5,000 | -- | 68 | 6 | 324 |
| **Total** | **624/108** | **8** | **42,500[1]** | **5,000** | -- | -- | **980[2]** |

[1] Retail area shown in table includes square footage of live/work units.
[2] Parking shown in table does not include the proposed on-street parking spaces.

**Building A.** Building A ranges in height from a four- to six-story building and is located in the northeast corner of the project site with frontage on 40th Street, Telegraph Avenue, and Village Drive. Building A is a mixed-use building with 23,500 square feet of commercial space located on the ground floor and 213 for-sale market-rate condominiums, and 7 for-sale below-market rate condominiums on the upper floors. Of the 23,500 square feet of commercial space, 3,000 square feet, would be "flex spaces" on Village Drive and 3,000 square feet of "flex space" on 40th Street. Flex spaces may be occupied by live/work

units, retail uses and/or community space for residents (i.e., gym or recreation room) in the buildings in which the flex space is located. Parking for Building A is provided in a two-level parking garage. The lower level of the parking garage in entirely below grade and the second level is above grade at the street level. The parking at the street level is wrapped by commercial area so the parking is not visible from the street. Access to the condominium units is provided by internal courtyards and vehicular access to the parking garage under Building A is provided by a driveway on Village Drive.

**Building B**. Building B is a six-story building located along the western edge of project site, south of Village Drive and adjacent to the shuttle access road with building frontage on Village Drive, Entry Drive and the proposed north/south internal street. Building B is a mixed-use building with 3,500 square feet of commercial space and 1,500 square feet of "flex space" on the ground floor, 132 for-sale market-rate condominiums and 5 below-market rate for-sale condominium units located throughout on all floors. Residential condominium units would be located on the upper floors of Building B and on the ground floor adjacent to the internal street. Parking for Building B is provided in a two-level parking garage. The lower level of the parking garage is entirely below grade and the second level is above grade at the street level. The parking provided at street level is wrapped by commercial area and residential units so the parking is not visible from Village Drive or Internal Street. The street level parking area is visible from Frontage Road, but will be screened by landscaping. Access to the condominium units is provided by internal courtyards and individual unit entrances that front onto the internal street. Front entrances with stoops and small porches are envisioned along the internal street frontage of Building B. Vehicular access to the parking garage under Building B is provided by a driveway on the internal street.

**Building C**. Building C is a five- and six-story building located along the eastern edge of the project site at the southwest corner of Telegraph Avenue and Village Drive. Building C is a mixed-use building with 6,500 square feet of commercial space and 2,500 square feet of "flex space" on the ground floor, 189 market rate condominiums and 5 below-market rate residential condominium units on the upper floors. Building C also includes 5,000 square feet of community-serving space located on the ground floor. The 5,000 square feet of community space is accompanied by a 2,000 square foot outdoor play area as the applicant is currently considering that a private childcare provider may occupy the community space. Residential condominium units would be located on the upper floors of Building C and on the ground floor adjacent to the internal street. Access to the condominium units is provided by internal courtyards and individual unit entrances that front onto the internal street. Parking for Building C is provided in a two-level parking garage. The lower level of the parking garage in entirely below grade and the second level is above grade at the street level. The parking provided at street level is wrapped by commercial area and residential units so the parking is not visible from the street. Vehicular access to the parking garage under Building C is provided by two driveways on the internal street.

**Building D**. Building D is a five-story building (with a below-podium parking garage) located along the western edge of the project site (directly south of Building B) with building frontage on the internal street and the Frontage Road. Building D is an entirely residential building with 90 for-rent, below-market-rate (affordable) apartment units. Building D would include a community room with a kitchen and shared laundry facilities for use by apartment tenants. Parking for Building D is provided in a single-level, below-grade parking garage. Access to the apartment units would be provided via internal courtyards and vehicular access to the parking garage under Building D is provided by a driveway on the internal street.

**Building E**. Building E is a six-story parking garage located at the southwest corner of the project site with frontage on West MacArthur Boulevard and Entry Drive. The garage would accommodate 300 parking spaces for BART patrons and the ground floor would include 5,000 square feet of commercial space. The commercial space would front onto West MacArthur Boulevard. Pedestrian access to Building E would be located on West MacArthur Boulevard, Entry Drive and the internal street. Vehicular access to the Building E would be provided by a two-way driveway on Entry Road which vehicles would access via West MacArthur Boulevard.

**Site Access and Circulation.** Several circulation improvements are proposed for the project site. Three internal roadways would be constructed as part of the proposed project: Frontage Road, Village Drive, and an internal north/south street off of Village Drive. New sidewalks, bicycle paths, and streetscape improvements would be constructed.

*Frontage Road.* The existing Frontage Road would be replaced, but remain in the same location as the existing Frontage Road, which is parallel to State Route 24, it extends from 40th Street to West MacArthur Boulevard. Frontage Road is a public street. Frontage Road is a two-way road for the segments between 40th Street and Village Drive and between West MacArthur Boulevard and the Parking Garage driveway. South of the Frontage Road/Village Drive intersection, and before the Parking Garage, vehicular access would be limited to emergency vehicle access, southbound shuttle operators, and building services. The majority of traffic at this section of Frontage Road would be shuttles traveling southbound between 40th Street and West MacArthur Boulevard. Additionally, the intersection of Frontage Road and West MacArthur Boulevard provides access to and from the Parking Garage (Building E) and vehicles can also access Frontage Road at the Village Drive intersection to exit onto 40th Street. Sidewalks would be provided along the west side of Frontage Road and bicycle lanes would be included on Frontage Road.

*Village Drive.* Village Drive would be a two-way, two-lane road between Telegraph Avenue and the Frontage Road. Village Drive would be a public street. It is anticipated that Village Drive would be open to vehicular traffic and pedestrian, as well as patrons who use kiss-and-ride. On-street parking and kiss-and-ride loading and unloading areas would be provided on Village Drive. Village Drive also includes large sidewalks because it is envisioned as the main pedestrian connection through the project site. Ground floor commercial and live-work units in Buildings A, B and C would be oriented to face Village Drive with pedestrian scale retail uses with outdoor seating areas and retail displays at the transit village plaza (across from the BART plaza) and on Telegraph Avenue.

*Internal Street.* An internal two-way street is proposed south of Village Drive. The internal street would provide vehicular access to Buildings B, C, and D. Internal Street would be a private street. The internal street is not a through street; a turn-around area is provided at the terminus of the street. On-street parking and sidewalks are proposed for both sides of the internal street at the southern edge of the project site. The internal street is envisioned as a residential street (no commercial space would front onto the internal street). Residential unit entrances (including stoops and small porches) would face onto the internal street. The primary pedestrian access to the internal street would be from Village Drive, but a pedestrian pathway located along the east elevation of the parking garage (Building E) would allow also pedestrians and bicyclists to access the internal street from West MacArthur Boulevard.

*Parking.* Parking for residential units would be provided at a 1 space per 1 unit ratio within each of the mixed-use and residential buildings. The S-15 zone requires only ½ space per unit and a CUP is required to exceed this amount. Approximately 30 parking spaces for commercial uses would be provided within the parking garage in Building A. The S-15 zone does not include specific parking ratios for commercial uses. Parking would be permitted on Village Drive and Internal Street and this street parking would be metered. Approximately 45 on-street parking would be available on the project site. Parking for BART patrons would be provided in the BART parking garage (Building E).

## APPLICABLE POLICY DOCUMENT ANALYSIS

### General Plan Analysis

The site is located in the Neighborhood Center Mixed Use land use designation of the Oakland General Plan. According to the General Plan, the intent and desired character of the NCMU designation is the following:

> **Intent**: The Neighborhood Center Mixed Use classification is intended to identify, create, maintain and enhance mixed use neighborhood commercial centers. These centers are typically characterized by smaller scale pedestrian-oriented, continuous street frontage with a mix of retail, housing, office, active open space, eating and drinking places, personal and business services, and smaller scale educational, cultural or entertainment uses.
>
> **Desired Character and Uses**: Future development within this classification should be commercial or mixed uses that are pedestrian-oriented and serve nearby neighborhoods, or urban residential with ground floor commercial.

The site is also designated as a "Transit-Oriented Development District" in the General Plan. Below is a description of the Transit-Oriented District designation:

> Transit Oriented Districts (TODs) are designated to take advantage of the opportunities presented by Oakland's eight region-serving BART stations and one location – Eastmont Town Center – served by multiple AC Transit lines. Many of these station locations, and the areas surrounding them, offer significant opportunities for compact, mixed-use types of development that include housing, business and other services. This strategy supports city and regional goals to foster sustainable development linking transit with higher density housing types downtown stations, for example, offer expansion opportunities for office, business, and housing development. Because each location offers unique possibilities, the TODs are discussed individually in the Transportation and Transit-Oriented Development section of the Policy Framework. Easy pedestrian, bicycle, and transit access, as well as a strong identity created through careful design and a mix of activity will be part of each transit-oriented district.

The Transportation and Transit-Oriented Development section includes the following description of the MacArthur BART Transit-Oriented District:

> MacArthur BART is uniquely situated as the central hub and transfer point of the BART system, with trains arriving and departing to destinations around the Bay Area. Four major arterials that support local traffic and commerce are adjacent to the station – Telegraph Avenue, MacArthur Boulevard, 40th Street, and Martin Luther King Junior Way. As the central hub, MacArthur BART has been proposed as a Maximum Access Station, a designation that must complement the type and density of uses in the surrounding development area, now characterized by mixed housing types and neighborhood-serving retail uses. Proposals to open up the Station entrance on the Martin Luther King Jr. Way side of the site are also being explored by BART and citizens concerned about providing safe and convenient access for Martin Luther King Jr. Way businesses and residents. New development around the station should capitalize on its maximum access potential to create business and residential revitalization, enhance the safety of the neighborhood, provide secure parking, improve station access, and encourage pedestrian activity and the use of public transportation.

The project is consistent with the density provisions of the NCMU General Plan land use designation. The maximum residential density allowed under this designation is 125 units per gross acre.[1] At a total acreage of 7.38 acres (not including the BART plaza), the General Plan would allow a maximum of 923 residential units on the site. The proposal includes 624 residential units (85 du/gross acre). Staff has also reviewed the project for consistency with relevant policies in the Land Use and Transportation Element of the General Plan. Staff believes that the proposed project is consistent with the applicable policies of the General Plan. A General Plan Amendment is not required. Please refer to Table IV.B-1 of MacArthur Transit Village Draft EIR (pages 108 to 122) for a discussion about the proposed project, which will transform the existing BART surface parking lot into a mixed-use transit village neighborhood, and its relationship with these key policies. The DEIR discussion is incorporated herein by reference.

**Zoning Analysis**

The site is located in two different base zoning districts with one overlay zone covering the entire site. The BART parking lot parcels are located in the R-70 High Density Residential Zone and parcels fronting on Telegraph Avenue and West MacArthur Boulevard are located in the C-28 Commercial Shopping Zone. The entire site is located in the S-18 Mediated Design Review Combining Zone. The proposed density and mix of commercial and residential uses within the transit village is not consistent with the existing R-70 and C-28 Zones. The applicant proposes to rezone the entire site to the S-15 Transit Oriented Development Zone. The S-15 Zone is consistent with the General Plan designation (Neighborhood Center Mixed Use). A map depicting existing and proposed zoning is included in this report as Exhibit E.

The intent of the S-15 zone is the following:

> [T]o create, preserve and enhance areas devoted primarily to serve multiple nodes of transportation and to feature high-density residential, commercial and mixed-use developments to encourage a balance of pedestrian-oriented activities, transit opportunities, and concentrated development; and encourage a safe and pleasant pedestrian environment near transit stations by allowing a mixture of residential, civic, commercial, and light industrial activities, allowing for amenities such as benches, kiosks, lighting, and outdoor cafes; and by limiting conflicts between vehicles and pedestrians, and is typically appropriate around transit centers such as Bay Area Rapid Transit District (BART) stations, AC Transit Centers and other transportation nodes. (OPC Sec. 17.100.010)

Staff believes the proposed rezoning best serves the public interest by meeting the following objectives of the zoning regulations:

A. **To promote the achievement of the proposals of the Oakland Comprehensive Plan (Section 17.07.030A).** The proposed rezoning will facilitate implementation of the proposal for a mixed use transit-oriented development which furthers the objectives of the General Plan (formerly the Comprehensive Plan). The proposed project is a transit-oriented development adjacent to a BART station. The current zoning designations are designed for more traditional commercial and residential developments; therefore, the City finds the rezoning of the project site to S-15, Transit Oriented Development zone would best serve the public interest for redevelopment of the project site because the S-15 zone provides development regulations specific to creation and implementation of TOD projects.

[1] The General Plan specifies residential density as "principal units per gross acre." Gross acreage includes all land in the neighborhood, including streets and parks.

The S-15 zone is consistent with the Neighborhood Center Mixed Use General Plan land use designation.

B. **To provide for desirable, appropriately located living areas in a variety of dwelling types and at a wide range of population densities, with adequate provision for sunlight, fresh air, and usable open space (Section 17.07.030D).** The proposed rezoning provides for residential and commercial mixed use development immediately adjacent to the existing MacArthur BART Station. The project includes both for-sale and for-rent affordable housing with a variety of unit types including studio units, 1-bedroom, 2-bedroom and 3-bedroom units to augment the city's supply of multi-family affordable housing. The project is designed to maintain adequate provision sunlight and air, and usable open space consistent with urban development standards by providing open space areas consistent with the proposed S-15 open space requirements which are consistent with the S-17 open space requirements. Open space within the project will include open air courtyards and the plaza adjacent to Building A. Additionally, a setback of 5 feet is proposed between the upper floors of the new and existing building at the corner of Telegraph Avenue and 40th Street.

C. **To achieve excellence and originality of design in all future developments and to preserve the natural beauty of Oakland's setting (Section 17.07.030G).** The proposal exhibits design excellence and originality through the efficient use of space, variety in architecture styles (to be further defined with Final Development Plans) and commitment to sustainable design through participation the LEED ND Pilot Program.

Staff also believes that the proposed text amendment to reduce open space standards in the S-15 zone best serves the public interest. The reduction in required open space would further the goals of TOD by increasing design flexibility for open space by removing the separate group and open space standard, and encourage increased density. The amendment would make the S-15 open space requirements consistent with the open space requirement currently applied to residential projects in the City's Downtown Open Space Combining (S-17) Zone. The amendment would apply to all properties in the City zoned S-15, and there two other areas of the City zoned S-15: parcels around Fruitvale BART Station and parcels around West Oakland BART station. The proposed project, and other properties zoned S-15, are located in walking distance to parks in the neighborhood. Additionally, surveys of other cities standards for open space in TOD, and mixed-use zones demonstrated that other agencies have similar standards. For these reasons, the text amendment to reduce open space requirements in the S-15 to be consistent with the S-17 zone, would promote the objectives of the General Plan to encourage TOD development near transit stations and therefore best serve the public interest.

**Redevelopment Plan Analysis**

The project site is located within the Broadway/MacArthur/San Pablo Redevelopment Project Area. The land use designations in the Broadway/MacArthur/San Pablo Redevelopment Plan correspond to the land use designations contained in the General Plan. The project is consistent with the General Plan designation, and is therefore consistent with the Redevelopment Plan designation. The proposed project will further the Redevelopment Agency's achievement of the following goals and objectives of the Broadway/MacArthur/ San Pablo Redevelopment Plan and its Five Year Implementation Plan:

- The MacArthur Transit Village Project will increase the stock of ownership housing and will provide affordable rental housing units in the Broadway/MacArthur/San Pablo Redevelopment Project Area;
- Development on the BART surface parking lot at the MacArthur BART Station will contribute to the Agency's goals to concentrate infill development on underutilized properties within the Broadway/MacArthur/San Pablo Redevelopment Project Area;

**RPP Program**
With regard to overflow of BART patrons parking within the surrounding neighborhood, the project sponsor has committed to fund $150,000 towards initiating a Residential Permit Parking Program for an area ¼ mile around the station. If approved, the RPP Program would limit street parking to two hours for non-residents of the RPP Program area. However, it is difficult to ensure implementation of an RPP Program because the program requires a petition signed by 51 percent of the resident population in the proposed RPP area and is subject to City Council approval. Should the RPP Program be the desire of the resident population and the City Council, the project applicant has committed to funding the initial costs of an RPP Program (up to $150,000) as part of the Conditions of Approval (see Condition No. 21).

**TDM Program**
The project sponsor is required to prepare and maintain a Traffic Demand Management (TDM) Program. The TDM Program is intended to serves two purposes: 1) fulfill CEQA mitigation measure requirements by providing implementation strategies to reduce vehicle trips from the project and 2) address planning concerns related to displaced BART parkers. The draft TDM Program, dated May 27, 2008, is included in this report as Exhibit C-2 and a summary of the recommended strategies are provided below.

There are currently 600 parking spaces within the surface parking lot at the BART station. In addition to these 600 parking spaces, recent surveys confirmed that approximately 200 BART patrons currently park in the neighborhood within ¼ mile radius around the station. As such, it is estimated that the parking space demand for the BART station is 800 spaces. The proposed project provides 300 BART parking spaces within the BART garage, and previous analysis indicates that approximately 51% who currently drive to BART would switch to another mode of transit rather than drive to another BART station or drive directly to their end destination. With a demand of 800 parking spaces, and an anticipated 50% of drivers that would switch to an alternate mode of transportation, there is a net demand of about 400 parking spaces and the proposed BART replacement garage will provide 300 spaces. To make-up for a potential shortfall of 100 spaces, the TDM Program recommends that the project provide an additional 210 parking spaces to make up for the gap of riders that would not switch travel modes. The 210 parking spaces would be provided by adding another level of parking to the BART garage (this additional level would be below grade), providing a parking attendant at the BART garage and/or securing 50 parking spaces within off-site parking lots within ¼ mile of the project site, or other alternative mechanisms as detailed in the TDM Program.

The TDM Program also includes the following measures to reduce vehicle trips from the project, which would in turn reduce the demand for parking at the site:

- Unbundle 10% of the parking for all market-rate residential units within project (for all phases, not just Building A)
- Unbundle parking for the affordable housing component, if feasible
- Offer lease back parking options for the project residents; the program will be managed by the HOA or entity approved by the HOA and will offer available parking to BART patrons, other than project residents, and commercial tenants
- Provide car share spaces in BART garage and within the proposed project
- Provide a marketing coordinator to distribute materials about transit programs to residents as part of the "move-in" packets
- Fund a one-time marketing campaign to educate neighborhood residents about alternative modes of transportation currently available to access BART station

- Facilitate discussions with BART, AC Transit and Emery-Go-Round to explore the potential for an additional shuttle stop or other transit service along 40th Street between the Emeryville Border and Telegraph Avenue
- Offer discounted transit passes to project residents
- Provide secure bike parking and bike repair area for residents
- Phase construction of parking within the project

The TDM Program also requires the project sponsor to submit a TDM monitoring plan at the beginning of each construction phase. The monitoring plan will gauge the effectiveness of the strategies and recommend modifications to improve the effectiveness of the program, including the option to increase the percentage of un-bundled parking and/or reduce on-site parking in future project phases if the demand for parking is decreased by the nature and location of the project as a transit village. Additionally, Condition No. 35 will ensure that the project sponsor coordinates with BART on the construction of the BART parking.

**Design Guidelines**
As mentioned at previous meetings with the Planning Commission and the Design Review Committee, the Preliminary Development Plan (PDP) does not include approval of architectural plans or elevations for future buildings. The PDP sets the stage for the project's overall site planning, building bulk, mass and height. Detailed building elevations will be reviewed and approved by the Design Review Committee and Planning Commission as part of the Final Development Plans (FDPs). To ensure that the FDPs are consistent with the vision for the project, staff has worked with the project sponsor to prepare the MacArthur Transit Village Design Guidelines (see Exhibit C-3).

The MacArthur Transit Village Design Guidelines include design principles and design guidelines. The design guidelines are divided into five sections: Site Planning; Architectural Design including sub sections for Height, Bulk and Scale and Architectural Treatments; Public Space Improvements; Transit Plaza Design; and Sustainable Design.

The Design Guidelines are incorporated into the project through the Conditions of Approval as a design review requirement for future approvals (see Condition No. 25). Prior to approval of any Final Development Plans for the project, the Commission will need to make findings to determine that the FDP is consistent with the S-15 Zoning District, approved Preliminary Development Plan, and MacArthur Transit Village Design Guidelines.

The Design Guidelines emphasize architectural variability, encourage building form and style based on adjoining street frontages and uses, address street walls and their relationship to the pedestrian environment, support a variety of building heights in the project, promote sustainable design and specify the use of high quality materials. The Design Guidelines are intended to allow future architects to be able to apply different building technology and materials and provide for a wide variety of architectural treatments within the 15 year development time frame.

**FDP Staging and Project Phasing**
Development of the proposed project is anticipated in five phases over the course of 15 year time frame. As per the regulations of a Planned Unit Development Permit (PUD), the Commission has the authority to approve staging of Final Development Plans. Staff has worked with the project applicant to development an FDP Staging Plan and Project Construction Phasing Plan for purposes of the PUD. However, it should be noted that staff and the project sponsor are currently negotiating terms and conditions for a Development Agreement (DA) and the DA may modify the project phasing plan. It is anticipated that the

DA negotiations will be completed in the early summer, and the DA will be brought to the Commission for consideration and recommendation to the Council in late summer. The DA would then be considered by the City Council together with the Redevelopment Agency's consideration of the Owner Participation Agreement between the Redevelopment Agency and the project sponsor. The FDP Staging and Project Phasing Plan shown in Table 3 below, and is incorporated into the project as Condition of Approval No. 2; however, the DA phasing plan will eventually supersede this condition.

**Table 3: Summary of Proposed Development**

| FDP Stage | Description | FDP Submittal Date | Commence Construction Date |
|---|---|---|---|
| 1 | Construction of Building E, the replacement BART parking garage, site remediation, Internal Drive, the Frontage Road improvements, and the portion of Village Drive that extends from the Frontage Road to the Internal Drive. | Within 1 year from the date of this approval | 2 years from date of Stage 1 FDP approval |
| 2 | Construction of Building D, consisting of a minimum of 90 below market rate rental units. | Within 3 years from the date of this approval | 2 years from date of Stage 2 FDP approval |
| 3 | Construction of Building A, consisting of up to 240 ownership residential units and 26,000 square feet of commercial space. All street improvements, including the completion of Village Drive and any new traffic signals required by the project, will be completed in this phase. This phase will also include the completion of a public plaza directly across Frontage Road from the existing BART Plaza. | Within 4 years from the date of this approval | 2 years from date of Stage 3 FDP approval |
| 4 | Construction of Building B, consisting of up to 150 ownership residential units and 5,500 square feet of commercial space. | Within 8 years from the date of this approval | 2 years from date of Stage 4 FDP approval |
| 5 | Construction of Building C, consisting of up to 195 ownership residential units and 12,500 square feet of commercial space. This phase will also include the construction of a community center use on the ground floor of Building C. | Within 10 years from the date of this approval | 2 years from date of Stage 5 FDP approval |

Notes:
1) Provided that Stage 1 and 2 FDPs are approved in accordance with the above time frames, the Developer shall have the discretion to change which buildings (A, B, or C) are constructed in which Stages (3, 4 or 5) provided that the FDP submittal dates for these stages remain the same. All other modifications to FDP staging shall be subject to review and approval by the Planning Commission.
2) FDP Stages may be combined and reviewed prior to the outlined time frames. If each stage of FDP is not submitted/ completed within the time frames outlined above, the PDP shall be considered null and void.

**Increased Density**

At the April 30th Planning Commission workshop, there was some discussion of increasing the density of the project. With 624 units, the proposed project density is 85 per gross acre the project is under the maximum density prescribed by the Neighborhood Center Mixed Use General Plan land use designation of 125 per gross acre.

Staff has considered the concept of allowing the project to increase density as future phases of the project are developed and market conditions change, and has determined that the appropriate mechanism would be to modify the PDP should the project sponsor wish to increase density of the project. The project sponsor feels the proposed Preliminary Development Plan (624 units) is the best and most realistic option under current market conditions. The EIR for the project analyzed the development to include up to 675 units. To facilitate opportunities to increase density in the future, staff has included a Condition of Approval to allow the FDPs to include up to 675 units (vs. 624 proposed in the PDP) without modifying the PDP.

It should also be noted that the EIR did consider "planning project alternatives" within the Alternatives Chapter, which included options for development of a tower within the project and increased commercial development. The analysis of the planning project alternatives was included to provide the City and the project applicant with an analysis of the project impacts that may result through implementation of these alternative project designs. The detailed analysis of the Tower Alternative and the Increased Commercial Alternative would facilitate modifying the PDP, if requested, which, in turn, would require public noticing and a hearing before the Planning Commission.

Any additional dwelling units beyond 675 would require a modification to the PDP (see Condition No. 1). This is not to say that staff would not support increased density at the site, but there is concern that a major increase would warrant public review and community input and a modification to the PDP would be an appropriate mechanism to assure that staff, the Commission and the community have input on modifications requested by the project sponsor.

**Parcel Acquisition**

The project sponsor does not currently own or have site control of the all parcels within the project. The project sponsor is currently in the process of negotiating acquisition of the privately owned parcels with the assistance of the Redevelopment Agency. It is not currently anticipated that the use of eminent domain will be required to achieve site control. If the project sponsor and Agency are not successful in acquiring all parcels with the project, the project area may be decreased and Final Development Plans would be submitted showing the modified site area.

The project area also includes existing right-of-way of a portions of 39th Street and Apgar Street, which are developed as part of the BART surface parking lot (see map on page 2 of this report). Though the right-of-way is not currently utilized, staff cannot find evidence that the right-of-way has been officially abandoned. This right-of-way will be abandoned as part of the subdivision map processing for the proposed project.

**LEED ND and Sustainable Design**

The MacArthur Transit Village has been chosen to participate in the LEED ND Pilot Program. The LEED ND Pilot Program was created by the U.S. Green Building Council (USGBC), the Congress for New Urbanism, and the National Resources Defense Council to test national standards for sustainable neighborhood developments. Unlike other U.S. Green Building Council (USGBC) LEED programs, LEED ND places significant emphasis on the design elements that bring buildings together into a neighborhood focusing on pedestrian experience and encouraging social interaction. LEED ND credits are broken up into four categories: (1) Smart Location and Linkage (SLL), (2) Neighborhood Pattern and Design (NPD), (3) Green Construction and Technology, and (4) Innovation and Design Process. LEED certification provides independent, third-party verification that a development's location and design meet accepted high standards for environmentally responsible, sustainable, development. LEED provides four levels of LEED ND certification dependent on the total credits awarded to project: LEED-ND Certified: 40–49 points, LEED-ND Silver: 50–59 points, LEED-ND Gold: 60–79 points, and LEED-ND Platinum: 80–106 points.

The project sponsor has indicated that their preliminary evaluation rating, based on the credits they assume will be received, would score 78 points on the LEED ND rating scale and be recognized as a LEED ND-Gold project. Staff applauds the project sponsor for participating in the LEED ND Pilot Program, and as part of the MacArthur Transit Village Design Guidelines, the project is encouraged to pursue the accreditation for Platinum certification.

**Grant Applications**
The development team applied to the State Department of Housing and Community Development (HCD) for Proposition 1C Housing TOD and Infill program funds to assist with the infrastructure and affordable housing financing of the project. The project received the highest point score of all of the TOD program applications in the entire Bay Area and also scored well under the Infill program. As a result, the project has qualified for consideration of funding under both programs and will be notified by the State in June regarding potential funding awards.

**Development Agreement**
As previously mentioned within the discussion on FDP Staging and Project Phasing, the project sponsor and staff are continuing negotiations on a Development Agreement for this project. Staff anticipates that the DA will be brought to the Commission for consideration and recommendation to the Council in late summer. The DA would then be considered by the City Council together with the Redevelopment Agency's consideration of the Owner Participation Agreement between the Redevelopment Agency and the project sponsor.

Community benefits proposed by the project sponsor as part of the DA include: underpass improvements at West MacArthur and Highway 24 including lighting, street furniture and sidewalk improvements in effort to improve pedestrian connections from Martin Luther King Jr. Way to the BART station; and greenscape improvements on West MacArthur between the project boundary and Telegraph Avenue. It should also be noted that as part of the project term sheet previously negotiated with the Redevelopment Agency, the project includes the following benefits: development of affordable housing (17% of the total unit count); compliance with the Agency's Small/Local Business Enterprise, Local Employment, Apprenticeship, Prevailing Wage, First Source Hiring and Living Wage Programs; execution of a Project Labor Agreement; and payment of initial costs for implementation of a Residential Permit Parking (RPP) Program.

**Project Sponsor Review of Proposed Conditions of Approval**
City staff has discussed the proposed Conditions of Approval with the project applicant and the applicant generally agrees with all the conditions except one, Condition No. 40, Roof Top Gardens/Green Roofs. The text of this condition is included below for easy reference.

**40. Green Roofs/Roof Top Gardens.**
***Prior to approval of Final Development Plan for Stages 2 through 5***
As part of the submittal for each FDP application for each phase of FDP, except Stage 1 (BART parking garage), the project sponsor shall study the feasibility of methods to further reduce heat island effect and/or provide additional open space for resident use. Potential methods include but are not limited to green roofs, roof gardens, roof decks, open or partially enclosed private or common balconies. For purposes of this condition of approval, feasibility as defined above includes the consideration of proximity to the highway or streets, location above livable space, construction type, insurability, long term maintenance, HOA costs, and the use of space for other purposes. The feasibility study for implementing additional methods to further reduce heat island effect and/or provide additional open space for resident use shall be provided to Planning Staff as part of each FDP application. The intent of this condition is to further the sustainable elements of the project design and potentially provide more open space area for the project residents.

The project sponsor has indicated that they do not want to incorporate green roofs or rooftop gardens as they are concerned about increased liability, associated costs, and the ability to obtain insurance for the condominiums. They are particularly concerned about elements that would introduce water to the roof and result in leaking. As a result, the project sponsor requests that this condition be deleted.

Staff has included this condition as we believe it is appropriate to further the City's commitment to green and sustainable building practices particularly given the amount of City and State money that is anticipated to subsidize the project. If it is determined feasible, the implementation of this condition also has the potential to increase open space areas available to project residents. Staff appreciates and understands the project sponsor's concerns, but also anticipates that the market conditions/expectations and the technology associated with the installation of green roofs and rooftop gardens is likely to advance over the next several years. Considering these factors together with the project build-out schedule of 15 years with the first residential building be anticipated in three to four years, staff believes that it is appropriate to request the project sponsor to study the feasibility of incorporating green roofs or rooftop gardens into the project as part of each FDP that will be considered in the future. Recognizing that there are challenges associated with the installation of green roofs or rooftop gardens, the proposed condition only requires the project sponsor to provide green roofs and/or roof top gardens if they are determined to be feasible at the time that subsequent FDPs are being considered (excluding Stage 1 which is the BART Parking Garage). Staff recommends the condition be maintained for these reasons: 1) If feasible, activating roof tops within the project would potentially increase the sustainability and open space amenities of the project; and 2) The FDP Staging Plan extends the life of the PDP for 15 years, and technology related to green roofs and roof top gardens is expected to evolve during this period.

## REQUESTED APPROVALS

This project, like many major projects in Oakland, will be processed through two phases of project approvals. This first phase of approvals includes the EIR, Rezone to S-15, Text Amendment relating to S-15 Open Space Requirement, Planned Unit Development (PUD) with Preliminary Development Plan (PDP), Conditional Use Permit (CUP) to exceed residential parking requirements and to allow off-street parking for non-residential land uses, Design Review and Tree Removals. The second phase of approvals would include the Final Development Plans and Vesting Tract Maps.

### Certification of the MacArthur Transit Village EIR

The Planning Commission is asked to certify the EIR for the MacArthur Transit Village Project. Certification does not imply endorsement of the proposed project, nor that the permit application(s) for the project will be approved. Rather, in certifying the EIR, the Commission must generally find that:

- The discussion in the EIR represents a good faith effort to disclose all the City reasonably can regarding the physical impacts which may result from the project;
- There is an adequate consideration and evaluation of measures and changes to the project that would eliminate or lessen the potentially significant physical impacts associated with the project;
- The process for considering the EIR complied with all applicable provisions of CEQA and the Municipal Code; and
- The significant environmental issues raised in the comments received about the Draft EIR were adequately responded to in the Final EIR.

Specific findings required by CEQA to certify the EIR and to apply it to approval of the project are found in Exhibit A. Included in these findings are specific statements pertaining to the completeness of analysis and procedure under CEQA Guideline Section 15090, a rejection alternatives to the project due to infeasibility and statements of overriding consideration in compliance with CEQA Guideline Section 15093 for those significant impacts that were found to be unavoidable and could not be mitigated to a less-than-significant level. In reviewing these findings, the Planning Commission must determine that the CEQA alternatives to the project were deemed infeasible and that all significant impacts have been substantially decreased to a less-than-significant level through mitigation measures or conditions of approval. For those impacts that cannot be mitigated to a less-than-significant level (traffic), the Commission must find that other legal, social, technological and other benefits of the project outweigh these impacts.

Staff Recommendation: Staff believes that the findings that have been proposed in Exhibit A can be made and supported by substantial evidence in the record of the project. The Financial Feasibility Study included in this report as Attachment D represents a part of the evidence relied upon to make the findings.

**Text Amendment to S-15, Transit Oriented Development Zone**

The Planning Commission is asked to recommend approval by City Council for a text amendment to modify the minimum open space requirement in the S-15 Zone. The Zoning Text Amendment would reduce the minimum open space requirements in the S-15 Zone from 180 square feet per unit (150 sq.ft. group open space and 30 sq.ft. private open space) to 75 sq.ft. of open space, whish would make it consistent with the open space requirement for residential projects in the City's Downtown Open Space Combining (S-17) Zone. The proposed modification of the text related to open space requirements in the S-15 zone is included in this report as Exhibit D.

The text amendment is a staff-initiated action. Staff's intent with this proposal is to reduce open space is to further the goals of TOD by increasing design flexibility for open space by removing the separate group and open space standard, decreasing the overall requirement for open space to be consistent with what is required in the S-17 zone, and encourage increased density. The text amendment would apply to all properties zoned S-15. Currently, there are only two areas of the City that are zoned S-15: parcels adjacent to Fruitvale BART station and parcels adjacent to West Oakland BART station. Staff has surveyed other cities to determine how open space requirements are regulated in high density, TOD, and mixed-use zones within other agencies. The Cities of San Francisco, Berkeley and Emeryville apply a 40 to 80 square foot per unit requirement on new residential development in mixed-use, TOD and high-density zones. The proposed text amendment is intended to reduce the S-15 Zone requirements for open space to be consistent with the City's current standard for open space in downtown residential projects.

The Preliminary Development Plans show that the project would provide approximately 60,000 square feet of group open space (approximately 95 sq.ft. per unit) within court yards and the open space plaza. The project's open space would increase as the plans are more defined with the size and location of balconies.

Staff Recommendation: Staff believes that the proposed text amendment to reduce the open space requirement for residential projects in the City's Transit Oriented Development Zone so as to be consistent with the City's standard for residential projects in the Downtown (in the S-17 Zone) is appropriate; and therefore, recommends that the Planning Commission forward a recommendation for approval of the text amendment to the City Council.

**Rezone from C-28/S-18 and R-70/S-18 to S-15**

The Planning Commission is asked to recommend approval by City Council for rezoning of the project area from the current zoning designations to the City's Transit Oriented Development Zone (S-15). The

parcels that are currently developed with BART surface parking are zoned R-70, Residential High Density and the other parcels in the project area (with frontage on Telegraph and West MacArthur) are currently zoned C-28, Commercial Shopping Zone. Additionally, all of the parcels in the project area are currently located in the S-18, Mediated Design Review Overlay Zone. As part of the project, all parcels would be rezoned S-15, Transit-Oriented Development (TOD) Zone.

The project includes rezoning to the S-15 Zone because the current zoning would not allow the density or mix of land uses proposed project; the S-15 Zone is a "best fit" zone for the existing General Plan Land Use Designation of Neighborhood Center Mixed Use; the proposed project is a TOD project immediately adjacent to a BART station, and proposed zoning of S-15 is intended for TOD projects. The proposed project is consistent with the development standards of the S-15 Zone, with the exception of maximum permitted height and minimum required open space. As described within this report, the project includes a text amendment to modify the open space requirements in the S-15 Zone and a PUD bonus to permit an increase in the permitted building height.

Staff Recommendation: Staff believes that the rezoning of the project area from the current zones to the S-15, Transit Oriented Development Zone is appropriate for the reasons above mentioned; and therefore, recommends that the Planning Commission forward a recommendation for approval of the rezoning to the City Council.

**Planned Unit Development Permit/Preliminary Development Plan**

The Planning Commission is asked to recommend approval of a Planned Unit Development Permit (PUD) for the proposed project. PUD approval is requested because provisions of the S-15 Zone (Sections 17.97.030 and 17.97.200) require approval of a PUD to allow development involving a BART station and for projects of more than 100,000 sq.ft. The purpose of the PUD is to ensure orderly development and establish a vision for development of large projects. The PUD provisions require submittal of a Preliminary Development Plan (PDP). The PDP includes the proposal for site layout and design including circulation patterns, conceptual landscape designs and proposed building bulk, mass and height. The PDP does not represent final building design and architectural details for the proposed project; the Design Review Committee and Planning Commission consider these details as part of the Final Development Plan.

The MacArthur Transit Village PDP was reviewed and discussed at the Planning Commission workshop on April 30, 2008 and is included in this report as Exhibit F. The PDP includes site plans, elevations, floor plans, and landscaping plans for the proposed project as described on pages four to seven of this report. Prior to implementation of the proposed project, the applicant would be required to return to the Commission with Final Development Plans (FDP) that are consistent with the site layout, design and bulk, mass and height shown in the PDP package. Additionally, FDPs for the proposed project would be required to be consistent with the MacArthur Transit Village Design Guidelines, which are incorporated into the Conditions of Approval.

As previously mentioned, the proposed project complies with the development standards of the S-15 Zone, except for standards related to building height and minimum open space (see above for discussion of text amendment related to open space). The maximum building height in the S-15 Zone is 45 feet, or 55 feet provided one-foot of setback is provided for each one foot in height over 45 feet. As a bonus of establishing a PUD, the PUD provisions (Section 17.122.100 G) allow large projects to waive or modify the maximum building height to encourage integrated site design. Buildings within the proposed project range in height from 50 to 85 feet (see sheet A-1.0H of Exhibit F for a building height diagram) and are consistent with the bonus provisions of the PUD regulations.

Staff Recommendation: Staff believes that the findings that have been proposed in Exhibit B can be made and supported by substantial evidence in the record of the project. Therefore, staff recommends the Commission forward a positive recommendation to the City Council for approval of the PUD, subject to the attached Conditions of Approval.

**Major Conditional Use Permit Related to Parking**

The Planning Commission is asked to approve a Major Conditional Use Permit (CUP) related to parking within the project area. The S-15 Zone requires ½ parking space per unit and the proposed project includes 1 parking space per unit. Provisions of the parking code (Section 17.166.290 (5)) require a CUP to provide parking in excess of the S-15 Zone requirements.

Additionally, the S-15 does not require parking for commercial uses (Section 17.116.080) and the parking regulations (Section 17.166.290 (2)) requires a CUP to provide off-street parking for non-residential land uses. The proposed project includes approximately 25 off-street parking spaces within the parking garage in Building A. The proposed project requires a Major Conditional Use Permit to exceed the S-15 parking requirements for residential land uses and to provide off-street parking for non-residential land uses.

Staff Recommendation: Staff believes that the findings that have been proposed in Exhibit B can be made and supported by substantial evidence in the record of the project. The proposed parking ratio of 1 space per unit is appropriate at this location given that some of the units are family units (3 bedroom) and because of the opportunity to share the parking with the general public (including BART patrons). Additionally, the proposed project includes a TDM Program (described in detail within the key issues discussion of this report) to promote additional parking at the project site, both for BART riders and residents and visitors of the project. With the reduction in BART parking, and potential opportunity to share parking with the general public as outlined in the TDM Program, permitting an increase in parking for uses in the project is appropriate. Therefore, staff recommends the Commission forward a positive recommendation to the City Council for approval of the CUP, subject to the attached Conditions of Approval.

**Preliminary Design Review**

The Planning Commission is asked to approve Preliminary Design Review for the PDP package. This approval is limited to the building siting and bulk, mass and height of proposed structures. Detailed building design and architectural review would be considered with Final Development Plans. The Design Review Committee reviewed the proposed PDP package at their meeting on December 12, 2007 and they stated overall support for the preliminary development plans and felt that the conceptual project plans are moving in the right direction (the December 12, 2007 Design Review staff report is included in this report as Attachment C). As stated above, staff has worked with the project sponsor to prepare the MacArthur Transit Village Design Guidelines, which are incorporated into the Conditions of Approval, and would be a tool for staff to use to ensure that the FDP is consistent with the vision and design concepts of the PDP package.

Staff Recommendation: Staff believes that the findings that have been proposed in Exhibit B can be made and supported by substantial evidence in the record of the project. Therefore, staff recommends the Commission forward a positive recommendation to the City Council for approval of the Preliminary Design Review, subject to the attached Conditions of Approval.

## CONCLUSION AND STAFF RECOMMENDATION

Staff recommends that the Planning Commission:

1) Open the public hearing, take public testimony on the proposed plan, recommended actions and other submitted information and reports; then close the hearing, deliberate on the matter and;

2) Then take the following actions:

- ***Certify*** the Environmental Impact Report and adopt the CEQA-related Findings (contained in Exhibit A).
- ***Recommend Approval*** to the City Council for the proposed amendment to the S-15 Zone related to minimum open space (contained in Exhibit D).
- ***Recommend Approval*** to the City Council for the proposed rezoning of the project area from the C-28/S-18 and R-70/S-18 Zones to the S-15 Zone (contained in Exhibit E).
- ***Recommend Approval*** to the City Council for the Planned Unit Development Permit, Major Conditional Use Permit and Preliminary Design Review, adopt the associated Findings (contained in Exhibit B), and subject the project to the Conditions of Approval and MMRP (contained in Exhibit C).

Prepared by:

Charity Wagner
Contract Planner

Approved by:

GARY PATTON
Deputy Director of Planning and Zoning

Approved for forwarding to the
Planning Commission:

Dan Lindheim
Director Community & Economic Development Agency

**EXHIBITS:**
Exhibit A: CEQA Findings
Exhibit B: Discretionary Permit Findings
Exhibit C: Conditions of Approval
Exhibit C-1: Mitigation Monitoring and Reporting Program (MMRP)
Exhibit C-2: MacArthur Transit Village TDM Program

Exhibit C-3: MacArthur Transit Village Design Guidelines
Exhibit C-4: Illustrative Map showing ¼ mile radius around project site for possible RPP program
Exhibit D: Language of Text Amendment Regarding Open Space in the S-15 Zone
Exhibit E: Map depicting rezoning of site to S-15 Zone
Exhibit F: Preliminary Development Plan, dated received 28, 2008

**ATTACHMENTS:**
Attachment A: March 5, 2008 Planning Commission Staff Report for hearing on Draft EIR
Attachment B: April 30, 2008 Planning Commission Staff Report for Workshop on Project
Attachment C: December 12, 2007 Design Review Committee Staff Report
Attachment D: MacArthur Transit Village Financial Feasibility Study
Attachment E: Project Correspondence received since April 30th Workshop

**NOTE:** The Final EIR (includes Draft EIR and Response to Comments Document) was previously provided to the Commission under separate cover.

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# MEMORANDUM

**DATE:** APRIL 10, 2015

**TO:**
Elois Thornton
Department of Planning and Building
City of Oakland (City)

**FROM:**
Lynette Dias, AICP
Principal

**RE: MacArthur Station[1] Parcel A and Parcel C-1 Final Development Plan: Substantial Conformance with Planned Unit Development /Preliminary Development Plan Approval and Determination of Consistency with Development Agreement and Design Guidelines**

This memorandum analyzes the proposed Final Development Plan (FDP) for parcels A and C-1 of the MacArthur Station[2] (MS) Project (originally submitted on 9-26-2014 and revised and resubmitted on April 9, 2015) to determine if it is in substantial conformance with the previous MTV Project approvals, including the Planned Unit Development/Preliminary Development Plan (PUD/PDP) approval (as modified by Parking Garage/Stage 1 FDP approval), Vesting Tentative Tract Map (VTTM) revision, Development Agreement, and Design Guidelines.

## 1. History of Project Approvals

The City has granted several approvals for the MS Project. The PUD/PDP approved in 2008 authorizes the development of up to 675 residential units, 49,000 square feet of commercial, 5,000 square feet of community space, a parking structure for BART patrons, and various infrastructure improvements. The PUD/PDP also establishes the approved land uses, density, bulk, massing and design guidelines for the site. The previous approvals for the MS Project are described below:

### A. 2008 PUD/PDP and Associated Approvals

(1) EIR: The City certified an EIR for the MS Project (SCH No. 2006022075) on July 1, 2008.

[1] The Project was previously called the MacArthur Transit Village Project.
[2] See note 1.

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(2) S-15 Text Amendment and Rezoning: The City approved Ordinance No. 12883 C.M.S. amending Section 17.97.170 of the Oakland Planning Code related to the minimum usable open space requirements in the S-15 zone and rezoning the MS Project site to S-15 Transit-Oriented Development Zone on July 1, 2008.

