Legislative File Id. No. 18-2503
Introduction Date: 11/14/18
Enactment No.:
Enactment Date:
By:

LODESTAR

A Lighthouse Community Public School

Material Revision Application & Supporting Documentation
Change in Location for 2018-19

WHERE OAKLAND SHINES

Material Revision
Change of School Location/New School Facility Application

Name of School	Lodestar: A Lighthouse Community Charter Public School
Grades Served	K-12 at full growth K-4 & 6-8 during 2018-19
Current Address	2634 Pleasant St. Oakland, CA 94602
New Address	701 105th Ave. Oakland, CA 94603
Proposed Occupancy Date	Lease as of: July 23, 2018 Student Occupancy as of: August 13, 2018

Please note, schools in Year 1 of operation do not need to submit a Material Revision but will need to meet/submit the requirements as listed.

Material Revision Summary

In 2-pages or less, please describe the following:

- reason/rationale for changing the school location
- school/neighborhood community engagement regarding the new school location
- financial costs of the project and the resources available to fulfill these

Lodestar comment: Please find this summary attached to this application.

District Required Language

Please include the following language within the material revision of the "Facilities Plan" portion of the charter petition. Please submit a redlined version AND final version of the material revision pertinent to the "Facilities Plan" only.

*"**[INSERT SCHOOL NAME]** shall occupy facilities that comply with the Asbestos requirement as cited in the Asbestos Hazard Emergency Response Act (AHERA), 40CFR part 763. AHERA requires that any building leased*

or acquired that is to be used as a school or administrative building shall maintain an asbestos management plan."

*"If **[INSERT SCHOOL NAME]** fails to submit a certificate of occupancy or other valid documentation to the District verifying that the intended facility in which the school will operate complies with Education Code Section 47610, not less than 30 days before the school is scheduled to begin operation pursuant to the first year of this renewal term, it may not commence operations unless an exception is made by the Office of Charter Schools and/or the local planning department or equivalent agency. If **[INSERT SCHOOL NAME]** moves or expands to another facility during the term of this charter, **[INSERT SCHOOL NAME]** shall provide a certificate of occupancy or other valid documentation to the District verifying that the intended facility in which the school will operate complies with Education Code Section 47610, to the District for each facility at least 30 days before school is scheduled to begin operations in the facility or facilities. **[INSERT SCHOOL NAME]** shall not begin operation in any location for which it has failed to timely provide a certificate of occupancy to the District, unless an exception is made by the Office of Charter Schools and/or the local planning department or equivalent agency. Not withstanding any language to the contrary in this charter, the interpretation, application, and enforcement of this provision are not subject to the Dispute Resolution Process."*

Lodestar comment:
Please find Appendix F to Lodestar's original application attached to this application. Note that the italicized language above is already included in this original submission that was approved by the district, so no redline changes were made to this version.

Lodestar: A Lighthouse Community Charter Public School will provide the following evidence that the facility complies with the following legal requirements prior to occupying the property*:

- Zoning: The location of the school meets local zoning requirements.
- Building Code: Each building on the site meets applicable building code requirements.
- The charter school has considered and met all requirements of the California Environmental Quality Act (i.e. proof of Environmental Review).
- The proposed site has adequate classroom space, non-classroom space and specialized teaching space for the enrollment levels to be housed at the site.
- Compliance with California Department of Education regulations regarding safety factors for school site, including proximity to airports, high-voltage power lines, hazardous air emissions, railroads, high-pressure natural gas lines, gasoline lines, pressurized sewer lines and other high-pressure water pipelines, propane tanks, noise, major roadways, geological studies and soils analysis, traffic safety, and safe routes to the school.

Lodestar will schedule a walk-through of the new facility with the Office of Charter Schools to take place at least two weeks in advance of the proposed date of student occupancy. The following check-list items will be fulfilled (see next page).

Lodestar comment:

The Office of Charter Schools conducted a walk-through on August 2, 2018. The following checklist had been completed by Lodestar staff prior to that walk-through and was provided upon the visit. Additional comments have been made based on that review.

*Please note, all schools should refer to and comply with all of the regulations listed on the CDE website. To download the CDE's School Site Selection Checklist, click here.

Pre-Opening Site Walkthrough Checklist

This tool is intended to be used by the Office of Charter Schools and charter schools who are moving into a facility for the first time, to ensure that the facility is appropriate for the educational program of the school and the health and safety of the students.

- It is the expectation of the Office of Charter Schools to conduct a pre-opening site walk-through within two weeks prior to the first day of school.
- Any issues or concerns which surface during the course of the walkthrough that require official notice to the school, will receive a separate letter from the Office of Charter Schools to that affect.
- Otherwise, information noted in this document is intended to provide guidance and support to schools prior to opening.

School Name: Lodestar

Contact: Brandon Paige, Director of Finance

Location: 701 105th Ave..; Oakland, CA 94603

Date of Walkthrough: August 2, 2018

Participants: Brett Noble, Leslie Jimenez, Elizabet Wendt; Office of Charter Schools
Brandon Paige, Arlene Aldrette; LCPS

General Considerations		***Comments***
Facilities are sufficient to accommodate estimated student enrollment and to carry out the curricular and instruction program envisioned in the charter.	☒ Yes ☐ No	Capacity: 648 Students in existing buildings
Site has adequate space for the support services the school intends to provide to its students (i.e. nurse, counselors, tutors, after-school programs, etc.).	☒ Yes ☐ No	
Facilities include cafeteria or other suitable space for students to eat meals.	☒ Yes ☐ No	
Building placement is compatible (i.e. music room is not next to library).	☒ Yes ☐ No	
Facilities are generally conducive to a learning environment.	☒ Yes ☐ No	

General Considerations		Comments
Site is away from freeways, railways, flight patterns, excessive noise, obnoxious odors, toxic conditions, electromagnetic fields, earthquake faults, flood zones.	☒ Yes ☐ No	Meets CDE guidelines; Conditional Use Permit is ATTACHED.
Site has good access and dispersal roads.	☒ Yes ☐ No	
Site has separate bus loading, parking areas, and parent drop off areas.	☒ Yes ☐ No	No bus operated; allows for sufficient pick-up & drop-off, and staff parking
Facilities operation permits and certificates, including evidence of inspection by a structural engineer, fire marshal and occupancy certificates, zoning variances, building permits, etc. have been secured.	☒ Yes ☐ No	See binder documentation; Conditional Use Permit, C.O. are ATTACHED. Per district request in walk-through, applicable codes are also ATTACHED.
Facilities are sufficient to accommodate the administrative and business functions, including the storage of student and other records, reports, and documents.	☒ Yes ☐ No	Administrative offices are adequate; files are kept securely
Facilities meet requirements of the Americans with Disabilities Act, including (1) accessible routes from outside the school to the entry and from the school entry to all other buildings, and (2) stairs, ramps, toilets and signage that meet accessibility standards. *	☒ Yes ☐ No	** Likely to be met as a result of CO issuance*
Site and facilities are situated to minimize student contact with adults who do not have appropriate clearances as required by *Education Code* Section 44237.	☒ Yes ☐ No	All staff meet mandated clearances; visitor procedures are in place
Relocatable facilities are single story and meet local seismic safety requirements.	☐ Yes ☐ No	N/A; No relocatable facilities
Site has appropriate security (i.e. fencing, adequate lighting, alarms, etc.).	☒ Yes ☐ No	
Facilities are clean, sanitary, and free from conditions that would create a fire, or other hazard.	☒ Yes ☐ No	