(3) PUD/PDP: The City approved a PUD/PDP permit on July 1, 2008 that guides development of the site in five stages. See Attachment A - 2008 PDP.

(4) Major Conditional Use Permit: The City approved a major conditional use permit to allow the S-15 parking requirements to be exceeded and to allow off-street parking for non-residential uses on July 1, 2008.

(5) Design Review: The City approved preliminary design review for the PUD/PDP on July 1, 2008.

(6) Development Agreement: The City approved Ordinance No. 12959 C.M.S on July 21, 2009 enacting a Development Agreement.

B. **FDP Approvals**

(1) Parking Structure/Stage 1 FTP and Vesting Tentative Map: On April 5, 2011, the City approved the Parking Structure/Stage 1 FDP to construct the new BART parking structure and certain infrastructure improvements and VTTM. This approval allowed an increase in the garage footprint to accommodate additional parking as required by the MS Project Conditions of Approval (COA) and adjustments to the plans for Internal Street and 39th Street (previously called Village Drive), and modified the PUD/PDP Illustrative Plan, (See Attachment B Modified PUD/PDP.) The City relied on the 2008 certified EIR for the MS Project and determined that no new information or changes in the project or project circumstances required subsequent or supplemental environmental review.

(2) Parcel D/Stage 2 FDP: On May 17, 2011, the City approved the Parcel D/Stage 2 FDP for the development of Parcel D with 90 residential units and 90 parking spaces. The City relied on the 2008 certified EIR for the MS Project and determined that no new information or changes in the project or project circumstances required subsequent or supplemental environmental review.

**2. Planning Code and Project Conditions of Approval Requirements for FDP Approval**

Oakland Planning Code section 17.140.040 (Submission of final development plan) requires that the "final development plan shall conform in all major respects with the approved development plan." This standard is incorporated into the PUD/PDP COA No. 25, which provides that "each stage of the FDP shall conform in all major respects with the approved Preliminary Development Plan received by the Planning Division on May 28, 2008."

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Oakland City Planning Code section 17.140.060 (Final Planning Commission action) provides in part:

> *Upon receipt of the final development plan, the City Planning Commission shall examine such plan and determine whether it conforms to all applicable criteria and standards and whether it conforms in all substantial respects to the previously approved preliminary development plan, or in the case of the design and arrangement of those portions of the plan shown in generalized schematic fashion, whether it conforms to applicable design review criteria.*

**3. Project Refinements—Proposed FDPs and Relationship to PUD/PDP Approval**

The developer has submitted to the City FDPs for Parcel A/Stage 3 and Parcel C-1/Stage 4. The analysis below describes how the FDPs conform in all substantial respects to the previous approvals.

A. **Parcel A/Stage 3**

(1) Description of FDP Proposal for Parcel A/Stage 3: The Parcel A/Stage 3 portion of the FDP proposes 287 apartment residential units and 22,287 square feet of commercial ground-floor retail. An alternate development program for Parcel A, which would accommodate a grocery store is also proposed. The alternate plan includes 292 residential units, 33,983 square feet of ground-floor commercial space including approximately 22,287 square feet for a grocery store. The PUD/PDP allows and the EIR evaluated up to 240 residential units and 26,000 square feet of commercial space on Parcel A and a total of 675 units and 49,000 of commercial square feet for the entire MS site.

The proposed FDP would increase the total residential units on Parcel A from 240 to 286 or 292–a net increase of 47 or 52 units. The commercial area would increase by up to 7,983 square feet if the alternate plan with the grocery store is developed. As shown in the attached Project Data Table and due to refinements in the approved FDP for the Parking Structure/Stage 1 and the proposed reallocations between parcels (see Table), the refinements proposed will not change the total maximum units and commercial square footage approved for the MS Project, which will remain at 675 units and 49,000 square feet of commercial space.

The proposed range of retail square footage will accommodate different types of retail and provide flexibility in obtaining viable retail tenants for this space. The change from ownership to rental units reflects market conditions and will allow the units to be available to a broader range of potential occupants.

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(2) Uses

*Applicable COAs*:

COA 1, with respect to the type and amount of uses, states

> *. . . .The project may however increase the number of permitted residential dwelling units up to a maximum of 675 dwelling. . .*

COA 2(a)(iii), with respect to the type and amount of uses, states:

> *Stage 3 FDP for the project will include construction of Building A, consisting of up to 240 ownership residential units and 26,000 square feet of commercial space. . .*

COA 41, with respect to the type and amount of uses, states:

> *. . . Because the Preliminary Development Plan (PDP) received by the Planning Division on May 28, 2008, shows a total of 624 units, and per Condition No. 1 the project is permitted to include a maximum of 675 units based on the EIR analysis and the City's desire for increased density, the buildings heights shown above may be slightly altered to accommodate this permitted increase in units. However, any such increase in height shall be reviewed as part of the Final Development Plan; and no such increase in height shall be permitted on Telegraph Avenue without modification to the PDP.. .*

COA 2 describes the allocation of the 675 residential units permitted under the PUD/PDP among the Project parcels as anticipated at the time of the initial approval. An increase of 47 or 52 units on Parcel A reflects a different allocation of units among the parcels, but it will not increase the overall maximum of 675 units within the MS Project as the amount of development proposed on Parcel C is less than what was approved in the PDP. The shift in units from one parcel to another is not significant. Additionally, the increased units/density on Parcel A is achieved without exceeding the building heights and setbacks (see discussion below).

*Development Agreement:* The Development Agreement includes several provisions describing the MTV Project as follows:

> *. . . for a mix of residential use (market-rate and affordable), retail and commercial uses (including live/work units), community uses, a BART Garage, and other uses and improvements . . .*

Given that the FDP will maintain a mix of residential and commercial uses and will maintain the PUD/PDP's overall mix of uses for the project, the Parcel A/Stage 3

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FDP is consistent with the Development Agreement provisions related to MS Project uses.

Based on maintaining the mix of uses for Parcel A/Stage 3, and the provisions in the COAs and the Development Agreement governing allowable uses, the FDP refinements are minor and conform in all major respects with the approved PUD/PDP.

*Design Guidelines*: The Design Guidelines include the following Transit Village Guiding Principle which supports the proposed refinements:

> *Mixed-Use*
>
> *4.1. Provide a diverse mix of land uses that create housing, employment and community-serving opportunities for Transit Village residents, visitors and employees.*

The FDP includes a mix of uses (residential and retail). The refinements to the amount of commercial space and the number of residential units are consistent with and promote this guiding principle.

(3) Timing. Section 3.3.3(c) of the Development Agreement requires the developer to submit the FDP application for Stage 3 in 2012 subject to certain extensions. In accordance with the extensions allowed by the Development Agreement, on November 6, 2012 the City granted the developer an extension of the submittal date until October 27, 2013. On October 24, 2013, under section 7.1 of the Development Agreement, the developer provided the City with notice of a Force Majeure extension for the FDP submittal for Stage 3 until October 26, 2014. Consequently, the FDP application for Stage 3 complies with the Development Agreement phasing requirements.

(4) Footprint. The proposed building footprint is consistent with the modified PUD/PDP and the parcel configuration approved on the Vesting Tentative Map.

(5) Height. COA 41 prescribes permitted building heights by frontage and states that the buildings within the project area shall vary. The condition also states that to achieve a higher density, the building heights shown may be slightly altered to accommodate a permitted increase in units (up to 675). The permitted range in building heights are shown below with the proposed building heights. The primary building forms are within the permitted building heights included in the PUD conditions. Some of the iconic corners and rooftop equipment enclosures exceed the height by approximately 5 feet. The PUD allocated 240 units to parcel A. Given an increase of either 47 or 52 units proposed to accommodate a higher density on the site, the increased height for select building elements is in substantial conformance with this condition.

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| Frontage | Permitted building height per COA 41 | Approximate roof height[3] |
|---|---|---|
| Telegraph Avenue, north of 39th Street: | 50 to 75 feet | 50 to 75 feet |
| 40th Street | 60 to 80 feet | 64 to 76 feet with up to 85' for iconic corner |
| Frontage Road | 65 to 80 feet | 75 to 80 feet with up to 85' for iconic corner |
| 39th Street, north side east of Internal Street | 70 to 85 feet | 78'-6" |
| 39th Street, north side west of Internal Street | 60 to 80 feet | 77 feet with up to 85' for iconic corner |

(6) Parking. The TDMP, Section III, B.4 "Unbundling of Parking" states the following related to parking for Parcel A/Stage 3:

- *30% of the parking for the first market rate building (Parcel A) will be unbundled (a minimum of 60 stalls).*
- *In Block A, one floor will be shared between various users, while a second floor will be secured only for residents. No residential guest parking will be dedicated in the structured, secured parking facilities.*
- *In Block A, only 31 parking spaces will be dedicated to retail use. Any unbundled parking not leased by residents will be made available to commercial tenants or BART patrons.*
- *All on-street parking will be metered and charged hourly at a market rate.*
- *No more than 1 parking space per residential unit will be offered.*

The Parcel A/Stage 3 portion of the FDP will comply with these strategies. Proposed parking will include a total of 254 spaces. Consistent with the requirements of the TDMP, parking is proposed at less than one space per unit and a minimum of 30 percent of the parking spaces for Parcel A will be unbundled as required by TDMP.

For the Alternate Plan for Parcel A/Stage 3, which includes a grocery store, a total of 355 spaces, of which 106 are allocated to the commercial retail and the remaining 249 for the residential. Consistent with the requirements of the TDMP, the residential parking is proposed at less than one space per unit. Additionally a

[3] The proposed building heights are listed as the roof heights shown on Sheets A0.30 and A0.31

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minimum of 30 percent of the parking spaces for Parcel A will be unbundled as required by TDMP.

A more detailed analysis of parking is provided in the Staff Report, dated April 15, 2015.

(7) Parcel A/Stage 3 Conclusion. The Development Agreement, the modified PUD/PDP, and the COAs and associated exhibits do not preclude any of the refinements proposed as part of the Parcel A/Stage 3 FDP. Based on the analysis above, the Parcel A/Stage 3 FDP is in substantial conformance with the approved PUD/PDP. Additionally, the Parcel A/Stage 3 FDP complies with the COAs and is consistent with the Development Agreement.

B. **Parcel C-1/Stage 4**

(1) Description of FDP Proposal for Parcel C-1/Stage 4.[4] As part of the Parking Structure/Stage 1 FDP and the Vesting Tentative Map, Parcel C was reconfigured and split into two parcels (C-1 and C-2) because the developer was not able to acquire the Surgery Center parcel. The proposed FDP is limited to C-1 and does not include C-2. The Parcel C-1 portion of the FDP proposes 96 apartment residential units and 1,202 square feet of ground floor retail. A total of 51 or 46 units and 17,311 or 5,615 square feet of commercial would remain for Parcel C-2 which if developed would result in a total on Parcel C of up to 148 or 142 (with Stage 3 Alternate Plan) residential units and 18,513 or 6,817 (with Stage 3 Alternate Plan) square feet of commercial. The 2008 PUD/PDP allows, and the EIR evaluated up to 195 (47 or 53 units more than proposed) for-sale residential units and 12,500 (6,013 square feet more or 5,683 square feet less than proposed) square feet of commercial space on the entirety of Parcel C. The change from ownership to rental units reflects market conditions and will allow the units to be available to a broader range of potential occupants.

(2) Uses.

*Applicable COAs*: The following COAs are applicable:

COA 2(a)(v), with respect to the type and amount of uses, states: "Stage 5 FDP will include the construction of Building C, consisting of up to 195 ownership residential units and 12,500 square feet of commercial space. This phase will also include the construction of a community use on the ground floor of Building C." The COA prescribes the maximum number of units, but does not preclude a lower number of units. The FDP for Parcel C-1 together with the development allocated to C-2

[4] Note that development of Parcel C is identified as Stage 5 in the PUD/PDP COAs and the Development Agreement but that both the DA (§3.4) and COA 2(c) allow the parcels and buildings associated with Stages 3, 4 and 5 to be built in any order provided that the FDP submittal dates for these stages are met.

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would bring the total development for the Parcel C up to 148 or 142 (with Stage 3 Alternate Plan) residential units and 18,513 or 6,817 (with Stage 3 Alternate Plan) square feet of commercial. This is 47 or 53 units and 6,013 square feet more or 5,683 square feet less than the maximum shown for Parcel C as part of the PUD/PDP and this COA, but it does not conflict with this COA. The Development Agreement sets a minimum density of 106 units per net acre for the entire MS Project as listed below.

The community space was originally located in parcel C-2. As this parcel was not acquired, the applicant has committed to providing the community space in internal and external space in parcel A and C-1.

*Development Agreement:* The DA provision 3.4(i) states that the minimum density for the MS Project is 106 units per net acre, which equals 560 units. The Parcel C-1 site is 0.49 acres. With the 96 units, it would be developed at approximately 195 units per net acre. This will result in a total of 473 (or 478 with alternate) units for Parcels D, A and C-1. The PUD/PDP as modified allows up to 202 (or 197 with alternate) units for Parcels B and C-2 (151 and 51 (or 46 with alternate), respectively). As a result, if a minimum of 91 (560-469) of the 206 units allocated to Parcels B and C-2 are developed as part of subsequent FDP(s), the overall density of the MS Project will meet the requirement to develop at least 560 units on the MS Project site.

(3) Timing. Both the DA (§3.4) and COA 2(c) allow the buildings associated with Stages 3, 4 and 5 to be built in any order provided that the FDP submittal dates for these stages are met. This condition allows the Developer to move ahead with Parcel C-1, ahead of Parcel B (which was listed as Stage 4 in the COAs and Development Agreement), but it requires Parcel C-1 to be subject to the timing requirement of Stage 4 instead of Stage 5. The Development Agreement terms prevail over the COAs and require submittal of Stage 4 by July 21, 2017. The FDP complies with this requirement.

(4) Footprint. The building footprint is consistent with the modified PUD/PDP and the parcel configuration on the approved Vesting Tentative Map.

(5) Height. The building height will be a maximum of 78.5 feet on the east side of Internal Street where 55 to 70 feet is permitted and 78.6 feet along 39th Street where 65 to 80 feet is permitted per COA 41. The proposed height of 78.5 feet along Internal Street is approximately 8.5 feet higher than the identified range. COA 41 also states that to achieve a higher density, the building heights shown may be slightly altered to accommodate a permitted increase in units (up to 675). The development that is under construction on Parcel D, south of Parcel C-1 along Internal Drive, is approximately 50 feet tall. So although Building C-1 is slightly taller than the identified range its

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development would result in the building heights be varied along Internal Drive and given the flexibility noted in the condition, the proposed building heights would be a minor change and the building height would be in substantial conformance with the modified PUD/PDP.

(6) Parking. *TDMP Provision:* The TDMP, Section III B.4 "Unbundling of Parking" states the following relevant to parking for and 5:

- *All on-street parking will be metered and charged hourly at a market rate.*
- *No more than 1 parking space per residential unit will be offered.*

The proposed development will comply with these strategies. Proposed parking will include 69 spaces. Consistent with the requirements of the TDMP, parking is proposed at not more than one space per unit.

(7) Stage 5 Conclusion. The Development Agreement, the modified PUD/PDP, and the COAs and associated exhibits do not preclude any of the refinements proposed as part of the Stage 5 FDP. Based on the analysis above, the Stage 5 FDP is in substantial conformance with the PUD/PDP. Additionally, the Stage 5 FDP complies with the COAs and is consistent with the Development Agreement.

C. **Conclusion**

The FDPs propose refinements to the PUD/PDP. As demonstrated by the analysis in this memorandum, these refinements are minor and conform in all major respects with the approved PUD/PDP and the applicable conditions of approval. Additionally, the FDPs are consistent with the approved Design Guidelines, the TDMP, and the Development Agreement. The Development Agreement provides that the granting or amendment of project approvals and subsequent approvals (e.g., an FDP) are not considered an amendment of the Development Agreement and "automatically shall be deemed to be incorporated into the Project and vested under this Agreement." (Section 11.2)

The proposed FDPs meet both the Planning Code and PUD/PDP conditions of approval requirement for substantial conformance with the PUD/PDP. No amendment of the approved project is required.

Attachments

1 Original PUD/PDP Site Plan
2. Modified PUD/PDP Site Plan

**ATTACHMENT E**

***Project Data – without Grocery***

| | PDP Approval per COAs | 2010 and 2014 FDPs | Difference btwn CC PDP (COAs) and Current FDPs |
|---|---|---|---|
| **Parking Garage and Infrastructure/VTTM/Stage 1** | | | |
| Residential | 0 | 0 | 0 |
| Commercial | 5,000 | 5,200 | 200 |
| Community | | 0 | 0 |
| Parking | 324 | 480 | 156 |
| **Parcel D/Stage 2** | | | |
| Residential | 90 | 90 | 0 |
| Commercial | 0 | 0 | 0 |
| Community[a] | 0 | 0 | 0 |
| **Parcel A/Stage 3** | | | |
| Residential | 240 | 287 | 47 |
| Commercial | 26,000 | 22,287 | -3,713 |
| Community[a] | 0 | 0 | 0 |
| **Parcel B/Stage 5** | | | |
| Residential | 150 | 151 | 1 |
| Commercial | 5,500 | 3,000 | -2,500 |
| Community[a] | 0 | 0 | 0 |
| **Parcel C/Stage 4** | | | |
| **Parcel C-1** | | | |
| Residential | | 96 | |
| Commercial | | 1,202 | |
| Community | | 0 | |
| **Parcel C-2** | | | |
| Residential | | 51 | |
| Commercial | | 17,311 | |
| Community[a] | | 0 | |
| **TOTAL for Parcel C** | | | |
| Residential | 195 | 147 | -48 |
| Commercial | 12,500 | 18,513 | 6,013 |
| Community[a] | 5,000 | 5,000 | 0 |
| **Totals** | | | |
| Residential | 675 | 675 | 1 |
| Commercial | 49,000 | 49,000 | 0 |
| Community[a] | 5,000 | 5,000 | 0 |

**ATTACHMENT E**

[a] The community space was originally located in parcel C-2. As this parcel was not acquired, the applicant has committed to providing the community space in internal and external space in parcel A and C-1 and is working with City staff to finalize approach and location.

***Project Data – with Grocery***

| | PDP Approval per COAs | 2010 and 2014 FDPs | Difference btwn CC PDP (COAs) and Current FDPs |
|---|---|---|---|
| **Parking Garage and Infrastructure/VTTM/Stage 1** | | | |
| Residential | 0 | 0 | 0 |
| Commercial | 5,000 | 5,200 | 200 |
| Community | | 0 | 0 |
| Parking | 324 | 480 | 156 |
| **Parcel D/Stage 2** | | | |
| Residential | 90 | 90 | 0 |
| Commercial | 0 | 0 | 0 |
| Community[a] | 0 | 0 | 0 |
| **Parcel A/Stage 3** | | | |
| Residential | 240 | 292 | 52 |
| Commercial[b] | 26,000 | 33,983 | 7,983 |
| Community[a] | 0 | 0 | 0 |
| **Parcel B/Stage 5** | | | |
| Residential | 150 | 151 | 1 |
| Commercial | 5,500 | 3,000 | -2,500 |
| Community[a] | 0 | 0 | 0 |
| **Parcel C/Stage 4** | | | |
| **Parcel C-1** | | | |
| Residential | | 96 | |
| Commercial | | 1,202 | |
| Community | | 0 | |
| **Parcel C-2** | | | |
| Residential | | 46 | |
| Commercial | | 5,615 | |
| Community[a] | | 0 | |
| **TOTAL for Parcel C** | | | |
| Residential | 195 | 142 | -53 |
| Commercial | 12,500 | 6,817 | -5,683 |
| Community[a] | 5,000 | 5,000 | 0 |

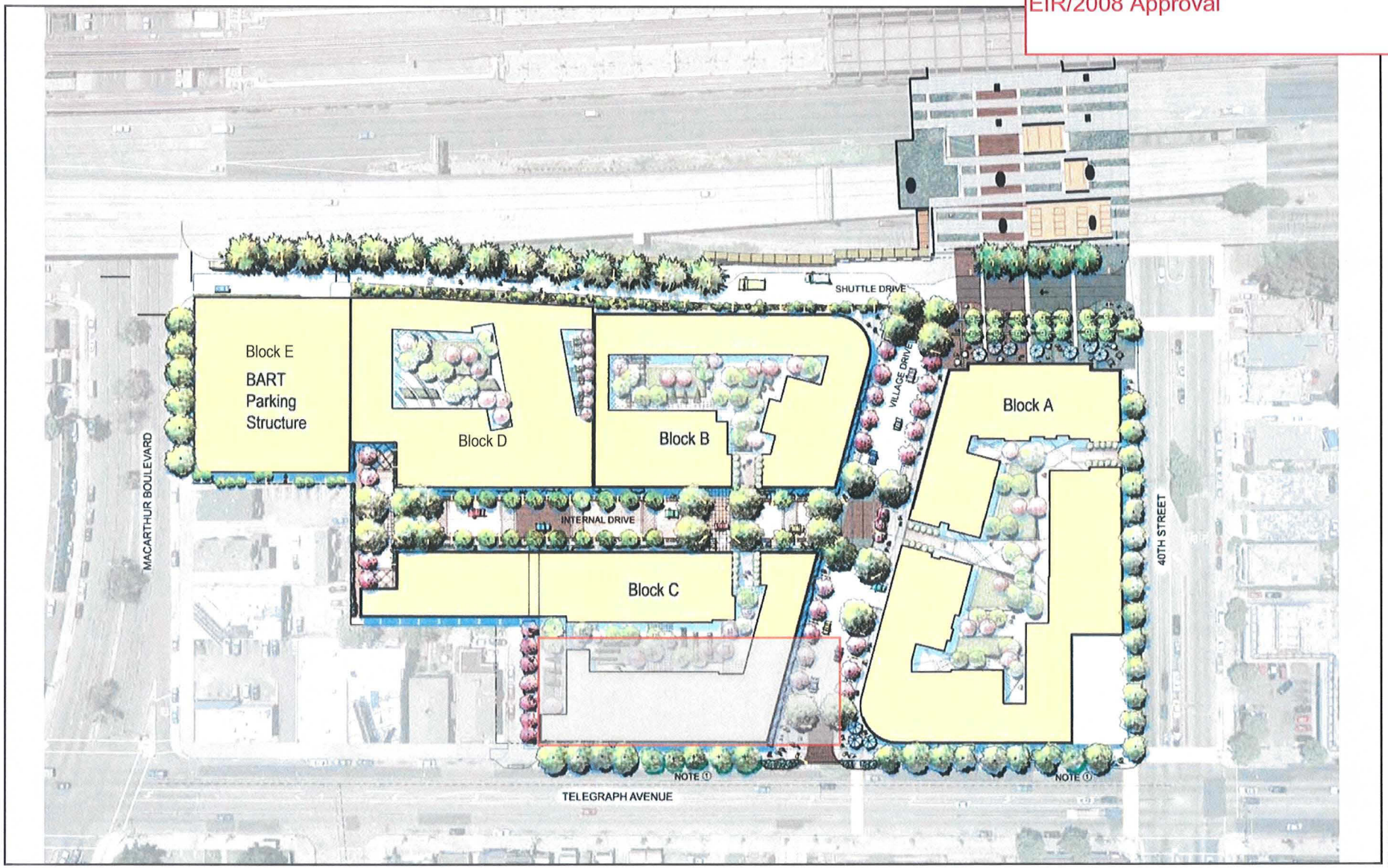
**ATTACHMENT E**

| Totals | | | |
|---|---|---|---|
| Residential | 675 | 675 | 0 |
| Commercial | 49,000 | 49,000 | 0 |
| Community[a] | 5,000 | 5,000 | 0 |

[a] The community space was originally located in parcel C-2. As this parcel was not acquired, the applicant has committed to providing the community space in internal and external space in parcel A and C-1 and is working with City staff to finalize approach and location.

[b] The total retail area for Parcel A with the grocery store is 33,983 sf. The grocery comprises 22,287 sf of this area. The remaining commercial space on parcel A and on other parcels is assumed to be general neighborhood commercial.

Exhibit A-2: Illustrative Plan from EIR/2008 Approval




Surgery Center Parcel

EXHIBIT A

**MacArthur Village Project EIR**
Illustrative Site Plan 2008

SOURCE: MACARTHUR TRANSIT COMMUNITY PARTNERS,LLC, 2007.

Exhibit A-3: Illustrative Plan
(updated to include Phase 1 and 2 FDPs, March 2011)

EXHIBIT A

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# MEMORANDUM

**To:** Catherine Payne

**From:** Jessica ter Schure and Phil Olmstead

**Date:** October 26, 2010

**Subject:** MacArthur Transit Village – Final Transportation Demand Management Plan

# I. INTRODUCTION

## A. Project Description

MacArthur Transit Community Partnership, LLC ("developer") has proposed to develop the MacArthur Transit Village project on the parking lot of the MacArthur BART Station and seven surrounding parcels in the City of Oakland. The project will include the following key components:

- **Residential Units:** Current plan is for 624 units total (516 market rate units; 108 affordable). However, the conditions of approval do allow for up to 675 units.
- **Retail Space:** Approximately 42,500 sq. ft.
- **Child Care facility or Community Center:** 5,000 sq. ft.
- **BART Parking:** 450 parking spaces included in a new parking garage.
- **Structured Parking:** Residential: Up to 624 parking spaces (1 space per unit) in 4 separate buildings; non-Residential: up to 31 spaces in Block A and 33 spaces in Block E (BART Garage).
- **On-site Street Parking:** A minimum of 26 on-site spaces.

A variety of high-quality transit services are currently provided and would be available to residents, employees, and guests of the MacArthur Transit Village project, including BART, AC Transit, and several shuttle providers. Free shuttle service is provided by Emery-Go-Round, Kaiser Hospital, Alta Bates Summit Hospital and Oakland Children's Hospital. Caltrans also operates a bicycle shuttle during peak travel time and charges for the service.

The design of the site will provide a safe, comfortable pedestrian environment, and support the use of bicycles. The provision of bicycle amenities is described in detail in this plan. Both the design of the site and the abundance of existing transit services promise to support a reduction in vehicle trips generated by the project.

ATTACHMENT F

Furthermore, the mix of uses on-site will provide key amenities that will reduce the need for people to travel elsewhere for daily needs. Recommended support services include banking, childcare, a post office, a dry cleaners, and convenience goods. Studies have consistently shown that providing these amenities on-site can lead to a measurable reduction in vehicle trips generated by a development.

The proposed Transportation Demand Management (TDM) Plan is comprised of a comprehensive set of programs and strategies, and a plan for implementation, to help achieve the following objectives:

- Reduce the number of vehicle trips to and from MacArthur Transit Village.
- Support a balance of transportation modes, including transit, carpool and vanpool, bicycling, and walking.
- Assess and manage parking demand, and provide sufficient supply to meet this demand.
- Support goals of reduced environmental impacts, sustained economic vitality, social equity, and improved quality of life.

In addition to these general objectives, the project's environmental impact report (EIR) has identified a need for the TDM Plan to be developed as a traffic mitigation measure and to address the needs for BART patron parking, as further described in the following sections.

## B. EIR Requirements

The EIR for the project requires this TDM Plan as a mitigation measure for the project's share of cumulative impacts to two intersections. These two intersections are Telegraph Avenue / 51st Street and Broadway / MacArthur Blvd.[1] The potential impacts are defined as follows:

- **Telegraph Avenue / 51st Street:** Under cumulative Year 2030 conditions, the project would contribute to LOS F operations during both AM and PM peak hours; would increase critical movement average delay by more than 4 seconds during the AM peak hour; and would increase intersection average delay by more than 2 seconds during the PM peak hour.
- **Broadway / MacArthur Blvd:** Under cumulative Year 2030 conditions, the project would contribute to LOS F operations and would increase intersection average delay by more than 2 seconds during the AM peak hour.

For both of these intersections, the EIR states that TDM measures are expected to reduce vehicle trips, and their impact at these intersections. However, it also states:

> *"...it is difficult to accurately predict a TDM program's effectiveness and to quantify the effects on reducing project trip generation. To present a conservative analysis, this study assumes that the intersection would continue to operate at LOS F with the implementation of this mitigation measure. Thus, these measures will partially mitigate the impact, but are not sufficient to mitigate the impact to a less-than-significant level."*

In fulfillment of the EIR mitigation measures:

[1] MacArthur BART Transit Village EIR, Public Draft released January 2008. Prepared by Fehr & Peers. http://www2.oaklandnet.com/Government/o/CEDA/o/PlanningZoning/DOWD008406

- The plan will be submitted to the City of Oakland for its review and approval. It has also been submitted to BART and AC Transit for their review and comment.
- The developer will be responsible for funding and implementation of the plan elements required to mitigate CEQA impacts.
- The plan shall include regular monitoring and adjustment to meet plan goals, pursuant to Section D of this TDM plan.

In addition to the TDM Plan, the following mitigation measures are required in the EIR to address these impacts:

- **Telegraph Avenue / 51st Street:** Change signal cycle length to 120 seconds and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/51st Street intersection. Coordinate signal phasing and timing with the adjacent Telegraph Avenue/52nd Street and Claremont Avenue intersection and other intersections in the same coordination group.
- **Broadway / MacArthur Blvd:** No mitigation measures were deemed feasible[2] and/or effective.

## C. BART Parking Replacement

The EIR also examined certain issues not required under CEQA, including replacement parking for BART patrons. Currently, there are approximately 600 parking spaces available in the surface parking lot. In addition, it is estimated that approximately 200 BART patrons park in the surrounding neighborhood. This plan addresses the need to provide replacement parking for these BART patrons.

This plan has been informed by the analysis and strategies contained in the MacArthur BART Station Access Feasibility Study, which examines a broad range of access issues of concern to the City and BART related to the MacArthur BART Station.

# II. GOALS

This TDM Plan has two primary goals:

1. To fulfill CEQA mitigation measure requirements by implementing strategies to reduce vehicle trips from the project.
2. To address planning concerns related to displaced BART parkers.

# III. STRATEGIES

## A. Introduction

The traffic analysis for the EIR determined that 4,886 daily vehicle trips would be generated by the MacArthur Transit Village project, with 358 of those trips occurring during the PM peak hour. The strategies included in this plan had not yet been identified when the EIR was prepared and were therefore not accounted for in the analysis. However, experience has shown that these strategies can reduce vehicle trips significantly, especially in

[2] As used through-out this document, "feasible" or "feasibility" means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

combination with other factors such as the mixing of uses on site and the presence of high-quality transit service.

Item B of this section includes strategies directly relating to the goal of fulfilling the CEQA mitigation measure requirements by implementing strategies to reduce vehicle trips from the project.

Item C of this section addresses the planning concerns related to the displacement of BART parkers. These strategies are not required under CEQA.

## B. TDM Strategies Required by CEQA

These strategies will help fulfill the EIR requirement that a TDM program be developed for the MacArthur Transit Village project to reduce vehicle trips to and from the project site and therefore help reduce the identified impacts of the project to the intersections of Telegraph Avenue / 51st Street and Broadway / MacArthur Blvd.

### 1. Discounted Transit Passes

All residents occupying the affordable housing units in Block D (restricted units) will be provided the opportunity to purchase at least one discounted AC Transit bus pass. The principle of this transit program, called EasyPass, is similar to that of group insurance plans – transit agencies offer deep bulk discounts when selling passes to a large group, with universal enrollment, on the basis that not all those offered the pass will actually use them regularly. Discounted and/or free transit passes are often an extremely effective means to reduce the number of vehicle trips in an area. By removing a large amount of the cost barrier to using transit, including the need to search for spare change for each trip, people become much more inclined to take transit to work or for non-work trips. Such programs also increase equity for low-income and individuals who cannot, or choose not to drive, by providing an amenity comparable to free parking.

AC Transit's EasyPass program[3] passes are valid at any time on all AC Transit local and Transbay buses. EasyPass is loaded onto a "Clipper" card (the regional transit fare smart card) with a resident's name and photo, and the participants "tag" the card on the reader each time they board a bus. Pricing for the EasyPass program is based on the number of participants in a residential development (minimums are 100 or more units and one pass per unit) and the current level of AC Transit bus service within ¼ of a mile of the residential development. For example, an EasyPass discounted pass in a 100-unit residential building with a high level of AC Transit service, would cost a resident $115 annually (approximately $9.58 per month). By comparison, an adult Transbay pass, which provides an equivalent amount of service, currently costs $132.50 per month.

Personnel at the affordable housing leasing office will sell both discounted and regular AC Transit passes and tickets, as well as high-value BART tickets (BART currently offers a $64 value ticket for $60 and a $48 value ticket for $45) to residents of the affordable housing development. As BART's tickets are replaced by "Clipper," equivalent tickets will be made available to the residents. At this time BART does not offer discounted passes or fares. If BART were to begin offering a discount, the affordable housing developer could expand the discounted pass program to offer discounted BART tickets and sell them to the affordable units in MacArthur Transit Village.

[3] Please go to www.actransit.org/easypass for more information.

Additionally, the developer will identify at least one location (a designated on-site retailer or the sales / leasing office for market-rate housing) for the purchase of AC Transit tickets and high-value BART tickets by the residents in the market-rate housing units.

## 2. Secure Residential and Retail Bicycle Parking

The project applicant is committed to meeting the City's goals for bicycle parking for residential and retail uses. The City of Oakland's bicycle parking ordinance[4] includes requirements for a specific quantity of short-term (bicycle racks) and long-term (locker or locked enclosure) bicycle parking spaces, based on land use. Key criteria for the location and design of bicycle racks include: visibility, access, lighting, weather protection, avoidance of conflicts with pedestrians and vehicles, and security (such as being able to lock both wheels).

Figure 1 summarizes the number of bicycle parking spaces required for MacArthur Transit Village under the City of Oakland's bicycle parking ordinance.

### Figure 1 – Bicycle Parking Spaces Required by City of Oakland

| Land Use | MacArthur Transit Village | Number of Required Bicycle Parking Spaces | | | |
|---|---|---|---|---|---|
| | | Long-term | # | Short-term | # |
| Residential | 624 du | 1 space per 4 du | 156 | 1 space per 20 du | 31 |
| Commercial - Retail | 42,500 sq. ft. | 1 space per 12,000 sq. ft. | 4 | 1 space per 5,000 sq. ft. | 9 |
| Community Center | 5,000 sq. ft. | Number of spaces to be prescribed by the Director of City Planning, pursuant to Section 17.117.040. | TBD | Number of spaces to be prescribed by the Director of City Planning, pursuant to Section 17.117.040. | TBD |
| TOTAL | | | 160 | | 40 |

Figure 2 provides a summary of the number of bicycle parking spaces that will be provided on each block of the site. As required by the bike ordinance, a total of 40 short-term and 160 long-term parking spaces will be supplied.

### Figure 2 – Bicycle Parking, Spaces per Block

| Block | Short-Term | | Long-Term | |
|---|---|---|---|---|
| | Residential | Retail | Residential | Employees |
| A | 10 | 6 | 51 | 2 |
| B | 8 | 1 | 38 | 1 |
| C | 9 | 2 | 44 | 1 |
| D | 4 | n/a | 23 | n/a |
| TOTAL | 31 | 9 | 156 | 4 |

[4] Adopted July 15, 2008. Additional information about the ordinance can be found at http://www.oaklandpw.com/Page127.aspx#ordinance.

## 3. Secure BART Bicycle Parking Facility

In addition to providing bicycle parking for residents and retail customers, the developer is committed to working with the City and BART to ensure that BART riders have adequate and secure bicycle parking. Secure bicycle parking is a key amenity for bicycle commuters and bicycle riders, as well as extremely important in showing that bicycling is a viable, convenient, and safe mode of transportation. People want to trust that their bicycle is protected from theft, weather conditions, or other physical damage, especially if parked for an extended period of time.

The developer will work with the City and BART to implement the City's goals for bicycle parking at Railroad and Bus Terminals (which is to provide a combination of short-term and long-term bike parking equal to 5% of the maximum projected ridership for the BART station). The developer recently completed a locational analysis for the bicycle parking facility to determine the ideal site for construction. It was determined that the best site for a new secure bicycle parking facility is the BART plaza outside of the fare gates. BART recently secured a $625,000 capital grant to specifically fund the construction of this bicycle parking facility.

However, many of the design, construction, and operational details of the bicycle parking facility have yet to be finalized. For example, it is unknown at this time whether the facility will be staffed and offer additional amenities, such as bicycle repair services, or if it will be a facility that simply offers secured parking. Currently, no operational funds for a staffed facility have been identified. The developer is currently conducting further financial analysis on this issue and a final determination, with final review and approval by BART, will be made based on the financial viability of a staffed facility and whether an independent operator can be found to manage such a facility in the long-term. Furthermore, the facility design and staging for construction is also under review by BART and will be resolved in the coming months.

## 4. Unbundling of Parking

Parking has real costs – approximately $30,000 or more to construct each space, in addition to ongoing operations and maintenance costs. If users do not pay directly for the cost of parking, it must be included in the rent or the purchase price of residential units and in the lease costs for businesses. These costs are then passed on to consumers and users of services. Instead of subsuming parking costs into overall residential and business costs, developers can charge separately, or "unbundle" parking. Unbundling parking ties the cost of parking more directly to the user and is one of the most effective strategies to encourage people to use alternatives to a single-occupant vehicle. Residents can choose whether they wish to buy or lease a parking space, and customers can choose whether to pay for parking or use a different mode of transportation to reach retail and service destinations.

Concurrently, provision of parking is considered an important amenity to market the units and it will also be important to provide secure semi-private parking for residents.

The following parking strategies will be employed at MacArthur Transit Village:

- 30 percent of the parking for the first market rate building (Block A) will be unbundled (a minimum of 60 stalls).
- To the extent not prohibited from a legal or financial feasibility standpoint, parking in the affordable component will be unbundled and, to the extent priority for those spaces and overall security for residents can be ensured, under-utilized parking would be shared with BART patrons.

- In Block A, one floor will be shared between various users, while a second floor will be secured only for residents. No residential guest parking will be dedicated in the structured, secured parking facilities.
- In Block A, only 31 parking spaces will be dedicated to retail use. Any unbundled parking not leased by residents will be made available to commercial tenants or BART patrons.
- All on-street parking will be metered and charged hourly at market rate.
- No more than 1 parking space per residential unit will be offered.

Subsequent to the construction and occupation of Block A, but prior to the initiation of the next phase of development, an evaluation will be performed to determine whether residential parking demand supports a reduction in the total number of spaces and/or unbundled parking. A reduction in the residential parking demand, created through unbundling, could enable the developer to increase the number of unbundled spaces and thereby increase on-site parking availability for BART patrons. The developer will maintain security for residential parking by segmenting the garage into separate security zones.

The developer will also explore the feasibility of a lease-back or assigning ownership of all or some of the parking spaces within the market rate buildings to the HOA, with first priority of use provided to residents and commercial tenants, with any unused spaces being available to lease to the general public. The feasibility analysis will be submitted to the City for review and comment for mutual determination by the parties as to feasibility. To the extent this approach is determined feasible, a plan will be submitted to the City for review and approval. If approved by the City, developer shall implement the approved plan.

## 5. Phased Parking Construction

Parking will be constructed in several phases, in the order indicated below:

1. Block E – BART parking garage
2. Block D – Affordable housing
3. Block A – Housing and retail
4. Blocks B and C – Housing and retail

As described in the previous section, after Block A is constructed, prior to the construction of the next block, parking demand will be assessed on site to determine whether the residential parking supply can be reduced and the number of unbundled spaces increased, perhaps increasing the on-site parking available to BART patrons. The potential to reduce parking supply will be determined as follows:

If occupancy of short-term parking (commercial and on-street) is more than 85 percent and occupancy for long-term parking (residential, employee, and BART) is more than 90 percent then no reduction in parking ratios will be pursued. If occupancy is less than 85 percent and 90 percent, respectively, and a reduction in pricing to increase occupancy is not deemed cost-effective, then parking ratios could be reduced to help achieve the adjusted occupancy.

Notwithstanding the above, the developer has the right to switch the phasing of Blocks A, B, and C, in which case the developer will submit a revised parking unbundling plan to the City for approval.

## 6. Carsharing

Companies such as City CarShare and Zipcar[5] provide car rentals by the hour, using internet and telephone-based reservation systems to allow their members to have access to a vehicle whenever needed without the significant costs to own, maintain, and park a car. This strategy has proven successful in reducing both household vehicle ownership and the amount of driving people do, both during peak commute hours and other times of day. According to the Transportation Research Board, each carshare vehicle takes nearly 15 private cars off the road. A UC Berkeley study of San Francisco's City CarShare found that members drive nearly 50 percent less after joining.[6]

Carsharing would reduce or eliminate the need for MacArthur Transit Village residents to own a vehicle, reducing their housing costs in addition to reduced transportation costs. This is especially advantageous for lower-income households.

City CarShare and Zipcar currently offer four vehicles in the existing surface parking lot at the MacArthur BART Station – three for City CarShare and one for ZipCar. These spaces are provided on a contract basis with BART. For the provision of future carshare spaces, a phased approach is recommended in order to coordinate the availability of parking spaces and future demand with project construction. In the early phases of project construction, two spaces shall be made available (one each to City CarShare and ZipCar) on Village Drive. These spaces shall be located as close and as convenient as possible to the fare gate entrances. In addition, up to four spaces will be provided in the newly constructed BART garage. The utilization of these spaces will be on a contract basis with BART.

As project buildout progresses, demand for carsharing is expected to grow for both residents and BART patrons. Therefore, in the later phases of project construction, eight spaces shall be provided as follows:

- Option 1: 4 spaces in the Block A parking garage and 4 spaces in the BART parking garage on a contract basis with BART.
- Option 2: 2 spaces in the Block A parking garage, 2 spaces on Village Drive, and 4 spaces in the BART parking garage on a contract basis with BART.

In general, all carshare parking spaces should be located in a manner that will attract as many users as possible. For example, carshare spaces shall be located in close proximity to fare gates and shall be made as visible and as recognizable as possible. When located in a parking garage, carshare spaces shall be located on the ground floor and as proximate to entrances/exits as possible.

## 7. 40th Street Transit Corridor

Because Emery-Go-Round and AC Transit transit services currently make limited stops along the 40th Street corridor between the Emeryville border and the MacArthur BART station, many BART patrons living on 40th Street drive and park at the MacArthur BART Station. The potential to reduce parking demand and increase BART ridership could be significantly increased through the provision of a shuttle stop or other transit service along this corridor. However, the funds that are currently available for access improvements to and from the station are not eligible for such operating expenses. Funds are strictly

[5] More information can be found at citycarshare.org, flexcar.com, and zipcar.com

[6] TCRP (2005) *Car-Sharing: Where and How it Succeeds*, TCRP Report 108, 2005. Available online at http://www.nelsonnygaard.com/articles/tcrp_rpt_108.pdf

restricted to capital expenditures and improvements, such as new bike lanes and bike parking facilities, pedestrian and street improvements, transit shelters, and new lighting.

To help improve transit connectivity in this corridor, however, the developer will collaborate with BART, AC Transit, and Emery-Go-Round stakeholders to research and identify additional funding sources for enhanced transit service along the 40th Street corridor. In addition, the developer, BART, and the City will work with Kaiser Hospital and Alta Bates Medical Center to evaluate if, and how, any service improvements can be made to better coordinate the number of other shuttle services in the area, and potentially provide additional transit service to 40th Street.

### 8. TDM Marketing Coordination

Informational materials about the above listed programs, as well as transit, shuttle service, and bicycling information, will be distributed as part of a "move-in" packet for residents. One or more full-time employees from the sales and/or leasing offices will be responsible for these tasks, including receiving TDM training to help residents become aware of, and make use of, non-vehicular modes of transportation. After initial lease-up or initial sales the manager of the HOA and a staff member of the respective leasing offices will assume this responsibility, pursuant to the master association CC&Rs.

### 9. Neighborhood Marketing Coordination

In an effort to decrease the number of local residents driving to the BART station, two months prior to the existing BART surface parking lot being closed for project construction the project applicant will undertake a one-time marketing campaign targeted to neighborhoods and local residents that have convenient access via other modes of transportation to the BART Station. In addition, marketing information shall also be provided to those currently parking in the surface lot via a windshield flyer or handouts at parking lot access points. Marketing materials will include distribution of information on alternative means of accessing BART and potentially free trial transit passes or other financial incentives to encourage people to not drive to BART. The marketing campaign will be created by the developer with input from the City, BART, AC Transit, and other local transit and transportation providers.

## C. TDM Strategies not required by CEQA

These strategies are not required by CEQA, but will be important to ensure the provision of sufficient vehicle parking supply for BART patrons, and effective signage to help orient people who are going to or passing through MacArthur Transit Village.

### 1. BART Parking Garage Supply and Operations

There are currently 600 on-site parking spaces at MacArthur BART Station. In addition, a number of BART patrons do not park in the BART lot, but rather on nearby city streets. Previous surveys have found that up to 200 cars are parked by BART patrons on local streets each day, which currently have no parking restrictions. However, to ensure that there is sufficient on-street parking for residents in the surrounding neighborhood, the City is exploring the feasibility of developing a residential permit program (RPP). An RPP operates by exempting permitted vehicles from the parking restrictions and time limits for non-metered, on-street parking spaces within a geographically defined area.

To accommodate the parking demand for BART patrons that would still access the station by automobile, the developer will build a 450-space replacement parking garage on Block E in the first phase of the project. In addition, the project applicant will unbundle at least 60

additional residential parking spaces. BART patrons will have a non-exclusive opportunity to share the 60 unbundled spaces that are built as the Project develops (as part of Phase 3). There is potential for additional unbundled spaces depending on residential parking demand, as discussed above.

## 2. Non-Residential Parking

All other non-residential parking at MacArthur Transit Village, both on-street and off-street, will be studied as paid parking at market-rates to be determined by the property owner, for off-street parking, and the City of Oakland, for on-street parking. The implementation plan will consider a phased program for off-street parking over time and limited free parking for retail use.

## 3. BART Access Strategies

The developer will contribute $350,000 toward capital costs for BART's "Access Strategies Fund." BART will have sole discretion to allocate these funds to a variety of approved capital access strategies, but will consult and coordinate with the City. This fund is separate from the TDM program outlined in this memorandum, but capital expenditures from this fund will likewise be designed to improve non-motorized access to the MacArthur BART station.

## 4. Wayfinding Strategies

"Wayfinding" refers to how people orient themselves and navigate from place to place, and the types of information they use to do so. People, especially those less familiar with an area, orient themselves using maps, signage, and other publicized information, as well as landmarks such as prominent buildings and other natural features in the landscape. An effective wayfinding system helps people feel safe and comfortable, and, ultimately, find their destination. It also gives them a "sense of place" – an understanding and familiarity with where they are and where they are going, and encourages them to use the same travel mode again in the future.

Residents, employees, and visitors to MacArthur Transit Village can all benefit from an effective wayfinding program, including signage and other information to help them navigate throughout the development, to BART from within the project area, and elsewhere in the City of Oakland and beyond. With simple and intuitive wayfinding tools, visitors can quickly find their destination without the fear or stress of getting lost, arriving on time, or feeling comfortable with their surroundings.

The wayfinding improvements and strategy can build on recent investments in new bicycle and pedestrian signage near MacArthur BART. The provision of wayfinding signage at MacArthur BART and MacArthur Transit Village can also share the same design and navigational themes.

The developer will install standard street signs pursuant to City standards and approvals. Furthermore, the developer shall ensure that any wayfinding improvements meet the City's existing wayfinding program requirements[7] (especially for bicyclists and pedestrians), are well-coordinated with BART signage, and integrate easily with other wayfinding improvements in the area. More specifically, to facilitate the creation of a holistic and well-coordinated signage program for the whole station area, the developer shall allocate $15,000 to the City. These funds can be used not only for the staff time required to plan and

[7] "City of Oakland – Design Guidelines for Bicycle Wayfinding Signage." Adopted in 2009.

coordinate the wayfinding program with BART and the developer, but also for the actual production and installation of the signage.

When coordinating the wayfinding program, the City, BART, and the developer shall evaluate some or all of the following strategies and wayfinding elements within the project area:

- Publicly displayed maps of the neighborhood surrounding MacArthur Transit Village and MacArthur BART Station that indicate prominent landmarks and important destinations, as well as maps of the regional transportation system for the Bay Area.
- Provide transportation information for all modes, including maps and schedules for transit, directions to bus stops, bicycle parking, carshare pods, and automobile parking areas.
- Signage throughout the site, designed in coordination with the City, BART, AC Transit, Emery-Go-Round, and other transportation services, to direct travelers to various services and key destinations. These signs will supplement the signs already being provided by BART, with an emphasis on pedestrian navigation.
- There will be many opportunities to design wayfinding into structures, plazas and other elements of the site. Furthermore, the actual design of the site, not just signage, will make an important contribution to the identity and ability for people to orient themselves at MacArthur Transit Village.

## D. Program Monitoring and Adjustment

It will be important to monitor and adjust the TDM program during the construction of each phase and subsequent to completion of the project to ensure that investments in TDM strategies are as effective as possible. The developer will therefore submit *a TDM Monitoring Plan before the beginning of each construction phase that will include the* following elements:

- Performance of each of the measures listed in B.1. - B.9. and C.1. - C.4. If a strategy is deemed unsuccessful or underutilized, it could be replaced by another strategy that is likely to be more successful.
- Parking supply and occupancy for peak periods, to determine feasibility of reductions in parking supply construction and/or expansion in unbundling.

The developer shall fund the monitoring plan and ongoing review by a qualified transportation firm with TDM development and monitoring experience, with oversight by the City, up to a maximum of $50,000 until completion of the project. Once again, a review of the TDM Plan will take place following the completion of each phase of the Project. These funds can be used at any time during the construction of the project. However, utilization of the funds will likely vary from year to year and depending on completion date of the five construction phases.

The developer shall fund an escrow type account to be used exclusively for the TDM monitoring activities as applicable for each phase by a qualified third party (such as: parking occupancy counts for each phase; travel surveys of residents, employees, customers, and BART patrons; data compilation and analysis of EasyPass participation, analysis of BART, AC Transit, and shuttle ridership, etc.), preparation of monitoring reports, and review by City staff. The specifics of the account shall be mutually agreed upon by the developer and the City, including the ability of the City to access the funds if the developer is not complying with the TDM requirements.

Within 6 months of completion of the last phase of development, a final TDM Monitoring Plan shall be completed highlighting the performance of each of the TDM strategies and recommending any changes or modifications that should be made to improve the ongoing performance of the various TDM strategies. In addition, the plan shall include a summary of the ongoing management obligations of the HOA and/or leasing office.

It is also important to note that the project's Conditions of Approval require that the developer allocate $150,000 to the City for the development of a Residential Permit Program (RPP). At this time, the extent of the RPP and its status remain uncertain. If these funds are not expended within five years of project completion, "...the project sponsor shall have no further obligation to pursue or fund any RPP program and any remaining funds shall revert back toward public improvements in the project area as determined by the City."

## E. Implementation

Figure 3 on the following page summarizes the implementation schedule for the TDM plan.

## Figure 3 Implementation Schedule for MacArthur Transit Village TDM Plan

| | | Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5 | Timeframe |
|---|---|---|---|---|---|---|---|
| Key Strategy | Sub Strategy | BART Garage & Infrastructure | Affordable Housing Component | Market-Rate Housing Phase 1, Block A | Market-Rate Housing, Blocks B or C | Market-Rate Housing, Blocks B or C | On-going or One-Time Item |
| B.1. Discounted Transit Passes | B.1.a. Collaborate with AC Transit to provide EasyPass program to affordable housing residents | N/A | To be implemented prior to Certificate of Occupancy and available to residents upon occupancy. | N/A | N/A | N/A | On-going through life of project |
| | B.1.b Provide location for sales of AC Transit and high-value BART/Clipper passes to market rate units | N/A | N/A | Single retailer or centralized market-rate project staff | Single retailer or centralized market-rate project staff | Single retailer or centralized market-rate project staff | On-going through life of project |
| B.2 and B.3. Bicycle Parking | B.2.a Provide secure bicycle parking for residential and retail uses | N/A | To be installed prior to Certificate of Occupancy in accordance with City of Oakland Bicycle Ordinance | To be installed prior to Certificate of Occupancy in accordance with City of Oakland Bicycle Ordinance | To be installed prior to Certificate of Occupancy in accordance with City of Oakland Bicycle Ordinance | To be installed prior to Certificate of Occupancy in accordance with City of Oakland Bicycle Ordinance | To be maintained through life of project |
| | B.3.a Collaborate with BART to provide high-capacity, secure bicycle parking | Collaborate with BART and City and, if feasible, located in the BART Plaza, a commercial space, or in new BART parking garage | N/A | N/A | N/A | N/A | Continued discussion until suitable solution has been found |

| | | Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5 | Timeframe |
|---|---|---|---|---|---|---|---|
| **Key Strategy** | **Sub Strategy** | **BART Garage & Infrastructure** | **Affordable Housing Component** | **Market-Rate Housing Phase 1, Block A** | **Market-Rate Housing, Blocks B or C** | **Market-Rate Housing, Blocks B or C** | **On-going or One-Time Item** |
| | **B.3.b Provide bicycle repair facilities** | N/A | N/A | To be installed prior to Certificate of Occupancy, if deemed feasible. | If deemed feasible, and not installed in Phase 3. | If deemed feasible, and not installed I Phase 3 or 4. | To be maintained through life of project |
| **B.4. Unbundling of Parking** | **B.4.a 30% of residential parking will be unbundled in Block A** | N/A | N/A | Prior to FDP approval, details of unbundling to City; to be ensured in selling the units in Parcel A. | Feasibility of additional unbundled parking to be assessed as part of B.4.a below and if deemed feasible, then to be ensured in the selling of the units in Phase 4. | Feasibility of additional unbundled parking to be assessed as part of B.4.a below and if deemed feasible, then to be ensured in the selling of the units in Phase 5. | In Phases 3-5 |
| | **B.4.b Explore potential for lease back of designated parking spaces** | N/A | Prior to FDP approval, determine feasibility; if determined feasible ensure garage design will accommodate and provide the details of the mechanisms of the lease-back program for review and approval by City staff prior to Certificate of Occupancy. | N/A | Feasibility of assigning ownership of all or some of the parking spaces within the market rate buildings to the HOA, with first priority of use provided to residents, commercial tenants with any unused spaces being available to lease to the general public | Feasibility of assigning ownership of all or some of the parking spaces within the market rate buildings to the HOA, with first priority of use provided to residents, commercial tenants with any unused spaces being available to lease to the general public | If deemed feasible , implement prior to Certificate of Occupancy and on-going through life of project |

| | | Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5 | Timeframe |
|---|---|---|---|---|---|---|---|
| **Key Strategy** | **Sub Strategy** | **BART Garage & Infrastructure** | **Affordable Housing Component** | **Market-Rate Housing Phase 1, Block A** | **Market-Rate Housing, Blocks B or C** | **Market-Rate Housing, Blocks B or C** | **On-going or One-Time Item** |
| | | | | | to be assessed as part of B.4.a below; if deemed feasible to be implemented prior to Certificate of Occupancy. | to be assessed as part of B.4.a below; if deemed feasible, to be implemented prior to Certificate of Occupancy. | |
| **B.5. Phased Parking Construction** | **B.5.a In future phases, assess whether parking supply can be reduced before construction** | N/A | N/A | N/A | Prior to FDP approval, assess whether parking supply in this phase can be reduced due to lower demand than expected in Phase 3. Opportunities to increase unbundling and/or a lease back program will also be assessed as part of this sub-strategy. | Prior to FDP approval, assess whether parking supply in this phase can be reduced due to lower demand than expected in Phases 3 and 4. . Opportunities to increase unbundling and/or a lease back program will also be assessed as part of this sub-strategy. | In Phase 4 and 5 |

| | | Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5 | Timeframe |
|---|---|---|---|---|---|---|---|
| Key Strategy | Sub Strategy | BART Garage & Infrastructure | Affordable Housing Component | Market-Rate Housing Phase 1, Block A | Market-Rate Housing, Blocks B or C | Market-Rate Housing, Blocks B or C | On-going or One-Time Item |
| B.6. Carsharing | B.6.a Maintain and increase number of parking spaces available for car-sharing | The 4 existing carshare spaces will be moved to the BART Garage once in operation | N/A | Prior to Certificate of Occupancy, discuss with carshare operators on potentially moving 2 vehicles to Parcel A and 2 vehicles to Village Drive, with a total potential supply of 8 spaces. | Prior to Certificate of Occupancy, discuss with carshare operators an increase in the number of carshare vehicles. | Prior to Certificate of Occupancy, discuss with carshare operators an increase in the number of carshare vehicles. | On-going discussions with carshare operators on the best locations for up to 8 carshare vehicles |
| B.7. TDM Marketing Coordination | B.7.a Provide TDM marketing coordination to residents and employees | N/A | Staff will provide move-in packets to new tenants and on-going marketing materials and support for non-vehicular modes of transportation. To be located in the leasing office. | Marketing coordination will take place in the sales/leasing office. | Marketing coordination will take place in the sales/leasing office. | Marketing coordination will take place in the sales/leasing office. | Once the sales office has closed, TDM coordination will be managed by the HOA or leasing offices. |
| C.1. BART Garage Operations | C.1.a Provide parking spaces to BART patrons | Project Sponsor will ensure a BART patron parking supply of 450 centralized parking spaces and potential sharing of 60 unbundled spaces within the Project | N/A | N/A | N/A | N/A | 450 spaces to be provided through the life of the project. |

| | | Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5 | Timeframe |
|---|---|---|---|---|---|---|---|
| Key Strategy | Sub Strategy | BART Garage & Infrastructure | Affordable Housing Component | Market-Rate Housing Phase 1, Block A | Market-Rate Housing, Blocks B or C | Market-Rate Housing, Blocks B or C | On-going or One-Time Item |
| C.4. Wayfinding Signage | C.4.a Improve wayfinding in, and in the vicinity of, the project site | On-going | On-going | On-going | On-going | On-going | On-going |

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**ATTACHMENT H**

**MEMORANDUM -**

**DATE:** April 10, 2015

**TO:**
Elois Thornton
Department of Planning and Building
City of Oakland (City)

**FROM:**
Lynette Dias, AICP
P. 510.251.8210
E. ldias@up-partners.com

**RE: CEQA Compliance for MacArthur Station[1] Parcel A and Parcel C-1 FDP**

## A. OVERVIEW/SUMMARY

### 1. Current Proposal

In accordance with the Standard Conditions of Approval for the MacArthur Station[2] (MS) Project PUD/PDP and the terms of the Development Agreement, the City is in receipt of an application for a Final Development Plan (FDP) for Parcel A and Parcel C-1. For Parcel A/Stage 3, the FDP proposes 287 apartment residential units and 22,287 square feet of ground-floor commercial. An alternate development program for Parcel A, which would accommodate a grocery store is also proposed. The alternate plan includes 292 residential units, 33,983 square feet of ground-floor commercial space including approximately 22,085 square feet for a grocery store. The FDP for Parcel C-1 proposes 96 apartment residential units, 1,202 square feet of ground floor retail see Project Included Data Tables at the end of this memorandum.

The key purpose of this review is to determine whether the environmental effects of the FDP are adequately analyzed in the 2008 certified MacArthur Transit Village Project Environmental Impact Report (2008 EIR). As described below, development of Parcel A and Parcel C-1 are considered in the 2008 EIR and as proposed would not result in new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified

[1] The Project was previously called the MacArthur Transit Village Project.

[2] See note 1 above.

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in the 2008 EIR. As a result, the City does not need to prepare a Subsequent or Supplemental EIR to satisfy the environmental review requirements of CEQA. The 2008 EIR remains adequate for the FDP proposed for Parcel A and Parcel C-1.

The discussion below provides: (1) an overview of MS Project approvals and environmental review; (2) a summary of the relationship of the current proposed Parcel A and Parcel C-1 FDP with the approved MS Project PUD/PDP and the project analyzed in the 2008 EIR; and (3) findings that Parcel A and Parcel C-1 FDP fall within the scope of the 2008 EIR and do not require preparation of subsequent or supplemental environmental review pursuant to CEQA Guidelines Section 15162 and Section 15163.

## 2. Prior Project Approvals and Environmental Review

The City has granted several approvals for the MS Project. The PUD/PDP approved in 2008 authorizes the development of up to 675 residential units, 49,000 square feet of commercial, 5,000 square feet of community space, a parking structure for BART patrons, and various infrastructure improvements. The PUD/PDP also establishes the approved land uses, density, bulk, massing and design guidelines for the site. Prior to approving the PUD/PDP, the City certified an EIR for the MS Project (SCH No. 2006022075) on July 1, 2008. The City also subsequently approved addenda to the EIR in 2010 for Phases/Stages 1 and 2. Each addendum found determined that no new information or changes in the project or project circumstances required subsequent or supplemental environmental review.

Each of the previous approvals for the MS Project is detailed in the PUD/PDP Substantial Conformance Memo dated March 24, 2015.

## 3. Summary

Urban Planning Partners reviewed the requested subsequent approvals and found that there: (1) are no substantial project changes, (2) are no substantial changes in the project circumstances, and (3) is no new information of substantial importance, which could not have been known with the exercise of reasonable diligence when the 2008 EIR was certified, that would require major revisions of the certified 2008 EIR because of a new significant effect or an increase in the severity of a previously identified significant effect. Under CEQA section 21166 and CEQA Guidelines sections 15162 and 15163, no further environmental review is required.

A summary of the relationship of these approvals relative to Parcel A and Parcel C-1 FDP to prior MS Project approvals and the certified 2008 EIR is provided below.

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## B. RELATIONSHIP OF PROPOSED FDP TO PUD/PDP AND 2008 EIR (PROJECT CHANGES)

### 1. Relationship to Modified PUD/PDP

Urban Planning Partners and City staff evaluated the proposed FDP for Parcel A and Parcel C-1 and found that in all fundamental respects the FDP is in substantial compliance with the modified PUD/PDP and is consistent with the terms of the Development Agreement (see memo PUD/PDP Conformance Memo, dated March 25, 2015). The Memorandum and the April 15, 2015 Planning Commission Staff Report find that the MacArthur BART Transit Village Development Agreement, the modified PUD/PDP, and the COAs and associated exhibits do not preclude any of the refinements proposed as part of the Parcel A/Stage 3 and Parcel C-1/Stage 4 FDP. Based on the analysis included in the Memorandum and Staff Report, the Parcel A/Stage 3 and Parcel C-1/Stage 4 FDP is in substantial conformance with the approved PUD/PDP. Additionally, the FDP complies with the COAs and is consistent with the terms of the Development Agreement.

### 2. Relationship to 2008 EIR

The Parcel A and Parcel C-1 FDP is within the scope of the MS Project evaluated in the 2008 EIR and would not trigger any new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified in the 2008 EIR. The MS Project analyzed in the certified 2008 EIR consisted of a new BART parking garage; improvements to the BART Plaza; up to 675 residential units (both market-rate and affordable); up to 44,000 square feet of commercial space (including live/work units) (note that 49,000 square feet of commercial was approved); 5,000 square feet of community space or childcare space; approximately 1,000 structured parking spaces, including the 300 space BART parking garage (which was increased to 480 spaces pursuant to the Conditions of Approval); approximately 30-45 on-street parking spaces, pedestrian and bicycle friendly internal streets and walkways; improvements to the Frontage Road; a new internal street, Village Drive (now called 39$^{th}$ Street), located between Frontage Road and Telegraph Avenue; two new traffic signals at the intersections of 39$^{th}$ Street/Telegraph Avenue and West MacArthur Boulevard/Frontage Road; a rezoning of the MS Project site to S-15, and a text amendment to the S-15 zone. Multiple FDPs were contemplated in the 2008 EIR (See Draft EIR, pages 72-74) to implement the Preliminary PUD/PDP.

#### a) Parcel A/Stage 3

The Parcel A/Stage 3 portion of the FDP proposes 287 apartment residential units and 22,287 square feet of commercial ground-floor retail. An alternate development program for Parcel A, which would accommodate a grocery store is also proposed. The alternate plan includes 292 residential units, 33,983 square feet of ground-floor commercial space including approximately 22,287 square feet for a grocery store. The PUD/PDP allows and the EIR evaluated up to 240 residential units and 26,000 square feet of commercial space on Parcel A. The EIR did not specify to whether the units would be for sale or rental units and such a distinction would not affect the EIR findings. Additionally, the refinement of the development buildout approved as part of the modified PUD/PDP and the Stage1 and 2 FDPs and the further refinement that is proposed as part of the FDP for Parcel, A and C-1,

would not result in a net increase in the overall development approved (675 units and 49,000 square feet of commercial) in the 2008 EIR.

The two key project revisions that are considered in this analysis are whether (1) the increase in residential units from 240 to 287 or 292—a net increase of 47 or 52 units for Parcel A; and (2) the potential increase in commercial space on Parcel A by up to 7,983 square feet if the alternate plan with the grocery store is developed would result in any new or substantially greater impacts. The analysis considers that the proposed refinements to Parcel A would not result in any net changes to the approved buildout for the modified PUD/PDP of up to 675 units and 49,000 square feet of commercial.

**b) Parcel C-1/Stage 4**

The Parcel C-1 portion of the FDP proposes 96 apartment residential units and 1,202 square feet of ground floor retail. A total of 51 or 46 units and 17,311 or 5,615 square feet of commercial would remain for Parcel C-2 which if developed would result in a total on Parcel C of up to 148 or 142 (with Stage 3 Alternate Plan) residential units and 18,513 or 6,817 (with Stage 3 Alternate Plan) square feet of commercial. The proposed FDP is limited to C-1 and does not include C-2. The 2008 PUD/PDP allows, and the EIR evaluated up to 195 (47 or 53 units more than proposed) for-sale residential units and 12,500 (6,013 square feet more or 5,683 square feet less than proposed) square feet of commercial space on the entirety of Parcel C. The EIR did not specify to whether the units would be for sale or rental units and such a distinction would not substantially affect the EIR findings.

The refinements in the approved FDP for the Parking Structure/Stage 1 and the proposed refinements for Parcels A and C-1 being considered as part of the current FDP application, would not result in net changes of commercial or residential units for the entire MS Project over what was analyzed in the EIR. The COAs and the EIR support development of up to 675 units and 49,000 square feet of commercial. **The modified distribution of these uses between blocks do not constitute a substantial changes to the project evaluated in the EIR that would require major revisions of the certified 2008 EIR, because of a new significant effect or a substantial increase in the severity of a previously identified significant effect.**

## C. CHANGED CIRCUMSTANCES AND NEW INFORMATION

In the six years since certification of the EIR, there have been some intervening events with the potential to affect the 2008 EIR findings. The most notable event being that mid-2014 the City Council approved the Broadway Valdez District Specific Plan (BVDSP), which is approximately one mile from the MS Project site, and certified the associated EIR. Additionally a few new small infill sites in the MS Project vicinity have been developed with projects that were already entitled in 2008 and there have been some minor right of way and bike lane improvements.

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Finally, since the 2008 EIR was certified, there have been updates to local, regional and State policies that may be applicable to the current FDP proposal.

The authors of this memorandum utilized the findings and analysis in the BVDSP EIR, which considers current conditions in the MS Project area and surrounding areas to assist in determining whether the changes referenced above or other new information, including changes to City, State, and regional policies and regulations, would constitute (1) a change in circumstances under which the MS Project would be taken or (2) new information of substantial importance that would require major revisions of the certified 2008 EIR, because of a new significant impact or a substantial increase in the severity of a previously identified significant impact under CEQA section 21166 and CEQA Guidelines sections 15162 and 15163.

Each environmental topic assessed under CEQA and in the 2008 EIR was considered, including Land Use and Planning Policy; Transportation and Circulation; Air Quality and Greenhouse Gases; Noise and Vibration; Hydrology and Water Quality; Public Services and Utilities; Cultural and Paleontological Resources; and Aesthetic Resources. There is no new information or changes in circumstances that would result in new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified in the 2008 EIR.

The impacts associated with the Stage 2 and Stage 4 FDP are consistent with the findings of the 2008 EIR for the MS Project and no new impacts or more severe impacts would result due to new information or changed circumstances. No new mitigation measures would be required.

Each impact identified in the 2008 EIR, except two cumulative impacts, would be mitigated to a less-than-significant level with implementation of the 2008 EIR's Mitigation Measures and the City's Standard Conditions of Approval, which are both included in the MTV Mitigation Monitoring Program. The Stage 2 and Stage 4 FDP will be required to comply with the Mitigation and Monitoring Program as a Condition of Approval. The two significant and unavoidable impacts from the 2008 EIR are associated with the MS Project's contribution to cumulative impacts at two intersections (Telegraph Avenue/51st Street intersection and Broadway/MacArthur Boulevard intersection). The MS Project (including the Stage 3 and 4 FDP) would continue to contribute to these two cumulative significant and unavoidable impacts consistent with the findings of the 2008 EIR.

A summary of the assessment prepared for Transportation and Circulation and the Air Quality and Greenhouse Gas findings is provided below as these are the two topics most likely affected by changed circumstances and/or new information.

### 1. Transportation, Circulation, and Parking

A supplemental traffic analysis was prepared by Fehr & Peers that considered changes in background conditions that have occurred since the 2008 EIR was prepared. New information

was also considered including the City's current Traffic Impact Analysis Guidelines that include updated methods for trip generation and thresholds of significance. The analysis also looked at a variation in the type of commercial uses, including a grocery store. The updated analysis is provided as Attachment A.

The analysis utilizes the traffic analysis from the BVDSP EIR and concluded that the MS project as refined by the Parcel A and Parcel C-1 FDP would not result in any new significant transportation impacts or a substantial increase or severity of a previously identified significant transportation impact from those identified in the 2008 EIR, nor are new mitigation measures or alternatives warranted to address potential transportation impacts.

### 2. Air Quality and Greenhouse Gas Emissions

As described in the 2008 EIR, no significant construction-related air quality impacts would occur with implementation of the City Standard Conditions of Approval. Additionally no significant operation-period air quality impacts were identified in the 2008 EIR. No changes in the MS Project or the Parcel A or C-1 FDP or existing conditions warrant any new analysis.

Since 2008, the BAAQMD has revised its CEQA thresholds with respect to air quality and global climate change. The new thresholds, and the information used to help develop these thresholds, however, do not represent "new information" as specifically defined under CEQA. As a result, an analysis of the MS project according to the recommended May 2011 Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and Thresholds is not required.

## D. CONCLUSION

As discussed above, the development associated with the Parcel A and Parcel C-1 FDPs was adequately considered in the 2008 EIR. The refinements incorporated into the FDP applications do not represent changes that would result in new or more severe impacts (or require new or significantly altered mitigation measures) beyond those already identified in the 2008 EIR. The 2008 EIR is adequate for the Parcel A and Parcel C-1 FDP and no subsequent or supplemental environmental review is warranted.

The following discussion summarizes the reasons why no supplemental or subsequent CEQA review is necessary pursuant to *CEQA Guidelines* Section 15162 and the City can rely on the previously certified EIR.

Substantial Changes to the Project. The refinements incorporated into the Parcel A and Parcel C-1 FDP, including an increase in the amount of commercial retail and office space would **not** result in new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified in the 2008 EIR. Therefore, the proposed changes

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included in the Parcel A and Parcel C-1 FDP are considered *minor* refinements, not *substantial* changes.

Project Circumstances. Since certification of the 2008 EIR, conditions in and around the MS Project area have not substantially changed and thus implementation of the Parcel A and Parcel C-1 FDP would **not** result in new significant environmental effects or a substantial increase in the severity of environmental effects already identified in the 2008 EIR. No substantial changes in noise levels, air quality, traffic, or other conditions have occurred within and around the MS Project site since certification of the EIR.

New Information. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2008 EIR was certified, has been identified which is expected to result in: 1) new significant environmental effects or a substantial increase in the severity of environmental effects already identified in the EIR; or 2) mitigation measures or alternatives which were previously determined to be infeasible would in fact be feasible, or which are considerably different from those recommended in the 2008 EIR, and which would substantially reduce significant effects of the project, but the project applicant declines to adopt them.

As described previously, changes to the Parcel A and Parcel C-1 FDP would not result in significant environmental effects (including effects that would be substantially more severe than impacts identified in the 2008 EIR). Existing regulations (including City General Plan policies and ordinances in the Municipal Code) and mitigation measures included in the 2008 EIR would be adequate to reduce the impacts resulting from the Parcel A and Parcel C-1 FDP to less-than-significant levels.

Consequently, there are no substantial project changes, no substantial changes in the project circumstances, and no new information of substantial importance that would require major revisions of the certified 2008 EIR, because of a new significant effect or an increase in the severity of a previously identified significant effect. Under CEQA section 21166 and CEQA Guidelines sections 15162 and 15163, no further environmental review is required. Thus, in considering approval of the Parcel A and Parcel C-1 FDP, the City should rely on the previously certified 2008 EIR.

Attachment
Transportation Memorandum

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**ATTACHMENT H**

**MEMORANDUM -**

**DATE:** April 10, 2015

**TO:**
Elois Thornton
Department of Planning and Building
City of Oakland (City)

**FROM:**
Lynette Dias, AICP
P. 510.251.8210
E. ldias@up-partners.com

**RE: CEQA Compliance for MacArthur Station[1] Parcel A and Parcel C-1 FDP**

## A. OVERVIEW/SUMMARY

### 1. Current Proposal

In accordance with the Standard Conditions of Approval for the MacArthur Station[2] (MS) Project PUD/PDP and the terms of the Development Agreement, the City is in receipt of an application for a Final Development Plan (FDP) for Parcel A and Parcel C-1. For Parcel A/Stage 3, the FDP proposes 287 apartment residential units and 22,287 square feet of ground-floor commercial. An alternate development program for Parcel A, which would accommodate a grocery store is also proposed. The alternate plan includes 292 residential units, 33,983 square feet of ground-floor commercial space including approximately 22,085 square feet for a grocery store. The FDP for Parcel C-1 proposes 96 apartment residential units, 1,202 square feet of ground floor retail see Project Included Data Tables at the end of this memorandum.

The key purpose of this review is to determine whether the environmental effects of the FDP are adequately analyzed in the 2008 certified MacArthur Transit Village Project Environmental Impact Report (2008 EIR). As described below, development of Parcel A and Parcel C-1 are considered in the 2008 EIR and as proposed would not result in new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified

[1] The Project was previously called the MacArthur Transit Village Project.

[2] See note 1 above.

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in the 2008 EIR. As a result, the City does not need to prepare a Subsequent or Supplemental EIR to satisfy the environmental review requirements of CEQA. The 2008 EIR remains adequate for the FDP proposed for Parcel A and Parcel C-1.

The discussion below provides: (1) an overview of MS Project approvals and environmental review; (2) a summary of the relationship of the current proposed Parcel A and Parcel C-1 FDP with the approved MS Project PUD/PDP and the project analyzed in the 2008 EIR; and (3) findings that Parcel A and Parcel C-1 FDP fall within the scope of the 2008 EIR and do not require preparation of subsequent or supplemental environmental review pursuant to CEQA Guidelines Section 15162 and Section 15163.

## 2. Prior Project Approvals and Environmental Review

The City has granted several approvals for the MS Project. The PUD/PDP approved in 2008 authorizes the development of up to 675 residential units, 49,000 square feet of commercial, 5,000 square feet of community space, a parking structure for BART patrons, and various infrastructure improvements. The PUD/PDP also establishes the approved land uses, density, bulk, massing and design guidelines for the site. Prior to approving the PUD/PDP, the City certified an EIR for the MS Project (SCH No. 2006022075) on July 1, 2008. The City also subsequently approved addenda to the EIR in 2010 for Phases/Stages 1 and 2. Each addendum found determined that no new information or changes in the project or project circumstances required subsequent or supplemental environmental review.

Each of the previous approvals for the MS Project is detailed in the PUD/PDP Substantial Conformance Memo dated March 24, 2015.

## 3. Summary

Urban Planning Partners reviewed the requested subsequent approvals and found that there: (1) are no substantial project changes, (2) are no substantial changes in the project circumstances, and (3) is no new information of substantial importance, which could not have been known with the exercise of reasonable diligence when the 2008 EIR was certified, that would require major revisions of the certified 2008 EIR because of a new significant effect or an increase in the severity of a previously identified significant effect. Under CEQA section 21166 and CEQA Guidelines sections 15162 and 15163, no further environmental review is required.

A summary of the relationship of these approvals relative to Parcel A and Parcel C-1 FDP to prior MS Project approvals and the certified 2008 EIR is provided below.

**ATTACHMENT H**

## B. RELATIONSHIP OF PROPOSED FDP TO PUD/PDP AND 2008 EIR (PROJECT CHANGES)

### 1. Relationship to Modified PUD/PDP

Urban Planning Partners and City staff evaluated the proposed FDP for Parcel A and Parcel C-1 and found that in all fundamental respects the FDP is in substantial compliance with the modified PUD/PDP and is consistent with the terms of the Development Agreement (see memo PUD/PDP Conformance Memo, dated March 25, 2015). The Memorandum and the April 15, 2015 Planning Commission Staff Report find that the MacArthur BART Transit Village Development Agreement, the modified PUD/PDP, and the COAs and associated exhibits do not preclude any of the refinements proposed as part of the Parcel A/Stage 3 and Parcel C-1/Stage 4 FDP. Based on the analysis included in the Memorandum and Staff Report, the Parcel A/Stage 3 and Parcel C-1/Stage 4 FDP is in substantial conformance with the approved PUD/PDP. Additionally, the FDP complies with the COAs and is consistent with the terms of the Development Agreement.

### 2. Relationship to 2008 EIR

The Parcel A and Parcel C-1 FDP is within the scope of the MS Project evaluated in the 2008 EIR and would not trigger any new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified in the 2008 EIR. The MS Project analyzed in the certified 2008 EIR consisted of a new BART parking garage; improvements to the BART Plaza; up to 675 residential units (both market-rate and affordable); up to 44,000 square feet of commercial space (including live/work units) (note that 49,000 square feet of commercial was approved); 5,000 square feet of community space or childcare space; approximately 1,000 structured parking spaces, including the 300 space BART parking garage (which was increased to 480 spaces pursuant to the Conditions of Approval); approximately 30-45 on-street parking spaces, pedestrian and bicycle friendly internal streets and walkways; improvements to the Frontage Road; a new internal street, Village Drive (now called 39th Street), located between Frontage Road and Telegraph Avenue; two new traffic signals at the intersections of 39th Street/Telegraph Avenue and West MacArthur Boulevard/Frontage Road; a rezoning of the MS Project site to S-15, and a text amendment to the S-15 zone. Multiple FDPs were contemplated in the 2008 EIR (See Draft EIR, pages 72-74) to implement the Preliminary PUD/PDP.

#### a) Parcel A/Stage 3

The Parcel A/Stage 3 portion of the FDP proposes 287 apartment residential units and 22,287 square feet of commercial ground-floor retail. An alternate development program for Parcel A, which would accommodate a grocery store is also proposed. The alternate plan includes 292 residential units, 33,983 square feet of ground-floor commercial space including approximately 22,287 square feet for a grocery store. The PUD/PDP allows and the EIR evaluated up to 240 residential units and 26,000 square feet of commercial space on Parcel A. The EIR did not specify to whether the units would be for sale or rental units and such a distinction would not affect the EIR findings. Additionally, the refinement of the development buildout approved as part of the modified PUD/PDP and the Stage1 and 2 FDPs and the further refinement that is proposed as part of the FDP for Parcel, A and C-1,

would not result in a net increase in the overall development approved (675 units and 49,000 square feet of commercial) in the 2008 EIR.

The two key project revisions that are considered in this analysis are whether (1) the increase in residential units from 240 to 287 or 292—a net increase of 47 or 52 units for Parcel A; and (2) the potential increase in commercial space on Parcel A by up to 7,983 square feet if the alternate plan with the grocery store is developed would result in any new or substantially greater impacts. The analysis considers that the proposed refinements to Parcel A would not result in any net changes to the approved buildout for the modified PUD/PDP of up to 675 units and 49,000 square feet of commercial.

**b) Parcel C-1/Stage 4**

The Parcel C-1 portion of the FDP proposes 96 apartment residential units and 1,202 square feet of ground floor retail. A total of 51 or 46 units and 17,311 or 5,615 square feet of commercial would remain for Parcel C-2 which if developed would result in a total on Parcel C of up to 148 or 142 (with Stage 3 Alternate Plan) residential units and 18,513 or 6,817 (with Stage 3 Alternate Plan) square feet of commercial. The proposed FDP is limited to C-1 and does not include C-2. The 2008 PUD/PDP allows, and the EIR evaluated up to 195 (47 or 53 units more than proposed) for-sale residential units and 12,500 (6,013 square feet more or 5,683 square feet less than proposed) square feet of commercial space on the entirety of Parcel C. The EIR did not specify to whether the units would be for sale or rental units and such a distinction would not substantially affect the EIR findings.

The refinements in the approved FDP for the Parking Structure/Stage 1 and the proposed refinements for Parcels A and C-1 being considered as part of the current FDP application, would not result in net changes of commercial or residential units for the entire MS Project over what was analyzed in the EIR. The COAs and the EIR support development of up to 675 units and 49,000 square feet of commercial. **The modified distribution of these uses between blocks do not constitute a substantial changes to the project evaluated in the EIR that would require major revisions of the certified 2008 EIR, because of a new significant effect or a substantial increase in the severity of a previously identified significant effect.**

## C. CHANGED CIRCUMSTANCES AND NEW INFORMATION

In the six years since certification of the EIR, there have been some intervening events with the potential to affect the 2008 EIR findings. The most notable event being that mid-2014 the City Council approved the Broadway Valdez District Specific Plan (BVDSP), which is approximately one mile from the MS Project site, and certified the associated EIR. Additionally a few new small infill sites in the MS Project vicinity have been developed with projects that were already entitled in 2008 and there have been some minor right of way and bike lane improvements.

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Finally, since the 2008 EIR was certified, there have been updates to local, regional and State policies that may be applicable to the current FDP proposal.

The authors of this memorandum utilized the findings and analysis in the BVDSP EIR, which considers current conditions in the MS Project area and surrounding areas to assist in determining whether the changes referenced above or other new information, including changes to City, State, and regional policies and regulations, would constitute (1) a change in circumstances under which the MS Project would be taken or (2) new information of substantial importance that would require major revisions of the certified 2008 EIR, because of a new significant impact or a substantial increase in the severity of a previously identified significant impact under CEQA section 21166 and CEQA Guidelines sections 15162 and 15163.

Each environmental topic assessed under CEQA and in the 2008 EIR was considered, including Land Use and Planning Policy; Transportation and Circulation; Air Quality and Greenhouse Gases; Noise and Vibration; Hydrology and Water Quality; Public Services and Utilities; Cultural and Paleontological Resources; and Aesthetic Resources. There is no new information or changes in circumstances that would result in new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified in the 2008 EIR.

The impacts associated with the Stage 2 and Stage 4 FDP are consistent with the findings of the 2008 EIR for the MS Project and no new impacts or more severe impacts would result due to new information or changed circumstances. No new mitigation measures would be required.

Each impact identified in the 2008 EIR, except two cumulative impacts, would be mitigated to a less-than-significant level with implementation of the 2008 EIR's Mitigation Measures and the City's Standard Conditions of Approval, which are both included in the MTV Mitigation Monitoring Program. The Stage 2 and Stage 4 FDP will be required to comply with the Mitigation and Monitoring Program as a Condition of Approval. The two significant and unavoidable impacts from the 2008 EIR are associated with the MS Project's contribution to cumulative impacts at two intersections (Telegraph Avenue/51st Street intersection and Broadway/MacArthur Boulevard intersection). The MS Project (including the Stage 3 and 4 FDP) would continue to contribute to these two cumulative significant and unavoidable impacts consistent with the findings of the 2008 EIR.

A summary of the assessment prepared for Transportation and Circulation and the Air Quality and Greenhouse Gas findings is provided below as these are the two topics most likely affected by changed circumstances and/or new information.

### 1. Transportation, Circulation, and Parking

A supplemental traffic analysis was prepared by Fehr & Peers that considered changes in background conditions that have occurred since the 2008 EIR was prepared. New information

was also considered including the City's current Traffic Impact Analysis Guidelines that include updated methods for trip generation and thresholds of significance. The analysis also looked at a variation in the type of commercial uses, including a grocery store. The updated analysis is provided as Attachment A.

The analysis utilizes the traffic analysis from the BVDSP EIR and concluded that the MS project as refined by the Parcel A and Parcel C-1 FDP would not result in any new significant transportation impacts or a substantial increase or severity of a previously identified significant transportation impact from those identified in the 2008 EIR, nor are new mitigation measures or alternatives warranted to address potential transportation impacts.

### 2. Air Quality and Greenhouse Gas Emissions

As described in the 2008 EIR, no significant construction-related air quality impacts would occur with implementation of the City Standard Conditions of Approval. Additionally no significant operation-period air quality impacts were identified in the 2008 EIR. No changes in the MS Project or the Parcel A or C-1 FDP or existing conditions warrant any new analysis.

Since 2008, the BAAQMD has revised its CEQA thresholds with respect to air quality and global climate change. The new thresholds, and the information used to help develop these thresholds, however, do not represent "new information" as specifically defined under CEQA. As a result, an analysis of the MS project according to the recommended May 2011 Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and Thresholds is not required.

## D. CONCLUSION

As discussed above, the development associated with the Parcel A and Parcel C-1 FDPs was adequately considered in the 2008 EIR. The refinements incorporated into the FDP applications do not represent changes that would result in new or more severe impacts (or require new or significantly altered mitigation measures) beyond those already identified in the 2008 EIR. The 2008 EIR is adequate for the Parcel A and Parcel C-1 FDP and no subsequent or supplemental environmental review is warranted.

The following discussion summarizes the reasons why no supplemental or subsequent CEQA review is necessary pursuant to *CEQA Guidelines* Section 15162 and the City can rely on the previously certified EIR.

Substantial Changes to the Project. The refinements incorporated into the Parcel A and Parcel C-1 FDP, including an increase in the amount of commercial retail and office space would **not** result in new significant impacts or a substantial increase or severity of a previously identified significant impact from those identified in the 2008 EIR. Therefore, the proposed changes

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included in the Parcel A and Parcel C-1 FDP are considered *minor* refinements, not *substantial* changes.

Project Circumstances. Since certification of the 2008 EIR, conditions in and around the MS Project area have not substantially changed and thus implementation of the Parcel A and Parcel C-1 FDP would **not** result in new significant environmental effects or a substantial increase in the severity of environmental effects already identified in the 2008 EIR. No substantial changes in noise levels, air quality, traffic, or other conditions have occurred within and around the MS Project site since certification of the EIR.

New Information. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2008 EIR was certified, has been identified which is expected to result in: 1) new significant environmental effects or a substantial increase in the severity of environmental effects already identified in the EIR; or 2) mitigation measures or alternatives which were previously determined to be infeasible would in fact be feasible, or which are considerably different from those recommended in the 2008 EIR, and which would substantially reduce significant effects of the project, but the project applicant declines to adopt them.

As described previously, changes to the Parcel A and Parcel C-1 FDP would not result in significant environmental effects (including effects that would be substantially more severe than impacts identified in the 2008 EIR). Existing regulations (including City General Plan policies and ordinances in the Municipal Code) and mitigation measures included in the 2008 EIR would be adequate to reduce the impacts resulting from the Parcel A and Parcel C-1 FDP to less-than-significant levels.

Consequently, there are no substantial project changes, no substantial changes in the project circumstances, and no new information of substantial importance that would require major revisions of the certified 2008 EIR, because of a new significant effect or an increase in the severity of a previously identified significant effect. Under CEQA section 21166 and CEQA Guidelines sections 15162 and 15163, no further environmental review is required. Thus, in considering approval of the Parcel A and Parcel C-1 FDP, the City should rely on the previously certified 2008 EIR.

Attachment
Transportation Memorandum

FEHR PEERS

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# MEMORANDUM

| | |
|---|---|
| Date: | April 9, 2015 |
| To: | Lynette Dias, Urban Planning Partners |
| From: | Sam Tabibnia |
| **Subject:** | **MacArthur Transit Village, 2014 Modified Project – Transportation Impact Analysis** |

*OK14-0015*

This memorandum summarizes the results of the transportation impact analysis that Fehr & Peers completed for the MacArthur Transit Village Project as modified in 2014. The impacts of the project were originally analyzed in an Environmental Impact Report (EIR) certified in 2008. The analysis in this memorandum accounts for changes in the project, in background conditions, and in the thresholds of significance since the certification of the EIR.

The MacArthur Transit Village Project as modified as a result of the Final Development Plans (FDPs) for Parcel A and Parcel C-1 would not result in any additional significant or more severe impacts than those identified in the 2008 EIR.

Our analysis assumptions and summary are detailed below.

## INTRODUCTION

**Figure 1** shows the location of the Project within the local and regional street system. This analysis evaluates the impacts of the project on intersection operations during the weekday morning and evening peak hours.

- ***Existing*** – Represents existing conditions
- ***Existing Plus Project*** – Existing conditions plus traffic generated by the proposed project
- ***2035 No Project*** – 2035 conditions as estimated by the *Broadway Valdez District Specific Plan (BVDSP) Draft EIR* (September 2013), without the traffic generated by the proposed project.

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- ***2035 Plus Project*** – 2035 conditions as estimated by the *BVDSP Draft EIR* plus the traffic generated by the proposed project.

Fehr & Peers assessed intersection operations using Level of Service (LOS)[1] at the study intersections using the 2000 *Highway Capacity Manual* (HCM) methodologies.

## PROJECT TRANSPORTATION CHARACTERISTICS

The project, as proposed in 2014, would consist of up to 675 multi-family dwelling units, 23,500 square feet of retail, 5,000 square feet of community space, and 25,500 square feet of supermarket.[2] The project also includes a 450 space garage that replaced the 618-space surface parking lot that served the BART Station.

Vehicular access to and from the project would be same as the previously analyzed project. Access to and from the MacArthur Transit Village would be through signalized intersections on 40th Street at Frontage Road adjacent to the BART Station, and on Telegraph Avenue at Village Drive south of 40th Street. Access to BART parking would be through a signalized intersection on MacArthur Boulevard.

### Trip Generation

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the local roadway network. **Table 1** summarizes the trip generation for the proposed Project. The estimates are based on rates and equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual* (9th Edition) with the following adjustments:

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1 The operations of roadway facilities are described with the term "level of service" (LOS). LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (i.e., best operating conditions) to LOS F (worst operating conditions). LOS E typically corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

2 The current project represents less development than this, but the 675 units represent the worst-case scenario for the number of residential units allowed by the PDP Conditions of Approval and covered in the EIR.