Building Exterior		Comments
Facilities are generally free of chipped paint, cracked floors, uneven surfaces, mold and evidence of leaks.	☒ Yes ☐ No	

Building Exterior		***Comments***
Sidewalks, driveways, and outdoor play areas are relatively free of cracks and uneven surfaces, and are good repair.	☒ Yes ☐ No	
Perimeter fences are installed as necessary and are in good repair.	☒ Yes ☐ No	
Graffiti or other signs of vandalism to the building are absent.	☒ Yes ☐ No	
School exterior needs minimal cosmetic repairs, painting, or additional lighting.	☒ Yes ☐ No	
Windows and doors are intact and in good repair.	☒ Yes ☐ No	
Exterior stairs or handrails are in good repair.	☒ Yes ☐ No	
Exits to buildings are free of obstructions.	☒ Yes ☐ No	
Signage is adequate for traffic flow and for directions to school offices.	☒ Yes ☐ No	Traffic Impact Analysis is ATTACHED.
Trees and vegetation provide a clear view of the school; places to hide or to gain authorized access to the building are minimized.	☒ Yes ☐ No	
School site is substantially free of litter and clutter.	☒ Yes ☐ No	

Interior Entrances, Corridors, and Stairs		***Comments***
Heating and ventilation systems are adequate for the size of the building and numbers of students. *	☒ Yes ☐ No	Compliant with all building codes ** Likely to be met as a result of CO issuance*
Electrical system has no major code violations. *	☒ Yes ☐ No	** Likely to be met as a result of CO issuance*
Fire alarm system meets applicable local life safety codes; appropriate fire extinguishers exist in the building(s) and inspections are up to date. *	☒ Yes ☐ No	** Likely to be met as a result of CO issuance*
Restrooms are conveniently located and accessible to students; toilets are clean and operable.	☒ Yes ☐ No	Convenient and meets mandated ratios
Bracing of overhead light fixtures, heating and air conditioning vents, etc. comply with local ordinances. *	☒ Yes ☐ No	Compliant with all building codes ** Likely to be met as a result of CO issuance*

Interior Entrances, Corridors, and Stairs		***Comments***
Lighting, including night time lighting, is sufficient for the educational activities being conducted at the site.	☒ Yes ☐ No	Functioning properly; compliant with Title 24
Floors, walls, and ceilings are clean; ceiling tiles are all intact.	☒ Yes ☐ No	
Halls and stairs are adequately lighted.	☒ Yes ☐ No	
Exit doors, including emergency exits, are free of clutter and readily accessible; doors are secure to prevent intruders into the building.	☒ Yes ☐ No	
Interior is free of other hazards that could endanger student safety.	☒ Yes ☐ No	

Classrooms		***Comments***
Classroom size and layout are related to functions that will be performed in them (i.e. science and computer laboratories, special education, locker rooms, gyms, etc.).	☒ Yes ☐ No	
Desks, tables, and chairs are in good repair.	☒ Yes ☐ No	
Space is provided to secure computers and other expensive electronic devices.	☒ Yes ☐ No	Locking Chromebook storage in place
Bookcases, racks, fixtures, etc. are adequately anchored to adjacent structures.	☒ Yes ☐ No	
Gas, electrical, and water outlets and appliances are in good repair.	☒ Yes ☐ No	
Classrooms have adequate lighting.	☒ Yes ☐ No	
Classrooms are visible to teachers at all times; classroom layout is conducive to quick evacuation.	☒ Yes ☐ No	

Additional Comments

Facilities Plan Material Revision Submission Process

The charter school shall submit **three (3) hard copies** and **one (1) electronic copy** of the following documents at a regularly scheduled board meeting:

- completed application
- material revision summary (2 pages or less)
- redlined **AND** final version of the "Facilities Plan" portion of the petition **ONLY**; to include the "Required Text and Assurances" listed in the application, as well as taking into consideration the elements of evaluation (see evaluation tool below).

Within 30 days of the material revision being submitted, a public hearing will be scheduled where a school representative will make a brief presentation to the OUSD Board of Education (BOE). Within 60 days of the material revision being submitted, a decision will be made by the OUSD BOE at a regularly scheduled board meeting.

LODESTAR

A Lighthouse Community Public School

Material Revision Summary

In 2-pages or less, please describe the following:

- *reason/rationale for changing the school location*
- *school/neighborhood community engagement regarding the new school location*
- *financial costs of the project and the resources available to fulfill these*

Lodestar: A Lighthouse Community Charter Public School opened as a new charter school in August 2016. During our first year of operation (2016-17), we leased property at Patten University on Coolidge Avenue in the Fruitvale. We occupied the space for just a single year, and our lease expired as of June 30, 2017. In our second year of operation (2017-18), we moved into a former school space at St. Jarlath, also in the Fruitvale neighborhood at 2634 Pleasant St. This facility served as an adequate home but could not accommodate our growing school community beyond that year.

Knowing that we would need a new facility solution in 2018-19, Lodestar's team researched and pursued all available options in Oakland. In partnership with PCSD – a non-profit developer – we were able to identify and secure the property at 701 105th Ave. in Sobrante Park.

During the process of due diligence on the property that spanned most of the 2017-18 school year, our Lodestar staff continuously provided existing families with updates regarding our facility plans, making sure to keep those families engaged in Lodestar's options. We also engaged the Sobrante Park community heavily. Our staff attended Resident Action Committees, visited schools and libraries, attended holiday events, and held both outreach & welcome events at the new campus.

The financial costs of this project included three monetary commitments: 1) upfront contributions, 2) one-time costs associated with moving and FF&E, and 3) ongoing rent and facilities maintenance. The upfront contributions totaled $1.8M that Lodestar raised from philanthropy. The moving costs were minimal and were absorbed into Lodestar's operational budget. Beyond strictly moving, our FF&E (Furnitures, Fixtures & Equipment) were structured as part of Lodestar's operational budget. Finally, our ongoing rental costs paid to PCSD are embedded in a sustainable budget, partially supported by state facility funding (SB740). Beyond base rent, Lodestar still budgets accordingly for the necessary upkeep of its site. This includes ongoing maintenance, as well as training to support our supervision staff with proper street and rail crossing procedures.

Element F: Health and Safety of Pupils and Staff

Governing Law: *The procedures that the school will follow to ensure the health and safety of pupils and staff. These procedures shall include the requirement that each employee of the school furnish the school with a criminal record summary as described in Section 44237. Education Code Section 47605(b)(5)(F).*

Lighthouse Community Charter Public Schools has adopted and implemented a comprehensive set of health, safety, and risk management procedures and/or policies attached as **Appendix 23**. These procedures and policies have been developed in consultation with our insurance carriers and risk management experts. These policies are reviewed annually and updated as necessary to insure the health and safety of our students and staff. The policy is distributed to all staff and families.

The following is a summary of LCCPS health and safety policies:

Student and Staff Health and Safety Provisions

Procedures for Background Checks

LCCPS will comply with all applicable state and federal laws regarding the background checks and clearance of all State and Federal laws concerning the maintenance and disclosure of employee records. Employees and contractors of LCCPS will be required to submit to a criminal background check and furnish a criminal record summary as required by Education Code Sections 44237 and 45125.1. New employees not possessing a valid California Teaching Credential must submit two sets of fingerprints to the California Department of Justice for the purpose of obtaining a criminal record summary. The Director of Talent shall monitor compliance with this policy and report to the Board of Directors on an annual basis. The Director of Talent shall monitor the fingerprinting and background clearance of the Head of School. Volunteers who will volunteer outside of the direct supervision of a credentialed employee shall be fingerprinted and receive background clearance prior to volunteering.

Role of Staff as Mandated Child Abuse Reporters

All classified and certificated staff will be mandated child abuse reporters and follow all applicable reporting laws, the same policies and procedures used by schools within OUSD.

TB Testing

All staff at Lodestar will be tested for tuberculosis prior to commencing employment and working with students as required by Education Code Section 49406.

Immunizations

The School adheres to all law related to legally required immunizations for entering students and staff pursuant to Health and Safety Code Sections 120325-120375 and Title 17, California Code of Regulations Sections 6000-6075.

Medication in School

LCCPS has adopted a policy regarding the administration of medication in school in accordance with Education Code 49423.

Vision/Hearing/Scoliosis

Students will be screened for vision, hearing and scoliosis. The school will adhere to Education Code Section 49450, et seq., as applicable to the grade levels served.

Diabetes

The school will provide an information sheet regarding type 2 diabetes to the parent or guardian of incoming 5th grade students, pursuant to Education Code Section 49452.7. The information sheet shall include, but shall not be limited to, all of the following:

- A description of type 2 diabetes.
- A description of the risk factors and warning signs associated with type 2 diabetes.
- A recommendation that students displaying or possibly suffering from risk factors or warning signs associated with type 2 diabetes should be screened for type 2 diabetes.
- A description of treatments and prevention of methods of type 2 diabetes.
- A description of the different types of diabetes screening tests available.

Blood-Borne Pathogens

The Head of School, or designee, will meet state and federal standards for dealing with blood-borne pathogens and other potentially infectious materials in the workplace. The LCCPS Board of Directors will establish a written "Exposure Control Plan" designed to protect employees from possible infection due to contact with blood-borne viruses, including human immunodeficiency virus (HIV) and hepatitis B virus (HBV). A draft of this policy is included as **Appendix 24**.

Whenever exposed to blood or other bodily fluids through injury or accident, staff and students shall follow the latest medical protocol for disinfecting procedures.

Drug Free / Smoke Free Environment

The school maintains a drug and alcohol and smoke free environment.

Comprehensive Sexual Harassment Policies and Procedures

LCCPS and Lodestar are committed to providing a school that is free from sexual harassment, as well as any harassment based upon such factors as race, religion, creed, color, national origin, ancestry, age, medical condition, marital status, sexual orientation, or disability. LCCPS has a comprehensive policy to prevent and immediately remediate any concerns about sexual discrimination or harassment at the school (including employee to employee, employee

to student, and student to employee misconduct). Misconduct of this nature is very serious and will be addressed by the sexual misconduct policy included within our Uniform Complaint Procedure and included as **Appendix 10**.

Emergency Preparedness

LCCPS requires that instructional and administrative staff receive training in emergency response, including CPR and first aid. In addition, LCCPS has adopted an extensive Emergency Preparedness Handbook, that outlines policies and procedures for response to natural disasters and emergencies. This includes seating a school wide emergency team that includes teachers, administrators, counselors, and parents. The emergency plan spells out procedures for most conceivable emergencies and is included as **Appendix 25**.

Once a facility is identified, LCCPS will draft an Emergency Preparedness Handbook specific to the needs of the school site and resource center(s) in conjunction with law enforcement and the Fire Marshall. This handbook will include but is not limited to the following responses: fire, flood, earthquake, terrorist threats, and hostage situations. LCCPS requires that instructional and administrative staff receive training in emergency and first aid response, including appropriate "first responder" training or its equivalent. The training will be conducted by a certified instructor and provided during a regularly scheduled staff development meeting. The training will occur at least bi-annually.

Facility Safety

Facility

The charter shall comply with Education Code Section 47610 by either utilizing facilities that are compliant with the Field Act or facilities that are compliant with the State Building Code, including provisions for seismic safety. Toward that end, the school:

- Shall be housed in a facility that has received state Fire Marshal approval and that have been evaluated by a qualified structural engineer who has determined that the facilities present no substantial seismic safety hazard.
- Shall occupy facilities that comply with the Asbestos requirement as cited in the Asbestos Hazard Emergency Response Act (AHERA), 40CFR part 763. AHERA requires that any building leased or acquired that is to be used as a school or administrative building shall maintain an asbestos management plan.
- Shall secure a Certificate of Occupancy before start of school. If Lodestar fails to submit a certificate of occupancy or other valid documentation to the District verifying that the intended facility in which the school will operate complies with Education Code Section 47610, not less than 30 days before the school is scheduled to begin operation pursuant to the first year of this renewal term, it may not commence operations unless an exception is made by the Office of Charter Schools and/or the local planning department or equivalent agency. If Lodestar moves or expands to another facility during the term of this charter, Lodestar shall provide a certificate of occupancy or other valid documentation to the District verifying that the intended facility in which the school will operate complies with Education Code Section 47610,

to the District for each facility at least 30 days before school is scheduled to begin operations in the facility or facilities. Lodestar shall not begin operation in any location for which it has failed to timely provide a certificate of occupancy to the District, unless an exception is made by the Office of Charter Schools and/or the local planning department or equivalent agency. Notwithstanding any language to the contrary in this charter, the interpretation, application, and enforcement of this provision are not subject to the Dispute Resolution Process.