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**TABLE 1**
**MACARTHUR TRANSIT VILLAGE**
**TRIP GENERATION SUMMARY**

| Land Use | Units[1] | ITE Code | Daily | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | In | Out | Total | In | Out | Total |
| Residential | 675 DU | 230 [2] | 3,387 | 40 | 198 | 238 | 193 | 95 | 288 |
| Retail | 23.5 KSF | 820 [3] | 1,003 | 14 | 9 | 23 | 42 | 45 | 87 |
| Supermarket | 25.5 KSF | 850[4] | 3,096 | 54 | 33 | 87 | 123 | 119 | 242 |
| Community Center | 5.0 KSF | 565 [5] | 370 | 32 | 29 | 61 | 29 | 33 | 62 |
| *Subtotal* | | | 7,856 | 140 | 269 | 409 | 387 | 292 | 679 |
| Non-Auto Reduction (-43%)[6] | | | -3,378 | -60 | -116 | -176 | -166 | -126 | -292 |
| Pass-by Reduction (-34%) [7] | | | -397 | 0 | 0 | 0 | -32 | -32 | -64 |
| **Net New Project Trips** | | | **4,478** | **80** | **153** | **233** | **189** | **134** | **323** |
| Approved Project[8] | | | 4,886 | 123 | 201 | 324 | 200 | 158 | 358 |
| Net Difference | | | -408 | -43 | -48 | -91 | -11 | -24 | -35 |

1. DU = Dwelling Units, KSF = 1,000 square feet.
2. ITE Trip Generation (9th Edition) land use category 230 (Residential Condominium/Townhouse):
   Daily: Ln(T) = 0.87*Ln(X) + 2.46
   AM Peak Hour: Ln(T) = 0.80*Ln(X) + 0.26 (17% in, 83% out)
   PM Peak Hour: Ln(T) = 0.82*Ln(X) + 0.32 (67% in, 33% out)
3. ITE Trip Generation (9th Edition) land use category 820 (Shopping Center):
   Daily: (T) = 42.70*(X)
   AM Peak Hour: (T) = 0.96*(X) (42% in, 58% out)
   PM Peak Hour: (T) = 3.71*(X) (36% in, 64% out)
4. ITE Trip Generation (9th Edition) land use category 850 (Supermarket):
   Daily: T = 66.85*(X) + 1391.56
   AM Peak Hour: T = 3.40*(X) (62% in, 38% out)
   PM Peak Hour: T = 9.48*(X) (51% in, 49% out)
5. ITE Trip Generation (9th Edition) land use category 565 (Day Care Center):
   Daily: (T) = 74.06*(X)
   AM Peak Hour: (T) = 12.18*(X) (53% in, 47% out)
   PM Peak Hour: (T) = 12.34*(X) (47% in, 53% out)
6. City of Oakland Transportation Impact Study Guidelines based on BATS 2000 data for developments in an urban environment within 0.5 miles of a BART station.
7. Based on ITE *Trip Generation Handbook (3rd Edition)*, the weekday PM peak hour average pass-by rates for land use categories 820 and 850, are 34% and 36%, respectively. A 34% pass-by rate is applied to the retail and supermarket uses to present a more conservative analysis. Pass by rates are not applied to the AM peak hour. Daily pass-by is estimated to be half of the PM peak hour. This reduction was applied to trips after the non-automobile reduction.
8. *MacArthur Transit Village Project Draft EIR, January 2008.*

Source: Fehr & Peers, 2015.

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- ***Non-Automobile Travel Modes*** - The ITE data is based on data collected at mostly single-use suburban sites where the automobile is often the only travel mode. However, the Project site is in a mixed-use urban environment with robust transit available and where many trips are walk, bike, or transit trips. Since the proposed Project is adjacent to the MacArthur BART Station, this analysis reduces the ITE based trip generation by 43 percent to account for the non-automobile trips. This reduction is consistent with City of Oakland *Transportation Impact Study Guidelines* and is based on the Bay Area Travel Survey (BATS) 2000 which shows that the non-automobile mode share within one-half mile of a BART Station in Alameda County is about 43 percent. A 2011 research study shows reducing ITE based trip generation using BATS data results in a more accurate estimation of trip generation for mixed use developments than just using ITE based trip generation.[3]
- ***Pass-by Trips*** - Pass-by trips are defined as trips attracted to a site from adjacent roadways as an intermediate stop on the way to a final destination. Pass-by trips alter travel patterns in the immediate study area but do not add new vehicle trips to the roadway network, and should therefore be excluded from trip generation estimates. According to ITE's *Trip Generation Handbook* (3rd Edition), the average weekday PM peak hour pass-by reduction is 34 percent for retail and 36 percent for supermarket uses. To be conservative, this analysis reduces the retail and supermarket trips by 34 percent for the PM.[4] This corresponds to about 64 trips, which is reasonable considering that it corresponds to about two percent of the current PM peak hour traffic volumes on Telegraph Avenue and 40th Street combined.

In addition, the project trip generation presented in Table 1 does not account for the following in order to present a "worst case" analysis:

- ***Existing Parking Lot Trips*** - The project would reduce the parking supply available to BART riders by about 168 spaces. This analysis conservatively assumes that the 450-space BART parking garage would continue to generate the same amount of peak hour traffic as the 618-space parking lot that occupied the site prior to start of construction.

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[3] *Evaluation of the Operation and Accuracy of Five Available Smart Growth Trip Generation Methodologies.* Institute of Transportation Studies, UC Davis, 2011.

[4] Since ITE does not provide pass-by reductions for AM peak hour, this analysis conservatively assumes no pass-by reductions for AM peak hour.

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As summarized in Table 1, the project would generate approximately 4,480 daily, 233 AM peak hour, and 323 PM peak hour trips. Table 1 also compares the project trip generation estimate with the project trip generation estimate in the 2008 certified EIR. The 2014 project would generate about 400 fewer daily trips, 91 fewer AM peak hour trips, and 35 fewer PM peak hour trips than estimated in the 2008 EIR. Note that the traffic impact analysis presented in the subsequent sections is conservative because it is based on a previous project description that generated more traffic than presented in Table 1.[5]

### Trip Distribution, Trip Assignment

The trip distribution and assignment process estimates how the vehicle trips generated by a project site would distribute across the roadway network. **Figures 2 and 3** show the trip distribution for the residential and non-residential components of the project, respectively. The trip distribution was developed for the 2008 EIR based on existing travel patterns, locations of complementary land uses and results of the Alameda County Transportation Commission's (ACTC) Travel Demand Model.

Trips generated by the proposed project, as shown in Table 1, were assigned to the roadway network according to the trip distribution shown on Figures 2 and 3. **Figure 4** shows the resulting trip assignment by roadway segment for the weekday PM peak hour because the weekday peak hour has the highest project trip generation. Figure 4 also shows the study intersections analyzed in the 2008 EIR.

### Study Intersections

The 2008 EIR analyzed the impacts of the proposed project at 25 study intersections in the vicinity of the project. The 2008 EIR identified significant impacts and improvements to mitigate those impacts to less-than-significant where feasible under cumulative conditions at the following locations:

- Under the Cumulative Year 2015 Baseline Plus Project conditions:

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[5] The traffic impact analysis is based on an earlier iteration of FDP project that included 24,500 square feet of office, 26,900 square feet of retail, and 11,200 square feet of supermarket. In comparison, the project evaluated in the traffic impact analysis included in the memo generated nine additional AM peak hour and 54 additional PM peak hour trips. As a result this analysis represents a worst-case analysis given it would generate more trips than the current FDP proposal.

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1. Telegraph Avenue/51st Street (intersection #3) – Mitigation consisting of optimizing signal timings would mitigate the impact to less-than-significant.
2. Market Street/MacArthur Boulevard (#16) – Mitigation consisting of changing the cycle length and optimizing signal timings would mitigate the impact to less-than-significant.

- Under Cumulative 2030 Baseline Plus Project conditions:

3. Telegraph Avenue/52nd Street/Claremont Avenue (#2) – Mitigation consisting of prohibiting northbound left-turns during peak commute times, changing the cycle length and optimizing signal timings, would mitigate the impact to less-than-significant.
4. Telegraph Avenue/51st Street (#3) – Mitigation consisting of changing the cycle length and optimizing signal timings, would not mitigate the impact. The impact is significant and unavoidable.
5. West Street/40th Street (#8) – Mitigation consisting of optimizing signal timings would mitigate the impact to less-than-significant.
6. Telegraph Avenue/40th Street (#13) – Mitigation consisting of providing protected/ permitted left-turn phasing on eastbound and westbound approaches, changing the cycle length, and optimizing signal timings, would mitigate the impact to less-than-significant.
7. Market Street/MacArthur Boulevard (#16) – Mitigation consisting of striping a left-turn lane on the northbound approach, changing the cycle length, and optimizing signal timings, would mitigate the impact to less-than-significant.
8. Telegraph Avenue/MacArthur Boulevard (#20) – Mitigation consisting of providing protected/permitted left-turn phasing on northbound and southbound approaches, changing the cycle length, and optimizing signal timings, would mitigate the impact to less-than-significant.
9. Broadway/MacArthur Boulevard (#22) – No improvements identified at this intersection. Impact is significant and unavoidable.

The *Broadway Valdez District Specific Plan (BVDSP) Draft EIR* (September 2013) provides the latest published traffic operations analysis at intersections in the vicinity of the MacArthur Transit Village. The BVDSP Draft EIR accounts for the approved MacArthur Transit Village project in the future forecasts. **Table 2** compares total intersection volumes under Existing and Cumulative Plus Project conditions at intersections that were analyzed in both the 2008 Project EIR and BVDSP EIR. In general, a 10 percent fluctuation in traffic volumes is within the typical fluctuation expected in day-to-day traffic volumes. Considering that the more recent traffic volume data shows a decrease or a less than 10 percent increase in volumes at all but one of the intersections listed in Table 2, it is estimated that traffic volumes in the project vicinity have decreased or stayed the same since the completed on the 2008 EIR.

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**TABLE 2**
**INTERSECTION VOLUME COMPARISON**

| Intersection | Peak Hour | Existing Conditions | | | Cumulative Plus Project | | |
|---|---|---|---|---|---|---|---|
| | | MTV [1] | BVSP [2] | Percent Difference | MTV [3] | BVSP [4] | Percent Difference |
| Telegraph Avenue/ 52nd Street/Claremont Avenue | AM | 2,622 | N/A | N/A | 4,507 | N/A | N/A |
| | PM | 2,907 | N/A | N/A | 3,662 | N/A | N/A |
| Telegraph Avenue/ 51st Street | AM | 3,607 | 2,817 | -22% | 5,138 | 3,896 | -24% |
| | PM | 3,856 | 3,085 | -20% | 5,064 | 4,440 | -12% |
| Telegraph Avenue/ 40th Street | AM | 2,198 | 1,766 | -20% | 4,201 | 3,540 | -16% |
| | PM | 3,360 | 3,549 | 6% | 5,130 | 5,880 | 15% |
| Market Street/ MacArthur Boulevard | AM | 1,239 | 1,326 | 7% | 3,591 | 2,650 | -26% |
| | PM | 2,165 | 1,684 | -22% | 4,100 | 3,470 | -15% |
| Telegraph Avenue/ MacArthur Boulevard | AM | 2,087 | 1,751 | -16% | 5,185 | 3,960 | -24% |
| | PM | 3,021 | 2,613 | -14% | 5,434 | 5,550 | 2% |
| Broadway/ MacArthur Boulevard | AM | 2,525 | N/A | N/A | 6,054 | N/A | N/A |
| | PM | 3,285 | 3,082 | -6% | 5,845 | 5,680 | -3% |
| Telegraph Avenue/ 27th Street | AM | 2,011 | 1,930 | -4% | 3,822 | 3,370 | -12% |
| | PM | 2,561 | 2,872 | 12% | 3,958 | 5,080 | 28% |

[1] Based on existing intersection volumes published in *MacArthur Transit Village Project Draft EIR (January 2008).*

[2] Based on existing intersection volumes published in *Broadway Valdez District Specific Plan Draft EIR* (September 2013).

[3] Based on Cumulative Plus Project (2030) intersection volumes published in *MacArthur Transit Village Project Draft EIR (January 2008).*

[4] Based on Cumulative Plus Project (2035) intersection volumes published in *Broadway Valdez District Specific Plan Draft EIR* (September 2013).

Source: Fehr & Peers, 2014.

**Table 3** shows intersection operations at major intersections in the vicinity of the MacArthur Transit Village project under Existing and 2035 Plus Project conditions as documented in the BVDSP Draft EIR. BVDSP Draft EIR does not identify any intersections in the vicinity of the MacArthur Transit Village project as operating at a deficient level under Existing conditions and identifies the following intersections as operating at a deficient level in 2035:

1. Telegraph Avenue/40th Street
2. Telegraph Avenue/MacArthur Boulevard
3. Telegraph Avenue/27th Street

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**TABLE 3**
**INTERSECTION LOS SUMMARY**
**BASED ON RECENT PUBLISHED DOCUMENTS**

| Intersection | Traffic Control[1] | Peak Hour | Existing Conditions | | 2035 Plus Project[3] | |
|---|---|---|---|---|---|---|
| | | | Delay [2] (seconds) | LOS | Delay [2] (seconds) | LOS |
| Telegraph Avenue/52nd Street/Claremont Avenue | Signal | AM | 14.3 | B | 21.1 | C |
| | | PM | 13.7 | B | 24.7 | C |
| Telegraph Avenue/ 51st Street | Signal | AM | 30.6 | C | 40.1 | D |
| | | PM | 42.0 | D | 72.3 | E |
| Telegraph Avenue/ 40th Street | Signal | AM | 21.2 | C | 36.9 | D |
| | | PM | 31.9 | C | **135.0 (v/c=1.80)** | **F** |
| Market Street/ MacArthur Boulevard | Signal | AM | 15.9 | B | 27.8 | C |
| | | PM | 15.2 | B | 29.9 | C |
| Telegraph Avenue/ MacArthur Boulevard | Signal | AM | 19.5 | B | 36.3 | D |
| | | PM | 12.5 | B | **126.5 (v/c=2.23)** | **F** |
| Broadway/ MacArthur Boulevard | Signal | AM | 30.0 | C | 62.6 | E |
| | | PM | 38.8 | D | 79.1 | E |
| Telegraph Avenue/ 27th Street | Signal | AM | 22.0 | C | 29.3 | C |
| | | PM | 22.9 | C | **138.1 (v/c=1.91)** | **F** |

**Bold** indicates intersections operating at an unacceptable level. All intersection located in Downtown or on arterials that provide direct access to Downtown where LOS E (not LOS D) is the threshold.

[1] Signal = intersection is controlled by a traffic signal

[2] For signalized intersections, average intersection delay and LOS based on the 2000 HCM method is shown. For side-street stop-controlled intersections, delays for worst movement and average intersection delay are shown: intersection average (worst movement)

[3] The 2035 Plus Project scenario includes the buildout of the MacArthur Transit Village project. Source: *Broadway Valdez District Specific Plan Draft EIR* (September 2013), Fehr & Peers, 2014.

Considering that the current project is estimated to generate fewer trips than the approved project during both AM and PM peak hours, and that recently published environmental documents show that existing and future traffic volumes in the study area have generally decreased, and that most intersections operate at same or better conditions under existing and future conditions, this analysis focuses on intersections for which recent documents (i.e., BVDSP EIR) project future operating deficiencies.

Therefore, this assessment focuses on the analysis of project impacts at these three intersections only. The proposed project is not expected to cause a significant impact at the other

intersections because the other intersections are expected to operate at LOS E[6] or better under 2035 Plus Project conditions.

## SIGNIFICANCE CRITERIA

This analysis uses City of Oakland's CEQA Thresholds of Significance Guidelines (November 2013) to determine if the proposed Project would cause significant impact. The Project would have a significant impact on the environment if it were to:

### Traffic Load and Capacity Thresholds

1. At a study, signalized intersection which is located **outside the Downtown[7] area and that does not provide direct access to Downtown**, the project would cause the motor vehicle level of service (LOS) to degrade to worse than LOS D (i.e., LOS E or LOS F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;

2. At a study, signalized intersection which is located **within the Downtown area or that provides direct access to Downtown**, the project would cause the motor vehicle LOS to degrade to worse than LOS E (i.e., LOS F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;

3. At a study, signalized intersection **outside the Downtown area and that does not provide direct access to Downtown** where the motor vehicle level of service is LOS E, the project would cause the total intersection average vehicle delay to increase by four (4) or more seconds;

4. At a study, signalized intersection **outside the Downtown area and that does not provide direct access to Downtown** where the motor vehicle level of service is LOS E, the project would cause an increase in the average delay for any of the critical movements of six (6) seconds or more;

5. At a study, signalized intersection for all areas where the motor vehicle level of service is LOS F, the project would cause (a) the overall volume-to-capacity ("V/C") ratio to increase 0.03 or more or (b) the critical movement V/C ratio to increase 0.05 or more;

---

[6] Based on City of Oakland's latest CEQA Thresholds of Significance Guidelines (November 2013), LOS E is considered the threshold on arterials that provide direct access to Downtown.

[7] The Downtown area is defined in the Land Use and Transportation Element of the General Plan (page 67) as the area generally bounded by the West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south, and I-980/Brush Street to the west. Intersections that provide direct access to downtown are generally defined as principal arterials within two (2) miles of Downtown and minor arterials within one (1) mile of Downtown, provided that the street connects directly to Downtown.

6. At a study, unsignalized intersection the project would add ten (10) or more vehicles to the critical movement, and after project completion, satisfy the California Manual on Uniform Traffic Control Devices (MUTCD) peak-hour volume traffic signal warrant;

### Cumulative Impacts

18. A project's contribution to cumulative impacts is considered "considerable" (i.e., significant) when the project exceeds at least one of the thresholds listed above in a future year scenario.

## TRAFFIC OPERATIONS ANALYSIS

This section discusses the impacts of the proposed Project on traffic operations under Existing and 2035 conditions based on the City of Oakland's Thresholds of Significance described above.

### Existing Plus Project Intersection Analysis

This section presents the extent of Project impacts relative to existing conditions based on application of Significance Thresholds #1 through #6 as listed on page 7 of this memorandum. **Figure 5** shows traffic volumes under Existing and Existing Plus Project conditions. Existing traffic volumes are based on existing counts presented in the BVDSP Draft EIR and the Existing Plus Project traffic volumes consist of Existing Conditions traffic volumes plus added traffic volumes generated by the Project.

**Table 4** summarizes the intersection operations results for the Existing No Project and Existing Plus Project conditions. All study intersections would continue to operate at an acceptable LOS C or better under Existing Plus Project conditions. The proposed Project would not cause a significant impact at the study intersections under Existing Plus Project conditions. Consistent with the findings of the 2008 EIR, the project would not result in any significant impacts under Existing Plus Project conditions.

**ATTACHMENT H**

**TABLE 4**
**INTERSECTION LOS SUMMARY**
**EXISTING PLUS PROJECT CONDITIONS**

| Intersection | Traffic Control[1] | Peak Hour | Existing Conditions | | Existing Plus Project Conditions | | Significant Impact? |
|---|---|---|---|---|---|---|---|
| | | | Delay [2] (seconds) | LOS | Delay [2] (seconds) | LOS | |
| 1. Telegraph Avenue/ 40th Street | Signal | AM | 21.2 | C | 21.2 | C | No |
| | | PM | 31.9 | C | 28.4 | C | No |
| 2. Telegraph Avenue/ MacArthur Boulevard | Signal | AM | 19.5 | B | 19.7 | B | No |
| | | PM | 12.5 | B | 13.9 | B | No |
| 3. Telegraph Avenue/ 27th Street | Signal | AM | 22.0 | C | 22.0 | C | No |
| | | PM | 22.9 | C | 23.2 | C | No |

**Bold** indicates intersections operating at an unacceptable level. All intersection located in Downtown or on arterials that provide direct access to Downtown where LOS E (not LOS D) is the threshold.

[1] Signal = intersection is controlled by a traffic signal

[2] For signalized intersections, average intersection delay and LOS based on the 2000 HCM method is shown. For side-street stop-controlled intersections, delays for worst movement and average intersection delay are shown: intersection average (worst movement)

Source: *Broadway Valdez District Specific Plan Draft EIR* (September 2013), Fehr & Peers, 2014.

## 2035 Intersection Analysis

Project impacts at intersections under 2035 conditions is based on direct application of Significance Threshold #18, which references Significance Thresholds #1 through #6.

### *Traffic Forecasts*

This analysis uses the year 2035 traffic forecasts from BVDSP Draft EIR, which was based on the most recent ACTC Model (released in June 2011), which uses land use data consistent with Association of Bay Area Government (ABAG) *Projection 2009*.

The 2035 Plus Project conditions forecasts are based on the traffic forecasts published in the BVDSP Draft EIR because the land use database used to develop the BVDSP Draft EIR forecasts include the approved MacArthur Transit Village Project. The 2035 No Project conditions forecasts were estimated by subtracting the Project trips from the 2035 Plus Project conditions forecasts.

**Figure 8** shows the traffic volumes for the 2035 No Project and 2035 Plus Project scenarios.

**ATTACHMENT H**

*2035 Roadway Network*

The 2035 No Project and the 2035 Plus Project conditions assume the following approved and fully funded modifications to the roadway network at the three study intersections:

- The Telegraph Avenue Complete Streets Project will provide buffered Class 2 bicycle lanes on northbound and southbound Telegraph Avenue between 20th and 41st Streets by eliminating one travel lane in each direction. The project will also provide right-turn lanes in both directions of Telegraph Avenue at most intersections.
- The MacArthur Boulevard Bikeway project will provide Class 2 bicycle lanes on MacArthur Boulevard. The project will also convert the shared left/through lane on both eastbound and westbound MacArthur Boulevard at Telegraph Avenue to exclusive left-turn lanes. The project will also upgrade the signal equipment at the Telegraph Avenue/MacArthur Boulevard intersection to provide protected east/west left-turn phasing.

*2035 Intersection Operations*

**Table 5** summarizes intersection LOS calculations for 2035 No Project and 2035 Plus Project conditions. The three study intersections are estimated to operate at LOS F during the PM peak hour regardless of the proposed project. The project would reduce the intersection delay and/or V/C ratio at the Telegraph Avenue/40th Street intersection because it would decrease the traffic volume for some movements, such as the eastbound left-turn, due to the relocation of the BART parking access from 40th Street to MacArthur Boulevard.

The project would not cause a significant impact at the Telegraph Avenue/27th Street intersections because the project would not cause the overall volume-to-capacity (V/C) ratio to increase by 0.03 or more or the critical movement V/C ratio to increase by 0.05 or more.

Consistent with the findings of the 2008 EIR, the MTV project with the FDPs for Parcel A and C-1 would cause significant impacts at the Telegraph Avenue/40th Street and Telegraph Avenue/ MacArthur Boulevard intersections. The mitigations included in the 2008 EIR would adequately mitigate these impacts to a less-than-significant level; no new mitigation is needed. The findings are also consistent with the findings of the *Broadway Valdez District Specific Plan Draft EIR* (September 2013).

**ATTACHMENT H**

**TABLE 5**
**INTERSECTION LOS SUMMARY**
**2035 CONDITIONS**

| Intersection | Traffic Control[1] | Peak Hour | 2035 No Project Conditions | | 2035 Plus Project Conditions | | Significant Impact? | 2035 Plus Project Conditions (Mitigated) | | Significance after Mitigation |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Delay[2] (seconds) | LOS | Delay[2] (seconds) | LOS | | Delay[2] (seconds) | LOS | |
| 1. Telegraph Avenue/ 40th Street | Signal | AM | 51.9 | D | 56.1 | E | No | 60.9 | E | Less than Significant |
| | | PM | **>120 (v/c=2.58)** | **F** | **>120 (v/c=2.49)** | **F** | **Yes[3]** | **>120 (v/c=1.70)** | **F** | |
| 2. Telegraph Avenue/ MacArthur Boulevard | Signal | AM | 76.9 | E | **86.7 (v/c=1.53)** | **F** | **Yes[4]** | 74.3 | E | Less than Significant |
| | | PM | **>120 (v/c=3.44)** | **F** | **>120 (v/c=3.57)** | **F** | **Yes[5]** | **>120 (v/c=1.45)** | **F** | |
| 3. Telegraph Avenue/ 27th Street | Signal | AM | 31.9 | C | 32.8 | C | No | 32.8 | C | No Impact |
| | | PM | **>120 (v/c=2.42)** | **F** | **>120 (v/c=2.43)** | **F** | No | **>120 (v/c=2.43)** | **F** | |

**Bold** indicates intersections operating at an unacceptable level. All intersection located in Downtown or on arterials that provide direct access to Downtown where LOS E (not LOS D) is the threshold.

1 Signal = intersection is controlled by a traffic signal

2 For signalized intersections, average intersection delay and LOS based on the 2000 HCM method is shown. For side-street stop-controlled intersections, delays for worst movement and average intersection delay are shown: intersection average (worst movement)

3 The project would cause a significant impact at this intersection because the project would cause the critical movement V/C ratio to increase by 0.05 or more at an intersection operating at LOS F regardless of the project.

4 The project would cause a significant impact at this intersection because the project would cause the intersection LOS to degrade from LOS E to LOS F.

5 The project would cause a significant impact at this intersection because the project would cause the overall intersection V/C ratio to increase 0.03 or more and critical movement V/C ratio to increase by 0.05 or more at an intersection operating at LOS F regardless of the project.

Source: *Broadway Valdez District Specific Plan Draft EIR* (September 2013), Fehr & Peers, 2014.

**ATTACHMENT H**

Please contact us with questions or comments.

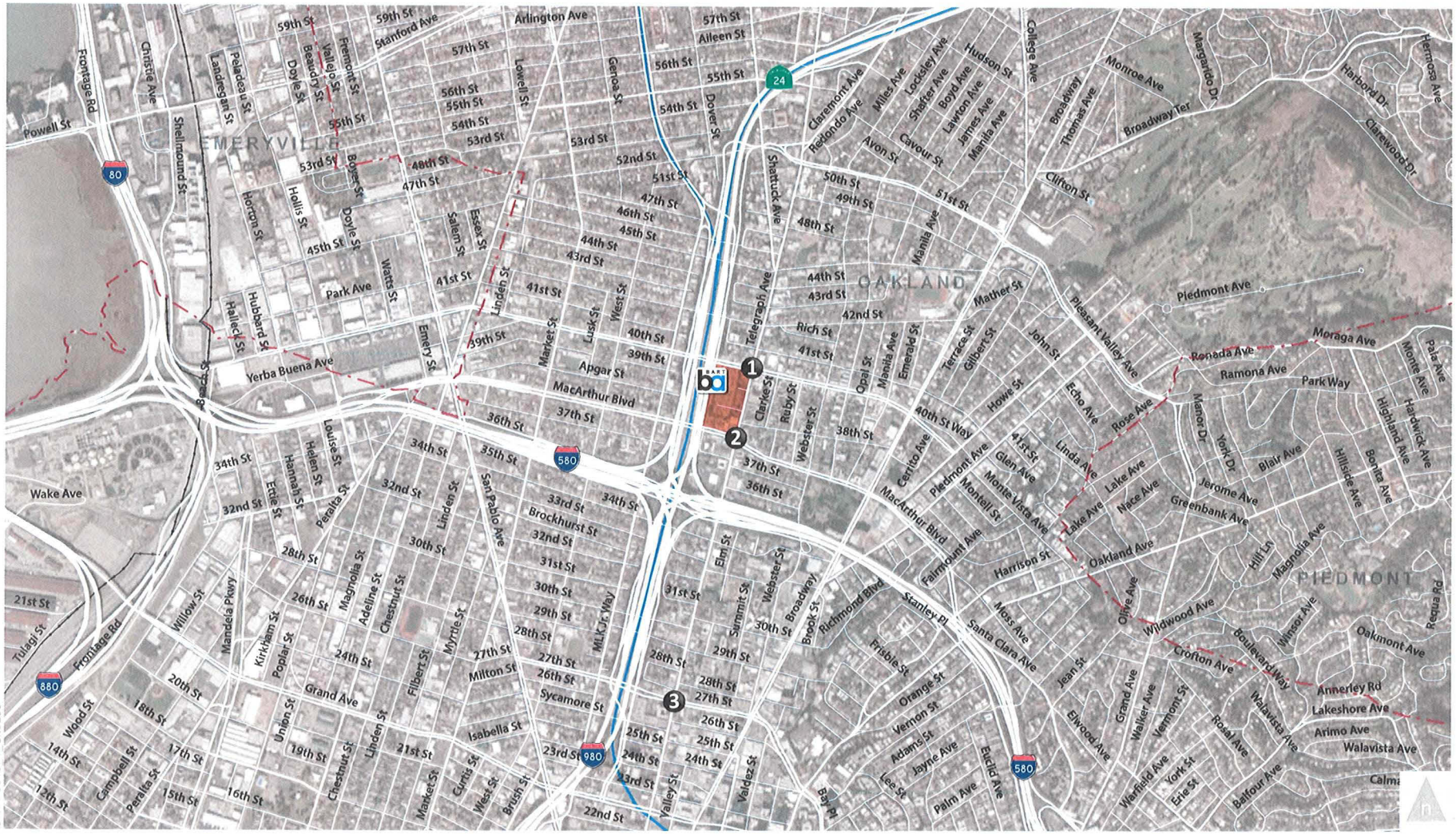
**Attachments:**

**Figures:**

| | |
|---|---|
| Figure 1 | Site Location |
| Figure 2 | Residential Trip Distribution |
| Figure 3 | Non-Residential Trip Distribution |
| Figure 4 | Project Peak Hour Net Change in Traffic Volume |
| Figure 5 | Existing Peak Hour Traffic Volumes |
| Figure 6 | 2035 Peak Hour Traffic Volumes |

**Appendix:**

Intersection LOS Calculations



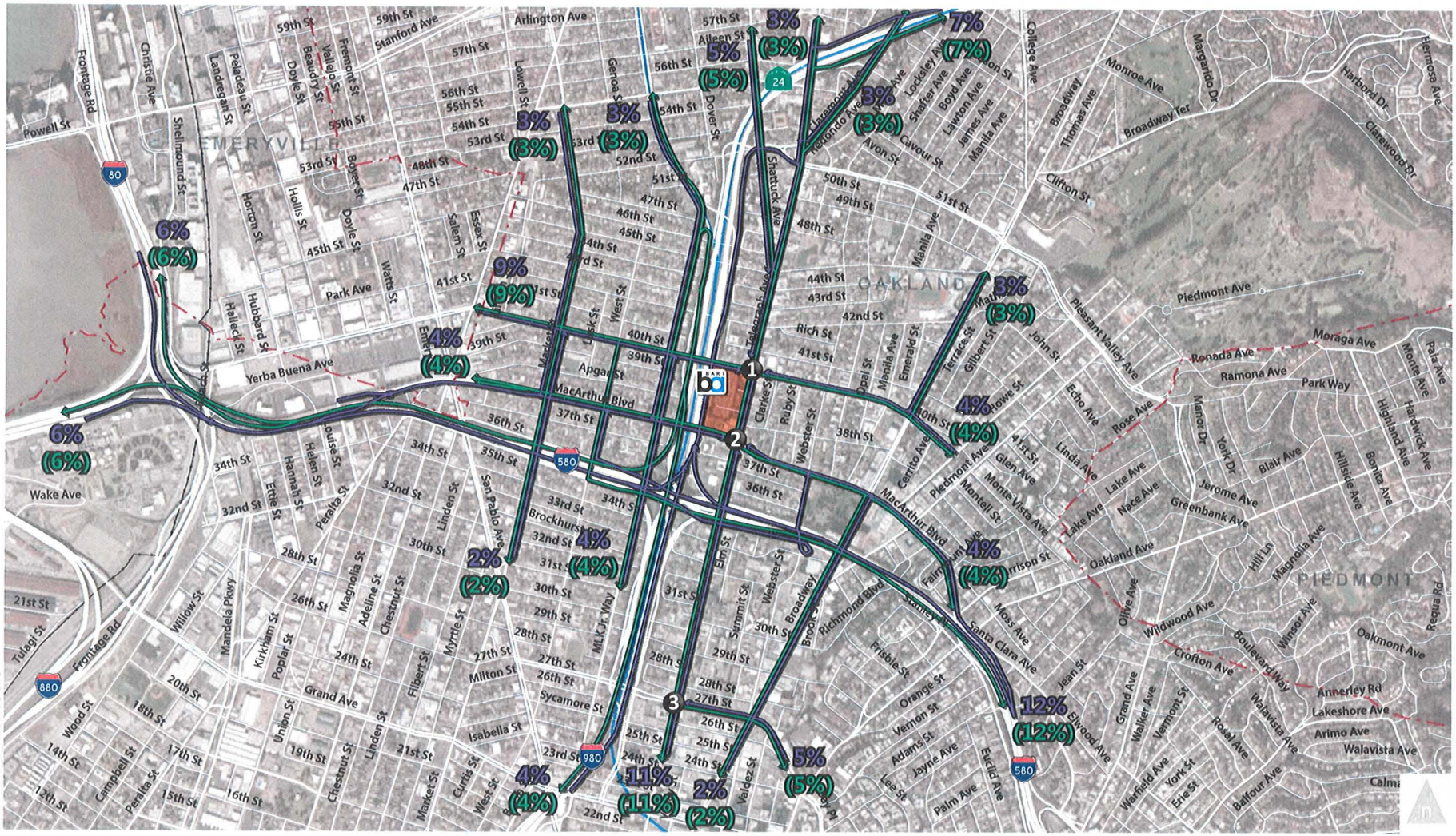

**LEGEND**

(#) Study Intersection

MacArthur Transit Village

Figure 1

## Site Location


EMERYVILLE
OAKLAND
PIEDMONT
6% (6%)
3% (3%)
9% (9%)
4% (4%)
2% (2%)
5% (5%)
7% (7%)
12% (12%)
11% (11%)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
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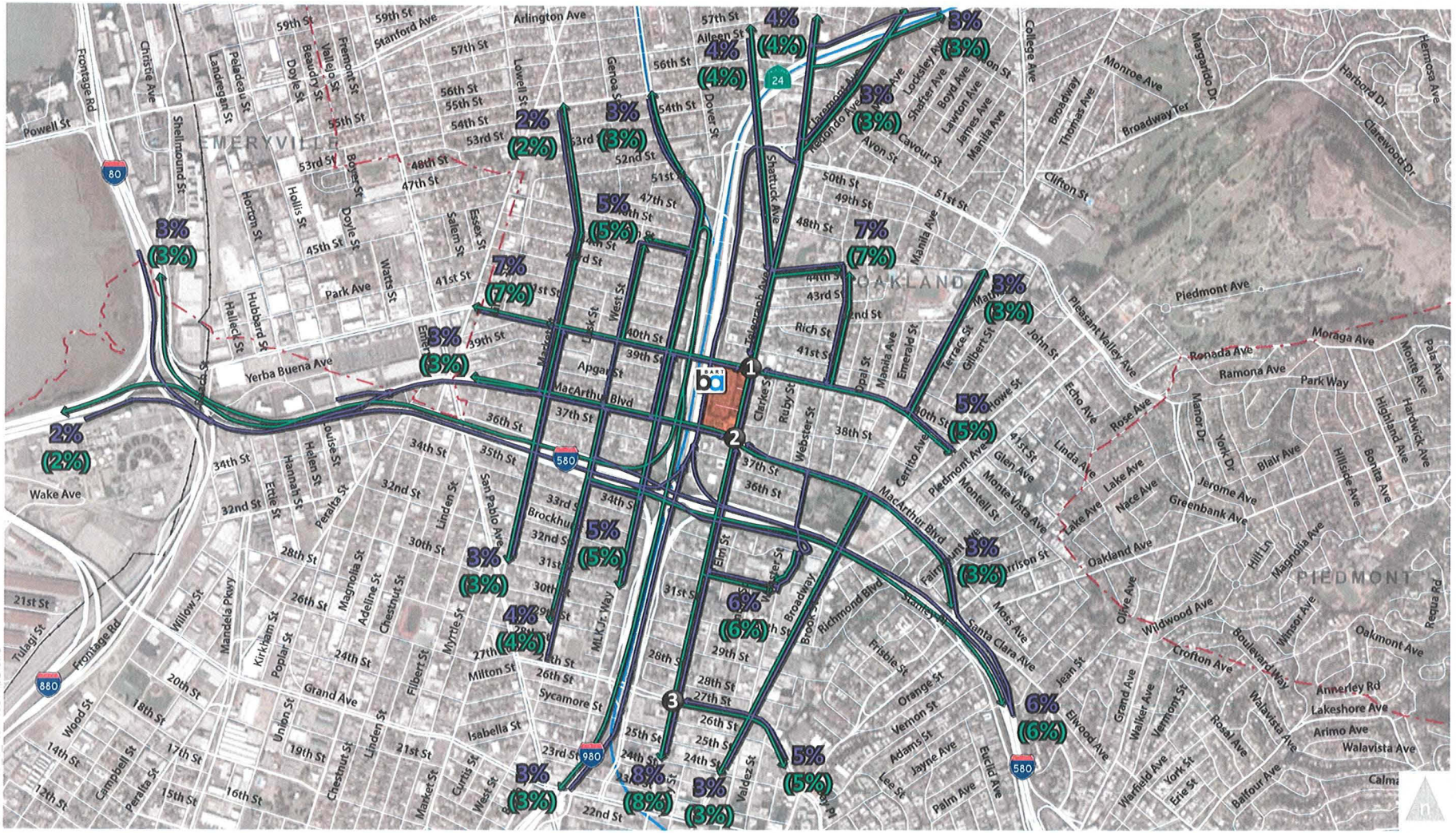
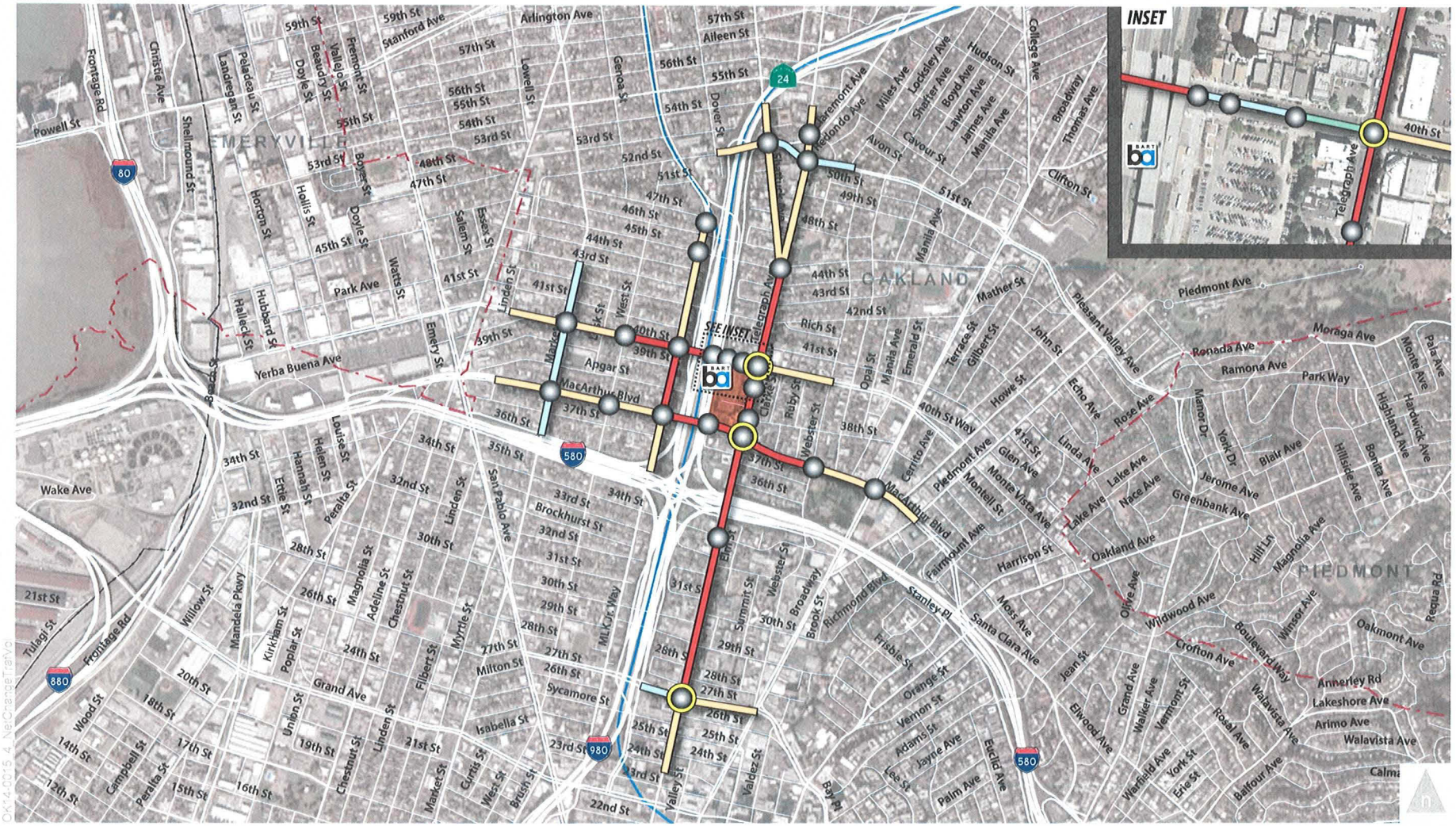

EMERYVILLE
OAKLAND
PIEDMONT
4% (4%)
3% (3%)
2% (2%)
5% (5%)
7% (7%)
6% (6%)
8% (8%)
1
2
3
Powell St
Stanford Ave
Arlington Ave
Frontage Rd
Christie Ave
Shellmound St
Yerba Buena Ave
Wake Ave
Park Ave
Piedmont Ave
MacArthur Blvd
Grand Ave
Lake Ave
Oakland Ave
Broadway
Webster St
Harrison St
Jackson St
Telegraph Ave
Shattuck Ave
Claremont Ave
Broadway Ter
Monte Vista Ave
Glen Ave
Linda Ave
Ronada Ave
Ramona Ave
Park Way
Moraga Ave
Crofton Ave
Boulevard Way
Annerley Rd
Lakeshore Ave
Arimo Ave
Walavista Ave
Oakmont Ave
Santa Clara Ave
Moss Ave
Richmond Blvd
Broadway
Webster St
Harrison St
Jackson St
Grand Ave
Lake Ave
Oakland Ave
Piedmont Ave
MacArthur Blvd

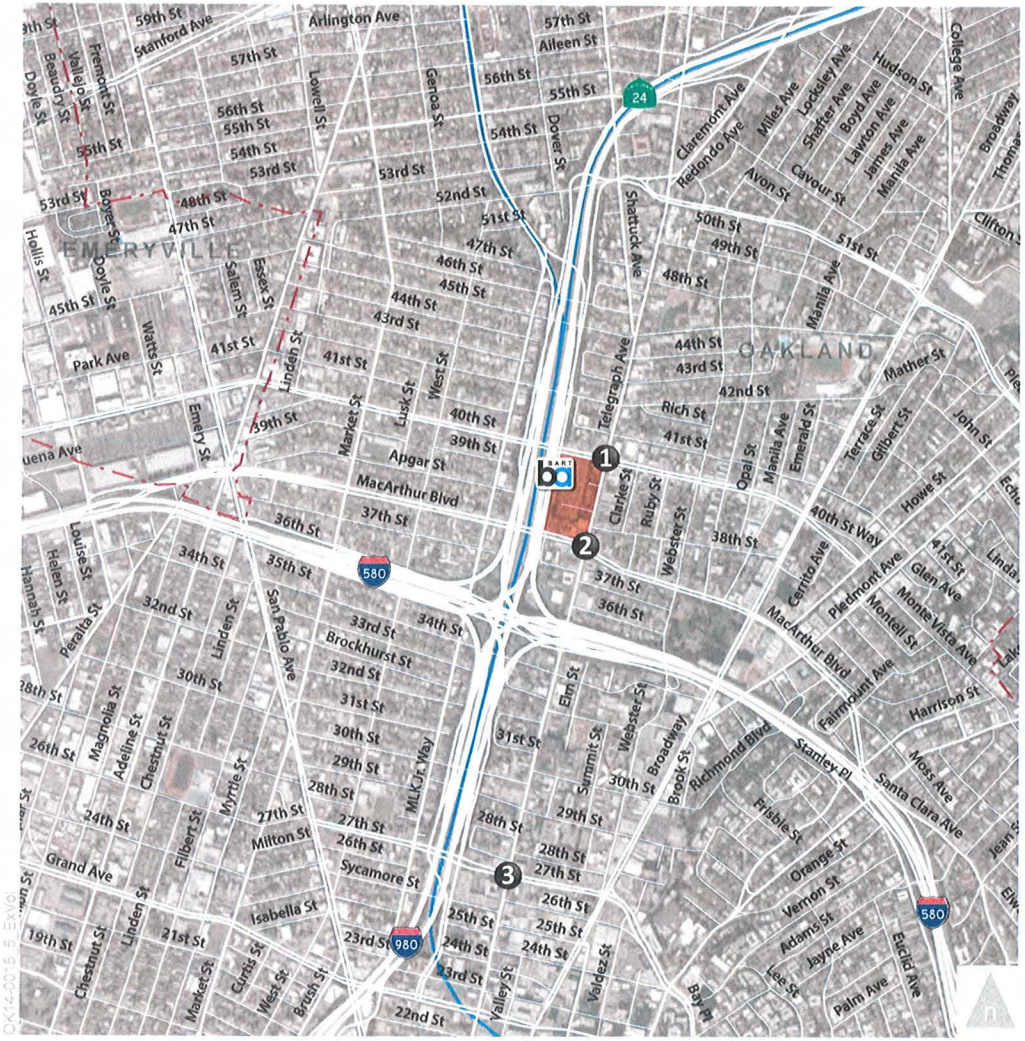



**LEGEND**

- Previous Study Intersection
- Recently Analyzed as Operating Deficiently
- MacArthur Transit Village
- Street Segment where Project would Increase Peak Hour Traffic by 50 or more trips
- Street Segment where Project would Increase Peak Hour Traffic by between 10 to 50 trips
- Street Segment where Project would Increase or decrease Peak Hour Traffic by 10 or fewer trips
- Street Segment where Project would Decrease Peak Hour Traffic by between 10 to 50 trips
- Street Segment where Project would Decrease Peak Hour Traffic by 50 or more trips