- Agrees to test sprinkler systems, fire extinguishers, and fire alarms annually at its facilities to ensure that they are maintained in an operable condition at all times.

Fire, Earthquake, and Lock-Down Drills

Students and staff will participate in earthquake, fire and lock-down drills as required under Education Code Section 32001.

Procedures

LCCPS has adopted procedures to implement the policy statements listed above, as provided in **Appendix 25**. Once a facility has been finalized, LCCPS will develop a site-specific school safety and emergency plan. The school safety plan will be guided by Education Code Section 35294(a). These policies and procedures have been and will continue to be incorporated as appropriate into the school's student, staff, and family handbooks and will be reviewed on an on-going basis by the Board of Directors and by the faculty and staff on a yearly basis during the Professional Development Institute.

CITY OF OAKLAND

DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA, SUITE 2114 • OAKLAND, CALIFORNIA 94612-2032

Department of Planning and Building
Zoning Division

(510) 238-3911
FAX (510) 238-4730
TDD (510) 238-3254

November 16, 2017

Jenna Stauffer
444 Hegenberger Road
Oakland, CA 94621

Dear Ms. Stauffer:

RE: Case File Nos.: PLN17-041; Address: 701-735 105th Avenue (APN: 045-5268-004-00; 005-00; 006-00; 007-00; 008-00; 009-00; 010-00; 011-00; 012-00; 013-00; 014-00; 015-00; 016-00; 017-00; 018-00)

Your application as noted above was **APPROVED** at the City Planning Commission meeting of **November 1, 2017**. The Commission's action is indicated below. This action became final ten (10) days after the date of the Planning Commission meeting since no appeal to the City Council was filed by **November 13, 2017**.

(X) Granted with required conditions. (Vote: 7 Ayes, 0 Nays)

If you have any questions, please contact the case planner, **Maurice Brenyah-Addow** at (510) **238-6342** or **mbrenyah@oaklandnet.com**.

Very Truly Yours,

Scott Miller

SCOTT MILLER
Zoning Manager

cc: Bill Quesada, Inspection Services
Philip Basada, Fire Prevention Bureau
Kevin Kashi, PWA
David Harlan, Building Services Division
Raymond Herbert, Acting City Surveyor
Darin Ranelletti, Bureau of Planning

George Neau, 701-735 105th Avenue, Oakland, CA 94603
Victoria Figg, 11127 Estepa Drive, Oakland, CA 94603
Paul & Aaron Forkash, 750 – 105th Avenue, Oakland, CA 94603
Adam Filyau, 750 105th Avenue, Oakland, CA 94603
Isaias Ramirez, 1528 76th Avenue, Oakland, CA 94621
Pamela Harris, 3143 Wisconsin Street, Oakland CA 94602
Teryra Hutchinson, 6219 Harmon Avenue, Oakland, CA 94621
Kymari Rhodes, 1337 C Street, Oakland, CA 94603

Attachments: Conditions of Approval

CONDITIONS OF APPROVAL

1. **Approved Use**

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, Staff report and the approved plans **dated February 14, 2017 and submitted February 14, 2017**, as amended by the following conditions of approval and mitigation measures, if applicable ("Conditions of Approval" or "Conditions").

2. **Effective Date, Expiration, Extensions and Extinguishment**

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **Two Calendar Years** from the Approval date, or from the date of the final decision in the event of an appeal, 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 Approval, 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 or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

3. **Compliance with Other Requirements**

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Bureau of Building, Fire Marshal, and Public Works Department. 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 #4.

4. **Minor and Major Changes**

a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning.

b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

5. Compliance with Conditions of Approval

a. The project applicant and property owner, including successors, (collectively referred to hereafter as the "project applicant" or "applicant") shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.

b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant's expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.

c. Violation of any term, Condition, or project description relating to the Approval 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 Approval or alter these Conditions if it is found that there is violation of any of the Conditions 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. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

6. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

7. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

8. Indemnification

a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this

Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

9. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

10. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential violations of the Conditions of Approval. The project applicant shall establish a deposit with the Bureau of Building, if directed by the Building Official, Director of City Planning, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

11. Public Improvements

The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and public improvement ("p-job") permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.

12. Compliance Matrix

The project applicant shall submit a Compliance Matrix, in both written and electronic form, for review and approval by the Bureau of Planning and the Bureau of Building that lists each Condition of Approval (including each mitigation measure if applicable) in a sortable spreadsheet. The Compliance Matrix shall contain, at a minimum, each required Condition

of Approval, when compliance with the Condition is required, and the status of compliance with each Condition. For multi-phased projects, the Compliance Matrix shall indicate which Condition applies to each phase. The project applicant shall submit the initial Compliance Matrix prior to the issuance of the first construction-related permit and shall submit an updated matrix upon request by the City.

13. **Construction Management Plan**

Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

14. **Regulatory Permits and Authorizations from Other Agencies**

Requirement: The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.

When Required: Prior to activity requiring permit/authorization from regulatory agency

Initial Approval: Approval by applicable regulatory agency with jurisdiction; evidence of approval submitted to Bureau of Planning

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

15. **Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP)**

a. All mitigation measures identified in the **Lighthouse Academy CEQA Analysis Document** are included in the Standard Condition of Approval / Mitigation Monitoring

and Reporting Program (SCAMMRP) which is included in these Conditions of Approval and are incorporated herein by reference, as Attachment C, as Conditions of Approval of the project. The Standard Conditions of Approval identified in the **Lighthouse Academy CEQA Analysis Document** are also included in the SCAMMRP, and are, therefore, incorporated into these Conditions by reference but are not repeated in these Conditions. To the extent that there is any inconsistency between the SCAMMRP and these Conditions, the more restrictive Conditions shall govern. In the event a Standard Condition of Approval or mitigation measure recommended in **Lighthouse Academy CEQA Analysis Document** has been inadvertently omitted from the SCAMMRP, that Standard Condition of Approval or mitigation measure is adopted and incorporated from the **Lighthouse Academy CEQA Analysis Document** into the SCAMMRP by reference, and adopted as a Condition of Approval. The project applicant and property owner shall be responsible for compliance with the requirements of any submitted and approved technical reports, all applicable mitigation measures adopted, and with all Conditions of Approval set forth herein at his/her sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or Condition of Approval, and subject to the review and approval by the City of Oakland. The SCAMMRP identifies the timeframe and responsible party for implementation and monitoring for each Standard Condition of Approval and mitigation measure. Monitoring of compliance with the Standard Conditions of Approval and mitigation measures will be the responsibility of the Bureau of Planning and the Bureau of Building, with overall authority concerning compliance residing with the Environmental Review Officer. Adoption of the SCAMMRP will constitute fulfillment of the CEQA monitoring and/or reporting requirement set forth in section 21081.6 of CEQA.

b. Prior to the issuance of the first construction-related permit, the project applicant shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

16. Regulatory Permits and Authorizations from Other Agencies

Requirement: The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.