Figure 4

## Project Peak Hour Net Change in Traffic Volume



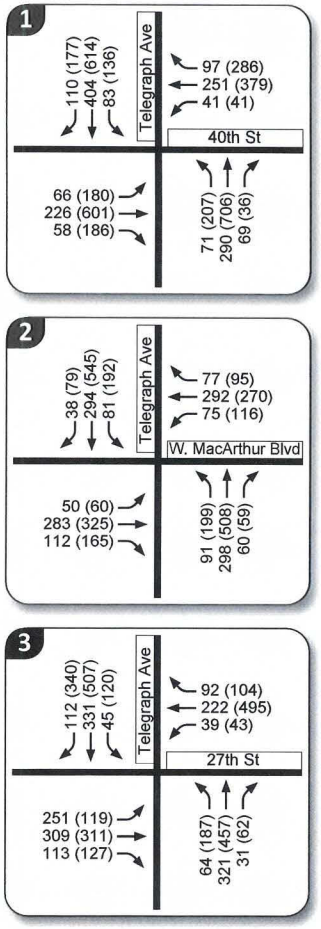

**LEGEND**

XX (YY) AM (PM) Peak Hour Trafffic Volumes

# Study Intersection

MacArthur Transit Village

## EXISTING




## EXISTING PLUS PROJECT

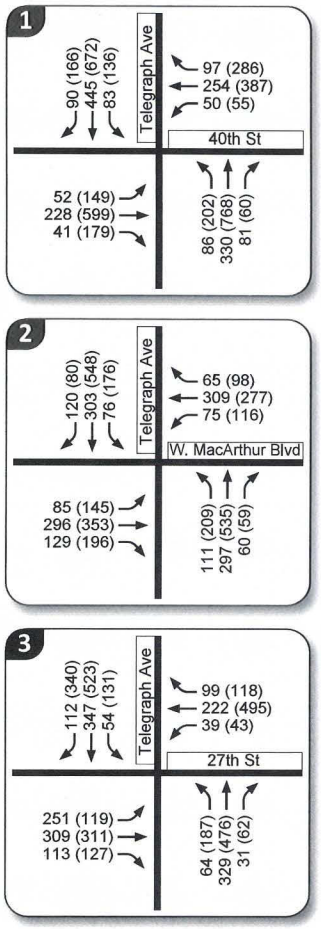



Figure 5

Existing Peak Hour Traffic Volumes

EMERYVILLE
OAKLAND
Telegraph Ave
MacArthur Blvd
Apgar St
Park Ave
Emery St
Market St
Linden St
Webster St
Broadway
Harrison St
Grand Ave
Milton St
Sycamore St
Isabella St
MLK Jr. Way
Fairmount Ave
Piedmont Ave
Rich St
Howe St
Mather St
Claremont Ave
Shattuck Ave
Manila Ave
Cavour St
Avon St
College Ave
Broadway
Stanford Ave
Arlington Ave
Aileen St
Dover St
Lowell St
Geroa St
Boyer St
Doyle St
Hollis St
Salem St
Baker St
Watts St
Fremont St
Valle jo St
Beaudry St
Louise St
Helen St
Peralta St
Hannah St
Magnolia St
Adeline St
Chestnut St
Myrtle St
Filbert St
Curtis St
Brush St
Valdez St
Elm St
Summit St
Brook St
Frisbie St
Orange St
Vernon St
Adams St
Jayne Ave
Lee St
Palm Ave
Euclid Ave
Stanley Pl
Santa Clara Ave
Moss Ave
Glen Ave
Monte Vista Ave
Montell St
Cerrito Ave
Terrace St
Gilbert St
Opal St
Emerald St
Ruby St
Clarke St
John St
Linda
Echo
Jean St
Elwood
Ple
Lake
Hudson St
Locksley Ave
Shafter Ave
Boyd Ave
Lawton Ave
James Ave
Manila Ave
Miles Ave
Redondo Ave
Broadway
Thomas
Clifton
Bay Pl
Brockhurst St
Brockhurst
Aileen
Stanford
Arlington
Fremont
Vallejo
Beaudry
Doyle
Lowell
Geroa
Boyer
Hollis
Salem
Baker
Watts
Louise
Helen
Peralta
Hannah
Magnolia
Adeline
Chestnut
Myrtle
Filbert
Curtis
Brush
Valdez
Elm
Summit
Brook
Frisbie
Orange
Vernon
Adams
Jayne
Lee
Palm
Euclid
Stanley
Santa Clara
Moss
Glen
Monte Vista
Montell
Cerrito
Terrace
Gilbert
Opal
Emerald
Ruby
Clarke
John
Linda
Echo
Jean
Elwood
Ple
Lake
Hudson
Locksley
Shafter
Boyd
Lawton
James
Manila
Miles
Redondo
Broadway
Thomas
Clifton
Bay

# APPENDIX

# Intersection LOS Calculations

MacArthur Transit Village

September 2014

FEHR & PEERS

# HCM Signalized Intersection Capacity Analysis
## 1: 40th St. & Telegraph Ave.

6/16/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 66 | 226 | 58 | 41 | 251 | 97 | 71 | 290 | 69 | 83 | 404 | 110 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 0.97 | | 1.00 | 0.97 | | 1.00 | 0.98 | |
| Flpb, ped/bikes | 0.95 | 1.00 | | 0.97 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.97 | | 1.00 | 0.96 | | 1.00 | 0.97 | | 1.00 | 0.97 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1688 | 3387 | | 1710 | 3306 | | 1770 | 3345 | | 1770 | 3368 | |
| Flt Permitted | 0.46 | 1.00 | | 0.54 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 820 | 3387 | | 964 | 3306 | | 1770 | 3345 | | 1770 | 3368 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 66 | 226 | 58 | 41 | 251 | 97 | 71 | 290 | 69 | 83 | 404 | 110 |
| RTOR Reduction (vph) | 0 | 30 | 0 | 0 | 53 | 0 | 0 | 18 | 0 | 0 | 22 | 0 |
| Lane Group Flow (vph) | 66 | 254 | 0 | 41 | 295 | 0 | 71 | 341 | 0 | 83 | 492 | 0 |
| Confl. Peds. (#/hr) | 81 | | 52 | 52 | | 81 | | | 112 | | | 59 |
| Turn Type | Perm | | | Perm | | | Prot | | | Prot | | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | | | | |
| Actuated Green, G (s) | 19.5 | 19.5 | | 19.5 | 19.5 | | 7.7 | 43.8 | | 8.2 | 44.3 | |
| Effective Green, g (s) | 19.5 | 19.5 | | 19.5 | 19.5 | | 7.7 | 43.8 | | 8.2 | 44.3 | |
| Actuated g/C Ratio | 0.23 | 0.23 | | 0.23 | 0.23 | | 0.09 | 0.52 | | 0.10 | 0.52 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 188 | 777 | | 221 | 758 | | 160 | 1724 | | 171 | 1755 | |
| v/s Ratio Prot | | 0.07 | | | c0.09 | | 0.04 | 0.10 | | c0.05 | c0.15 | |
| v/s Ratio Perm | 0.08 | | | 0.04 | | | | | | | | |
| v/c Ratio | 0.35 | 0.33 | | 0.19 | 0.39 | | 0.44 | 0.20 | | 0.49 | 0.28 | |
| Uniform Delay, d1 | 27.4 | 27.3 | | 26.4 | 27.7 | | 36.6 | 11.1 | | 36.4 | 11.4 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.85 | 1.28 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 1.1 | 0.2 | | 0.4 | 0.3 | | 1.9 | 0.3 | | 2.2 | 0.4 | |
| Delay (s) | 28.6 | 27.5 | | 26.8 | 28.0 | | 33.2 | 14.5 | | 38.6 | 11.8 | |
| Level of Service | C | C | | C | C | | C | B | | D | B | |
| Approach Delay (s) | | 27.7 | | | 27.9 | | | 17.6 | | | 15.5 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 21.2 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.32 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 63.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: W MacArthur Blvd. & Telegraph Ave.

6/16/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 50 | 283 | 112 | 75 | 292 | 77 | 91 | 298 | 60 | 81 | 294 | 38 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Lane Util. Factor | | 0.91 | | | 0.91 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | | 0.99 | | | 0.99 | | 1.00 | 0.99 | | 1.00 | 1.00 | |
| Flpb, ped/bikes | | 1.00 | | | 1.00 | | 0.99 | 1.00 | | 0.98 | 1.00 | |
| Frt | | 0.96 | | | 0.97 | | 1.00 | 0.97 | | 1.00 | 0.98 | |
| Flt Protected | | 0.99 | | | 0.99 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 4786 | | | 4870 | | 1746 | 3427 | | 1738 | 3465 | |
| Flt Permitted | | 0.83 | | | 0.77 | | 0.55 | 1.00 | | 0.54 | 1.00 | |
| Satd. Flow (perm) | | 3984 | | | 3792 | | 1013 | 3427 | | 984 | 3465 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 50 | 283 | 112 | 75 | 292 | 77 | 91 | 298 | 60 | 81 | 294 | 38 |
| RTOR Reduction (vph) | 0 | 89 | 0 | 0 | 61 | 0 | 0 | 9 | 0 | 0 | 6 | 0 |
| Lane Group Flow (vph) | 0 | 356 | 0 | 0 | 383 | 0 | 91 | 349 | 0 | 81 | 326 | 0 |
| Confl. Peds. (#/hr) | 34 | | 41 | | | 34 | 21 | | 29 | 29 | | 21 |
| Turn Type | Perm | | | pm+pt | | | Perm | | | Perm | | |
| Protected Phases | | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | | 17.7 | | | 17.7 | | 56.8 | 56.8 | | 56.8 | 56.8 | |
| Effective Green, g (s) | | 17.7 | | | 17.7 | | 56.8 | 56.8 | | 56.8 | 56.8 | |
| Actuated g/C Ratio | | 0.21 | | | 0.21 | | 0.67 | 0.67 | | 0.67 | 0.67 | |
| Clearance Time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Vehicle Extension (s) | | 2.0 | | | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | | 830 | | | 790 | | 677 | 2290 | | 658 | 2315 | |
| v/s Ratio Prot | | | | | | | | c0.10 | | | 0.09 | |
| v/s Ratio Perm | | 0.09 | | | c0.10 | | 0.09 | | | 0.08 | | |
| v/c Ratio | | 0.43 | | | 0.48 | | 0.13 | 0.15 | | 0.12 | 0.14 | |
| Uniform Delay, d1 | | 29.3 | | | 29.6 | | 5.1 | 5.2 | | 5.1 | 5.2 | |
| Progression Factor | | 1.20 | | | 1.00 | | 1.00 | 1.00 | | 1.26 | 1.28 | |
| Incremental Delay, d2 | | 0.1 | | | 0.2 | | 0.4 | 0.1 | | 0.4 | 0.1 | |
| Delay (s) | | 35.2 | | | 29.8 | | 5.6 | 5.3 | | 6.8 | 6.7 | |
| Level of Service | | D | | | C | | A | A | | A | A | |
| Approach Delay (s) | | 35.2 | | | 29.8 | | | 5.4 | | | 6.7 | |
| Approach LOS | | D | | | C | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 19.5 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.23 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 10.5 |
| Intersection Capacity Utilization | 76.2% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 3: 27th St. & Telegraph Ave.

6/16/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 251 | 309 | 113 | 39 | 222 | 92 | 64 | 321 | 31 | 45 | 331 | 112 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.96 | | 1.00 | 0.96 | | 1.00 | 0.99 | | 1.00 | 0.96 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3381 | | 1770 | 3345 | | 1761 | 3487 | | 1765 | 3376 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.46 | 1.00 | | 0.52 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3381 | | 1770 | 3345 | | 852 | 3487 | | 972 | 3376 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 251 | 309 | 113 | 39 | 222 | 92 | 64 | 321 | 31 | 45 | 331 | 112 |
| RTOR Reduction (vph) | 0 | 39 | 0 | 0 | 57 | 0 | 0 | 7 | 0 | 0 | 33 | 0 |
| Lane Group Flow (vph) | 251 | 383 | 0 | 39 | 257 | 0 | 64 | 345 | 0 | 45 | 410 | 0 |
| Confl. Peds. (#/hr) | | | 2 | | | 21 | 10 | | 5 | 5 | | 10 |
| Confl. Bikes (#/hr) | | | 5 | | | 3 | | | 4 | | | 27 |
| Turn Type | Prot | | | Prot | | | Perm | | | Perm | | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 15.7 | 29.4 | | 4.5 | 18.2 | | 37.6 | 37.6 | | 37.6 | 37.6 | |
| Effective Green, g (s) | 16.2 | 28.9 | | 5.0 | 17.7 | | 39.1 | 39.1 | | 39.1 | 39.1 | |
| Actuated g/C Ratio | 0.19 | 0.34 | | 0.06 | 0.21 | | 0.46 | 0.46 | | 0.46 | 0.46 | |
| Clearance Time (s) | 4.5 | 3.5 | | 4.5 | 3.5 | | 5.5 | 5.5 | | 5.5 | 5.5 | |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | 337 | 1150 | | 104 | 697 | | 392 | 1604 | | 447 | 1553 | |
| v/s Ratio Prot | c0.14 | c0.11 | | 0.02 | 0.08 | | | 0.10 | | | c0.12 | |
| v/s Ratio Perm | | | | | | | 0.08 | | | 0.05 | | |
| v/c Ratio | 0.74 | 0.33 | | 0.38 | 0.37 | | 0.16 | 0.22 | | 0.10 | 0.26 | |
| Uniform Delay, d1 | 32.5 | 20.9 | | 38.5 | 28.9 | | 13.4 | 13.8 | | 13.0 | 14.1 | |
| Progression Factor | 1.00 | 1.00 | | 1.19 | 0.80 | | 1.26 | 1.28 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 7.6 | 0.1 | | 0.8 | 0.1 | | 0.9 | 0.3 | | 0.5 | 0.4 | |
| Delay (s) | 40.1 | 20.9 | | 46.6 | 23.1 | | 17.8 | 18.0 | | 13.4 | 14.5 | |
| Level of Service | D | C | | D | C | | B | B | | B | B | |
| Approach Delay (s) | | 28.1 | | | 25.7 | | | 17.9 | | | 14.4 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 22.0 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.38 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 67.9% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

# HCM Signalized Intersection Capacity Analysis
## 1: 40th St. & Telegraph Ave.

6/16/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 180 | 601 | 186 | 41 | 379 | 286 | 207 | 706 | 36 | 136 | 614 | 177 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.95 | | 1.00 | 0.99 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | 0.97 | 1.00 | | 0.97 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.96 | | 1.00 | 0.94 | | 1.00 | 0.99 | | 1.00 | 0.97 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1708 | 3288 | | 1708 | 3138 | | 1770 | 3496 | | 1770 | 3379 | |
| Flt Permitted | 0.26 | 1.00 | | 0.19 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 474 | 3288 | | 342 | 3138 | | 1770 | 3496 | | 1770 | 3379 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 180 | 601 | 186 | 41 | 379 | 286 | 207 | 706 | 36 | 136 | 614 | 177 |
| RTOR Reduction (vph) | 0 | 37 | 0 | 0 | 172 | 0 | 0 | 4 | 0 | 0 | 33 | 0 |
| Lane Group Flow (vph) | 180 | 750 | 0 | 41 | 493 | 0 | 207 | 738 | 0 | 136 | 758 | 0 |
| Confl. Peds. (#/hr) | 93 | | 122 | 122 | | 93 | | | 86 | | | 39 |
| Turn Type | Perm | | | Perm | | | Prot | | | Prot | | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | | | | |
| Actuated Green, G (s) | 25.5 | 25.5 | | 25.5 | 25.5 | | 12.1 | 30.8 | | 10.2 | 28.9 | |
| Effective Green, g (s) | 25.5 | 25.5 | | 25.5 | 25.5 | | 12.1 | 30.8 | | 10.2 | 28.9 | |
| Actuated g/C Ratio | 0.32 | 0.32 | | 0.32 | 0.32 | | 0.15 | 0.39 | | 0.13 | 0.36 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | 151 | 1048 | | 109 | 1000 | | 268 | 1346 | | 226 | 1221 | |
| v/s Ratio Prot | | 0.23 | | | 0.16 | | c0.12 | 0.21 | | 0.08 | c0.22 | |
| v/s Ratio Perm | c0.38 | | | 0.12 | | | | | | | | |
| v/c Ratio | 1.19 | 0.72 | | 0.38 | 0.49 | | 0.77 | 0.55 | | 0.60 | 0.62 | |
| Uniform Delay, d1 | 27.2 | 24.1 | | 21.1 | 22.0 | | 32.6 | 19.2 | | 33.0 | 21.0 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 134.1 | 2.0 | | 0.8 | 0.1 | | 11.8 | 1.6 | | 3.1 | 2.4 | |
| Delay (s) | 161.4 | 26.0 | | 21.9 | 22.2 | | 44.5 | 20.8 | | 36.1 | 23.4 | |
| Level of Service | F | C | | C | C | | D | C | | D | C | |
| Approach Delay (s) | | 51.2 | | | 22.2 | | | 26.0 | | | 25.3 | |
| Approach LOS | | D | | | C | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 31.9 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.87 | | |
| Actuated Cycle Length (s) | 80.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 81.9% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: W MacArthur Blvd. & Telegraph Ave.

6/16/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 60 | 325 | 165 | 116 | 270 | 95 | 199 | 508 | 59 | 192 | 545 | 79 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Lane Util. Factor | | 0.91 | | | 0.91 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | | 0.98 | | | 0.99 | | 1.00 | 1.00 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | | 1.00 | | | 0.99 | | 0.99 | 1.00 | | 0.99 | 1.00 | |
| Frt | | 0.95 | | | 0.97 | | 1.00 | 0.98 | | 1.00 | 0.98 | |
| Flt Protected | | 0.99 | | | 0.99 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 4735 | | | 4796 | | 1748 | 3469 | | 1746 | 3454 | |
| Flt Permitted | | 0.82 | | | 0.73 | | 0.41 | 1.00 | | 0.44 | 1.00 | |
| Satd. Flow (perm) | | 3920 | | | 3554 | | 751 | 3469 | | 805 | 3454 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 60 | 325 | 165 | 116 | 270 | 95 | 199 | 508 | 59 | 192 | 545 | 79 |
| RTOR Reduction (vph) | 0 | 68 | 0 | 0 | 65 | 0 | 0 | 4 | 0 | 0 | 6 | 0 |
| Lane Group Flow (vph) | 0 | 482 | 0 | 0 | 416 | 0 | 199 | 563 | 0 | 192 | 618 | 0 |
| Confl. Peds. (#/hr) | 55 | | 54 | 54 | | 55 | 37 | | 38 | 38 | | 37 |
| Turn Type | Perm | | | pm+pt | | | Perm | | | Perm | | |
| Protected Phases | | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | | 15.0 | | | 15.0 | | 39.4 | 39.4 | | 39.4 | 39.4 | |
| Effective Green, g (s) | | 15.0 | | | 15.0 | | 39.4 | 39.4 | | 39.4 | 39.4 | |
| Actuated g/C Ratio | | 0.23 | | | 0.23 | | 0.61 | 0.61 | | 0.61 | 0.61 | |
| Clearance Time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Vehicle Extension (s) | | 2.0 | | | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | | 906 | | | 821 | | 456 | 2106 | | 489 | 2097 | |
| v/s Ratio Prot | | | | | | | | 0.16 | | | 0.18 | |
| v/s Ratio Perm | | c0.12 | | | 0.12 | | c0.27 | | | 0.24 | | |
| v/c Ratio | | 0.53 | | | 0.51 | | 0.44 | 0.27 | | 0.39 | 0.29 | |
| Uniform Delay, d1 | | 21.9 | | | 21.7 | | 6.8 | 6.0 | | 6.6 | 6.1 | |
| Progression Factor | | 1.00 | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | | 0.3 | | | 0.2 | | 0.2 | 0.0 | | 0.2 | 0.0 | |
| Delay (s) | | 22.2 | | | 21.9 | | 7.1 | 6.0 | | 6.8 | 6.1 | |
| Level of Service | | C | | | C | | A | A | | A | A | |
| Approach Delay (s) | | 22.2 | | | 21.9 | | | 6.3 | | | 6.3 | |
| Approach LOS | | C | | | C | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 12.5 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.46 | | |
| Actuated Cycle Length (s) | 64.9 | Sum of lost time (s) | 10.5 |
| Intersection Capacity Utilization | 85.2% | ICU Level of Service | E |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 3: 27th St. & Telegraph Ave.

6/16/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 119 | 311 | 127 | 43 | 495 | 104 | 187 | 457 | 62 | 120 | 507 | 340 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.96 | | 1.00 | 0.97 | | 1.00 | 0.98 | | 1.00 | 0.94 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3344 | | 1770 | 3430 | | 1766 | 3464 | | 1765 | 3292 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.27 | 1.00 | | 0.43 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3344 | | 1770 | 3430 | | 494 | 3464 | | 795 | 3292 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 119 | 311 | 127 | 43 | 495 | 104 | 187 | 457 | 62 | 120 | 507 | 340 |
| RTOR Reduction (vph) | 0 | 51 | 0 | 0 | 22 | 0 | 0 | 11 | 0 | 0 | 121 | 0 |
| Lane Group Flow (vph) | 119 | 387 | 0 | 43 | 577 | 0 | 187 | 508 | 0 | 120 | 726 | 0 |
| Confl. Peds. (#/hr) | | | 20 | | | 12 | 9 | | 6 | 6 | | 9 |
| Confl. Bikes (#/hr) | | | 9 | | | 3 | | | 25 | | | 13 |
| Turn Type | Prot | | | Prot | | | Perm | | | Perm | | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 7.9 | 23.4 | | 4.6 | 20.1 | | 43.5 | 43.5 | | 43.5 | 43.5 | |
| Effective Green, g (s) | 8.4 | 22.9 | | 5.1 | 19.6 | | 45.0 | 45.0 | | 45.0 | 45.0 | |
| Actuated g/C Ratio | 0.10 | 0.27 | | 0.06 | 0.23 | | 0.53 | 0.53 | | 0.53 | 0.53 | |
| Clearance Time (s) | 4.5 | 3.5 | | 4.5 | 3.5 | | 5.5 | 5.5 | | 5.5 | 5.5 | |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | 175 | 901 | | 106 | 791 | | 262 | 1834 | | 421 | 1743 | |
| v/s Ratio Prot | c0.07 | c0.12 | | 0.02 | c0.17 | | | 0.15 | | | 0.22 | |
| v/s Ratio Perm | | | | | | | c0.38 | | | 0.15 | | |
| v/c Ratio | 0.68 | 0.43 | | 0.41 | 0.73 | | 0.71 | 0.28 | | 0.29 | 0.42 | |
| Uniform Delay, d1 | 37.0 | 25.7 | | 38.5 | 30.3 | | 15.1 | 11.0 | | 11.1 | 12.1 | |
| Progression Factor | 1.00 | 1.00 | | 0.93 | 1.36 | | 0.95 | 0.84 | | 0.89 | 0.86 | |
| Incremental Delay, d2 | 8.3 | 0.1 | | 0.9 | 2.8 | | 14.9 | 0.4 | | 1.7 | 0.7 | |
| Delay (s) | 45.3 | 25.8 | | 36.5 | 44.0 | | 29.4 | 9.6 | | 11.6 | 11.1 | |
| Level of Service | D | C | | D | D | | C | A | | B | B | |
| Approach Delay (s) | | 30.0 | | | 43.5 | | | 14.9 | | | 11.1 | |
| Approach LOS | | C | | | D | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 22.9 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.74 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 16.0 |
| Intersection Capacity Utilization | 73.2% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

8/26/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 52 | 228 | 41 | 50 | 254 | 97 | 86 | 330 | 81 | 83 | 445 | 90 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 0.98 | | 1.00 | 0.97 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | 0.95 | 1.00 | | 0.97 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.98 | | 1.00 | 0.96 | | 1.00 | 0.97 | | 1.00 | 0.97 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1688 | 3426 | | 1709 | 3308 | | 1770 | 3340 | | 1770 | 3404 | |
| Flt Permitted | 0.46 | 1.00 | | 0.55 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 816 | 3426 | | 996 | 3308 | | 1770 | 3340 | | 1770 | 3404 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 52 | 228 | 41 | 50 | 254 | 97 | 86 | 330 | 81 | 83 | 445 | 90 |
| RTOR Reduction (vph) | 0 | 19 | 0 | 0 | 52 | 0 | 0 | 19 | 0 | 0 | 15 | 0 |
| Lane Group Flow (vph) | 52 | 250 | 0 | 50 | 299 | 0 | 86 | 392 | 0 | 83 | 520 | 0 |
| Confl. Peds. (#/hr) | 81 | | 52 | 52 | | 81 | | | 112 | | | 59 |
| Turn Type | Perm | NA | | Perm | NA | | Prot | NA | | Prot | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | | | | |
| Actuated Green, G (s) | 19.6 | 19.6 | | 19.6 | 19.6 | | 8.3 | 43.7 | | 8.2 | 43.6 | |
| Effective Green, g (s) | 19.6 | 19.6 | | 19.6 | 19.6 | | 8.3 | 43.7 | | 8.2 | 43.6 | |
| Actuated g/C Ratio | 0.23 | 0.23 | | 0.23 | 0.23 | | 0.10 | 0.51 | | 0.10 | 0.51 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 188 | 789 | | 229 | 762 | | 172 | 1717 | | 170 | 1746 | |
| v/s Ratio Prot | | 0.07 | | | c0.09 | | c0.05 | 0.12 | | 0.05 | c0.15 | |
| v/s Ratio Perm | 0.06 | | | 0.05 | | | | | | | | |
| v/c Ratio | 0.28 | 0.32 | | 0.22 | 0.39 | | 0.50 | 0.23 | | 0.49 | 0.30 | |
| Uniform Delay, d1 | 26.9 | 27.1 | | 26.5 | 27.7 | | 36.4 | 11.4 | | 36.4 | 11.9 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.87 | 1.32 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 0.8 | 0.2 | | 0.5 | 0.3 | | 2.3 | 0.3 | | 2.2 | 0.4 | |
| Delay (s) | 27.7 | 27.4 | | 27.0 | 28.0 | | 34.1 | 15.3 | | 38.6 | 12.3 | |
| Level of Service | C | C | | C | C | | C | B | | D | B | |
| Approach Delay (s) | | 27.4 | | | 27.9 | | | 18.6 | | | 15.9 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 21.2 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.35 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 63.3% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

8/26/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 85 | 296 | 129 | 75 | 309 | 65 | 111 | 297 | 60 | 76 | 303 | 120 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Lane Util. Factor | | 0.91 | | | 0.91 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | | 0.99 | | | 0.99 | | 1.00 | 0.99 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | | 1.00 | | | 1.00 | | 0.99 | 1.00 | | 0.98 | 1.00 | |
| Frt | | 0.96 | | | 0.98 | | 1.00 | 0.97 | | 1.00 | 0.96 | |
| Flt Protected | | 0.99 | | | 0.99 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 4767 | | | 4899 | | 1749 | 3426 | | 1738 | 3357 | |
| Flt Permitted | | 0.77 | | | 0.75 | | 0.51 | 1.00 | | 0.54 | 1.00 | |
| Satd. Flow (perm) | | 3709 | | | 3698 | | 930 | 3426 | | 985 | 3357 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 85 | 296 | 129 | 75 | 309 | 65 | 111 | 297 | 60 | 76 | 303 | 120 |
| RTOR Reduction (vph) | 0 | 102 | 0 | 0 | 51 | 0 | 0 | 9 | 0 | 0 | 23 | 0 |
| Lane Group Flow (vph) | 0 | 408 | 0 | 0 | 398 | 0 | 111 | 348 | 0 | 76 | 400 | 0 |
| Confl. Peds. (#/hr) | 34 | | 41 | | | 34 | 21 | | 29 | 29 | | 21 |
| Turn Type | Perm | NA | | pm+pt | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | | 17.9 | | | 17.9 | | 56.6 | 56.6 | | 56.6 | 56.6 | |
| Effective Green, g (s) | | 17.9 | | | 17.9 | | 56.6 | 56.6 | | 56.6 | 56.6 | |
| Actuated g/C Ratio | | 0.21 | | | 0.21 | | 0.67 | 0.67 | | 0.67 | 0.67 | |
| Clearance Time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Vehicle Extension (s) | | 2.0 | | | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | | 781 | | | 778 | | 619 | 2281 | | 655 | 2235 | |
| v/s Ratio Prot | | | | | | | | 0.10 | | | 0.12 | |
| v/s Ratio Perm | | c0.11 | | | 0.11 | | c0.12 | | | 0.08 | | |
| v/c Ratio | | 0.52 | | | 0.51 | | 0.18 | 0.15 | | 0.12 | 0.18 | |
| Uniform Delay, d1 | | 29.8 | | | 29.7 | | 5.4 | 5.3 | | 5.1 | 5.4 | |
| Progression Factor | | 1.18 | | | 1.00 | | 1.00 | 1.00 | | 1.26 | 1.47 | |
| Incremental Delay, d2 | | 0.3 | | | 0.2 | | 0.6 | 0.1 | | 0.4 | 0.2 | |
| Delay (s) | | 35.3 | | | 29.9 | | 6.0 | 5.4 | | 6.8 | 8.1 | |
| Level of Service | | D | | | C | | A | A | | A | A | |
| Approach Delay (s) | | 35.3 | | | 29.9 | | | 5.6 | | | 7.9 | |
| Approach LOS | | D | | | C | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 19.7 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.28 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 15.5 |
| Intersection Capacity Utilization | 77.6% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 3: Telegraph Ave. & 27th St.

8/26/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 251 | 309 | 113 | 39 | 222 | 99 | 64 | 329 | 31 | 54 | 347 | 112 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.96 | | 1.00 | 0.95 | | 1.00 | 0.99 | | 1.00 | 0.96 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3381 | | 1770 | 3335 | | 1761 | 3488 | | 1765 | 3381 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.45 | 1.00 | | 0.52 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3381 | | 1770 | 3335 | | 832 | 3488 | | 961 | 3381 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 251 | 309 | 113 | 39 | 222 | 99 | 64 | 329 | 31 | 54 | 347 | 112 |
| RTOR Reduction (vph) | 0 | 39 | 0 | 0 | 64 | 0 | 0 | 7 | 0 | 0 | 31 | 0 |
| Lane Group Flow (vph) | 251 | 383 | 0 | 39 | 257 | 0 | 64 | 353 | 0 | 54 | 428 | 0 |
| Confl. Peds. (#/hr) | | | 2 | | | 21 | 10 | | 5 | 5 | | 10 |
| Confl. Bikes (#/hr) | | | 5 | | | 3 | | | 4 | | | 27 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 15.7 | 29.4 | | 4.5 | 18.2 | | 37.6 | 37.6 | | 37.6 | 37.6 | |
| Effective Green, g (s) | 16.2 | 28.9 | | 5.0 | 17.7 | | 39.1 | 39.1 | | 39.1 | 39.1 | |
| Actuated g/C Ratio | 0.19 | 0.34 | | 0.06 | 0.21 | | 0.46 | 0.46 | | 0.46 | 0.46 | |
| Clearance Time (s) | 4.5 | 3.5 | | 4.5 | 3.5 | | 5.5 | 5.5 | | 5.5 | 5.5 | |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | 337 | 1149 | | 104 | 694 | | 382 | 1604 | | 442 | 1555 | |
| v/s Ratio Prot | c0.14 | c0.11 | | 0.02 | 0.08 | | | 0.10 | | | c0.13 | |
| v/s Ratio Perm | | | | | | | 0.08 | | | 0.06 | | |
| v/c Ratio | 0.74 | 0.33 | | 0.38 | 0.37 | | 0.17 | 0.22 | | 0.12 | 0.28 | |
| Uniform Delay, d1 | 32.5 | 20.9 | | 38.5 | 28.9 | | 13.4 | 13.8 | | 13.1 | 14.2 | |
| Progression Factor | 1.00 | 1.00 | | 1.20 | 0.80 | | 1.27 | 1.29 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 7.6 | 0.1 | | 0.8 | 0.1 | | 0.9 | 0.3 | | 0.6 | 0.4 | |
| Delay (s) | 40.1 | 20.9 | | 47.2 | 23.1 | | 18.0 | 18.1 | | 13.7 | 14.6 | |
| Level of Service | D | C | | D | C | | B | B | | B | B | |
| Approach Delay (s) | | 28.1 | | | 25.7 | | | 18.1 | | | 14.5 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 22.0 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.40 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 12.0 |
| Intersection Capacity Utilization | 68.1% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

8/26/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 149 | 599 | 179 | 55 | 387 | 286 | 202 | 768 | 60 | 136 | 672 | 166 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.95 | | 1.00 | 0.99 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | 0.97 | 1.00 | | 0.96 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.97 | | 1.00 | 0.94 | | 1.00 | 0.99 | | 1.00 | 0.97 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1709 | 3295 | | 1707 | 3143 | | 1770 | 3474 | | 1770 | 3398 | |
| Flt Permitted | 0.26 | 1.00 | | 0.20 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (perm) | 465 | 3295 | | 351 | 3143 | | 1770 | 3474 | | 1770 | 3398 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 149 | 599 | 179 | 55 | 387 | 286 | 202 | 768 | 60 | 136 | 672 | 166 |
| RTOR Reduction (vph) | 0 | 35 | 0 | 0 | 167 | 0 | 0 | 7 | 0 | 0 | 26 | 0 |
| Lane Group Flow (vph) | 149 | 743 | 0 | 55 | 506 | 0 | 202 | 821 | 0 | 136 | 812 | 0 |
| Confl. Peds. (#/hr) | 93 | | 122 | 122 | | 93 | | | 86 | | | 39 |
| Turn Type | Perm | NA | | Perm | NA | | Prot | NA | | Prot | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | | | | |
| Actuated Green, G (s) | 25.5 | 25.5 | | 25.5 | 25.5 | | 12.1 | 30.8 | | 10.2 | 28.9 | |
| Effective Green, g (s) | 25.5 | 25.5 | | 25.5 | 25.5 | | 12.1 | 30.8 | | 10.2 | 28.9 | |
| Actuated g/C Ratio | 0.32 | 0.32 | | 0.32 | 0.32 | | 0.15 | 0.39 | | 0.13 | 0.36 | |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | 148 | 1050 | | 111 | 1001 | | 267 | 1337 | | 225 | 1227 | |
| v/s Ratio Prot | | 0.23 | | | 0.16 | | c0.11 | 0.24 | | 0.08 | c0.24 | |
| v/s Ratio Perm | c0.32 | | | 0.16 | | | | | | | | |
| v/c Ratio | 1.01 | 0.71 | | 0.50 | 0.51 | | 0.76 | 0.61 | | 0.60 | 0.66 | |
| Uniform Delay, d1 | 27.2 | 24.0 | | 22.0 | 22.1 | | 32.5 | 19.8 | | 33.0 | 21.4 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | 75.8 | 1.8 | | 1.3 | 0.1 | | 10.3 | 2.1 | | 3.1 | 2.8 | |
| Delay (s) | 103.0 | 25.8 | | 23.3 | 22.3 | | 42.9 | 21.9 | | 36.1 | 24.3 | |
| Level of Service | F | C | | C | C | | D | C | | D | C | |
| Approach Delay (s) | | 38.2 | | | 22.4 | | | 26.0 | | | 25.9 | |
| Approach LOS | | D | | | C | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 28.4 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.81 | | |
| Actuated Cycle Length (s) | 80.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 81.3% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

8/26/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 145 | 353 | 196 | 116 | 277 | 98 | 209 | 535 | 59 | 176 | 548 | 80 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Lane Util. Factor | | 0.91 | | | 0.91 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | | 0.98 | | | 0.99 | | 1.00 | 1.00 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | | 0.99 | | | 1.00 | | 0.99 | 1.00 | | 0.99 | 1.00 | |
| Frt | | 0.96 | | | 0.97 | | 1.00 | 0.99 | | 1.00 | 0.98 | |
| Flt Protected | | 0.99 | | | 0.99 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 4716 | | | 4798 | | 1748 | 3472 | | 1746 | 3453 | |
| Flt Permitted | | 0.76 | | | 0.69 | | 0.40 | 1.00 | | 0.42 | 1.00 | |
| Satd. Flow (perm) | | 3620 | | | 3369 | | 735 | 3472 | | 767 | 3453 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 145 | 353 | 196 | 116 | 277 | 98 | 209 | 535 | 59 | 176 | 548 | 80 |
| RTOR Reduction (vph) | 0 | 60 | 0 | 0 | 64 | 0 | 0 | 5 | 0 | 0 | 6 | 0 |
| Lane Group Flow (vph) | 0 | 634 | 0 | 0 | 427 | 0 | 209 | 589 | 0 | 176 | 622 | 0 |
| Confl. Peds. (#/hr) | 55 | | 54 | 54 | | 55 | 37 | | 38 | 38 | | 37 |
| Turn Type | Perm | NA | | pm+pt | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | | 17.7 | | | 17.7 | | 39.2 | 39.2 | | 39.2 | 39.2 | |
| Effective Green, g (s) | | 17.7 | | | 17.7 | | 39.2 | 39.2 | | 39.2 | 39.2 | |
| Actuated g/C Ratio | | 0.26 | | | 0.26 | | 0.58 | 0.58 | | 0.58 | 0.58 | |
| Clearance Time (s) | | 5.5 | | | 5.5 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Vehicle Extension (s) | | 2.0 | | | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | | 950 | | | 884 | | 427 | 2019 | | 446 | 2008 | |
| v/s Ratio Prot | | | | | | | | 0.17 | | | 0.18 | |
| v/s Ratio Perm | | c0.17 | | | 0.13 | | c0.28 | | | 0.23 | | |
| v/c Ratio | | 0.67 | | | 0.48 | | 0.49 | 0.29 | | 0.39 | 0.31 | |
| Uniform Delay, d1 | | 22.2 | | | 21.0 | | 8.2 | 7.1 | | 7.7 | 7.2 | |
| Progression Factor | | 1.00 | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Incremental Delay, d2 | | 1.4 | | | 0.2 | | 0.3 | 0.0 | | 0.2 | 0.0 | |
| Delay (s) | | 23.6 | | | 21.1 | | 8.6 | 7.1 | | 7.9 | 7.2 | |
| Level of Service | | C | | | C | | A | A | | A | A | |
| Approach Delay (s) | | 23.6 | | | 21.1 | | | 7.5 | | | 7.4 | |
| Approach LOS | | C | | | C | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 13.9 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.60 | | |
| Actuated Cycle Length (s) | 67.4 | Sum of lost time (s) | 15.5 |
| Intersection Capacity Utilization | 86.3% | ICU Level of Service | E |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 3: Telegraph Ave. & 27th St.