When Required: Prior to activity requiring permit/authorization from regulatory agency

Initial Approval: Approval by applicable regulatory agency with jurisdiction; evidence of approval submitted to Bureau of Planning

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

Project-Specific Conditions

17. **Public Improvements Consistent with the LMSP**

Requirement: Plans shall be submitted for review and approval that include public right of way improvements that are consistent with the Lake Merritt Station Plan. This shall apply to all project frontages.

When Required: Prior to issuance of Building Permit

Initial Approval: Bureau of Planning; Public Works

Monitoring/Inspection: Bureau of Building

18. **Exterior Finishes**

Requirement: The final building permit plan set shall contain detailed information on all proposed exterior finishes for city approval. If requested by the Bureau of Planning sample materials shall be submitted and are subject to final approval by the Zoning Manager.

When Required: Prior to issuance of a Building Permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Planning

19. **Public Art for Private Development Condition of Approval**

Requirement: The project is subject to the City's Public Art Requirements for Private Development, adopted by Ordinance No. 13275 C.M.S. ("Ordinance"). The public art contribution requirements are equivalent to one-half percent (0.5%) for the "residential" building development costs, and one percent (1.0%) for the "non-residential" building development costs. The contribution requirement can be met through the commission or acquisition and installation of publicly accessible art fund, or satisfaction of alternative compliance methods described in the Ordinance. The applicant shall provide proof of full payment of the in-lieu contribution, or provide proof of installation of artwork on the development site prior to the City's issuance of a final certificate of occupancy for each phase unless a separate, legal binding instrument is executed ensuring compliance within a timely manner subject to City approval. On-site art installation shall be designed by independent artists, or artists working in conjunction with arts or community organizations that are verified by the City to either hold a valid Oakland business license and/or be an Oakland-based 501(c) (3) tax designated organization in good standing.

The project sponsor shall allocate the public art funds to hire Oakland-based artists to provide public art on or near the site if an in-lieu contribution is not selected. The method of calculating public art fees for mixed use developments (as explained below) shall apply:

For projects containing a mix of residential and nonresidential uses, the proportion of the building development cost assessed for the residential or commercial contribution is equal to the proportion of the floor area devoted to such activities. For example, if 80 percent of the floor area of a proposed new building is residential, then 80 percent of the development costs would be used to determine the residential share of the contribution. The remaining 20

percent of development cost would be used to determine the nonresidential share of the contribution fee.
When Required: Prior to issuance of Final Certificate of Occupancy for the first unit and Ongoing
Initial Approval: Bureau of Planning; Bureau of Building
Monitoring/Inspection: Bureau of Building

20. Development Impact Fees

The project shall be subject to, and Applicant shall agree to pay, any applicable development impact fees adopted by the City Council.
When Required: Prior to issuance of Building Permits
Initial Approval: Bureau of Planning; Bureau of Building
Monitoring/Inspection: Bureau of Building

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21. Green Building Requirements

a. ***Compliance with Green Building Requirements During Plan-Check***
Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code).

i. The following information shall be submitted to the City for review and approval with the application for a building permit:
- Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards.
- Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit.
- Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit.
- Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below.
- Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance.
- Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit.
- Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

ii. The set of plans in subsection (i) shall demonstrate compliance with the following:
- CALGreen mandatory measures.

- All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit.
- 53 per the appropriate checklist approved during the Planning entitlement process.
- All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted.
- The required green building point minimums in the appropriate credit categories.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. ***Compliance with Green Building Requirements During Construction***
Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project.

The following information shall be submitted to the City for review and approval:

i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit.

ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance.

iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

c. ***Compliance with Green Building Requirements After Construction***
Requirement: Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to **Green Building Certification Institute** and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above.

When Required: After project completion as specified

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

22. Sanitary Sewer System

Requirement: The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Department of Engineering and Construction

Monitoring/Inspection: N/A

23. Tentative Parcel Map

In order for the proposed project to be completed as condominiums, the project applicant shall revise the Tentative Parcel Map to reflect the change in number of units, and apply and receive approval for a Final Parcel Map with the City of Oakland Planning and Building Departments.

When Required: Prior to approval of issuance of certificate of occupancy

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

24. Other City Department Requirements

The applicant shall comply with all requirements of other City of Oakland departments.

When Required: Prior to application for a building permit

Initial Approval: Bureau of Planning; Bureau of Building; Fire Prevention; Public Works.

Monitoring/Inspection: Bureau of Building

25. Final Building Materials and Colors

The applicant shall submit the final exterior building materials and colors to the Oakland Planning Bureau for review and approval. The applicant shall provide the following details:

a. Samples of exterior materials, colors, and other finishes; and
b. Window details showing 2" minimum recess from surrounding exterior walls.

When Required: Prior to application for a building permit

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

26. Transportation Improvement Measures

The applicant shall incorporate the following transportation improvements into the proposed project, subject to City review and approval:

The following project-specific improvement measures have been identified to further reduce the less than significant transportation-related impacts related to vehicle access and circulation, bicycle access, and pedestrian access:

Improvement Measure TR-1: Entering Queue Abatement
For Phase 2 conditions, as an improvement measure to minimize the tendency for vehicles on Edes Avenue to queue across the railroad tracks, the project would work with City staff to identify appropriate street markings and signage, compliant with the MUTCD, to warn drivers where to wait in advance of the tracks when a downstream queue is present.

Improvement Measure TR-2: Spillback Queue Abatement
For Phase 1 and Phase 2 conditions, as an improvement measure to minimize the tendency for vehicles in queue to drop off or pick up students to spillback onto the local street network, the project sponsor should designate staff members to help manage the flow of traffic during drop off and pick up periods to ensure the queue continues to flow.

Improvement Measure TR-3: Transit Subsidy
As an improvement measure to encourage use of transit, the project sponsor should provide subsidized transit passes to all students and staff. The value of the student passes should be equivalent to the monthly pass value of an AC Transit local youth 31-day pass (currently $26.50). The value of the staff passes should be equivalent to the monthly pass value of the adult local 31-day pass (currently $81).

Improvement Measure TR-5: Signal Timing Modifications at 105th Avenue/Edes Avenue
For Phase 1 and Phase 2 conditions, since the pedestrian crossings at the intersection are approximately 32 feet to 40 feet in length, the pedestrian clearance time should be increased to 10 to 12 seconds, relative to the crossing distance. The MUTCD standard assumption of 3.5 feet per second crossing speed should be used to compute the pedestrian clearance time for each crossing.

Improvement Measure TR-5: Pedestrian-Specific Points of Access to Project Site
As the site plan is refined for Phase 1 and Phase 2, pedestrian-specific access points should be incorporated into the site plan. For example, pedestrian-only gates should be installed in the existing perimeter fence along 105th Avenue and Edes Avenue so that pedestrians can enter and exit the project site via pathways other than the vehicle driveways.

Transportation and Parking Demand Management Plan
The following transportation demand management measures have been recommended as part of the TDM plan:

TDM-1: TDM Program Coordinator. The TDM Program Coordinator is responsible for implementation, monitoring, and reporting of the TDM Plan. The TDM Coordinator would

facilitate site inspections by City staff to verify that the standards specified as conditions of approval are met. This person(s) can be a school employee or a third party provider that runs the program.

TDM-2: Bike Parking. The project would provide short-term and long-term bicycle parking facilities to meet maximum estimated demand. The maximum estimated demand is calculated as 200 percent of the highest peak hour demand based on the bike mode share and estimated travel demand and the increase in bike trips resulting from implementation of this TDM strategy. The project shall include at least 20 short-term and 20 long-term bicycle parking spaces. The number of bicycle parking spaces would be equitably adjusted (increased) based on observed demand.

TDM-3: Transit and Bicycle Incentives. The project would provide subsidized/discounted daily or monthly public transit or bike share passes. The project would provide the equivalent of a $1.50 per trip subsidy for these modes.

TDM-4: School Pool Program. The project would develop and implement a ridesharing program for students. The ridesharing "School Pool" program will help to match parents to transport students to/from campus. The VMT reduction calculation assumes aggressive implementation with a 35 percent adoption rate.

TDM-5: Pedestrian Network Improvements. The project would implement on-site and off-site improvements to the pedestrian network and link areas of the project site and encourage people to walk instead of drive. The project would also minimize barriers to pedestrian access and interconnectivity. The project would implement the following improvements:

- o Modify signal timing at 105th Avenue/Edes Avenue to increase pedestrian clearance time across 105th Avenue (Improvement Measure TR-3);8
- o Install reconstructed sidewalks and roadway striping upgrades at the nearby railroad crossings at 105th Avenue and Edes Avenue;9 and,
- o Provide pedestrian access points to reduce out of direction travel and allow people to enter the campus from multiple directions (Improvement Measure TR-4).

The project sponsor shall submit an annual compliance report for review and approval by the City. This report will be submitted within one year of occupancy and every following year for a total of at least five years. If timely reports are not submitted, the reports indicate a failure to achieve the stated policy goals, or the required alternative mode split is still not achieved, staff will work with the project sponsor to find ways to meet their commitments and achieve trip reduction goals. If the issues cannot be resolved, the matter may be referred to the Planning Commission for resolution. Project sponsors shall be required, as a condition of approval to reimburse the City for costs incurred in maintaining and enforcing the trip reduction program for the approved project.
When Required: Prior to application for; issuance of; Building Permits; final inspections; issuance of Certificate of Occupancy; and Ongoing
Initial Approval: Bureau of Planning; Bureau of Building; PWA
Monitoring/Inspection: Bureau of Building

27. Emergency Preparedness Plan

The project applicant shall develop an emergency preparedness plan for the school to address safety, shelter-in-place and evacuation measures in the event of any train derailment or hazardous materials spill due to the proximity of rain tracks in the vicinity of the proposed school.
When Required: Prior to application for; issuance of; Building Permits; final inspections; issuance of Certificate of Occupancy; and Ongoing
Initial Approval: Bureau of Planning; Bureau of Building; PWA
Monitoring/Inspection: Bureau of Building

Applicant Statement

I have read and accept responsibility for the Conditions of Approval. I agree to abide by and conform to the Conditions of Approval, as well as to all provisions of the Oakland Planning Code and Oakland Municipal Code pertaining to the project.

_____
Name of Project Applicant

_____
Signature of Project Applicant

_____
Date

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

Attachment C

Standard Conditions of Approval and Mitigation and Monitoring Reporting Plan

This Standard Conditions of Approval and Mitigation and Monitoring Reporting Plan (SCAMMRP) is based on the CEQA Analysis prepared for the Lighthouse Academy Project.

The City of Oakland's Uniformly Applied Development Standards, adopted as Standard Conditions of Approval (Standard Conditions of Approval, or SCAs), were originally adopted by the City in 2008 (Ordinance No. 12899 C.M.S.) pursuant to Public Resources Code section 21083.3) and have been incrementally updated over time. The SCAs incorporate development policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection, Stormwater Water Management and Discharge Control Ordinance, Oakland Tree Protection Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, Green Building Ordinance, historic/Landmark status, California Building Code, and Uniform Fire Code, among others), which have been found to substantially mitigate environmental effects. These SCAs are incorporated into Projects as conditions of approval, regardless of the determination of a Project's environmental impacts. As applicable, the SCAs are adopted as requirements of an individual Project when it is approved by the City, and are designed to, and will, avoid or substantially reduce a Project's environmental effects.

In reviewing Project applications, the City determines which SCAs apply based upon the zoning district, community plan, and the type of permits/approvals required for the Project. Depending on the specific characteristics of the Project type and/or Project site, the City will determine which SCAs apply to a specific Project. Because these SCAs are mandatory City requirements imposed on a city-wide basis, environmental analyses assume that these SCAs will be imposed and implemented by the Project, and are not imposed as mitigation measures under CEQA.

All SCAs identified in the CEQA Analysis—which are consistent with the measures and conditions presented in the City of Oakland General Plan, Land Use and Transportation EIR (LUTE EIR, 1998)—are included herein. To the extent that any SCA identified in the CEQA Analysis was inadvertently omitted, it is automatically incorporated herein by reference.

- The first column identifies the SCA applicable to that topic in the CEQA Analysis.
- The second column identifies the monitoring schedule or timing applicable to the Project.
- The third column names the party responsible for monitoring the required action for the Project.

In addition to the SCAs identified and discussed in the CEQA Analysis, other SCAs that are applicable to the Project are included herein.

The Project sponsor is responsible for compliance with any recommendations in approved technical reports and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific SCA, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the SCAs will be the responsibility of the Planning and Zoning Division. Prior to the issuance of a demolition, grading, and/or construction permit, the Project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule. Note that the SCAs included in this document are referred to using an abbreviation for the environmental topic area and are numbered sequentially for each topic area—i.e., SCA-AIR-1, SCA-AIR-2, etc. The SCA title and the SCA number that corresponds to the City's master SCA list are also provided in the Appendix listing—i.e., SCA-AIR-1: Construction-Related Air Pollution (Dust and Equipment Emissions) (#19).