8/26/2014

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 119 | 311 | 127 | 43 | 495 | 118 | 187 | 476 | 62 | 131 | 523 | 340 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 0.99 | |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | 1.00 | 0.96 | | 1.00 | 0.97 | | 1.00 | 0.98 | | 1.00 | 0.94 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3344 | | 1770 | 3418 | | 1766 | 3467 | | 1765 | 3296 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.26 | 1.00 | | 0.42 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3344 | | 1770 | 3418 | | 481 | 3467 | | 774 | 3296 | |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 119 | 311 | 127 | 43 | 495 | 118 | 187 | 476 | 62 | 131 | 523 | 340 |
| RTOR Reduction (vph) | 0 | 51 | 0 | 0 | 25 | 0 | 0 | 10 | 0 | 0 | 113 | 0 |
| Lane Group Flow (vph) | 119 | 387 | 0 | 43 | 588 | 0 | 187 | 528 | 0 | 131 | 750 | 0 |
| Confl. Peds. (#/hr) | | | 20 | | | 12 | 9 | | 6 | 6 | | 9 |
| Confl. Bikes (#/hr) | | | 9 | | | 3 | | | 25 | | | 13 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 7.9 | 23.5 | | 4.6 | 20.2 | | 43.4 | 43.4 | | 43.4 | 43.4 | |
| Effective Green, g (s) | 8.4 | 23.0 | | 5.1 | 19.7 | | 44.9 | 44.9 | | 44.9 | 44.9 | |
| Actuated g/C Ratio | 0.10 | 0.27 | | 0.06 | 0.23 | | 0.53 | 0.53 | | 0.53 | 0.53 | |
| Clearance Time (s) | 4.5 | 3.5 | | 4.5 | 3.5 | | 5.5 | 5.5 | | 5.5 | 5.5 | |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lane Grp Cap (vph) | 174 | 904 | | 106 | 792 | | 254 | 1831 | | 408 | 1741 | |
| v/s Ratio Prot | c0.07 | c0.12 | | 0.02 | c0.17 | | | 0.15 | | | 0.23 | |
| v/s Ratio Perm | | | | | | | c0.39 | | | 0.17 | | |
| v/c Ratio | 0.68 | 0.43 | | 0.41 | 0.74 | | 0.74 | 0.29 | | 0.32 | 0.43 | |
| Uniform Delay, d1 | 37.0 | 25.6 | | 38.5 | 30.3 | | 15.5 | 11.2 | | 11.4 | 12.2 | |
| Progression Factor | 1.00 | 1.00 | | 0.93 | 1.36 | | 0.96 | 0.85 | | 0.89 | 0.86 | |
| Incremental Delay, d2 | 8.5 | 0.1 | | 0.9 | 3.1 | | 16.9 | 0.4 | | 2.1 | 0.8 | |
| Delay (s) | 45.5 | 25.7 | | 36.8 | 44.3 | | 31.7 | 9.9 | | 12.2 | 11.3 | |
| Level of Service | D | C | | D | D | | C | A | | B | B | |
| Approach Delay (s) | | 29.9 | | | 43.8 | | | 15.5 | | | 11.4 | |
| Approach LOS | | C | | | D | | | B | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 23.2 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.72 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 12.0 |
| Intersection Capacity Utilization | 73.9% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 204 | 485 | 273 | 81 | 517 | 130 | 135 | 350 | 51 | 90 | 879 | 270 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.92 |
| Flpb, ped/bikes | 0.97 | 1.00 | | 0.98 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.95 | | 1.00 | 0.97 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1722 | 3223 | | 1729 | 3371 | | 1770 | 1863 | 1363 | 1770 | 1863 | 1458 |
| Flt Permitted | 0.29 | 1.00 | | 0.22 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 525 | 3223 | | 409 | 3371 | | 1770 | 1863 | 1363 | 1770 | 1863 | 1458 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 204 | 485 | 273 | 81 | 517 | 130 | 135 | 350 | 51 | 90 | 879 | 270 |
| RTOR Reduction (vph) | 0 | 92 | 0 | 0 | 26 | 0 | 0 | 0 | 30 | 0 | 0 | 50 |
| Lane Group Flow (vph) | 204 | 666 | 0 | 81 | 621 | 0 | 135 | 350 | 21 | 90 | 879 | 221 |
| Confl. Peds. (#/hr) | 81 | | 52 | 52 | | 81 | | | 112 | | | 59 |
| Turn Type | Perm | NA | | Perm | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | 2 | | | 6 |
| Actuated Green, G (s) | 29.5 | 29.5 | | 29.5 | 29.5 | | 6.5 | 34.5 | 34.5 | 7.5 | 35.5 | 35.5 |
| Effective Green, g (s) | 29.5 | 29.5 | | 29.5 | 29.5 | | 6.5 | 34.5 | 34.5 | 7.5 | 35.5 | 35.5 |
| Actuated g/C Ratio | 0.35 | 0.35 | | 0.35 | 0.35 | | 0.08 | 0.41 | 0.41 | 0.09 | 0.42 | 0.42 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 182 | 1118 | | 141 | 1169 | | 135 | 756 | 553 | 156 | 778 | 608 |
| v/s Ratio Prot | | 0.21 | | | 0.18 | | c0.08 | 0.19 | | 0.05 | c0.47 | |
| v/s Ratio Perm | c0.39 | | | 0.20 | | | | | 0.02 | | | 0.15 |
| v/c Ratio | 1.12 | 0.60 | | 0.57 | 0.53 | | 1.00 | 0.46 | 0.04 | 0.58 | 1.13 | 0.36 |
| Uniform Delay, d1 | 27.8 | 22.8 | | 22.6 | 22.2 | | 39.2 | 18.5 | 15.2 | 37.2 | 24.8 | 17.0 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.05 | 0.83 | 1.23 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 102.9 | 0.9 | | 5.6 | 0.5 | | 74.2 | 1.9 | 0.1 | 5.1 | 74.3 | 1.7 |
| Delay (s) | 130.6 | 23.7 | | 28.2 | 22.7 | | 115.3 | 17.1 | 18.8 | 42.3 | 99.0 | 18.7 |
| Level of Service | F | C | | C | C | | F | B | B | D | F | B |
| Approach Delay (s) | | 46.4 | | | 23.3 | | | 42.0 | | | 77.4 | |
| Approach LOS | | D | | | C | | | D | | | E | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 51.9 | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | 1.11 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 101.6% | ICU Level of Service | G |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 64 | 962 | 213 | 60 | 374 | 81 | 200 | 441 | 150 | 390 | 751 | 106 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.96 | 1.00 | 1.00 | 0.97 |
| Flpb, ped/bikes | 0.99 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | 1.00 | 0.97 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1746 | 3408 | | 1770 | 3395 | | 1770 | 1863 | 1518 | 1746 | 1863 | 1531 |
| Flt Permitted | 0.45 | 1.00 | | 0.16 | 1.00 | | 0.15 | 1.00 | 1.00 | 0.40 | 1.00 | 1.00 |
| Satd. Flow (perm) | 828 | 3408 | | 295 | 3395 | | 274 | 1863 | 1518 | 733 | 1863 | 1531 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 64 | 962 | 213 | 60 | 374 | 81 | 200 | 441 | 150 | 390 | 751 | 106 |
| RTOR Reduction (vph) | 0 | 22 | 0 | 0 | 22 | 0 | 0 | 0 | 76 | 0 | 0 | 42 |
| Lane Group Flow (vph) | 64 | 1153 | 0 | 60 | 433 | 0 | 200 | 441 | 74 | 390 | 751 | 64 |
| Confl. Peds. (#/hr) | 34 | | 41 | | | 34 | 21 | | 29 | 29 | | 21 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 26.7 | 23.5 | | 29.3 | 25.3 | | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 |
| Effective Green, g (s) | 26.7 | 23.5 | | 29.3 | 25.3 | | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 |
| Actuated g/C Ratio | 0.31 | 0.28 | | 0.34 | 0.30 | | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Clearance Time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 3.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 294 | 942 | | 171 | 1010 | | 135 | 920 | 750 | 362 | 920 | 756 |
| v/s Ratio Prot | 0.01 | c0.34 | | c0.02 | 0.13 | | | 0.24 | | | 0.40 | |
| v/s Ratio Perm | 0.06 | | | 0.10 | | | c0.73 | | 0.05 | 0.53 | | 0.04 |
| v/c Ratio | 0.22 | 1.22 | | 0.35 | 0.43 | | 1.48 | 0.48 | 0.10 | 1.08 | 0.82 | 0.08 |
| Uniform Delay, d1 | 20.8 | 30.8 | | 21.6 | 24.0 | | 21.5 | 14.3 | 11.4 | 21.5 | 18.2 | 11.4 |
| Progression Factor | 1.20 | 1.11 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.03 | 1.02 | 1.32 |
| Incremental Delay, d2 | 0.4 | 109.6 | | 0.5 | 0.1 | | 251.9 | 1.8 | 0.3 | 48.8 | 2.4 | 0.1 |
| Delay (s) | 25.2 | 143.8 | | 22.1 | 24.1 | | 273.4 | 16.0 | 11.7 | 71.0 | 21.0 | 15.1 |
| Level of Service | C | F | | C | C | | F | B | B | E | C | B |
| Approach Delay (s) | | 137.7 | | | 23.9 | | | 80.3 | | | 36.1 | |
| Approach LOS | | F | | | C | | | F | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 76.9 | HCM 2000 Level of Service | E |
| HCM 2000 Volume to Capacity ratio | 1.33 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 15.5 |
| Intersection Capacity Utilization | 105.9% | ICU Level of Service | G |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 3: Telegraph Ave. & 27th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 290 | 460 | 150 | 90 | 620 | 233 | 100 | 412 | 60 | 141 | 564 | 210 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 0.95 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3392 | | 1770 | 3346 | | 1762 | 1863 | 1547 | 1764 | 1863 | 1504 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.18 | 1.00 | 1.00 | 0.34 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3392 | | 1770 | 3346 | | 335 | 1863 | 1547 | 630 | 1863 | 1504 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 290 | 460 | 150 | 90 | 620 | 233 | 100 | 412 | 60 | 141 | 564 | 210 |
| RTOR Reduction (vph) | 0 | 31 | 0 | 0 | 45 | 0 | 0 | 0 | 38 | 0 | 0 | 132 |
| Lane Group Flow (vph) | 290 | 579 | 0 | 90 | 808 | 0 | 100 | 412 | 22 | 141 | 564 | 78 |
| Confl. Peds. (#/hr) | | | 3 | | | 32 | 15 | | 8 | 8 | | 15 |
| Confl. Bikes (#/hr) | | | 8 | | | 5 | | | 6 | | | 41 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 16.9 | 32.4 | | 7.7 | 23.2 | | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 |
| Effective Green, g (s) | 17.4 | 31.9 | | 8.2 | 22.7 | | 32.9 | 32.9 | 31.4 | 32.9 | 32.9 | 31.4 |
| Actuated g/C Ratio | 0.20 | 0.38 | | 0.10 | 0.27 | | 0.39 | 0.39 | 0.37 | 0.39 | 0.39 | 0.37 |
| Clearance Time (s) | 4.5 | 3.5 | | 4.5 | 3.5 | | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 362 | 1272 | | 170 | 893 | | 129 | 721 | 571 | 243 | 721 | 555 |
| v/s Ratio Prot | c0.16 | 0.17 | | 0.05 | c0.24 | | | 0.22 | | | c0.30 | |
| v/s Ratio Perm | | | | | | | 0.30 | | 0.01 | 0.22 | | 0.05 |
| v/c Ratio | 0.80 | 0.46 | | 0.53 | 0.90 | | 0.78 | 0.57 | 0.04 | 0.58 | 0.78 | 0.14 |
| Uniform Delay, d1 | 32.2 | 20.0 | | 36.6 | 30.1 | | 22.8 | 20.5 | 17.1 | 20.6 | 22.9 | 17.8 |
| Progression Factor | 1.00 | 1.00 | | 1.06 | 1.10 | | 1.17 | 1.17 | 1.40 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 11.4 | 0.1 | | 0.6 | 5.8 | | 33.8 | 3.1 | 0.1 | 9.7 | 8.3 | 0.5 |
| Delay (s) | 43.5 | 20.1 | | 39.2 | 39.0 | | 60.4 | 27.1 | 24.1 | 30.3 | 31.2 | 18.3 |
| Level of Service | D | C | | D | D | | E | C | C | C | C | B |
| Approach Delay (s) | | 27.6 | | | 39.1 | | | 32.6 | | | 28.1 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 31.9 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.82 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 12.0 |
| Intersection Capacity Utilization | 90.0% | ICU Level of Service | E |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 301 | 922 | 371 | 75 | 683 | 370 | 484 | 1228 | 56 | 170 | 838 | 275 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.89 | | 1.00 | 0.94 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.92 |
| Flpb, ped/bikes | 0.98 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.95 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1729 | 3019 | | 1770 | 3145 | | 1770 | 1863 | 1346 | 1770 | 1863 | 1464 |
| Flt Permitted | 0.13 | 1.00 | | 0.12 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 242 | 3019 | | 229 | 3145 | | 1770 | 1863 | 1346 | 1770 | 1863 | 1464 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 301 | 922 | 371 | 75 | 683 | 370 | 484 | 1228 | 56 | 170 | 838 | 275 |
| RTOR Reduction (vph) | 0 | 54 | 0 | 0 | 90 | 0 | 0 | 0 | 36 | 0 | 0 | 56 |
| Lane Group Flow (vph) | 301 | 1239 | 0 | 75 | 963 | 0 | 484 | 1228 | 20 | 170 | 838 | 219 |
| Confl. Peds. (#/hr) | 140 | | 183 | 183 | | 140 | | | 129 | | | 59 |
| Turn Type | Perm | NA | | Perm | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | 2 | | | 6 |
| Actuated Green, G (s) | 32.5 | 32.5 | | 32.5 | 32.5 | | 8.5 | 28.5 | 28.5 | 5.5 | 25.5 | 25.5 |
| Effective Green, g (s) | 32.5 | 32.5 | | 32.5 | 32.5 | | 8.5 | 28.5 | 28.5 | 5.5 | 25.5 | 25.5 |
| Actuated g/C Ratio | 0.41 | 0.41 | | 0.41 | 0.41 | | 0.11 | 0.36 | 0.36 | 0.07 | 0.32 | 0.32 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 98 | 1226 | | 93 | 1277 | | 188 | 663 | 479 | 121 | 593 | 466 |
| v/s Ratio Prot | | 0.41 | | | 0.31 | | c0.27 | c0.66 | | 0.10 | 0.45 | |
| v/s Ratio Perm | c1.25 | | | 0.33 | | | | | 0.01 | | | 0.15 |
| v/c Ratio | 3.07 | 1.01 | | 0.81 | 0.75 | | 2.57 | 1.85 | 0.04 | 1.40 | 1.41 | 0.47 |
| Uniform Delay, d1 | 23.8 | 23.8 | | 21.0 | 20.3 | | 35.8 | 25.8 | 16.8 | 37.2 | 27.2 | 21.8 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 958.6 | 28.3 | | 36.4 | 2.3 | | 723.8 | 389.3 | 0.2 | 224.2 | 195.8 | 3.4 |
| Delay (s) | 982.4 | 52.1 | | 57.4 | 22.6 | | 759.6 | 415.0 | 17.0 | 261.4 | 223.0 | 25.2 |
| Level of Service | F | D | | E | C | | F | F | B | F | F | C |
| Approach Delay (s) | | 227.7 | | | 24.9 | | | 496.8 | | | 185.7 | |
| Approach LOS | | F | | | C | | | F | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 261.2 | HCM 2000 Level of Service | F |
| HCM 2000 Volume to Capacity ratio | 2.58 | | |
| Actuated Cycle Length (s) | 80.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 138.9% | ICU Level of Service | H |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 112 | 705 | 319 | 200 | 816 | 334 | 310 | 1173 | 80 | 313 | 807 | 190 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.94 | | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.95 | | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3236 | | 1770 | 3165 | | 1770 | 1863 | 1442 | 1770 | 1863 | 1444 |
| Flt Permitted | 0.10 | 1.00 | | 0.11 | 1.00 | | 0.07 | 1.00 | 1.00 | 0.07 | 1.00 | 1.00 |
| Satd. Flow (perm) | 179 | 3236 | | 197 | 3165 | | 136 | 1863 | 1442 | 135 | 1863 | 1444 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 112 | 705 | 319 | 200 | 816 | 334 | 310 | 1173 | 80 | 313 | 807 | 190 |
| RTOR Reduction (vph) | 0 | 45 | 0 | 0 | 20 | 0 | 0 | 0 | 36 | 0 | 0 | 36 |
| Lane Group Flow (vph) | 112 | 979 | 0 | 200 | 1130 | 0 | 310 | 1173 | 44 | 313 | 807 | 154 |
| Confl. Peds. (#/hr) | 83 | | 81 | 81 | | 83 | 56 | | 57 | 57 | | 56 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 45.6 | 41.6 | | 44.6 | 41.6 | | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| Effective Green, g (s) | 45.6 | 41.6 | | 44.6 | 41.6 | | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| Actuated g/C Ratio | 0.40 | 0.36 | | 0.39 | 0.36 | | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 |
| Clearance Time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 3.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 126 | 1169 | | 117 | 1143 | | 64 | 890 | 689 | 64 | 890 | 690 |
| v/s Ratio Prot | 0.03 | 0.30 | | c0.04 | 0.36 | | | 0.63 | | | 0.43 | |
| v/s Ratio Perm | 0.32 | | | c0.62 | | | 2.27 | | 0.03 | c2.31 | | 0.11 |
| v/c Ratio | 0.89 | 0.84 | | 1.71 | 0.99 | | 4.84 | 1.32 | 0.06 | 4.89 | 0.91 | 0.22 |
| Uniform Delay, d1 | 30.9 | 33.6 | | 35.8 | 36.5 | | 30.0 | 30.0 | 16.2 | 30.0 | 27.7 | 17.6 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 47.4 | 5.1 | | 352.8 | 23.6 | | 1764.4 | 151.0 | 0.0 | 1785.4 | 12.4 | 0.1 |
| Delay (s) | 78.3 | 38.8 | | 388.6 | 60.1 | | 1794.5 | 181.1 | 16.2 | 1815.5 | 40.1 | 17.6 |
| Level of Service | E | D | | F | E | | F | F | B | F | D | B |
| Approach Delay (s) | | 42.7 | | | 108.8 | | | 492.6 | | | 461.1 | |
| Approach LOS | | D | | | F | | | F | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 292.8 | HCM 2000 Level of Service | F |
| HCM 2000 Volume to Capacity ratio | 3.44 | | |
| Actuated Cycle Length (s) | 115.1 | Sum of lost time (s) | 15.5 |
| Intersection Capacity Utilization | 138.6% | ICU Level of Service | H |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 190 | 480 | 260 | 90 | 520 | 130 | 150 | 390 | 70 | 90 | 920 | 250 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.86 | 1.00 | 1.00 | 0.92 |
| Flpb, ped/bikes | 0.97 | 1.00 | | 0.98 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.95 | | 1.00 | 0.97 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1722 | 3231 | | 1727 | 3371 | | 1770 | 1863 | 1363 | 1770 | 1863 | 1458 |
| Flt Permitted | 0.28 | 1.00 | | 0.23 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 508 | 3231 | | 411 | 3371 | | 1770 | 1863 | 1363 | 1770 | 1863 | 1458 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 190 | 480 | 260 | 90 | 520 | 130 | 150 | 390 | 70 | 90 | 920 | 250 |
| RTOR Reduction (vph) | 0 | 85 | 0 | 0 | 26 | 0 | 0 | 0 | 41 | 0 | 0 | 44 |
| Lane Group Flow (vph) | 190 | 655 | 0 | 90 | 624 | 0 | 150 | 390 | 29 | 90 | 920 | 206 |
| Confl. Peds. (#/hr) | 81 | | 52 | 52 | | 81 | | | 112 | | | 59 |
| Turn Type | Perm | NA | | Perm | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | 2 | | | 6 |
| Actuated Green, G (s) | 28.5 | 28.5 | | 28.5 | 28.5 | | 6.5 | 35.5 | 35.5 | 7.5 | 36.5 | 36.5 |
| Effective Green, g (s) | 28.5 | 28.5 | | 28.5 | 28.5 | | 6.5 | 35.5 | 35.5 | 7.5 | 36.5 | 36.5 |
| Actuated g/C Ratio | 0.34 | 0.34 | | 0.34 | 0.34 | | 0.08 | 0.42 | 0.42 | 0.09 | 0.43 | 0.43 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 170 | 1083 | | 137 | 1130 | | 135 | 778 | 569 | 156 | 799 | 626 |
| v/s Ratio Prot | | 0.20 | | | 0.19 | | c0.08 | 0.21 | | 0.05 | c0.49 | |
| v/s Ratio Perm | c0.37 | | | 0.22 | | | | | 0.02 | | | 0.14 |
| v/c Ratio | 1.12 | 0.60 | | 0.66 | 0.55 | | 1.11 | 0.50 | 0.05 | 0.58 | 1.15 | 0.33 |
| Uniform Delay, d1 | 28.2 | 23.6 | | 24.1 | 23.0 | | 39.2 | 18.2 | 14.7 | 37.2 | 24.2 | 16.1 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.07 | 0.90 | 0.84 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 104.1 | 1.0 | | 10.8 | 0.6 | | 106.9 | 2.1 | 0.2 | 5.1 | 82.3 | 1.4 |
| Delay (s) | 132.3 | 24.5 | | 34.9 | 23.6 | | 149.0 | 18.5 | 12.6 | 42.3 | 106.6 | 17.5 |
| Level of Service | F | C | | C | C | | F | B | B | D | F | B |
| Approach Delay (s) | | 46.5 | | | 25.0 | | | 49.9 | | | 84.3 | |
| Approach LOS | | D | | | C | | | D | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 56.1 | HCM 2000 Level of Service | E |
| HCM 2000 Volume to Capacity ratio | 1.13 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 103.8% | ICU Level of Service | G |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 110 | 970 | 220 | 60 | 390 | 70 | 220 | 440 | 150 | 390 | 770 | 170 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.96 | 1.00 | 1.00 | 0.97 |
| Flpb, ped/bikes | 0.99 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1746 | 3405 | | 1770 | 3416 | | 1770 | 1863 | 1518 | 1746 | 1863 | 1531 |
| Flt Permitted | 0.45 | 1.00 | | 0.16 | 1.00 | | 0.13 | 1.00 | 1.00 | 0.40 | 1.00 | 1.00 |
| Satd. Flow (perm) | 820 | 3405 | | 295 | 3416 | | 246 | 1863 | 1518 | 735 | 1863 | 1531 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 110 | 970 | 220 | 60 | 390 | 70 | 220 | 440 | 150 | 390 | 770 | 170 |
| RTOR Reduction (vph) | 0 | 23 | 0 | 0 | 18 | 0 | 0 | 0 | 76 | 0 | 0 | 42 |
| Lane Group Flow (vph) | 110 | 1167 | 0 | 60 | 442 | 0 | 220 | 440 | 74 | 390 | 770 | 128 |
| Confl. Peds. (#/hr) | 34 | | 41 | | | 34 | 21 | | 29 | 29 | | 21 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 26.7 | 23.5 | | 29.3 | 25.3 | | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 |
| Effective Green, g (s) | 26.7 | 23.5 | | 29.3 | 25.3 | | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 |
| Actuated g/C Ratio | 0.31 | 0.28 | | 0.34 | 0.30 | | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Clearance Time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 3.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 292 | 941 | | 171 | 1016 | | 121 | 920 | 750 | 363 | 920 | 756 |
| v/s Ratio Prot | 0.01 | c0.34 | | c0.02 | 0.13 | | | 0.24 | | | 0.41 | |
| v/s Ratio Perm | 0.10 | | | 0.10 | | | c0.89 | | 0.05 | 0.53 | | 0.08 |
| v/c Ratio | 0.38 | 1.24 | | 0.35 | 0.44 | | 1.82 | 0.48 | 0.10 | 1.07 | 0.84 | 0.17 |
| Uniform Delay, d1 | 21.7 | 30.8 | | 21.6 | 24.1 | | 21.5 | 14.2 | 11.4 | 21.5 | 18.5 | 11.9 |
| Progression Factor | 1.18 | 1.11 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.06 | 1.05 | 1.12 |
| Incremental Delay, d2 | 0.8 | 116.7 | | 0.5 | 0.1 | | 398.7 | 1.8 | 0.3 | 48.2 | 2.9 | 0.1 |
| Delay (s) | 26.3 | 150.8 | | 22.1 | 24.2 | | 420.2 | 16.0 | 11.7 | 71.0 | 22.3 | 13.4 |
| Level of Service | C | F | | C | C | | F | B | B | E | C | B |
| Approach Delay (s) | | 140.2 | | | 24.0 | | | 125.0 | | | 35.5 | |
| Approach LOS | | F | | | C | | | F | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 86.7 | HCM 2000 Level of Service | F |
| HCM 2000 Volume to Capacity ratio | 1.53 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 15.5 |
| Intersection Capacity Utilization | 108.4% | ICU Level of Service | G |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 3: Telegraph Ave. & 27th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 290 | 460 | 150 | 90 | 620 | 240 | 100 | 420 | 60 | 150 | 580 | 210 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | 5.5 | 4.0 | 4.0 | 5.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 0.95 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3392 | | 1770 | 3342 | | 1763 | 1863 | 1547 | 1764 | 1863 | 1504 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.16 | 1.00 | 1.00 | 0.33 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3392 | | 1770 | 3342 | | 305 | 1863 | 1547 | 614 | 1863 | 1504 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 290 | 460 | 150 | 90 | 620 | 240 | 100 | 420 | 60 | 150 | 580 | 210 |
| RTOR Reduction (vph) | 0 | 31 | 0 | 0 | 47 | 0 | 0 | 0 | 38 | 0 | 0 | 132 |
| Lane Group Flow (vph) | 290 | 579 | 0 | 90 | 813 | 0 | 100 | 420 | 22 | 150 | 580 | 78 |
| Confl. Peds. (#/hr) | | | 3 | | | 32 | 15 | | 8 | 8 | | 15 |
| Confl. Bikes (#/hr) | | | 8 | | | 5 | | | 6 | | | 41 |
| Turn Type | Prot | NA | | Prot | NA | | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 16.9 | 32.4 | | 7.7 | 23.2 | | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 |
| Effective Green, g (s) | 17.4 | 31.9 | | 8.2 | 22.7 | | 32.9 | 32.9 | 31.4 | 32.9 | 32.9 | 31.4 |
| Actuated g/C Ratio | 0.20 | 0.38 | | 0.10 | 0.27 | | 0.39 | 0.39 | 0.37 | 0.39 | 0.39 | 0.37 |
| Clearance Time (s) | 4.5 | 3.5 | | 4.5 | 3.5 | | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 362 | 1272 | | 170 | 892 | | 118 | 721 | 571 | 237 | 721 | 555 |
| v/s Ratio Prot | c0.16 | 0.17 | | 0.05 | c0.24 | | | 0.23 | | | 0.31 | |
| v/s Ratio Perm | | | | | | | c0.33 | | 0.01 | 0.24 | | 0.05 |
| v/c Ratio | 0.80 | 0.46 | | 0.53 | 0.91 | | 0.85 | 0.58 | 0.04 | 0.63 | 0.80 | 0.14 |
| Uniform Delay, d1 | 32.2 | 20.0 | | 36.6 | 30.2 | | 23.8 | 20.6 | 17.1 | 21.1 | 23.2 | 17.8 |
| Progression Factor | 1.00 | 1.00 | | 1.06 | 1.10 | | 1.16 | 1.17 | 1.39 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 11.4 | 0.1 | | 0.6 | 6.4 | | 47.2 | 3.2 | 0.1 | 12.2 | 9.3 | 0.5 |
| Delay (s) | 43.5 | 20.1 | | 39.2 | 39.6 | | 74.8 | 27.3 | 23.9 | 33.3 | 32.5 | 18.3 |
| Level of Service | D | C | | D | D | | E | C | C | C | C | B |
| Approach Delay (s) | | 27.6 | | | 39.6 | | | 35.2 | | | 29.5 | |
| Approach LOS | | C | | | D | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 32.8 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.86 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 12.0 |
| Intersection Capacity Utilization | 91.1% | ICU Level of Service | F |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 270 | 920 | 360 | 90 | 690 | 370 | 480 | 1290 | 80 | 170 | 900 | 260 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.89 | | 1.00 | 0.94 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.92 |
| Flpb, ped/bikes | 0.98 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.95 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1730 | 3029 | | 1770 | 3147 | | 1770 | 1863 | 1346 | 1770 | 1863 | 1464 |
| Flt Permitted | 0.13 | 1.00 | | 0.12 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 237 | 3029 | | 229 | 3147 | | 1770 | 1863 | 1346 | 1770 | 1863 | 1464 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 270 | 920 | 360 | 90 | 690 | 370 | 480 | 1290 | 80 | 170 | 900 | 260 |
| RTOR Reduction (vph) | 0 | 52 | 0 | 0 | 88 | 0 | 0 | 0 | 52 | 0 | 0 | 56 |
| Lane Group Flow (vph) | 270 | 1228 | 0 | 90 | 972 | 0 | 480 | 1290 | 29 | 170 | 900 | 204 |
| Confl. Peds. (#/hr) | 140 | | 183 | 183 | | 140 | | | 129 | | | 59 |
| Turn Type | Perm | NA | | Perm | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | 2 | | | 6 |
| Actuated Green, G (s) | 32.5 | 32.5 | | 32.5 | 32.5 | | 8.5 | 28.5 | 28.5 | 5.5 | 25.5 | 25.5 |
| Effective Green, g (s) | 32.5 | 32.5 | | 32.5 | 32.5 | | 8.5 | 28.5 | 28.5 | 5.5 | 25.5 | 25.5 |
| Actuated g/C Ratio | 0.41 | 0.41 | | 0.41 | 0.41 | | 0.11 | 0.36 | 0.36 | 0.07 | 0.32 | 0.32 |
| Clearance Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 96 | 1230 | | 93 | 1278 | | 188 | 663 | 479 | 121 | 593 | 466 |
| v/s Ratio Prot | | 0.41 | | | 0.31 | | c0.27 | c0.69 | | 0.10 | 0.48 | |
| v/s Ratio Perm | c1.14 | | | 0.39 | | | | | 0.02 | | | 0.14 |
| v/c Ratio | 2.81 | 1.00 | | 0.97 | 0.76 | | 2.55 | 1.95 | 0.06 | 1.40 | 1.52 | 0.44 |
| Uniform Delay, d1 | 23.8 | 23.7 | | 23.2 | 20.4 | | 35.8 | 25.8 | 16.9 | 37.2 | 27.2 | 21.6 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 843.8 | 25.1 | | 81.5 | 2.4 | | 714.3 | 431.1 | 0.2 | 224.2 | 241.6 | 3.0 |
| Delay (s) | 867.5 | 48.8 | | 104.7 | 22.8 | | 750.1 | 456.8 | 17.2 | 261.4 | 268.8 | 24.6 |
| Level of Service | F | D | | F | C | | F | F | B | F | F | C |
| Approach Delay (s) | | 191.4 | | | 29.3 | | | 513.9 | | | 220.1 | |
| Approach LOS | | F | | | C | | | F | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 267.7 | HCM 2000 Level of Service | F |
| HCM 2000 Volume to Capacity ratio | 2.49 | | |
| Actuated Cycle Length (s) | 80.0 | Sum of lost time (s) | 13.5 |
| Intersection Capacity Utilization | 140.6% | ICU Level of Service | H |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 200 | 740 | 350 | 200 | 820 | 340 | 320 | 1200 | 80 | 290 | 810 | 200 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.93 | | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.95 | | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3226 | | 1770 | 3160 | | 1770 | 1863 | 1441 | 1770 | 1863 | 1443 |
| Flt Permitted | 0.09 | 1.00 | | 0.09 | 1.00 | | 0.07 | 1.00 | 1.00 | 0.07 | 1.00 | 1.00 |
| Satd. Flow (perm) | 175 | 3226 | | 175 | 3160 | | 135 | 1863 | 1441 | 135 | 1863 | 1443 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 200 | 740 | 350 | 200 | 820 | 340 | 320 | 1200 | 80 | 290 | 810 | 200 |
| RTOR Reduction (vph) | 0 | 47 | 0 | 0 | 15 | 0 | 0 | 0 | 36 | 0 | 0 | 36 |
| Lane Group Flow (vph) | 200 | 1043 | 0 | 200 | 1145 | 0 | 320 | 1200 | 44 | 290 | 810 | 164 |
| Confl. Peds. (#/hr) | 83 | | 81 | 81 | | 83 | 56 | | 57 | 57 | | 56 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 46.5 | 42.5 | | 45.5 | 42.5 | | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| Effective Green, g (s) | 46.5 | 42.5 | | 45.5 | 42.5 | | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| Actuated g/C Ratio | 0.40 | 0.37 | | 0.39 | 0.37 | | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 |
| Clearance Time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 3.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 125 | 1181 | | 109 | 1157 | | 64 | 883 | 683 | 64 | 883 | 684 |
| v/s Ratio Prot | c0.06 | 0.32 | | 0.05 | 0.36 | | | 0.64 | | | 0.43 | |
| v/s Ratio Perm | 0.58 | | | c0.67 | | | c2.36 | | 0.03 | 2.14 | | 0.11 |
| v/c Ratio | 1.60 | 0.88 | | 1.83 | 0.99 | | 5.00 | 1.36 | 0.06 | 4.53 | 0.92 | 0.24 |
| Uniform Delay, d1 | 33.6 | 34.4 | | 35.5 | 36.5 | | 30.5 | 30.5 | 16.5 | 30.5 | 28.4 | 18.1 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 304.1 | 7.9 | | 409.0 | 23.7 | | 1834.5 | 168.9 | 0.0 | 1624.4 | 13.8 | 0.1 |
| Delay (s) | 337.7 | 42.3 | | 444.5 | 60.2 | | 1865.0 | 199.4 | 16.6 | 1654.9 | 42.2 | 18.2 |
| Level of Service | F | D | | F | E | | F | F | B | F | D | B |
| Approach Delay (s) | | 88.1 | | | 116.7 | | | 523.4 | | | 398.3 | |
| Approach LOS | | F | | | F | | | F | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 293.3 | HCM 2000 Level of Service | F |
| HCM 2000 Volume to Capacity ratio | 3.57 | | |
| Actuated Cycle Length (s) | 116.0 | Sum of lost time (s) | 15.5 |
| Intersection Capacity Utilization | 141.7% | ICU Level of Service | H |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 190 | 480 | 260 | 90 | 520 | 130 | 150 | 390 | 70 | 90 | 920 | 250 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.5 | | 4.0 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.91 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.95 | | 1.00 | 0.97 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1762 | 3219 | | 1764 | 3365 | | 1770 | 1863 | 1339 | 1770 | 1863 | 1446 |
| Flt Permitted | 0.20 | 1.00 | | 0.16 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 370 | 3219 | | 303 | 3365 | | 1770 | 1863 | 1339 | 1770 | 1863 | 1446 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 190 | 480 | 260 | 90 | 520 | 130 | 150 | 390 | 70 | 90 | 920 | 250 |
| RTOR Reduction (vph) | 0 | 77 | 0 | 0 | 24 | 0 | 0 | 0 | 40 | 0 | 0 | 66 |
| Lane Group Flow (vph) | 190 | 663 | 0 | 90 | 626 | 0 | 150 | 390 | 30 | 90 | 920 | 184 |
| Confl. Peds. (#/hr) | 81 | | 52 | 52 | | 81 | | | 112 | | | 59 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | 2 | | | 6 |
| Actuated Green, G (s) | 29.3 | 25.3 | | 27.7 | 24.5 | | 8.5 | 41.1 | 41.1 | 7.9 | 40.5 | 40.5 |
| Effective Green, g (s) | 29.3 | 25.3 | | 27.7 | 24.5 | | 8.5 | 41.1 | 41.1 | 7.9 | 40.5 | 40.5 |
| Actuated g/C Ratio | 0.31 | 0.27 | | 0.29 | 0.26 | | 0.09 | 0.43 | 0.43 | 0.08 | 0.43 | 0.43 |
| Clearance Time (s) | 4.0 | 4.5 | | 4.0 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 172 | 857 | | 137 | 867 | | 158 | 805 | 579 | 147 | 794 | 616 |
| v/s Ratio Prot | c0.05 | 0.21 | | 0.02 | 0.19 | | c0.08 | 0.21 | | 0.05 | c0.49 | |
| v/s Ratio Perm | c0.29 | | | 0.17 | | | | | 0.02 | | | 0.13 |
| v/c Ratio | 1.10 | 0.77 | | 0.66 | 0.72 | | 0.95 | 0.48 | 0.05 | 0.61 | 1.16 | 0.30 |
| Uniform Delay, d1 | 32.2 | 32.2 | | 27.6 | 32.1 | | 43.0 | 19.3 | 15.6 | 42.1 | 27.2 | 17.9 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 99.4 | 4.4 | | 10.8 | 3.0 | | 55.9 | 2.1 | 0.2 | 7.3 | 85.3 | 1.2 |
| Delay (s) | 131.6 | 36.6 | | 38.4 | 35.1 | | 98.9 | 21.4 | 15.8 | 49.4 | 112.5 | 19.2 |
| Level of Service | F | D | | D | D | | F | C | B | D | F | B |
| Approach Delay (s) | | 56.0 | | | 35.5 | | | 39.8 | | | 89.5 | |
| Approach LOS | | E | | | D | | | D | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 60.9 | HCM 2000 Level of Service | E |
| HCM 2000 Volume to Capacity ratio | 1.13 | | |
| Actuated Cycle Length (s) | 95.0 | Sum of lost time (s) | 17.5 |
| Intersection Capacity Utilization | 103.4% | ICU Level of Service | G |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 110 | 970 | 220 | 60 | 390 | 70 | 220 | 440 | 150 | 390 | 770 | 170 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 4.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.96 | 1.00 | 1.00 | 0.97 |
| Flpb, ped/bikes | 0.99 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1750 | 3405 | | 1770 | 3416 | | 1769 | 1863 | 1518 | 1767 | 1863 | 1531 |
| Flt Permitted | 0.41 | 1.00 | | 0.15 | 1.00 | | 0.16 | 1.00 | 1.00 | 0.19 | 1.00 | 1.00 |
| Satd. Flow (perm) | 752 | 3405 | | 288 | 3416 | | 298 | 1863 | 1518 | 345 | 1863 | 1531 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 110 | 970 | 220 | 60 | 390 | 70 | 220 | 440 | 150 | 390 | 770 | 170 |
| RTOR Reduction (vph) | 0 | 23 | 0 | 0 | 17 | 0 | 0 | 0 | 106 | 0 | 0 | 96 |
| Lane Group Flow (vph) | 110 | 1167 | 0 | 60 | 443 | 0 | 220 | 440 | 44 | 390 | 770 | 74 |
| Confl. Peds. (#/hr) | 34 | | 41 | | | 34 | 21 | | 29 | 29 | | 21 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 31.3 | 26.5 | | 29.1 | 25.9 | | 30.8 | 25.0 | 25.0 | 39.8 | 30.0 | 30.0 |
| Effective Green, g (s) | 31.3 | 26.5 | | 29.1 | 25.9 | | 30.8 | 25.0 | 25.0 | 39.8 | 30.0 | 30.0 |
| Actuated g/C Ratio | 0.37 | 0.31 | | 0.34 | 0.30 | | 0.36 | 0.29 | 0.29 | 0.47 | 0.35 | 0.35 |
| Clearance Time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 4.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 3.0 | 2.0 | | 2.0 | 2.0 | | 3.0 | 2.0 | 2.0 | 3.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 333 | 1061 | | 154 | 1040 | | 208 | 547 | 446 | 342 | 657 | 540 |
| v/s Ratio Prot | c0.02 | c0.34 | | 0.01 | 0.13 | | 0.07 | 0.24 | | c0.14 | c0.41 | |
| v/s Ratio Perm | 0.10 | | | 0.12 | | | 0.31 | | 0.03 | 0.39 | | 0.05 |
| v/c Ratio | 0.33 | 1.10 | | 0.39 | 0.43 | | 1.06 | 0.80 | 0.10 | 1.14 | 1.17 | 0.14 |
| Uniform Delay, d1 | 18.2 | 29.2 | | 21.9 | 23.6 | | 25.5 | 27.7 | 21.8 | 18.1 | 27.5 | 18.7 |
| Progression Factor | 0.77 | 0.79 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.6 | 58.7 | | 0.6 | 0.1 | | 78.5 | 11.9 | 0.4 | 92.4 | 92.9 | 0.5 |
| Delay (s) | 14.5 | 81.9 | | 22.5 | 23.7 | | 103.9 | 39.7 | 22.3 | 110.5 | 120.4 | 19.2 |
| Level of Service | B | F | | C | C | | F | D | C | F | F | B |
| Approach Delay (s) | | 76.2 | | | 23.6 | | | 53.9 | | | 104.6 | |
| Approach LOS | | E | | | C | | | D | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 74.3 | HCM 2000 Level of Service | E |
| HCM 2000 Volume to Capacity ratio | 1.15 | | |
| Actuated Cycle Length (s) | 85.0 | Sum of lost time (s) | 19.5 |
| Intersection Capacity Utilization | 107.6% | ICU Level of Service | G |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 1: Telegraph Ave. & 40th St.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 270 | 920 | 360 | 90 | 690 | 370 | 480 | 1290 | 80 | 170 | 900 | 260 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.5 | | 4.0 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.89 | | 1.00 | 0.94 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.92 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.95 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3029 | | 1770 | 3147 | | 1770 | 1863 | 1346 | 1770 | 1863 | 1464 |
| Flt Permitted | 0.17 | 1.00 | | 0.19 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 323 | 3029 | | 347 | 3147 | | 1770 | 1863 | 1346 | 1770 | 1863 | 1464 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 270 | 920 | 360 | 90 | 690 | 370 | 480 | 1290 | 80 | 170 | 900 | 260 |
| RTOR Reduction (vph) | 0 | 50 | 0 | 0 | 88 | 0 | 0 | 0 | 49 | 0 | 0 | 142 |
| Lane Group Flow (vph) | 270 | 1230 | 0 | 90 | 972 | 0 | 480 | 1290 | 31 | 170 | 900 | 118 |
| Confl. Peds. (#/hr) | 140 | | 183 | 183 | | 140 | | | 129 | | | 59 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 3 | 4 | | 7 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | | | 2 | | | 6 |
| Actuated Green, G (s) | 27.9 | 23.1 | | 24.7 | 21.5 | | 13.5 | 30.7 | 30.7 | 5.5 | 22.7 | 22.7 |
| Effective Green, g (s) | 27.9 | 23.1 | | 24.7 | 21.5 | | 13.5 | 30.7 | 30.7 | 5.5 | 22.7 | 22.7 |
| Actuated g/C Ratio | 0.35 | 0.29 | | 0.31 | 0.27 | | 0.17 | 0.38 | 0.38 | 0.07 | 0.28 | 0.28 |
| Clearance Time (s) | 4.0 | 4.5 | | 4.0 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 2.0 | | 3.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 199 | 874 | | 164 | 845 | | 298 | 714 | 516 | 121 | 528 | 415 |
| v/s Ratio Prot | c0.08 | c0.41 | | 0.02 | 0.31 | | c0.27 | c0.69 | | 0.10 | 0.48 | |
| v/s Ratio Perm | 0.39 | | | 0.15 | | | | | 0.02 | | | 0.08 |
| v/c Ratio | 1.36 | 1.41 | | 0.55 | 1.15 | | 1.61 | 1.81 | 0.06 | 1.40 | 1.70 | 0.28 |
| Uniform Delay, d1 | 34.6 | 28.4 | | 34.8 | 29.2 | | 33.2 | 24.6 | 15.5 | 37.2 | 28.6 | 22.3 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 189.7 | 189.9 | | 3.7 | 81.0 | | 289.9 | 368.6 | 0.2 | 224.2 | 325.1 | 1.7 |
| Delay (s) | 224.3 | 218.4 | | 38.5 | 110.2 | | 323.2 | 393.2 | 15.8 | 261.4 | 353.7 | 24.0 |
| Level of Service | F | F | | D | F | | F | F | B | F | F | C |
| Approach Delay (s) | | 219.4 | | | 104.6 | | | 358.7 | | | 277.5 | |
| Approach LOS | | F | | | F | | | F | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 253.9 | HCM 2000 Level of Service | F |
| HCM 2000 Volume to Capacity ratio | 1.70 | | |
| Actuated Cycle Length (s) | 80.0 | Sum of lost time (s) | 17.5 |
| Intersection Capacity Utilization | 140.2% | ICU Level of Service | H |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# HCM Signalized Intersection Capacity Analysis
## 2: Telegraph Ave. & W MacArthur Blvd.

4/10/2015

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Volume (vph) | 200 | 740 | 350 | 200 | 820 | 340 | 320 | 1200 | 80 | 290 | 810 | 200 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 4.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.96 | | 1.00 | 0.93 | | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.95 | | 1.00 | 0.96 | | 1.00 | 1.00 | 0.85 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3221 | | 1770 | 3153 | | 1770 | 1863 | 1437 | 1770 | 1863 | 1439 |
| Flt Permitted | 0.11 | 1.00 | | 0.10 | 1.00 | | 0.10 | 1.00 | 1.00 | 0.10 | 1.00 | 1.00 |
| Satd. Flow (perm) | 213 | 3221 | | 186 | 3153 | | 182 | 1863 | 1437 | 186 | 1863 | 1439 |
| Peak-hour factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj. Flow (vph) | 200 | 740 | 350 | 200 | 820 | 340 | 320 | 1200 | 80 | 290 | 810 | 200 |
| RTOR Reduction (vph) | 0 | 43 | 0 | 0 | 38 | 0 | 0 | 0 | 53 | 0 | 0 | 94 |
| Lane Group Flow (vph) | 200 | 1047 | 0 | 200 | 1122 | 0 | 320 | 1200 | 27 | 290 | 810 | 106 |
| Confl. Peds. (#/hr) | 83 | | 81 | 81 | | 83 | 56 | | 57 | 57 | | 56 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Actuated Green, G (s) | 43.0 | 35.0 | | 53.5 | 41.5 | | 53.0 | 41.0 | 41.0 | 51.0 | 40.0 | 40.0 |
| Effective Green, g (s) | 43.0 | 35.0 | | 53.5 | 41.5 | | 53.0 | 41.0 | 41.0 | 51.0 | 40.0 | 40.0 |
| Actuated g/C Ratio | 0.36 | 0.29 | | 0.45 | 0.35 | | 0.44 | 0.34 | 0.34 | 0.42 | 0.33 | 0.33 |
| Clearance Time (s) | 4.0 | 5.5 | | 5.0 | 5.5 | | 4.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 |
| Vehicle Extension (s) | 3.0 | 2.0 | | 2.0 | 2.0 | | 3.0 | 2.0 | 2.0 | 3.0 | 2.0 | 2.0 |
| Lane Grp Cap (vph) | 180 | 939 | | 261 | 1090 | | 239 | 636 | 490 | 224 | 621 | 479 |
| v/s Ratio Prot | c0.07 | c0.32 | | 0.09 | c0.36 | | c0.13 | c0.64 | | 0.12 | 0.43 | |
| v/s Ratio Perm | 0.32 | | | 0.25 | | | 0.46 | | 0.02 | 0.43 | | 0.07 |
| v/c Ratio | 1.11 | 1.11 | | 0.77 | 1.03 | | 1.34 | 1.89 | 0.06 | 1.29 | 1.30 | 0.22 |
| Uniform Delay, d1 | 33.3 | 42.5 | | 28.5 | 39.2 | | 34.5 | 39.5 | 26.5 | 33.3 | 40.0 | 28.8 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 100.0 | 66.2 | | 11.4 | 35.1 | | 178.0 | 405.0 | 0.0 | 161.6 | 148.4 | 0.1 |
| Delay (s) | 133.3 | 108.7 | | 40.0 | 74.3 | | 212.5 | 444.5 | 26.5 | 194.9 | 188.4 | 28.9 |
| Level of Service | F | F | | D | E | | F | F | C | F | F | C |
| Approach Delay (s) | | 112.5 | | | 69.3 | | | 377.2 | | | 165.3 | |
| Approach LOS | | F | | | E | | | F | | | F | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 190.6 | HCM 2000 Level of Service | F |
| HCM 2000 Volume to Capacity ratio | 1.45 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 19.5 |
| Intersection Capacity Utilization | 140.9% | ICU Level of Service | H |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# ATTACHMENT I

## CEQA COMPLIANCE FINDINGS MACARTHUR STATION

I. **Introduction:** These findings are made pursuant to the California Environmental Quality Act (Public Resources Code section 21000 et seq.; "CEQA") and the CEQA Guidelines (Cal. Code Regs. title 14, section 15000 et seq.; "CEQA Guidelines") by the Oakland City Council in connection with the environmental analysis of the effects of implementation of the MacArthur Station[1] Parcel A and Parcel C-1 FDP, as more fully described elsewhere in this Agenda Report and City Of Oakland ("City")-prepared CEQA Analysis document entitled "CEQA Compliance for MacArthur Station Parcel A and Parcel C-1 FDP" dated March 25, 2015 ("CEQA Analysis") (the "Project"). The City is the lead agency for purposes of compliance with the requirements of CEQA. These CEQA findings are attached and incorporated by reference into each and every decision associated with approval of the Project and are based on substantial evidence in the entire administrative record.

II. **Approval of the MacArthur BART PUD/PDP and Certification of the MacArthur Transit Village EIR:** The City finds and determines that the Oakland City Council on July 1, 2008 adopted Resolution No. 81422 C.M.S. which approved the Development Permits (PUD, Design Review, and Conditional Use Permit) for the MacArthur Transit Village, made appropriate CEQA findings, including certification of the MacArthur Transit Village EIR. The City Council, in adopting the MacArthur BART Transit Village PUD following a public hearing, approved as a part thereof Standard Conditions of Approval ("SCAs") which constitute uniformly applied development policies or standards (together with other City development regulations) and determined that the uniformly applicable development policies or standards, together with the mitigation measures set out in the MacArthur Transit Village EIR, would substantially mitigate the impacts of the MacArthur BART Transit Village PUD and future projects thereunder.

III. **CEQA Analysis Document:** The CEQA Analysis and all of its findings, determinations and information is hereby incorporated by reference as if fully set forth herein. The CEQA Analysis concluded that the CEQA Analysis constitutes an addendum to the MacArthur Transit Village EIR, as summarized below and provides substantial evidence to support the following findings.

CEQA Analysis Constitutes an Addendum; Public Resources Code Section 21166 (CEQA Guidelines §15164): The City finds and determines that the CEQA Analysis constitutes an Addendum to the MacArthur Transit Village EIR and that no additional environmental

[1] The Project was previously called the MacArthur Transit Village Project.

analysis of the Project beyond that contained in the MacArthur Transit Village EIR is necessary. The City further finds that no substantial changes are proposed in the Project that would require major revisions to the MacArthur Transit Village EIR because of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; no substantial changes occur with respect to the circumstances under which the Project will be undertaken which will require major revisions of the MacArthur Transit Village EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and there is no new information of substantial importance not known and which could not have been known with the exercise of reasonable diligence as of the time of certification of the MacArthur Transit Village EIR showing that the Project will have one or more significant effects not discussed in the MacArthur Transit Village EIR; significant effects previously examined will be substantially more severe than shown in the MacArthur Transit Village EIR, mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project; or mitigation measures or alternatives which are considerably different from those analyzed in the MacArthur Transit Village EIR would substantially reduce one or more significant effects on the environment.

Based on these findings and determinations, the City further finds that no Subsequent or Supplemental EIR or additional environmental analysis shall be required because of the Project. The City has considered the CEQA Analysis along with the MacArthur Transit Village EIR prior to making its decision on the Project and a discussion is set out in the CEQA Analysis explaining the City's decision not to prepare a Subsequent or Supplemental EIR pursuant to Guidelines sections 15162 and/or 15163.

**IV. Incorporation by Reference of Statement of Overriding Considerations**: The MacArthur Transit Village EIR identified two areas of environmental effects of the MacArthur BART Transit Village PUD that presented significant and unavoidable impacts. Because the Project may contribute to some significant and unavoidable impacts identified in the MacArthur Transit Village EIR, but a Subsequent and/or Supplemental EIR is not required in accordance with CEQA Guidelines sections 15162 and 15163, a Statement of Overriding Considerations is not legally required. Nevertheless, in the interest of being conservative, the Statement of Overriding Consideration for the MacArthur Transit Village EIR, approved as Section X of the CEQA Findings adopted by the City Council on July 1, 2008, via Resolution No. 81422 C.M.S., is hereby incorporated by reference as if fully set forth herein.

# CONDITIONS OF APPROVAL
# FOR THE MACARTHUR TRANSIT VILLAGE PROJECT

**Part 1: General Conditions of Approval**

1. **Approved Use**
   ***Ongoing***
   a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, staff report, and the plans submitted on **May 28, 2008**, and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall require prior written approval from the Director of City Planning or designee. The project may however increase the number of permitted residential dwelling units up to a maximum of 675 dwelling units, as analyzed in the MacArthur Transit Village Project EIR provided that a) the ratio of affordable units (20% of market rate units) is maintained; and the resulting project design with the additional units shall conform in all major respects with the approved Preliminary Development Plan.

   b) This action by the **City Planning Commission** ("this Approval") includes the approvals set forth below. This Approval includes:

      i. **Planned Unit Development (PUD), under Oakland Planning Code Chapters 17.122 and 17.140;**

      ii. **Major Conditional Use Permit (CUP), under Oakland Planning Code Chapter 17.134; and**

      iii. **Design Review, under Oakland Planning Code Chapter 17.136**

   c) **This Approval shall not become effective unless the proposed legislative actions (rezoning and text amendment) occur as stated in Condition of Approval 20.**

2. **Effective Date, Expiration, Extensions and Extinguishment**
   ***Ongoing***
   Unless a different termination date is prescribed, this Approval shall expire **two years** from the approval date, unless within such period all necessary permits for construction of Stage 1 (the BART Parking Garage) have been issued. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant two one-year extensions of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired. These time periods are "tolled" due to litigation challenging this approval and thus such time shall not be counted toward expiration of this approval. The Preliminary Development Plan Approval for the Planned Unit Development Permit shall expire June 4, 2018 and all Final Development Plan phases shall be reviewed and approved by that date (see below for details on FDP Staging).

Notwithstanding, the timeframes provided for in this Condition no. 2 the project sponsor shall, if feasible, make reasonable effort to proceed with all phases of the project as expeditiously as possible, and have the full build out of the project be completed as early as possible.

***FDP Staging***
Submittal of Final Development Plans (FDPs) shall be permitted in five (5) stages over a 10 year time period from the date of this approval, as detailed below.

(a) Each stage of FDP is described below:

i. Stage 1. Stage 1 FDP for the project will include the construction of Building E, the replacement BART parking garage, site remediation, Internal Drive, the Frontage Road improvements, and the portion of Village Drive that extends from the Frontage Road to the Internal Drive. Stage 1 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 1 FDP within 1 year from the date of this approval. If approved, construction associated with Stage 1 FDP shall commence in earnest by not later than 2 years from the date of Stage 1 FDP approval.

ii. Stage 2. Stage 2 FDP for the project will include construction of Building D, consisting of a minimum of 90 below market rate rental units. Stage 2 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 2 FDP within 3 years from the date of this approval. If approved, construction associated with Stage 2 FDP shall commence in earnest by not later than 2 years from the date of Stage 2 FDP approval.

iii. Stage 3. Stage 3 FDP for the project will include construction of Building A, consisting of up to 240 ownership residential units and 26,000 square feet of commercial space. All street improvements, including the completion of Village Drive and any new traffic signals required by the project, will be completed in this phase. This phase will also include the completion of a public plaza directly across Frontage Road from the existing BART Plaza. Stage 3 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 3 FDP within 3 years from the date of this approval. If not feasible, Stage 3 FDP approval may be delayed up to a year. If approved, construction associated with Stage 3 FDP shall commence in earnest not later than 2 years from the date of Stage 3 FDP approval.

iv. Stage 4. Stage 4 FDP for the project will include the construction of Building B, consisting of up to 150 ownership residential units and 5,500 square feet of commercial space. Stage 4 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 4 FDP within 8 years from the date of this approval. If approved, construction

associated with Stage 4 FDP shall commence in earnest not later than 2 years from the date of Stage 4 FDP approval.

v. Stage 5. Stage 5 FDP for the will include the construction of Building C, consisting of up to 195 ownership residential units and 12,500 square feet of commercial space. This phase will also include the construction of a community center use on the ground floor of Building C. Stage 5 FDP shall be submitted to the Planning Department for review and processing 10 years from the date of this approval. If approved, construction associated with Stage 5 FDP shall commence in earnest not later than 2 years from the date of Stage 5 FDP approval.

(b) For purposes of this conditions, the term "commence in earnest" shall mean to initiate activities based on a City-issued building permit and other necessary permit (s) and diligently prosecute such permit(s) in substantial reliance thereon and make regular and consistent progress toward the completion of construction and the issuance of final certificate of occupancy, including successful completion of building inspections to keep the building permit and other permits active without the benefit of extension.

(c) Provided that Stage 1 and 2 FDPs are approved in accordance with the above time frames, the Developer shall have the discretion to change which buildings (A, B, or C) are constructed in which Stages (3, 4 or 5) provided that the FDP submittal dates for these stages remain the same. All other modifications to FDP staging shall be subject to review and approval by the Planning Commission.

(d) FDP Stages may be combined and reviewed prior to the outlined time frames. If each stage of FDP is not submitted/completed within the time frames outlined above, the PDP shall be considered null and void.

(e) If, subsequent to this approval, a Development Agreement for this project is adopted by the City, the phasing and construction timeframes prescribed within the Development Agreement shall supersede this condition of approval and govern construction phasing for the project.

**3. Scope of This Approval; Major and Minor Changes**

***Ongoing***

The project is approved pursuant to the Planning Code only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

**4. Conformance to Approved Plans; Modification of Conditions or Revocation**

***Ongoing***

a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of the project sponsor obtaining site control, unless an earlier date is specified elsewhere.

b) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved

plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.

c) Violation of any term, Conditions, Mitigation Measures or project description relating to the Approvals is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approvals or alter these Conditions and Mitigation Measures if it is found that there is violation of any of the Conditions, Mitigation Measures or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it limit in any manner whatsoever the ability of the City to take appropriate enforcement actions.

**5. Signed Copy of the Conditions and Mitigation Measures**

***With submittal of a demolition, grading, and building permit***

A copy of the approval letter and Conditions and Mitigation Measures shall be signed by the property owner, notarized, and submitted with each set of permit plans to the appropriate City agency for this project.

**6. Indemnification**

***Ongoing***

a) The project applicant shall defend (with counsel reasonably acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and their respective agents, officers, and employees (hereafter collectively called the City) from any claim, action, or proceeding (including legal costs and attorney's fees) against the City to attack, set aside, void or annul this Approval, or any related approval by the City. The City shall promptly notify the project applicant of any claim, action or proceeding and the City shall cooperate fully in such defense. The City may elect, in its sole discretion, to participate in the defense of said claim, action, or proceeding. The project applicant shall reimburse the City for its reasonable legal costs and attorney's fees.

b) Within ten (10) calendar days of the filing of a claim, action or proceeding to attack, set aside, void, or annul this Approval, or any related approval by the City, the project applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations and this condition of approval. This condition/obligation shall survive termination, extinguishment, or invalidation of this, or any related approval. Failure to timely execute the Letter Agreement does not relieve the project applicant of any of the obligations contained in 7(a) above, or other conditions of approval.

**7. Conditions of Approval/Mitigation Monitoring Program**

***Ongoing***

a) All mitigation measures identified in the MacArthur Transit Village Project EIR are included in the Mitigation Monitoring and Reporting Program (MMRP) which is included in these conditions of approval and are incorporated herein by reference, as Attachment 2-A, as conditions of approval of the project. The Standard Conditions of Approval identified in the MacArthur Transit Village EIR are also included in the MMRP, and are therefore, not repeated in these conditions of approval. To the extent that there is any inconsistency between the MMRP and these conditions, the more restrictive conditions shall govern. The project sponsor (also referred to as the Developer, Applicant or MTCP) shall be responsible for compliance with the

recommendation in any submitted and approved technical reports, all applicable mitigation measures adopted and with all conditions of approval set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. The MMRP identifies the time frame and responsible party for implementation and monitoring for each mitigation measure. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Planning and Zoning Division.

b) For purposes of these conditions of approval, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

**8. Severability**

***Ongoing***

Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified conditions and mitigations, and if any one or more of such conditions and/or mitigations is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid conditions and/or mitigations consistent with achieving the same purpose and intent of such Approval.

**9. Job Site Plans**

***Ongoing throughout demolition, grading, and/or construction***

At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval and mitigations, shall be available for review at the job site at all times.

**10. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Management**

***Prior to issuance of a demolition, grading, and/or construction permit***

The project applicant may be required to pay for on-call special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review, or construction. The project applicant may also be required to cover the full costs of independent technical and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

**11. Required Landscape Plan for New Construction and Certain Additions to Residential Facilities**

***Prior to issuance of a building permit***

Submittal and approval of a landscape plan for each stage of the project is required. The landscape plan and the plant materials installed pursuant to the approved plan shall conform with all provisions of Chapter 17.124 of the Oakland Planning Code, including the following:

a) Landscape plans shall include a detailed planning schedule showing the proposed location, size, quantities, and specific common botanical names of plant species.

b) Landscape plans for projects involving grading, rear walls on downslope lots requiring conformity with the screening requirements in Section 17.124.040, or vegetation management prescriptions in the S-11 zone, shall show proposed landscape treatments for all graded areas, rear wall treatments, and vegetation management prescriptions.

c) All landscape plans shall show proposed methods of irrigation. The methods shall ensure adequate irrigation of all plant materials for at least one growing season.

**12. Landscape Requirements for Street Frontages.**

***Prior to issuance of a final inspection of the building permit***

a) All areas between a primary Residential Facility and abutting street lines shall be fully landscaped, plus any unpaved areas of abutting rights-of-way of improved streets or alleys, provided, however, on streets without sidewalks, an unplanted strip of land five (5) feet in width shall be provided within the right-of-way along the edge of the pavement or face of curb, whichever is applicable. Existing plant materials may be incorporated into the proposed landscaping if approved by the Director of City Planning.

b) In addition to the general landscaping requirements set forth in Chapter 17.124, a minimum of one (1) fifteen-gallon tree, or substantially equivalent landscaping consistent with city policy and as approved by the Director of City Planning, shall be provided for every twenty-five (25) feet of street frontage. On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees to be provided shall include street trees to the satisfaction of the Director of Parks and Recreation.

**13. Assurance of Landscaping Completion.**

***Prior to Issuance of a Certificate of Occupancy***

The trees, shrubs and landscape materials required by the conditions of approval attached to this project shall be planted before the certificate of occupancy will be issued; or a bond, cash, deposit, or letter of credit, acceptable to the City, shall be provided for the planting of the required landscaping. The amount of such or a bond, cash, deposit, or letter of credit shall equal the greater of two thousand five hundred dollars ($2,500.00) or the estimated cost of the required landscaping, based on a licensed contractor's bid.

**14. Landscape Maintenance.**

***Ongoing***

All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. All required fences, walls and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

**15. Bicycle Parking**

***Prior to the issuance of first certificate of occupancy***

The applicant shall submit for review and approval of the Planning and Zoning Division and Transportation Services Division, a bicycle parking plan that shows bicycle storage and parking facilities to accommodate a minimum of 40 short-term bicycle parking spaces (31 for residential uses and 9 for commercial uses) onsite or on public sidewalk, and a minimum of 160 long-term bicycle parking spaces (156 for residential uses and 4 for commercial uses). The plans shall show the design and location of bicycle racks within the secure bicycle storage areas. The applicant shall pay for the cost and installation of any bicycle racks in the public right of way.

***Prior to approval of Final Development Plan for Stage 1***

Additionally, the project applicant shall work with the City's Transportation Services Division and BART to implement the City's goals for bicycle parking at Railroad and Bus Terminals (provide a combination of short-term and long-term bike parking equal to 5% of the maximum projected ridership for the BART station). The project applicant shall study the

feasibility of providing a long-term bike parking facility within the BART plaza, commercial area of the development (i.e., café with bicycle storage or bicycle sales and repair shop and storage) or within the proposed parking garage. Said study shall consider economic and physical feasibility and shall be reviewed by the City's Transportation Services Division, Planning and Zoning Division and BART. If the study finds that such a facility is feasible in the commercial area or parking garage: the project applicant shall use its best efforts during the initial marketing of the commercial space to market a portion of the commercial space to potential bike parking facility operators for a market-rate commercial operation, or include a market-rate, long-term bike facility within the parking garage. If the study finds that options for bike parking within the commercial area or parking garage are not feasible, then the project sponsor shall have no further commitment with respect to the long-term bicycle parking for BART.

**PART 2: Additional Conditions of Approval for Major Projects**

**16. Underground Utilities**

***Prior to issuance of a building permit***

The project applicant shall submit plans for review and approval by the Building Services Division and the Public Works Agency, and other relevant agencies as appropriate, that show all new electric and telephone facilities; fire alarm conduits; street light wiring; and other wiring, conduits, and similar facilities placed underground. The new facilities shall be placed underground along the project applicant's street frontage and from the project applicant's structures to the point of service. The plans shall show all electric, telephone, water service, fire water service, cable, and fire alarm facilities installed in accordance with standard specifications of the serving utilities.

**17. Improvements in the Public Right-of-Way (General)**

***Approved prior to the issuance of a P-job or building permit***

a) The project applicant shall submit Public Improvement Plans to Building Services Division for adjacent public rights-of-way (ROW) showing all proposed improvements and compliance with the conditions and/or mitigations and City requirements including but not limited to proposed project traffic signals (MacArthur Boulevard/Frontage Road and Telegraph Avenue/40$^{th}$ Street), curbs, gutters, sewer laterals, storm drains, street trees, paving details, locations of transformers and other above ground utility structures, the design specifications and locations of facilities required by the East Bay Municipal Utility District (EBMUD), street lighting, on-street parking and accessibility improvements compliant with applicable standards and any other improvements or requirements for the project as provided for in this Approval. Encroachment permits shall be obtained as necessary for any applicable improvements- located within the public ROW.

b) Review and confirmation of the street trees by the City's Tree Services Division is required as part of this condition and/or mitigations.

c) The Planning and Zoning Division and the Public Works Agency will review and approve designs and specifications for the improvements. Improvements shall be completed prior to the issuance of the final building permit.

d) The Fire Services Division will review and approve fire crew and apparatus access, water supply availability and distribution to current codes and standards.

**18. Payment for Public Improvements**

***Prior to issuance of a final inspection of the final building permit.***

The project applicant shall pay for and install public improvements made necessary by the project including damage caused by construction activity.

**19. Compliance Plan**

***Prior to issuance of a demolition, grading, or building permit***

The project applicant shall submit to the Planning and Zoning Division and the Building Services Division a Conditions/ Mitigation Measures compliance plan that lists each condition of approval and/or mitigation measure, the City agency or division responsible for review, and how/when the project applicant has met or intends to meet the conditions and/or mitigations. The applicant will sign the Conditions of Approval attached to the approval letter and submit that with the compliance plan for review and approval. The compliance plan shall be organized per step in the plancheck/construction process unless another format is acceptable to the Planning and Zoning Division and the Building Services Division. The project applicant shall update the compliance plan and provide it with each item submittal.

**PART 3: Project-Specific Conditions of Approval**

**20. Rezoning and Zoning Text Amendment**

***Required prior to this approval becoming effective***

This Approval shall not become effective unless the Zoning Map Amendment and S-15 Text Amendment related to open space standards are adopted by the City Council. The City Council has the authority to consider and revise as appropriate (accept, reject, or modify) the adjudicatory land use decisions of the Planning Commission (including planned unit development permit, design review, and the conditional use permit), regardless of whether an appeal to the City Council is filed challenging such adjudicatory land use decisions.

**21. Residential Parking Permits.**

***Required prior to the demolition of the BART surface parking lot; or prior to elimination of half of the existing BART parking spaces***

The project sponsor shall work with the City of Oakland to implement a Residential Parking Permit (RPP), in accordance with all legal requirements, within one quarter mile radius around the station in the residential neighborhoods west of Highway 24 and the BART station, north of 40th Street, east of Telegraph Avenue and south of West MacArthur Boulevard. The street segments to be included in the RPP program are generally shown in Exhibit C-4. The RPP would restrict on-street parking by non-residents to less than four hours during the weekdays. The project sponsor shall put $150,000 in escrow in order to fund the RPP. When the funds required by this condition have been exhausted or after five years after the completion of the whole project, the project sponsor shall have no further obligation to pursue or fund any RPP program and any remaining funds shall revert back toward public improvements in the project area as determined by the City.

**22. Traffic Demand Management (TDM) and Parking Program**

***Prior to approval of Final Development Plan for Stage 1 FDP and ongoing***

The project is conditioned on the implementation of a TDM program by MTCP and effectively monitored by the City, as required in MMRP Mitigation Measures Trans-4 and Trans-9. A draft TDM Plan prepared by Nelson Nygaard dated May 27, 2008, and is included herein as Exhibit C-2. The final TDM Plan, as stipulated in the MMRP, is subject to review by BART, AC Transit and the review and approval by the City of Oakland. The final TDM Plan shall be approved by the City of Oakland Planning Division prior to approval of the Final Development Plan for Stage 1.

Funding for monitoring, reporting and review of the TDM program shall be provided by the project sponsor.

In addition to the CEQA requirements for a TDM program, the TDM program described in MMRP Mitigation Measures Trans-4 and Trans-9 is also designed to promote the City's Transit First Policy of the general plan, reduce parking demand and lessen parking impacts on adjacent neighborhoods and to promote good urban design by reducing the number and size of parking facilities. Therefore MMRP Mitigation Measures Trans-4 and Trans-9 are also imposed as a separate non-CEQA conditions of approval and the TDM program shall be incorporated into the project, for the duration of the project, to maximize parking capacity and help ensure that these goals are met.

**23. Minimum Right-of-Way for Fire Emergency Vehicle Access.**
***Prior to approval of Each Stage of Final Development Plan or Vesting Tentative Map and Ongoing***
The project shall accommodate the intent of the 2008 fire code provisions for increased right-of-way access as follows:

(a) Village Drive will be maintain an unobstructed right-of-way distance of 26 feet.

(b) Internal Street will include two (2) 26-foot wide staging areas and the remaining right-of-way will remain 20 feet wide.
   i. The staging areas will be a minimum of 30 feet in length.
   ii. No parking or landscaping will be permitted in the staging areas.
   iii. The location of the staging areas will be based on a ladder study to be completed by MTCP in consultation with the Fire Department.
   iv. Fire hydrants will be staggered outside of the staging areas.

(c) Frontage Road will include one (1) 26-foot wide staging area and the remaining right-of-way will remain the same.
   i. The staging area for the frontage road will be located approximately 30 feet north of the crosswalk on the north side of the parking garage.
   ii. The staging area will be a minimum of 30 feet in length.
   iii. No parking or landscaping will be permitted in the staging areas.

(d) In addition to incorporating staging areas and setting a minimum unobstructed street width of 26 feet for Village Drive and 20 feet for Internal Street, as described above, the project sponsor will include Alternate Materials and Methods Requests (AMMRs) into the project to the satisfaction of the Fire Chief. The appropriate AMMRs will be determined by the Fire Chief's review of Final Development Plans or Vesting Tentative Maps, and may include the following measures:
   i. Increased sprinkler density (provide sprinklers in bathrooms and closets)
   ii. Install 8-head instead of 4-head sprinklers
   iii. Design fire hydrants with a minimum 200 foot separation
   iv. Provide dual water connections and water sources per building
   v. Provide Fire Department Connections (FDCs) on each street (minimum of 2 per building)

**24. Air Filtration/Ventilation System.**
***Prior to issuance of a building permit***
Although the studies conducted for the EIR demonstrate that the project site was found to be below the significance criteria for health risk based on the assessment prepared in

accordance with the California Air Resources Board and the Office of Environmental Health and Hazard Assessment for exposure to vehicular exhaust from roadways, the project sponsor has agreed to incorporate into the project a mechanical ventilation system that meets the efficiency standard of the MERV 13 for those units with windows fronting the freeway or Frontage Road. The ventilations shall be subject to review and approval by the City's Building Services Division. Appropriate maintenance, operation and repair materials will be furnished to project residents.

**25. Components of Final Development Plans.**

***Prior to approval of Any Final Development Plans***

In accordance with the Planning Code Chapter 17.140, each stage of FDP shall:

(a) Conform to all major respects with the approved Preliminary Development Plan received by the Planning Division on May 28, 2008, and included as Exhibit F;

(b) Comply with development standards of the S-15 Zone, except and modified for building height as bonus for the Planned Unit Development and shown in the Preliminary Development Plan;

(c) Be consistent with the MacArthur Transit Village Design Guidelines included in these conditions as Exhibit C-3;

(d) Include all information included in the preliminary development plan plus the following:

i. the location of water, sewerage, and drainage facilities;
ii. detailed building floor plans, elevations and landscaping plans;
iii. the character and location of signs;
iv. plans for street improvements; and
v. grading or earth-moving plans.

(e) Be sufficiently detailed to indicate fully the ultimate operation and appearance of the development stage including the quality of exterior materials and windows; and

(f) Include copies of legal documents required for dedication or reservation of group or common spaces, for the creation of nonprofit homes' association, or for performance bonds, shall be submitted with each Final Development Plan.

**26. Subdivision Maps**

***Prior to final approval of Each Final Development Plan***

Final Development Plans shall be accompanied by subdivision maps as required to subdivide the property. The subdivision maps shall be reviewed and processed in accordance with Title 17, Subdivisions, of the City of Oakland Municipal Code and the Subdivision Map Act.

**27. Final Development Review and Approval by City Council.**

***Prior to final approval of Any Final Development Plan***

All Final Development Plan(s) shall be subject to review and recommendation by the Planning Commission's Design Review Committee and Planning Commission, with final approval by the City Council.

**28. Minimum Setback to Buildings Adjacent to Project Site.**

***Prior to issuance of a building permit***

All buildings within the project shall maintain a minimum 5 foot setback, except at the ground level, to existing buildings adjacent to the project site. The 5 foot minimum setback will ensure a minimum setback of 9 feet from the south windows located in the building light

well and 17 feet from the west windows of the existing building at the corner of 40th and Telegraph. The applicant shall show all proposed building setbacks on the plans submitted for a building permit.

New buildings built adjacent to the existing corner building at 40th and Telegraph shall be designed in such a way that the windows are offset from the windows of the existing building to eliminate a direct line of site into existing residents and to ensure privacy for residents of the existing building.

**29. Safety Plan.**

***Prior to issuance of a building permit***

The project sponsor shall work with the Oakland Police Department and the Planning and Zoning Division to prepare a safety plan for the portion of the project area along Frontage Road between the BART Garage and the BART Plaza. Without limiting the foregoing, the safety plan shall assess the efficacy and feasibility of installing video security cameras along Frontage Road. The project sponsor shall implement the approved recommendations/ conclusions of the safety study including, if determined necessary and feasible by the City, the implementation of video cameras.

**30. Special Project Driveway Design Improvements.**

***Prior to approval of Each Final Development Plan Stage or Vesting Tentative Map and Ongoing***

To limit conflicts between pedestrians, bicycles and vehicles entering and exiting the BART parking garage and residential parking garages within the project, the project driveways shall incorporate the following design measures, subject to review and approval of the City's Transportation Services Division (TSD):

(a) Install a high-visibility crosswalk across Frontage Road connecting the BART garage to the western sidewalk. Note that currently, the City of Oakland does not install high visibility crosswalks at signalized intersections unless there are problems with sight distance.

(b) For driveways along Internal Street, provide adequate sight distance at all residential garage exits. End the ramp before the sidewalk so that the sidewalk remains level and vehicles do not encroach on the sidewalk. Landscaping should be maintained so that adequate sight distance is provided. Consider installing pedestrian warning lights to alert pedestrians to exiting vehicles at driveways with high pedestrian volumes and limited sight distance. Installation of loud audible warning devices is not recommended.

(c) For the driveway along Village Drive, provide adequate sight distance the garage exit. End the ramp before the sidewalk so that the sidewalk remains level and vehicles do not encroach on the sidewalk. Landscaping should be maintained so that adequate sight distance is provided. Consider installing pedestrian warning lights to alert pedestrians to exiting vehicles at driveways with high pedestrian volumes and limited sight distance. Installation of loud audible warning devices is not recommended.

**31. Pedestrian Access Paths.**

***Prior to approval of the Final Development Plan for Stages 1 and 5 or Vesting Tentative Map and Ongoing***

Design the paths between Internal Street and West MacArthur Boulevard, and Internal Street and Telegraph Avenue for pedestrian use only.

The two 10-foot wide paths shown on the Preliminary Development Plan between the southern end of Internal Street and West MacArthur Boulevard, and between Internal Street and Telegraph Avenue, along the southern edge of Block C shall be restricted to pedestrian use and signage shall be provided to mark the paths for pedestrian use only.

**32. Internal Street.**

***Prior to approval of the Final Development Plan for Stages 1 or Vesting Tentative Map and Ongoing***

The developer shall reserve "Internal Street" on the owner's statement of the Final Map for private street purposes and clearly indicate who will benefit and maintain the private street. The private street maintenance language shall be included in the subdivision CC&R and reviewed and approved by Planning Director and City attorney. The developer shall provide proof on how the private street shall be maintained. Unless otherwise approved by the Engineering Division, the private street shall be constructed to the City's standard details for public street construction.

**33. Specific Project Intersection Improvements.**

***Prior to approval of Final Development Plan for Stage 3 or Vesting Tentative Map and Ongoing***

In order to enhance pedestrian activity and safety to and from the project site, the following measures shall be implemented, subject to review and approval by the City's Transportation Services Division (TSD):

(a) For the intersection of 40th Street and the Frontage Road:
   i. Prohibit right turns on red and provide a leading pedestrian interval.
   ii. Increase the initial walk interval (this allows more time for clusters of pedestrians to leave the sidewalk when crossing)
   iii. Install high visibility cross walks (i.e., ladder striping or colored pavement)
   iv. Install audible pedestrian countdown signals
   v. Provide separate curb ramps for each cross walk

(b) For the intersection of Telegraph Avenue and Village Drive
   i. Increase the initial walk interval (this allows more time for clusters of pedestrians to leave the sidewalk when crossing)
   ii. Install high visibility cross walks (i.e., ladder striping or colored pavement)
   iii. Install audible pedestrian countdown signals
   iv. Provide separate curb ramps for each cross walk

(c) For the intersection of Frontage Road and Village Drive
   i. Install high visibility cross walks (i.e., ladder striping or colored pavement)
   ii. Provide a raised intersection with high visibility striping to connect pedestrians from the BART plaza to Village Drive
   iii. Install signage (i.e., "Left Turn Only, Except Shuttles and Bicycles") and striping at this intersection to prohibit south bound traffic except shuttles and bicycles from continuing south to West MacArthur Boulevard.

(d) For the intersection of West MacArthur Boulevard and Frontage Road
   i. Increase the initial walk interval (this allows more time for clusters of pedestrians to leave the sidewalk when crossing)
   ii. Install high visibility cross walks (i.e., ladder striping or colored pavement)
   iii. Install audible pedestrian countdown signals
   iv. Provide separate curb ramps for each cross walk

v. Install bulb-outs at corners

(e) For the intersection of the BART Garage and Frontage Road
   i. Construct curbs and provide striping to prohibit vehicles exiting the BART garage from turning right; and to prohibit northbound vehicle from traveling further north beyond the driveway into the BART garage.
   ii. Provisions should be made to allow through access for emergency vehicles, such as City and BART Police, Fire and Ambulance vehicles.

**34. Coordination of BART Parking and Plaza Improvements**
***Prior to approval of Final Development Plan for Stage 1***

(a) The BART parking structure shall include a minimum of 300 parking spaces.

(b) The project applicant shall coordinate with BART to facilitate construction of the BART parking structure and BART Plaza improvements as shown in the Preliminary Development Plan.

**35. Bicycle Access and Bicycle Paths**
***Prior to approval of Final Development Plan for Stage 1 or Vesting Tentative Map and Ongoing***
In order to enhance bicycle safety to and from the project site, the following measures shall be implemented, subject to review and approval by the City's Transportation Services Division:

(c) Provide two-way bike lanes on Frontage Road. Locate the northbound bike lane west of the northbound (right-turn only) vehicle lane. Southbound bicyclists could use the southbound shuttle lane.

(d) Install STOP signs for vehicles exiting the BART garage and for southbound shuttles approaching the BART garage.

(e) Provide adequate sight distance at the garage exit. Landscaping should be maintained so that adequate sight distance is provided.

(f) Provide signage at the West MacArthur Boulevard/Frontage Road intersection directing bicyclists to the bicycle path or lanes on Frontage Road.

(g) Install bicycle detection for all actuated through movements or left turns at the new signal at 40th Street and Frontage Road; the new signal at Telegraph Avenue and Village Drive; and West MacArthur Boulevard and Frontage Road.

(h) Install signage (i.e., "Left Turn Only, Except Shuttles and Bicycles" and "Left Turn Only, Except Shuttles and Bicycles") and striping at the Frontage Road/Village Drive intersection to prohibit southbound and westbound vehicles, except shuttle buses and bicycles, from continuing southbound to West MacArthur Boulevard. (Also see Condition 34 (c) iii).

(i) Study the feasibility of providing a "bicycle box" at the southbound approach to the West MacArthur Boulevard/Frontage Road/37th Street intersection and at the northbound approach to the Frontage Road/40th Street intersection. Project applicant

shall submit said feasibility to the City's Transportation Services Department for review and approval. If said improvement is determined to be feasible, the project applicant shall implement this measure.

(j) Study the feasibility of using colored pavement or other visual treatments on the bike path or lanes to increase their visibility and use by bicyclists. Project applicant shall submit said feasibility to the City's Transportation Services Department for review and approval. If said improvement is determined to be feasible, the project applicant shall implement this measure.

**36. Area Right of Way Improvements.**

***Prior to approval of Final Development Plan for Stage 3 or Vesting Tentative Map and Ongoing***

Project applicant shall perform feasibility and other studies of the following measures for review and approval by the City Planning Division and Transportation Services Division (TSD). The Project applicant shall implement items determined feasible by the City.

(a) Removal of the slip right-turns on northbound and southbound Telegraph Avenue at West MacArthur Boulevard.

(b) Providing street furniture and widening sidewalks where feasible for street frontages immediately adjacent to the project site.

**37. Traffic Monitoring.**

***Prior to project construction, and after completion of project***

Project sponsor shall pay to monitor traffic volumes and speeds on the following roadways in accordance with the schedule below. In consultation with local residents, and in accordance with all legal requirements, appropriate traffic calming measures, such as speed humps, or roadway closures, should be considered if and when excessive traffic volumes or speeding are observed. These potential improvements should be funded by the project applicant, if approved by the City's Transportation Services Division (TSD):

(a) 37th Street between West MacArthur Boulevard and Telegraph Avenue; Monitoring shall be undertaken before construction, and one year after a certificate of occupancy issued for the BART garage.

(b) 38th Street between Telegraph Avenue and Webster Street; Monitoring should be undertaken before construction, and about one year after a certificate of occupancy issued for FDP Stage 3, or when eighty (80) percent occupancy is achieved, whichever occurs earlier.

(c) Clarke Street and Ruby Street between 38th Street and 40th Street; Monitoring should be undertaken before construction, and about one year after a certificate of occupancy issued for FDP Stage 3, or when eighty (80) percent occupancy is achieved, whichever occurs earlier.

**38. Outdoor Active Areas.**

***Prior to approval of Final Development Plan for each stage***

To the maximum extent practicable, exterior active use areas, including playgrounds, patios, and decks, shall either be shielded by buildings or otherwise buffered to further reduce exterior noise for project residents.

**39. BART Garage Elevations**

***Prior to approval of Final Development Plan for Stage 1 and Ongoing***

Final Development Plans for the BART Garage shall include detailed architectural plans demonstrating how the design and building details break up the massing of the parking garage. Signage and advertising on the BART garage shall be subject to the guidelines and standards in the City of Oakland Uniform Sign Code, including Code Section 17.104.060 that prohibits advertising signs, except as permitted via a Franchise Agreement or Relocation Agreement is authorized by the City Council.

***40.* Green Roofs/Roof Top Gardens.**

***Prior to approval of Final Development Plan for Stages 2 through 5***

As part of the submittal for each FDP application for each phase of FDP, except Stage 1 (BART parking garage), the project sponsor shall study the feasibility of methods to further reduce heat island effect and/or provide additional open space for resident use. Potential methods include but are not limited to green roofs, roof gardens, roof decks, open or partially enclosed private or common balconies. For purposes of this condition of approval, feasibility as defined above includes the consideration of proximity to the highway or streets, location above livable space, construction type, insurability, long term maintenance, HOA costs, and the use of space for other purposes. The feasibility study for implementing additional methods to further reduce heat island effect and/or provide additional open space for resident use shall be provided to Planning Staff as part of each FDP application. The intent of this condition is to further the sustainable elements of the project design and potentially provide more open space area for the project residents.

**41. Building Height.**

***Prior to approval of any Final Development Plan***

In accordance with the Preliminary Development Plan (PDP) received by the Planning Division on May 28, 2008, buildings within the project area shall vary in height along each street frontage. Permitted building height by street frontage is shown on PDP sheet A-1.0H, and listed below:

(a) Telegraph Avenue, south of Village Drive: 55 to 60 feet
(b) Telegraph Avenue, north of Village Drive: 50 to 75 feet
(c) Village Drive, south side of street and west of Internal Street: 55 to 65 feet
(d) Village Drive, south side of street and east of Internal Street: 65 to 80 feet
(e) Village Drive, north side of street and west of Internal Street: 60 to 80 feet
(f) Village Drive, north side of street and east of Internal Street: 70 to 85 feet
(g) 40th Street: 60 to 80 feet
(h) Buildings along east edge of transit plaza: 75 to 85 feet
(i) Internal Street, east side of street: 55 to 70 feet
(j) Internal Street, west side of street: 45 to 70 feet
(k) Frontage Road: 65 to 80 feet
(l) Parking garage: 68 feet

The height above 45 feet allowed on Telegraph Avenue is contingent on the use of quality building design, exterior materials and windows.

Because the Preliminary Development Plan (PDP) received by the Planning Division on May 28, 2008, shows a total of 624 units, and per Condition No. 1 the project is permitted to include a maximum of 675 units based on the EIR analysis and the City's desire for increased density, the buildings heights shown above may be slightly altered to accommodate this permitted increase in units. However, any such increase in height shall be reviewed as part of

the Final Development Plan; and no such increase in height shall be permitted on Telegraph Avenue without modification to the PDP.

**42. Permitted land uses.**

***On-going.***

Permitted land uses within the project area are subject to the S-15 zone, and shall further be subject to and consistent with the permitted land uses outlined in the Development Agreement or Owner Participation Agreement. Until an agreement on commercial uses is reached in the Development Agreement or Owner Participation Agreement, proposals for individual commercial users on the site will be subject to approval by the City Council.

**43. Live-work Spaces along Village Drive to be Removed from the Preliminary Development Plan**

The live work spaces shown in the Preliminary Development Plan (PDP) on Village Drive are not to be approved, instead commercial/retail space at a minimum height of 15 feet shall be substituted for said live/work spaces. Some office uses shall be allowed for a period of time to be determined in the Development Agreement or Owner Participation Agreement, after which time the commercial/retail spaces will revert to retail-only spaces. This condition does not pertain to the live/work spaces on 40th Street that are shown in the Preliminary Development Plan.

**APPROVED BY:**

City Planning Commission:_____(date)_____(vote)

City Council:_____(date)_____(vote)

**Applicant and/or Contractor Statement**

I have read and accept responsibility for the Conditions of Approval, as approved by Planning Commission action on June 4, 2008. I agree to abide by and conform to these conditions, as well as to all provisions of the Oakland Zoning Code and Municipal Code pertaining to the project.

Signature of Owner/Applicant: _____(date)

Signature of Contractor _____(date)

# EXHIBIT C-1

# MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based on the findings of the Environmental Impact Report (EIR) prepared for the MacArthur Transit Village project in the City of Oakland. This MMRP is in compliance with Section 15097 of the *CEQA Guidelines*, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The MMRP lists mitigation measures recommended in the EIR and identifies mitigation monitoring requirements.

Table 1 presents the mitigation measures identified in the MacArthur Transit Village EIR necessary to mitigate potentially significant impacts. Each mitigation measure is numbered according to the topical section to which it pertains in the EIR. As an example, Mitigation Measure TRANS-1 is the first mitigation measure identified in the EIR for the MacArthur Transit Village. The City's Standard Conditions of Approval identified in the EIR as measures that would minimize potential adverse effects that could result from implementation of the project are also included in this MMRP to ensure the conditions are implemented and monitored. The Standard Conditions are identified with a COA prefix (e.g., COA TRANS-1).

The first column of Table 5-1 identifies the Standard Condition of Approval or Mitigation Measure. The second column identifies the monitoring schedule or timing, while the third column names the party responsible for monitoring the required action. The fourth column, "Monitoring Procedure," outlines the steps for monitoring the action identified in the mitigation measure. The fifth and sixth columns deal with reporting and provide spaces for comments and dates and initials. These last columns will be used by the City to ensure that individual mitigation measures have been monitored.

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| **A. LAND USE** | | | | | |
| *No significant land use impacts would occur.* | | | | | |
| **B. PUBLIC POLICY** | | | | | |
| *No significant public policy impacts were identified and no mitigation measures were identified in the EIR. The following SCOA is included to ensure no significant impacts occur..* | | | | | |
| **COA POLICY-1:** To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of raptors shall not occur during the breeding season of March 15 and August 15. If tree removal must occur during the breeding season, all sites shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to start of work from March 15 through May 31, and within 30 days prior to the start of work from June 1 through August 15. The pre-removal surveys shall be submitted to the Planning and Zoning Division and the Tree Services Division of the Public Works Agency. If the survey indicates the potential presences of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the CDFG, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest. | Prior to the issuance of a tree removal permit | City of Oakland Planning and Zoning Division | Verify that tree removal will not occur during the breeding season of March 15 and August 15. If tree removal must occur during the breeding season, verify that the required pre-removal surveys have been conducted, provided to the Planning and Zoning Division, and if necessary an adequate nest buffer is implemented. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| C. TRANSPORTATION, CIRCULATION AND PARKING | | | | | |
| **COA TRANS-1:** Prior to the issuance of each building permit, the project sponsor and construction contractor shall meet with the Transportation Services Division and other appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project sponsor shall develop a construction management plan for review and approval by the City Transportation Services Division. The plan shall also be submitted to BART and AC Transit for review and comment. The plan shall include at least the following items and requirements:<br>• A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.<br>• Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.<br>• Location of construction staging areas for materials, equipment, and vehicles (must be located on the project site). | Prior to commencing each phase of construction | City of Oakland , CEDA, Transportation Services Division | Verify that the Construction Management Plan has been prepared and that it meets the standards listed in the mitigation measure. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| • Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant.<br>• Temporary construction fences to contain debris and material and to secure the site.<br>• Provisions for removal of trash generated by project construction activity.<br>• A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager.<br>• Subject to City review and approval, prior to start of construction, a construction worker transportation demand management (TDM) program shall be implemented to encourage construction workers to carpool or use alternative transportation modes in order to reduce the overall number of vehicle trips associated with construction workers.<br>• Identification and maintenance of vehicular, bicycle, pedestrian and transit access to and from the BART Station.<br>It is anticipated that this Construction Traffic Management Plan would be developed in the context of a larger Construction Management Plan, which would address other issues such as hours of construction on-site, limitations on noise and dust emissions, and other applicable items. | | | | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-1: Optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/51st Street intersection and coordinate signal phasing and timing with the adjacent Telegraph Avenue/52nd Street and Claremont Avenue intersection and other intersections in the same coordination group. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The plan shall consist of signal timing parameters for the signals in the coordination group. The project sponsor shall fund the cost of preparing and implementing the plan. | Submit plan prior to the issuance of first building permit;<br><br>Implement signal optimization measures according to timing outlined in approved plan | City of Oakland , CEDA, Transportation Services Division | • Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation measure.<br>• Verify that the project sponsor funds the cost of preparing and implementing the Signal Optimization Plan.<br>• Ensure plan measures are being implemented. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-2: Change the signal cycle length to 90 seconds and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Market Street/MacArthur Boulevard intersection. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The plan shall consist of signal timing parameters for the Market Street/MacArthur Boulevard intersection. The project sponsor shall fund the cost of preparing and implementing the plan. | Submit plan prior to the issuance of first building permit;<br><br>Implement signal optimization measures according to timing outlined in approved plan | City of Oakland , CEDA, Transportation Services Division | • Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation measure.<br>• Verify that the project sponsor funds the cost of preparing and implementing the Signal Optimization Plan.<br>• Ensure plan measures are being implemented. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-3: Implement the following measures:<br>• Prohibit left-turns from northbound Telegraph Avenue into westbound 52nd Street during the peak commute times (i.e., 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.). Currently, a small volume of traffic uses this movement (about 10 peak hour vehicles), which can be diverted to 51st Street. Thus, the peak hour prohibition on left-turns would not result in excessive and circuitous diversions.<br>• Change signal cycle length to 120 seconds and optimizing signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/52nd Street and Claremont Avenue intersection; coordinate signal timing and phasing with the adjacent Telegraph Avenue/51st Street intersection and other intersections in the same coordination group.<br>To implement these measures, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:<br>• Signing plans to prohibit left-turns from northbound Telegraph Avenue into westbound 52nd Street.<br>• Signal timing plans for the signals in the coordination group.<br>The project sponsor shall fund the cost of preparing and implementing these plans. | Submit plans prior to the issuance of first building permit;<br><br>Implement measures according to timing outlined in approved plan | City of Oakland , CEDA, Transportation Services Division | • Verify that the signing plans to prohibit left-turns from northbound Telegraph Avenue into westbound 52nd Street have been adequately prepared.<br>• Verify that the signal timing plans for the signals in the coordination group have been adequately prepared.<br>• Ensure plan measures are being implemented. | | |
| | | | | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-4: Implement the following measures:<br>• Change signal cycle length to 120 seconds and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/51st Street intersection and coordinate signal phasing and timing with the adjacent Telegraph Avenue/52nd Street and Claremont Avenue intersection and other intersections in the same coordination group. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The plan shall consist of signal timing parameters for the signals in the coordination group. The project sponsor shall fund the cost of preparing and implementing the plan. | Submit plan prior to the issuance of first building permit;<br><br>Implement signal optimization measures according to timing outlined in approved plan | • City of Oakland , CEDA, Transportation Services Division | • Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation measure. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| • To help further minimize impacts at this intersection, a Transportation Demand Management (TDM) program shall be implemented at the project site to encourage more residents and employees to shift from driving alone to other modes of travel. Potential TDM measures may include, but are not limited to, transit ticket subsidies, awareness programs, direct transit sales, providing a guaranteed ride home program, and parking management strategies. The effectiveness of the TDM program shall be regularly monitored, and if necessary adjusted to meet its goals. The project applicant shall submit the TDM program to the City for its review and approval. The plan shall also be submitted to BART for review and comment. The project applicant shall also be responsible for funding and implementing the TDM program.<br><br>The components of the proposed TDM program have not been finalized. Additionally, it is difficult to accurately predict a TDM program's effectiveness and to quantify the effects on reducing project trip generation. To present a conservative analysis, this study assumes that the intersection would continue to operate at LOS F with the implementation of this mitigation measure. Thus, these measures will partially mitigate the impact, but are not sufficient to mitigate the impact to a less-than-significant level. | Submit TDM Plan prior to the issuance of first building permit;<br><br>Implement measures according to timeframes outlined in approved plan | • City of Oakland Transportation Services Division | • Review Transportation Demand Management Program for adequacy and review regular monitoring reports regarding program effectiveness.<br>• Ensure plan and program measures are being implemented. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-5: Optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the West Street/40th Street intersection. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The plan shall consist of signal timing parameters for the West Street/40th Street intersection. The project sponsor shall fund the cost of preparing and implementing the plan. | Submit plan prior to the issuance of first building permit;<br><br>Implement signal optimization measures according to timing outlined in approved plan | City of Oakland , CEDA, Transportation Services Division | • Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation measure.<br>• Ensure plan and program measures are being implemented. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-6: Implement the following measures:<br>• Provide protected/permitted left-turn phasing on eastbound and westbound 40th Street approaches.<br>• Change signal cycle length to 120 seconds in the AM peak and 105 seconds during the PM peak hour, and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/40th Street intersection. The change in signal cycle length may also require coordination with other intersections in the same coordination group.<br>To implement these measures, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:<br>• Plans, Specifications, and Estimates (PS&E) to modify intersection to provide left-turn phasing on eastbound and westbound 40th Street approaches.<br>• Signal timing plans for the signals in the coordination group.<br>The project sponsor shall fund the cost of preparing and implementing these plans. | Prior to the issuance of first building permit;<br><br>Modify intersection and signal timing in accordance with approved plan | City of Oakland , CEDA, Transportation Services Division | • Verify that the Plans, Specifications, and Estimates (PS&E) to modify intersection to provide left-turn phasing on eastbound and westbound 40th Street approaches have been adequately prepared.<br>• Verify that signal timing plans for the signals in the coordination group have been adequately prepared.<br>• Ensure plan measures are being implemented. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
|---|---|---|---|---|---|
| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-7: The impact shall be mitigated by the following:<br>• Stripe a left-turn lane on northbound Market Street at MacArthur Boulevard. The left-turn lane can be accommodated within the existing right-of-way, but may result in loss of a few on-street parking and relocation of an AC Transit bus stop on northbound Market Street.<br>• Change signal cycle length to 110 seconds during the AM peak hour and 90 seconds during the PM peak hour, and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Market Street/MacArthur Boulevard intersection.<br>To implement these measures, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:<br>• Plans, Specifications, and Estimates (PS&E) to stripe a left-turn lane on northbound Market Street at MacArthur Boulevard.<br>• Signal timing plans for the Market Street/MacArthur Boulevard intersection.<br>The project sponsor shall fund the cost of preparing and implementing these plans. | Submit plans prior to the issuance of first building permit;<br><br>Implement measures according to timeframes outlined in approved plan | City of Oakland , CEDA, Transportation Services Division | • Verify that the Plans, Specifications, and Estimates (PS&E) to stripe a left-turn lane on northbound Market Street at MacArthur Boulevard have been adequately prepared.<br>• Verify that the signal timing plans for the Market Street/MacArthur Boulevard intersection have been adequately prepared.<br>• Ensure plan measures are being implemented. | | |