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
Aesthetics, Shadow, and Wind			
SCA AES-1 (Standard Condition of Approval 16): *Graffiti Control* a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following: i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. iii. Replacing with new surfacing (with City permits if required).	Ongoing.	N/A	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA AES-2 (Standard Condition of Approval 17): *Landscape Plan* a. Landscape Plan Required The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. b. Landscape Installation The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated	a. Prior to approval of construction-related permit. b. Prior to building permit final. c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Planning and Building c. N/A	a. N/A b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Condition of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring Inspection
cost of implementing the Landscape Plan based on a licensed contractor's bid. c. Landscape Maintenance 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. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.			
SCA AES-3 (Standard Condition of Approval 18): *Lighting* Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties.	Prior to building permit final.	N/A	City of Oakland Bureau of Building Services Division, Zoning Inspections
Air Quality			
SCA AIR-1 (Standard Condition of Approval 19): *Construction-Related Air Pollution Controls (Dust and Equipment Emissions)* The project applicant shall implement all of the following applicable air pollution control measures during construction of the project: a. Water all exposed surfaces of 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 feasible. 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.	During construction.	N/A	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Condition of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring Inspection
g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in 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. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations").			
i. All construction equipment shall be maintained 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.			
j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas.			
k. 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.			
l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.			
m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.			
n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).			
o. 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.			
p. 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.			

Standard Condition of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring Inspection
q. 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. r. Activities such as excavation, grading, and other ground-disturbing construction activities shall be phased to minimize the amount of disturbed surface area at any one time. s. All trucks and equipment, including tires, shall be washed off prior to leaving the site. t. 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. u. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") must meet emissions and performance requirements one year in advance of any fleet deadlines. Upon request by the City, the project applicant shall provide written documentation that fleet requirements have been met. 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 California Air Resources Board's most recent certification standard. y. Post a publicly-visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.			
SCA AIR-2 (Standard Condition of Approval 20): *Exposure to Air Pollution (Toxic Air Contaminants)* ***a. Health Risk Reduction Measures*** Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods:	a. Prior to approval of construction-related permit. b. Ongoing	a. City of Oakland Bureau of Planning and Building; b. N/A	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building

Standard Condition of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring Inspection
i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City.			Services Division, Zoning Inspections
- or -			
ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: • Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. • Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). • Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. • The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a			

Standard Condition of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring Inspection
distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods. • Sensitive receptors shall be located on the upper floors of buildings, if feasible. • Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid popular (*Populus deltoids X trichocarpa*), and Redwood (*Sequoia sempervirens*). • Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible. • Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible. • Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: – Installing electrical hook-ups for diesel trucks at loading docks. – Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards. – Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. – Prohibiting trucks from idling for more than two minutes. – Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented.			
b. *Maintenance of Health Risk Reduction Measures* Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and			

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maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.			
SCA AIR-3 (Standard Condition of Approval 21) *Stationary Sources of Air Pollution (Toxic Air Contaminants)* The Project applicant shall incorporate appropriate measures into the Project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose one of the following methods: a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. or b The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: i. Installation of non-diesel fueled generators, if feasible, or; ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.	Prior to approval of Construction-related permit	City of Oakland Bureau of Building Services Division.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA AIR-4 (Standard Condition of Approval 23): *Asbestos in Structures* Requirement: The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and	Prior to approval of construction-related permit	City of Oakland Bureau of Building Services Division BAAQMD	City of Oakland Bureau of Building Services Division, Zoning Inspections BAAQMD

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Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.			
SCA GEN-1 (Standard Condition of Approval 13): *Construction Management Plan* Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.	Prior to issuance of construction related permit	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections
Biological Resources			
SCA BIO-1 (Standard Condition of Approval 26): *Tree Removal During Bird Nesting Season* To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed 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 the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence 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 California Department of Fish and	Prior to removal of trees.	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections

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Wildlife, 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			
SCA BIO-2 (Standard Condition of Approval 27): *Tree Permit* *a. Tree Permit Required* Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. *b. Tree Protection During Construction* Requirement: Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter	a. Prior to approval of construction-related permit b. During construction. c. Prior to building permit final.	a. City of Oakland Public Works Department, Tree Division; Bureau of Buildings b. City of Oakland Public Works Department, Tree Division c. Public Works Department, Tree Division	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections

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the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree. iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.			
v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations. c. *Tree Replacement Plantings* Requirement: Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria: i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered. ii. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus			

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menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia californica (California Bay Laurel), or other tree species acceptable to the Tree Division. iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate. iv. Minimum planting areas must be available on site as follows: • For Sequoia sempervirens, three hundred fifteen (315) square feet per tree; • For other species listed, seven hundred (700) square feet per tree. v. In the event that replacement trees are required but cannot be planted due to site constraints, and in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians. vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense.			
Cultural Resources			
SCA CUL-1 (Standard Condition of Approval 29): *Archaeological and Paleontological Resources – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of	During construction.	N/A	City of Oakland Bureau of Building Services Division

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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, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.			
SCA CUL-2 (Standard Condition of Approval SCA 30): *Archaeologically Sensitive Areas—Pre-Construction Measures* Requirement: The project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT Sheet) concerning archaeological resources. **Provision A: Intensive Pre-Construction Study.** The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period	Prior to approval of Construction-related permit; during construction	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division

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archaeological resources on the project site. At a minimum, the study shall include: a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources. b. A report disseminating the results of this research. c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources. If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction. **Provision B: Construction ALERT Sheet.** The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil-disturbing activities within the project site. The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, firecracked rocks); concentrations of bones; recognizable Native American artifacts			

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(arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted invisible location at the project site.			
SCA CUL-3 (Standard Condition of Approval SCA 31): *Human Remains – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event 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 California Health and Safety Code. 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 and at the expense of the project applicant.	During construction.	N/A	City of Oakland Bureau of Building Services Division, Zoning Inspections
Geology and Soils			
SCA GEO-1 (Standard Condition of Approval 33): *Construction-Related Permit(s)* Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA GEO-2 (Standard Condition of Approval 34): *Soils Report* Requirement: The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections	City of Oakland Bureau of Building Services Division, Zoning Inspections

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report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction.			
Greenhouse Gas Emissions/Global Climate Change			
Also refer to **SCA-TRANS-1:** *Transportation and Parking Demand Management* **(#71)** and **SCA-UTIL-3:** *Construction and Demolition Waste Reduction and Recycling (#74)* for additional Greenhouse Gas Conditions of Approval that apply to this project			
Hazards and Hazardous Materials			
SCA HAZ-1 (Standard Condition of Approval 39): *Hazards Materials Related to Construction* Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and 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 project 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 notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the	During construction.	N/A	City of Oakland Bureau of Building Services Division, Zoning Inspections