## Mitigation Monitoring and Reporting Program

| Standard COA/MM | Mitigation Monitoring | | | Reporting | |
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| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| Mitigation Measure TRANS-8: Implement the following measures:<br>• Provide protected/permitted left-turn phasing on northbound and southbound Telegraph Avenue approaches.<br>• Change signal cycle length to 120 seconds and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/MacArthur Boulevard intersection. Signal phasing and timing shall also be coordinated with other intersections in the same coordination group.<br>To implement this measure, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:<br>• Plans, Specifications, and Estimates (PS&E) to modify intersection to provide left-turn phasing on northbound and southbound Telegraph Avenue approaches.<br>• Signal timing parameters for the signals in the coordination group.<br>The project sponsor shall fund the cost of preparing and implementing the plan. | Submit plans prior to the issuance of first building permit;<br><br>Implement measures according to timeframes outlined in approved plan | City of Oakland , CEDA, Transportation Services Division | • Verify that the Plans, Specifications, and Estimates (PS&E) to modify intersection to provide left-turn phasing on northbound and southbound Telegraph Avenue approaches have been adequately prepared.<br>• Verify that the signal timing parameters for the signals in the coordination group have been adequately prepared.<br>• Ensure plan measures are being implemented. | | |

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| Mitigation Measure TRANS-9: Implement the following measures:<br>• To help further minimize impacts at this intersection, a Transportation Demand Management (TDM) program shall be implemented at the project site to encourage more residents and employees to shift from driving alone to other modes of travel. Potential TDM measures may include, but are not limited to, transit ticket subsidies, awareness programs, direct transit sales, providing a guaranteed ride home program, and parking management strategies. The effectiveness of the TDM program shall be regularly monitored, and if necessary adjusted to meet its goal. The project applicant shall submit the TDM program to the City for its review and approval. The plan shall also be submitted to BART for review and comment. The project applicant shall also be responsible for funding and implementing the TDM program.<br>The components of the proposed TDM program have not been finalized. Additionally, it is difficult to accurately predict a TDM program's effectiveness and to quantify the effects on reducing project trip generation. | *See Mitigation Measure TRANS-4* | | | | |

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| D. AIR QUALITY | | | | | |
| **COA AIR-1: Dust Control.** *Prior to issuance of a demolition, grading, or building permit.* During construction, the project applicant shall require the construction contractor to implement the following measures required as part of BAAQMD basic and enhanced dust control procedures required for construction sites. These include:<br>**BASIC (Applies to ALL construction sites)**<br>a) Water all active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.<br>b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).<br>c) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.<br>d) Sweep daily (with water sweepers using reclaimed water if possible) all paved access roads, parking areas and staging areas at construction sites.<br>e) Sweep streets (with water sweepers using reclaimed water if possible) at the end of each day if visible soil material is carried onto adjacent paved roads.<br>f) Limit the amount of the disturbed area at any one time, where feasible. | Ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division | • Make regular visits to the project site to ensure that all dust-control mitigation measures are being implemented.<br>• Verify that a designated dust control coordinator is on-call during construction periods. | | |

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| g) Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.<br>h) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.<br>i) Replant vegetation in disturbed areas as quickly as feasible.<br>j) Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).<br>k) Limit traffic speeds on unpaved roads to 15 miles per hour.<br>l) Clean off the tires or tracks of all trucks and equipment leaving any unpaved construction areas. | | | | | |
| **ENHANCED (All "Basic" Controls listed above plus the following if the construction site is greater than 4 acres)**<br>a) All "Basic" controls listed above, plus:<br>b) Install sandbags or other erosion control measures to prevent silt runoff to public roadways.<br>c) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).<br>d) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such person shall be provided to the BAAQMD prior to the start of construction as well as posted on-site over the duration of construction.<br>e) Install appropriate wind breaks at the construction site to minimize wind blown dust. | | | | | |

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| **COA AIR-2: Construction Emissions.** *Prior to issuance of a demolition, grading, or building permit.* To minimize construction equipment emissions during construction, the project applicant shall require the construction contractor to:<br>a) Demonstrate compliance with BAAQMD Regulation 2, Rule 1 (General Requirements) for all portable construction equipment subject to that rule. BAAQMD Regulation 2, Rule 1, provides the issuance of authorities to construct and permits to operate certain types of portable equipment used for construction purposes (e.g., gasoline or diesel-powered engines used in conjunction with power generation, pumps, compressors, and cranes) unless such equipment complies with all applicable requirements of the "CAPCOA" Portable Equipment Registration Rule" or with all applicable requirements of the Statewide Portable Equipment Registration Program. This exemption is provided in BAAQMD Rule 2-1-105.<br>b) Perform low- NOx tune-ups on all diesel-powered construction equipment greater than 50 horsepower (no more than 30 days prior to the start of use of that equipment). Periodic tune-ups (every 90 days) shall be performed for such equipment used continuously during the construction period. | Prior to issuance of a demolition, grading, or building permit; and ongoing throughout construction | City of Oakland, CEDA, Building Services Division | Verify that all construction equipment meets mitigation measures. | | |
| **E. NOISE AND VIBRATION** | | | | | |
| **COA NOISE-1: Days/Hours of Construction Operation.** *Ongoing throughout demolition, grading, and/or construction.* The project applicant shall require construction contractors to limit standard construction activities as follows:<br>a) Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday. | Ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division | Make regular visits to the construction site to ensure that construction activities are restricted the hours designated in COA NOISE-1. | | |

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| b) Any construction activity proposed to occur outside of the standard hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division. | | | | | |
| c) Construction activity shall not occur on Saturdays, with the following possible exceptions:<br>• Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case-by-case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.<br>• After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed. | | | | | |
| d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions. | | | | | |

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| e) No construction activity shall take place on Sundays or Federal holidays.<br>f) Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. | | | | | |
| **COA NOISE-2: Noise Control.** *Ongoing throughout demolition, grading, and/or construction.* To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to city review and approval, which includes the following measures:<br>a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).<br>b) Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. | Ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division | • Verify that a site-specific noise reduction program has been prepared and implemented.<br>• Make regular visits to the construction site to ensure that noise from construction activities is appropriately controlled. | | |

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| c) Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction<br>d) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented. | | | | | |
| **COA NOISE-3: Noise Complaint Procedures.** *Ongoing throughout demolition, grading, and/or construction.* Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:<br>a) A procedure and phone numbers for notifying the City Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours);<br>b) A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);<br>c) The designation of an on-site construction complaint and enforcement manager for the project; | Submit list prior to the issuance of a building permit;<br>Ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division | Verify the implementation of the list of measures to respond to and track complaints pertaining to construction noise. | | |

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| d) Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and<br>e) A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed. | | | | | |
| **COA NOISE-4: Interior Noise.** *Prior to issuance of a building permit.* If necessary to comply with the interior noise requirements of the City of Oakland General Plan Noise Element and achieve an acceptable interior noise level, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design, based upon recommendations of a qualified acoustical engineer. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phase; however, the following sound-rated assembly recommendations, based on the conceptual project layout and design (described in Chapter III, Project Description) should be included in the final study and will be included in the Standard Condition of Approval:<br><br>An alternate form of ventilation, such as air conditioning systems, shall be included in the design for all units located within 659 feet of the centerline of SR-24, or within 153 feet of the centerline of 40th Street, or within 166 feet of the centerline of MacArthur Boulevard to ensure that widows can remain closed for prolonged periods of time to meet the interior noise standard and Uniform Building Code Requirements. | Submit noise recommend-ations prior to the issuance of a building permit for each phase of construction containing residential units<br><br>Implement recommend ations according to timeframes outlined in plan | City of Oakland, CEDA, Building Services Division | Verify that appropriate sound-rated assemblies to reduce noise levels have been incorporated into the project building design. | | |

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| All residential building façades directly exposed to and within 240 feet of the centerline of SR-24 must be constructed to meet the interior DNL 45 dB requirement; this likely could be achieved with an overall STC-30 rating with windows having a minimum STC-34 rating. This could be achieved with a typical 1-inch insulated glazing assembly, possibly with one light being laminated (or other appropriate example assembly). Quality control must be exercised in construction to ensure all air-gaps and penetrations of the building shell are controlled and sealed. | | | | | |
| **COA NOISE-5: Pile Driving and Other Extreme Noise Generators.** *Ongoing throughout demolition, grading, and/or construction.* To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the City to ensure that maximum feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third-party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official and the deposit shall be submitted by the project applicant concurrent | Submit plan prior commencing construction activities involving pile driving or other extreme noise generators; Implement measures according to timeframes outlined in the plan | City of Oakland, CEDA, Building Services Division | • Verify that a plan for reducing extreme noise generating construction impacts has been prepared.<br>• Verify that the plan will achieve the maximum feasible noise attenuation.<br>• Verify that a special inspection deposit has been submitted. | | |

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| with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:<br>a) Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;<br>b) Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;<br>c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;<br>d) Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example, and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and<br>e) Monitor the effectiveness of noise attenuation measures by taking noise measurements. | | | | | |

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| **COA NOISE-6: Demolition/Construction Adjacent to Historic Structures.** The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage the buildings adjacent to the project site and design means and methods of construction that shall be utilized to not exceed the thresholds. Additionally, the project applicant shall submit a demolition plan for review and approval so as not to unduly impact neighboring property improvements particularly 505 40th Street. Neighboring property improvements within 10 of the project boundary shall be indicated on the demolition plan. The method of protection for any improvements within 5 feet of the project boundary shall be specifically addressed in the demolition plan. The applicant shall submit such engineering report and demolition plan and means of compliance with the engineering recommendations to the City (CEDA Building Services) for review and approval and implement the approved plan.<br>f) | Prior to the issuance of a demolition, grading, or building permit for building A | City of Oakland, CEDA, Building Services Division | Verify that a structural engineer or other appropriate professional has determined the means and methods of construction will not exceed threshold levels of vibration that may damage buildings adjacent to the project site. | | |

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| F. HYDROLOGY AND WATER QUALITY | | | | | |
| **COA HYDRO-1 (same as COA GEO-1): Erosion and Sedimentation Control Plan.** *Prior to any grading activities.*<br>a) The project applicant shall obtain a grading permit if required by the Oakland Grading Regulations pursuant to Section 15.04.780 of the Oakland Municipal Code. The grading permit application shall include an erosion and sedimentation control plan. The erosion and sedimentation control plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading operations. The plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the Director of Development or designee. The plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment. | Prior to any grading activities | City of Oakland, CEDA, Building Services Division; Planning and Zoning Division | • Verify that an erosion and sedimentation control plan has been adequately prepared.<br>• Verify that the applicant has obtained permissions and easements necessary for any off-site work required by the plan. | | |

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| *Ongoing throughout grading and construction activities.*<br>b) The project applicant shall implement the approved erosion and sedimentation plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Building Services Division. | Ongoing throughout grading and construction activities. | City of Oakland, CEDA, Building Services Division; Planning and Zoning Division | • Verify that the plan has been implemented.<br>• Conduct visits to the construction site to ensure that no grading is taking place during the wet weather season unless specifically authorized by the Building Services Division. | | |

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| **COA HYDRO-2: Stormwater Pollution Prevention Plan (SWPPP).** *Prior to and ongoing throughout demolition, grading, and/or construction activities.* The project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a stormwater pollution prevention plan (SWPPP). At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; Best Management Practices (BMPs), and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit a copy of the SWPPP and evidence of approval of the SWPPP by the SWRCB to the Building Services Division. Implementation of the SWPPP shall start with the commencement of construction and continue though the completion of the project. After construction is completed, the project applicant shall submit a notice of termination to the SWRCB. | Submit SWPP to SWRCB prior to applying for first building permit;<br><br>Submit copy of approved SWPP prior to issuance of first building permit;<br><br>Comply with measures in SWPP: ongoing throughout demolition, grading, and/or construction activities | City of Oakland, CEDA, Building Services Division; Planning and Zoning Division | • Verify the preparation and approval of the SWPPP.<br>• Conduct regular site visits to ensure compliance with the SWPPP throughout the completion of the project. | | |

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| **COA HYDRO-3: Post-Construction Stormwater Pollution Management Plan.** *Prior to issuance of building permit (or other construction-related permit).* The applicant shall comply with the requirements of Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. The applicant shall submit with the application for a building permit (or other construction-related permit) a completed Stormwater Supplemental Form for the Building Services Division. The project drawings submitted for the building permit (or other construction-related permit) shall contain a stormwater pollution management plan, for review and approval by the City, to limit the discharge of pollutants in stormwater after construction of the project to the maximum extent practicable.<br>a) The post-construction stormwater pollution management plan shall include and identify the following:<br>• All proposed impervious surface on the site;<br>• Anticipated directional flows of on-site stormwater runoff; and<br>• Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces; and<br>• Source control measures to limit the potential for stormwater pollution; and<br>• Stormwater treatment measures to remove pollutants from stormwater runoff.<br>b) The following additional information shall be submitted with the post-construction stormwater pollution management plan:<br>• Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and | Submit plan prior to issuance of building permit (or other construction-related permit) | City of Oakland, CEDA, Building Services Division; Planning and Zoning Division | • Verify that the applicant complies with the requirements of Provision C.3 of the NPDES permit issued to the Alameda Countywide Clean Water Program.<br>• Verify that a completed Stormwater Supplemental Form and a stormwater pollution management plan have been adequately prepared.<br>• Prior to final permit inspection, verify that the stormwater pollution management plan is implemented. | | |

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| • Pollutant removal information demonstrating that any proposed manufactured/mechanical (i.e., non-landscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable or removing the range of pollutants typically removed by landscape-based treatment measures.<br>All proposed stormwater treatment measures shall incorporate appropriate planting materials for stormwater treatment (for landscape-based treatment measures) and shall be designed with considerations for vector/mosquito control. Proposed planting materials for all proposed landscape-based stormwater treatment measures shall be included on the landscape and irrigation plan for the project. The applicant is not required to include on-site stormwater treatment measures in the post-construction stormwater pollution management plan if he or she secures approval from Planning and Zoning of a proposal that demonstrates compliance with the requirements of the City's Alternative Compliance Program.<br>*Prior to final permit inspection.* The applicant shall implement the approved stormwater pollution management plan. | | | | | |
| **COA HYDRO-4: Maintenance Agreement for Stormwater Treatment Measures.** *Prior to final zoning inspection.* For projects incorporating stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following:<br>• The applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures | Prior to final zoning inspection for each phase of development | City of Oakland, CEDA, Building Services Division; Planning and Zoning Division | Verify that the applicant has entered into the the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit. | | |

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| being incorporated into the project until the responsibility is legally transferred to another entity; and<br>• Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The agreement shall be recorded at the County Recorder's Office at the applicant's expense. | | | | | |
| G. GEOLOGY, SOILS AND SEISMICITY | | | | | |
| **COA GEO-1 (same as COA HYDRO-1): Erosion and Sedimentation Control Plan.** *Prior to any grading activities.*<br>a) The project applicant shall obtain a grading permit if required by the Oakland Grading Regulations pursuant to Section 15.04.780 of the Oakland Municipal Code. The grading permit application shall include an erosion and sedimentation control plan. The erosion and sedimentation control plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading operations. The plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for | *See COA HYDRO-1* | | | | |

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| off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the Director of Development or designee. The plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment.<br>*Ongoing throughout grading and construction activities.*<br>b) The project applicant shall implement the approved erosion and sedimentation plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Building Services Division. | *See COA HYDRO-1* | | | | |
| **COA GEO-2: Soils Report.** *Required as part of the submittal of a Tentative Tract or Tentative Parcel Map.* A preliminary soils report for each construction site within the project area shall be required as part if this project. The soils reports shall be based, at least in part, on information obtained from on-site testing. Specifically the minimum contents of the report should include:<br>*A.* Logs of borings and/or profiles of test pits and trenches:<br>a) The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such borings shall be sufficient to establish a soils profile suitable for the design of all the footings, foundations, and retaining structures.<br>b) The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures.<br>c) All boring logs shall be included in the soils report. | Required as part of the submittal of a Tentative Tract or Tentative Parcel Map(s) | City of Oakland, CEDA, Building Services Division | Verify that a preliminary soils report has been prepared for each construction site. | | |

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| *B.* Test pits and trenches:<br>a) Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all proposed structures.<br>b) Soils profiles of all test pits and trenches shall be included in the soils report.<br>*C.* A plat shall be included which shows the relationship of all the borings, test pits, and trenches to the exterior boundary of the site. The plat shall also show the location of all proposed site improvements. All proposed improvements shall be labeled.<br>*D.* Copies of all data generated by the field and/or laboratory testing to determine allowable soil bearing pressures, sheer strength, active and passive pressures, maximum allowable slopes where applicable and any other information which may be required for the proper design of foundations, retaining walls, and other structures to be erected subsequent to or concurrent with work done under the grading permit.<br>*E.* Soils Report. A written report shall be submitted which shall but is not limited to the following:<br>a. Site description.<br>b. Local and site geology.<br>c. Review of previous field and laboratory investigations for the site.<br>d. Review of information on or in the vicinity of the site on file at the Information Counter, City of Oakland, Office of Planning and Building. | | | | | |

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| e. Site stability shall be addressed with particular attention to existing conditions and proposed corrective attention to existing conditions and proposed corrective actions at locations where land stability problems exist.<br>f. Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading, slopes, and specifications, for fills, and pavement design as required.<br>g. Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report.<br>h. All other items which a Soils Engineer deems necessary.<br>i. The signature and registration number of the Civil Engineer preparing the report.<br>*F.* The Director of Planning and Building may reject a report that she/he believes is not sufficient. The Director of Planning and Building may refuse to accept a soils report if the certification date of the responsible soils engineer on said document is more than three years old. In this instance , the Director may be require that the old soils report be recertified, that an addendum to the soils report be submitted, or that a new soils report be provided. | | | | | |

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| **COA GEO-3: Geotechnical Report.** *Required as part of the submittal of a tentative Tract Map or tentative Parcel Map.*<br>a) A site-specific, design level, Landslide or Liquefaction geotechnical investigation for each construction site within the project area shall be required as part if this project. Specifically:<br>Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be accordance with applicable City ordinances and polices, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.<br>The investigations shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).<br>The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, will be included in the final design, as approved by the City of Oakland.<br>The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the "No Build" zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge. | Required as part of the submittal of a Tentative Tract or Tentative Parcel Map(s) | City of Oakland, CEDA, Building Services Division | Verify that a site-specific, design level, Landslide or Liquefaction geotechnical investigation for each construction site has been conducted and that the recommendations are included in the final project design. | | |

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| Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the projects design phase, shall be incorporated in the project.<br><br>A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.<br><br>Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.<br><br>b) Tentative Tract or Parcel Map approvals shall require, but not be limited to approval of the Geotechnical Report. | | | | | |
| **H. PUBLIC HEALTH AND HAZARDS** | | | | | |
| **COA HAZ-1: Hazards Best Management Practices.** *Prior to issuance of a demolition, grading, or building permit.* The project applicant and construction contractor shall ensure that construction best management practices are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:<br>a) Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;<br>b) Avoid overtopping construction equipment fuel gas tanks;<br>c) During routine maintenance of construction equipment, properly contain and remove grease and oils; | Ongoing through demolition, grading and construction activities | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that construction BMPs are implemented. | | |

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| d) Properly dispose of discarded containers of fuels and other chemicals. | | | | | |
| e) Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building. | | | | | |
| f) If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions described in Standard Conditions of Approval (see COA HAZ-3 and HAZ-5 below) as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate. | | | | | |

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| **COA HAZ-2: Asbestos Removal in Structures.** *Prior to issuance of a demolition permit.* If asbestos is found to be present in building materials to be removed, demolition and disposal is required to be conducted in accordance with procedures specified by Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of Bay Area Air Quality Management District (BAAQMD) regulations, as may be amended. | Make determin-ation prior to issuance of a demolition permit; Follow applicable procedures during removal activities | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that any asbestos removal is conducted in accordance with procedures specified by Regulation 11, Rule 2 of BAAQMD regulations | | |
| **COA HAZ-3: Phase I and/or Phase II Reports.** *Prior to issuance of a demolition, grading, or building permit.* Prior to issuance of demolition, grading, or building permits the project applicant shall submit to the Fire Prevention Bureau, Hazardous Materials Unit, a Phase I environmental site assessment report, and a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. | Prior to issuance of a demolition, grading, or building permit | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that a Phase I, and, if appropriate, Phase II, environmental site assessment report has been submitted to the Fire Prevention Bureau Hazardous Materials Unit. Ensure any approved recommended remediation actions are implemented. | | |

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| **COA HAZ-4: Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment.** *Prior to issuance of a demolition, grading, or building permit.* The project applicant shall submit a comprehensive assessment report, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACM), lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or federal law. | Prior to issuance of a demolition, grading, or building permit | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that a comprehensive assessment report detailing materials classified as hazardous waste has been submitted. | | |
| **COA HAZ-5: Environmental Site Assessment Reports Remediation.** *Prior to issuance of a demolition, grading, or building permit.* If the environmental site assessment reports recommend remedial action, the project applicant shall:<br>a) Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.<br>b) Obtain and submit written evidence of approval for any remedial action if required by a local, State, or federal environmental regulatory agency. | Prior to issuance of a demolition, grading, or building permit; | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | • Verify that written evidence of approval for any remedial actions required has been obtained and that Remediation Action Plan has been adequately prepared.<br>• Verify that a Construction-Phase Risk Management Plan has adequately been prepared. | | |

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| c) Submit a copy of all applicable documentation required by local, State, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II environmental site assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans.<br>Prior to issuing any permits for construction at the project site, a Construction-Phase Risk Management Plan (RMP) shall be prepared for the project. The RMP shall include any health and safety measures determined necessary in the HHRA to protect the health of construction workers and nearby public during construction activities. These measures may potentially include dust control, air monitoring, and/or the use of personal protective equipment during construction activities. Action levels for contaminants of concern shall be established, with detailed descriptions of corrective actions to be taken in the event that the action levels are reached during monitoring. The RMP shall also include safety and emergency response measures included in the City's Standard Conditions HAZ-1 and HAZ-2. The RMP shall be reviewed and approved by the City of Oakland or designated regulatory oversight agency. | | | | | |

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| d) Implementation of COA HAZ-5 would require a Remediation Action Plan (RAP). Required remedial actions shall include measures to ensure that any potential added health risks to future site users as a result of hazardous materials are reduced to a cumulative human health risk of less than 1 × 10-6 (one in one million) for carcinogens and a cumulative hazard index of 1.0 for non-carcinogens, or other site-specific goals established by regulatory oversight agencies. The potential risks to human health in excess of these goals may be reduced either by remediation of the contaminated soils or groundwater (e.g., excavation and off-site disposal of soils and treatment of groundwater) and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include the use of hardscape (buildings and pavements), importation of clean soil in landscaped areas to eliminate exposure pathways, and deed restrictions. Specific remedies would depend on the findings of the site-specific HHRA and the requirements of the regulatory agencies | | | | | |
| **COA HAZ-6: Lead-Based Paint Remediation.** *Prior to issuance of a demolition, grading, or building permit.* If lead-based paint is present, the project applicant shall submit specifications signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: Cal/OSHA's Construction Lead Standard, 8 CCR1532.1 and DHS regulation 17 CCR Sections 35001 through 36100, as may be amended. | Prior to issuance of a demolition, grading, or building permit | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that specifications for the stabilization or removal of any lead paint have been submitted. | | |

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| **COA HAZ-7: Asbestos Remediation.** *Prior to issuance of a demolition, grading, or building permit.* If asbestos-containing materials (ACM) are present, the project applicant shall submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health & Safety Code 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. | Prior to issuance of a demolition, grading, or building permit | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that specifications for the removal, encapsulation, or enclosure of any asbestos-containing materials have been submitted. | | |
| **COA HAZ-8: Other Materials Classified as Hazardous Waste.** *Prior to issuance of a demolition, grading, or building permit.* If other building materials or stored materials classified as hazardous waste by State or federal law is present, the project applicant shall submit written confirmation that all State and federal laws and regulations shall be followed when profiling, handling, treating, transporting and/or disposing of such materials. | Prior to issuance of a demolition, grading, or building permit | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that written confirmation has been obtained that all State and federal laws will be followed when profiling, handling, treating, transporting and/or disposing of all hazardous waste. | | |

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| **COA HAZ-9: Health and Safety Plan per Assessment.** *Prior to issuance of a demolition, grading, or building permit.* If the required lead-based paint/coatings, asbestos, or PCB assessment finds presence of such materials, the project applicant shall create and implement a health and safety plan to protect workers from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal. | Submit plan prior to issuance of a demolition, grading, or building permit;<br><br>Implement measures in accordance with timeframes outlined in plan | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division | Verify that a health and safety plan to protect workers from hazardous waste has been adequately prepared. | | |
| **COA HAZ-10: Fire Safety Phasing Plan.** *Prior to issuance of a demolition, grading, or building permit and concurrent with any p-job submittal permit.* The project applicant shall submit a separate fire safety phasing plan to the Planning and Zoning Division and Fire Services Division for their review and approval. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. Fire Services Division may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase. | Submit plan prior to issuance of a demolition, grading, or building permit and concurrent with any p-job submittal permit | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Services Division | Verify that a fire safety phasing plan has been prepared. | | |

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| **COA HAZ-11: Fire Safety.** *Prior to and ongoing throughout demolition, grading, and/or construction.* The project applicant and construction contractor will ensure that during project construction, all construction vehicles and equipment will be fitted with spark arrestors to minimize accidental ignition of dry construction debris and surrounding dry vegetation. | Prior to and ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Services Division | Conduct periodic site visits to ensure that all construction vehicles and equipment are fitted with spark arrestors. | | |
| **COA HAZ-12: Hazardous Materials Business Plan.** *Prior to issuance of a business license.* The project applicant shall submit a Hazardous Materials Business Plan for review and approval by Fire Prevention Bureau, Hazardous Materials Unit. Once approved this plan shall be kept on file with the City and will be updated as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle the materials and provides information to the Fire Services Division should emergency response be required. The Hazardous Materials Business Plan shall include the following:<br>1. The types of hazardous materials or chemicals stored and/or used on site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.<br>2. The location of such hazardous materials.<br>3. An emergency response plan including employee training information<br>4. A plan that describes the manner in which these materials are handled, transported and disposed. | Prior to issuance of a business license for businesses handling hazardous materials | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Services Division | Verify that a hazardous materials business plan has been prepared. | | |

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| **I. PUBLIC SERVICES** | | | | | |
| **COA SERV-1: Conformance with other Requirements.** *Prior to issuance of a demolition, grading, P-job, or other construction related permit.*<br>a) The project applicant shall comply with all other applicable federal, state, regional and/or local codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition of Approval 3.<br>b) The applicant shall submit approved building plans for project-specific needs related to fire protection to the Fire Services Division for review and approval, including, but not limited to automatic extinguishing systems, water supply improvements and hydrants, fire department access, and vegetation management for preventing fires and soil erosion. | Prior to issuance of a demolition, grading, P-job, or other construction related permit. | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Services Division | Ensure that the project applicant complies with all applicable laws and regulations as detailed in COA SERV-1. | | |
| **COA SERV-2: Fire Safety Phasing Plan.** *Prior to issuance of a demolition, grading, and/or construction and concurrent with any p-job submittal permit,* the project applicant shall submit a separate fire safety phasing plan to the Planning and Zoning Division and Fire Services Division for their review and approval. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. Fire Services Division may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase. | *See COA HAZ-10* | | | | |

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| **COA SERV-3: Site Review by the Fire Services Division.** *Prior to the issuance of demolition, grading or building permit.* The project applicant shall submit plans for site review and approval to the Fire Prevention Bureau Hazardous Materials Unit. Property owner may be required to obtain or perform a Phase II hazard assessment. | Prior to issuance of a demolition, grading, or building permit | City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Prevention Bureau Hazardous Materials Unit | Verify that plan has been submitted for review and approval. | | |
| J. UTILITIES AND INFRASTRUCTURE | | | | | |
| **COA UTIL-1: Waste Reduction and Recycling.** *Prior to issuance of demolition, grading, or building permit.* The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency. Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/ alterations/modifications with construction values of $50,000 or more (except R-3), and all demolition (including soft demo).The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx_or in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan. | Submit plan prior to issuance of demolition, grading, or building permit;<br><br>Implement plan according to timeframes outlined in plan | City of Oakland, CEDA, Building Services Division | Verify that a Construction & Demolition Waste Reduction and Recycling Plan and an Operational Diversion Plan have been submitted. | | |

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| *Ongoing.* The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be in implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of the Public Works Agency for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site. | Ongoing | City of Oakland, CEDA, Building Services Division | Verify that the proposed program is implemented and maintained for the duration of the proposed activity or facility. | | |

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| **COA UTIL-2: Storm Water and Sewer.** *Prior to completing the final design for the project's sewer service.* Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the City. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers. | Prior to completing the final design for the project's sewer service | City of Oakland, CEDA, Building Services Division | • Confirm that any necessary stormwater and sanitary sewer infrastructure improvements required by the project are implemented.<br>• Verify that the project applicant pays additional fees for any City improvements to the sanitary sewer system, as well as any fees to the affected service providers.<br>• Ensure that BMPs to reduce stormwater runoff are implemented. | | |

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| **COA UTIL-3: Site Design Measures for Post-Construction Stormwater Pollution Management**<br>*Prior to issuance of building permit (or other construction-related permit)*<br>The project drawings submitted for a building permit (or other construction-related permit) shall contain a final site plan to be reviewed and approved by Planning and Zoning. The final site plan shall incorporate appropriate site design measures to manage stormwater runoff and minimize impacts to water quality after the construction of the project. These measures may include, but are not limited to, the following:<br>i. Minimize impervious surfaces, especially directly connected impervious surfaces;<br>ii. Utilize permeable paving in place of impervious paving where appropriate;<br>iii. Cluster buildings;<br>iv. Preserve quality open space; and<br>v. Establish vegetated buffer areas.<br>*Ongoing*<br>The approved plan shall be implemented and the site design measures shown on the plan shall be permanently maintained. | Prior to issuance of building permit (or other construction -related permit); and ongoing | City of Oakland, CEDA, Building Services Division; Planning and Zoning Division; Public Works Agency, Environmental Services Division | Confirm that any necessary stormwater and sanitary sewer infrastructure improvements required by the project are implemented. | | |

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| **COA UTIL-4: Source Control Measures to Limit Stormwater Pollution.** *Prior to issuance of building permit (or other construction-related permit)*<br>The applicant shall implement and maintain all structural source control measures imposed by the Chief of Building Services to limit the generation, discharge, and runoff of stormwater pollution.<br>*Ongoing*<br>The applicant, or his or her successor, shall implement all operational Best Management Practices (BMPs) imposed by the Chief of Building Services to limit the generation, discharge, and runoff of stormwater pollution. | Prior to issuance of building permit (or other construction -related permit); and ongoing | City of Oakland, CEDA, Building Services Division; Planning and Zoning Division; Public Works Agency, Environmental Services Division | • Confirm that any necessary structural source control measures improvements are implemented.<br>• | | |

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| **COA UTIL-5: Storm Water and Sewer.** *Prior to completing the final design for the project's sewer service.* Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed. | Prior to completing the final design for the project's sewer service | City of Oakland, CEDA, Building Services Division | • Confirm that any necessary stormwater and sanitary sewer infrastructure improvements required by the project.<br>• | | |
| K. CULTURAL AND PALEONTOLOGICAL RESOURCES | | | | | |
| **COA CULT-1: Archaeological Resources.** *Ongoing throughout demolition, grading, and/or construction*<br>Pursuant to CEQA Guidelines section 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards. | Ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division and Planning and Zoning Division - Historic Preservation Staff | Ensure that all work within 50 feet of the site where any prehistoric or historic subsurface cultural resources are discovered is halted. | | |

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| In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out.<br><br>Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measure measures recommended by the archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and treatment, and would prepare a report on the findings for submittal to the Northwest Information Center. | | | | | |

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| **COA CULT-2: Human Remains.** *Ongoing throughout demolition, grading, and/or construction*<br>In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously. | Ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division and Planning and Zoning Division | Ensure that all work is halted if any human skeletal remains are uncovered at the project site and that the Alameda County Coroner is contacted. | | |

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| | Monitoring Schedule | Monitoring Responsibility | Monitoring Procedure | Comments | Date/ Initials |
| **COA CULT-3: Paleontological Resources.** *Ongoing throughout demolition, grading, and/or construction*<br>In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval. | Ongoing throughout demolition, grading, and/or construction | City of Oakland, CEDA, Building Services Division and Planning and Zoning Division | Ensure that excavations within 50 feet of any paleontological resource discovery are halted and that a qualified paleontologist is notified. | | |
| L. AESTHETIC RESOURCES | | | | | |
| **COA AES-1: Lighting Plan.** *Prior to the issuance of an electrical or building permit*<br>The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. All lighting shall be architecturally integrated into the site. | Prior to the issuance of an electrical or building permit | City of Oakland Community and Economic Development Agency | Ensure that proposed lighting fixtures are adequately shielded to prevent unnecessary glare onto adjacent properties. | | |

# *Oakland City Planning Commission*

***Design Review Committee***

## STAFF REPORT

**November 12, 2014**

| | |
|---|---|
| **Location:** | 585 40th Street (see map) |
| **Assessors Parcel Numbers:** | 012-0969-053-05 and 012-0968-055-03 |
| **Proposal:** | Construct Phases 3 and 4 of the MacArthur Station Project which includes: development of Block A with 286 residential units, between 22,000 and 30,650 square feet of ground-floor commercial space (current plans show 22,287 square feet), and 254 parking spaces; and development of Block C1 with 93 residential units, 2,235 square feet of ground-floor commercial space, and 63 parking spaces. |
| **Applicant:** | Bridge Housing Corporation |
| **Contact Person:** | Joe McCarthy (415) 321-3583 |
| **Owner:** | MacArthur Transit Community Partners, LLC |
| **Planning Permits Required:** | Final Development Plan for Phases 3 and 4 of the MacArthur Station Project. |
| **General Plan:** | Neighborhood Center Mixed Use |
| **Zoning:** | S-15 Transit-Oriented Development Zone |
| **Environmental Determination:** | An Environmental Impact Report (EIR) was certified in June 2008. |
| **Historic Status:** | There are no Potential Designated Historic Properties located on the project site. |
| **Service Delivery District:** | Service District 2 |
| **City Council District:** | 1 |
| **Date Filed:** | October 16, 2014 |
| **Status:** | Preliminary Design Review; the project will be considered by the full Planning Commission at a future public hearing. |
| **Action to be Taken:** | No formal action; public hearing concerning the design of the proposal. |
| **Staff Recommendation:** | Take public testimony concerning the design of the proposal and provide direction to staff and the applicant. |
| **Finality of Decision:** | No decision will be made on the project at this time. |
| **For Further Information:** | Contact the case planner, **Lynn Warner**, at **(510) 238-6983** or by e-mail at lwarner@oaklandnet.com |

### SUMMARY

The purpose of this item is to receive preliminary feedback on the design of Phases 3 and 4 of the proposed MacArthur Station Project (formerly known as the Macarthur Transit Village). The Final Development Plan (FDP) for Phases 3 and 4 of the project would include construction of two 6-story mixed-use buildings on two blocks. Block A would entail the development of 286 residential units, 22,287 square feet of ground-floor commercial space, and 254 parking spaces; and Block C1 would entail the development of 93 residential units, 2,235 square feet of ground-floor commercial space, and 63 parking spaces.

No action will be taken at today's hearing. The recommendation to the City Council on project entitlements will occur at a future hearing of the full Planning Commission. Staff requests that the Design Review Committee review and comment on the proposed design of Phases 3 and 4 of the project.

# CITY OF OAKLAND PLANNING COMMISSION

Case File: PUDF08
Applicant: Bridge Housing
Address: 585 40th Street
Zone: S-15

## PROJECT SITE AND SURROUNDING AREA

The MacArthur Station area is located in North Oakland, within the area bounded by 40th Street, Telegraph Avenue, West Macarthur Boulevard, and State Route 24. The project site includes Block A, which is bounded by Frontage Road, 40th Street, Telegraph Avenue, and 39th Street; and Block C1, which is located on Internal Street and 39th Street adjacent to the Phase 2 affordable housing (see map on page 2). There are a variety of land uses surrounding the site including residential, civic, and commercial uses, as well as State Route 24, and the BART tracks.

## BACKGROUND

The Macarthur Station Project has been in development since 1993 with the involvement of the surrounding community and has been through several iterations. The Preliminary Development Plan (PDP) for the Planned Unit Development (PUD) was approved in July 2008 in association with several other approvals as listed below. The PUD/PDP approval authorizes the development of up to 675 residential units, 49,000 square feet of commercial space, 5,000 square feet of community space, a parking structure for BART patrons, and various infrastructure improvements. The PUD/PDP and Development Agreement also establish the approved land uses, density, bulk, massing, and design guidelines for the site.

1) **EIR**: The City certified an EIR for the MacArthur Station Project (SCH No. 2006022075) on July 1, 2008.
2) **S-15 Text Amendment and Rezoning**: The City approved Ordinance No. 12883 C.M.S. amending Section 17.97.170 of the Oakland Planning Code related to the minimum usable open space requirements in the S-15 zone and rezoning the MacArthur Station Project site to S-15 Transit-Oriented Development Zone on July 1, 2008.
3) **PUD/PDP**: The City approved a PUD/PDP permit on July 1, 2008 that guides development of the site in five stages.
4) **Major Conditional Use Permit**: The City approved a major conditional use permit to allow the S-15 parking requirements to be exceeded and to allow off-street parking for non-residential uses on July 1, 2008.
5) **Design Review**: The City approved preliminary design review for the PUD/PDP on July 1, 2008.
6) **Development Agreement**: The City approved Ordinance No. 12959 C.M.S on July 21, 2009 enacting a Development Agreement.

Additionally a Final Development Plan (FDP) was approved for Phase 1 (BART Parking Structure), as well as a Vesting Tentative Tract Map (VTTM), and site infrastructure in April 2011 (construction was recently completed), and an FDP was approved for Phase 2 (90 affordable units) in May of 2011 (units are currently under construction).

The approved PDP for the MacArthur Station Project involves the demolition of the existing BART surface parking lots and all existing buildings on the project site to allow for the construction of a new mixed-use, transit village development project. The phased project includes five new blocks that would accommodate a total of up to 675 residential units (including 108 affordable units), 49,000 square feet of neighborhood-serving retail and commercial uses, 5,000 square feet of community space, and a 480-space parking garage for BART patrons. Parking for residential units will be provided within each individual building, and approximately 30 commercial parking spaces would be provided in Building A. The MacArthur Station Project also includes creation of two new streets, which were approved as part of the VTTM and Phase 1 FDP: 39th Street will provide an east/west connection between Telegraph Avenue and Frontage Road, and Internal Street will provide a north/south connection from 39th Street to the southern edge of the project. Frontage Road will be reconfigured to allow continued access by shuttle operators. New sidewalks, bicycle paths, and streetscape improvements will also be constructed.

The project involves the construction of up to five phases (see Attachment A: Sheet A0.21) on the project site, including three mixed-use buildings with ground floor retail spaces and residential units on upper floors, one entirely residential building, and one BART parking garage.

Increased and enhanced access to the BART station is a key component of the proposed project. 39th Street, the main pedestrian and vehicular access to the project, is envisioned as a lively pedestrian street with shops and service uses that include outdoor displays and seating areas. The existing BART plaza will be renovated, and a new public plaza will be provided immediately east of the BART plaza and fare gates. The transit village plaza will include outdoor seating, public art, landscaping, and other activity to provide a sense of arrival to the project, especially for BART patrons as they enter and exit the station. Internal Street, which provides access to a majority of the residential units, is envisioned as a neighborhood street. Residential units will front onto Internal Street with stoops and front porches.

Phase 1 of the project includes the construction of the BART parking garage and site infrastructure. The BART parking garage opened on September 15, 2014 and the remaining site development work is scheduled to be completed in May 2015. Phase 2 of the project, which is currently under construction, entails the development of 90 units of affordable housing in a 4-story building fronting on Internal Street, and completion of all the public improvements for the project. Phase 2 is expected to be completed by June 2015.

## PROJECT DESCRIPTION

The proposed Phases 3 and 4 FDP entails the construction of two 6-story mixed-use buildings on Blocks A and C1. Block A would include 286 residential units (eight of which would be affordable), 22,287 square feet of ground-floor commercial and building amenity space, and 254 parking spaces. Block A is one structure although it is designed to look like two separate buildings separated by a landscaped mews. The mews would include landscaping, lighting, lounge seating, and café seating. The Block A west portion of the building includes 92 units and the Block A east portion of the building includes 194 units. Block C1 would include 93 residential units (four of which would be affordable), 2,235 square feet of ground-floor commercial space, and 63 parking spaces.

The design includes a variety of architectural styles and building materials. The design of the Block A west building, which is adjacent to the BART platform, is decidedly urban. Proposed building materials for Block A west include: metal panels, stucco, and glass solar shades. The height of the Block A east building steps down toward the adjacent building at the corner of 40th Street and Telegraph Avenue. Building materials for Block A east include: stucco, wood composite panels, aluminum composite panels, and architectural masonry units. Building materials for Block C1 include: cementitious composite panels, stucco, board formed concrete, and perforated metal solar shades. The Block C1 building is located adjacent to the 90-unit affordable housing project currently under construction.

**Design Guidelines**

The Conditions of Approval for the project require consistency with the MacArthur Station Design Guidelines. The portions of the Design Guidelines that are most relevant to the Phases 3 and 4 FDP are included in Attachment B with a description of the project's relationship to the applicable guidelines.

## KEY DESIGN ISSUES

The proposed Phases 3 and 4 FDP design was presented at a community meeting held on November 6, 2014 (following completion of this report). The key design comments from that meeting will be presented orally to the Committee at the hearing. Below is a summary of the key design issues staff has identified related to the proposal.

*Block A Elevations*

Staff recommends that the design incorporate stronger cornice lines on the intermediate and lower portions of the buildings to create a more pronounced roofline and a more defined top to the buildings, per Design Guidelines A1.14 and A3.12.

*Additional Information*

The applicant needs to provide more information for staff review including window details, detailed landscaping plans, and conceptual lighting and signage plans. Furthermore, the applicant needs to provide additional information regarding building height, parking, bike parking, loading, setbacks, open space, and recycling space for staff to confirm the Phases 3 and 4 FDP plans are consistent with such standards as detailed in the PUD/PDP approvals (including, but not limited to, the Conditions of Approval and the Development Agreement) and the S-15 zoning regulations (those which are not superseded by the PUD/PDP project approvals). It is anticipated that a variance to the required loading standards may be required. The project is expected to conform to all other applicable development standards.

## CONCLUSION

Staff recommends that the Design Review Committee take public testimony on the design of the proposal and provide direction to staff and the applicant on the key design issues identified above.

Prepared by:

Lynn Warner
Planner III

Approved by:

ROBERT MERKAMP
Development Manager

## ATTACHMENTS:

A. Project Plans
B. Design Guidelines Compliance Table