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measures have been implemented under the oversight of the City or regulatory agency, as appropriate.			
SCA HAZ-2 (Standard Condition of Approval 40): *Hazardous Building Materials and Site Contamination* *a. Hazardous Building Materials Assessment* Requirement: The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.	a. Prior to approval of demolition, grading or building permits b. Prior to approval of construction-related permit c. Prior to approval of construction-related permit d. During Construction	a. City of Oakland Bureau of Building Services Division b. Applicable regulatory agency with jurisdiction c. City of Oakland Bureau of Building Services Division d. N/A	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. Applicable regulatory. agency with jurisdiction c. City of Oakland Bureau of Building Services Division, Zoning Inspections d. City of Oakland Bureau of Building Services Division, Zoning Inspections
b. Environmental Site Assessment Required Requirement: The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. *c. Health and Safety Plan Required* Requirement: The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. *d. Best Management Practices (BMPs) Required for Contaminated Sites*			

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Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.			
See **SCA AIR-4, Asbestos in Structures.** See *Air Quality*, above for actions to address Hazardous Materials impacts.			
Hydrology and Water Quality			
SCA HYD-1 (Standard Condition of Approval 45): *Erosion and Sedimentation Control Plan for Construction* ***a. Erosion and Sedimentation Control Plan Required*** Requirement: The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. 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 and/or construction 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,	a. Prior to approval of construction-related permit. b. During construction.	a. City of Oakland Bureau of Building Services Division b. N/A	a. N/A b. City of Oakland Bureau of Building Services Division, Zoning Inspections
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			

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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 City. 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. b. *Erosion and Sedimentation Control During Construction* Requirement: The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.			
Noise			
SCA NOI-1 (Standard Condition of Approval 58): *Construction Days/Hours* Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours: a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. 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. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property	During construction.	N/A	City of Oakland Bureau of Building Services Division, Zoning Inspections

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owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.			
SCA NOI-2 (Standard Condition of Approval 59): *Construction Noise* Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: 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. 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 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. c. Applicant shall use temporary power poles instead of generators where feasible. d. Stationary noise sources shall be located as far from adjacent properties 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. e. 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.	During construction.	N/As	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-3 (Standard Condition of Approval 60): *Extreme Construction Noise* ***a. Construction Noise Management Plan Required***	a. Prior to approval of construction-	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division,

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Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. 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; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. 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 v. Monitor the effectiveness of noise attenuation measures by taking noise measurements. *b. Public Notification Required* Requirement: The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.	related permit. b. During construction.		Zoning Inspections
SCA NOI-4 (Standard Condition of Approval 61): *Project-Specific Construction Noise Reduction Measures* Requirement: Requirement: The project applicant shall submit a Construction Noise Management Plan	Prior to approval of construction-related permit	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction noise impacts. The project applicant shall implement the approved Plan during construction.			
SCA NOI-5 (Standard Condition of Approval 62): *Construction Noise Complaints* Requirement: The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-6 (Standard Condition of Approval 63) *Exposure to Community Noise* Requirement: The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-7 (Standard Condition of Approval 64): *Operational Noise* Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning	Ongoing.	City of Oakland Bureau of Building Services Division,	City of Oakland Bureau of Building Services Division, Zoning Inspections

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
Code and chapter 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 City.			
Recreation			
Refer to **SCA HAZ-2** *Hazardous Materials Related to Construction* (#39) and **SCA-HAZ-3** *Hazardous Building Materials and Site Contamination* (#40) to address potential recreation impacts			
Transportation and Circulation			
SCA TRA-1 (Standard Condition of Approval 68): *Construction Activity in the Public Right-of-Way* *a. Obstruction Permit Required* Requirement: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks. *b. Traffic Control Plan Required* Requirement: In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction. *c. Repair of City Streets* Requirement: The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.	a. Prior to approval of construction-related permit. b. Prior to approval of construction-related permit. c. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division b. Public Works Department, Transportation Services Division c. N/A	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-2 (Standard Condition of Approval 69): *Bicycle Parking* Requirement: The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland	Prior to approval of construction-related permit.	City of Oakland Bureau of Planning and Building	City of Oakland Bureau of Building Services Division, Zoning Inspections

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.			
SCA TRA-3 (Standard Condition of Approval 70): *Transportation Improvements.* The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Study for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, and pedestrian and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for, among other items, the elements listed below: a. 2070L Type Controller with cabinet accessory b. GPS communication (clock) c. Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile) d. Countdown pedestrian head module switch out e. City Standard ADA wheelchair ramps f. Video detection on existing (or new, if required) g. Mast arm poles, full activation (where applicable) h. Polara Push buttons (full activation) l. Bicycle detection (full activation) j. Pull boxes k. Signal interconnect and communication with trenching (where applicable), or through existing conduit (where applicable), 600 feet maximum l. Conduit replacement contingency m. Fiber switch n. PTZ camera (where applicable)	Prior to building permit final or as otherwise specified	Bureau of Building; Public Works Department, Transportation Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
o. Transit Signal Priority (TSP) equipment consistent with other signals along corridor p. Signal timing plans for the signals in the coordination group			
SCA TRA-4 (Standard Condition of Approval 71): *Transportation and Parking Management Plan* *a. Transportation and Parking Demand Management (TDM) Plan Required* Requirement: The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. i. The goals of the TDM Plan shall be the following: • Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project. • Achieve the following project vehicle trip reductions (VTR): – Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR • Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate. • Enhance the City's transportation system, consistent with City policies and programs. ii. TDM strategies to consider include, but are not limited to, the following: • Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement. • Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping. • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to	Prior to building permit final or as otherwise specified	Bureau of Building; Public Works Department, Transportation Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project. • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan. • Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements. • Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency). Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes. • Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3). • Guaranteed ride home program for employees, either through 511.org or through separate program. • Pre-tax commuter benefits (commuter checks) for employees. • Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants. • On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools. • Distribution of information concerning alternative transportation options. • Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive			

Standard Condition of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring Inspection
or transit pass alternative to a free parking space in commercial properties. • Parking management strategies including attendant/valet parking and shared parking spaces. • Requiring tenants to provide opportunities and the ability to work off-site. • Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week). • Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours. The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report. *b. TDM Implementation – Physical Improvements* Requirement: For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project. *c. TDM Implementation – Operational Strategies* Requirement: For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports			

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.			
SCA TRA-5 (Standard Condition of Approval 73): *Railroad Crossings* Requirement: The project applicant shall submit for City review and approval a Diagnostic Review to evaluate potential impacts to at-grade railroad crossings resulting from project-related traffic. In general, the major types of impacts to consider are collisions between trains and vehicles, trains and pedestrians, and trains and bicyclists. The Diagnostic Review shall include specific traffic elements, such as roadway and rail description, accident history, traffic volumes (all modes, including pedestrian and bicyclist crossing movements), train volumes, vehicular speeds, train speeds, and existing rail and traffic control. Where the Diagnostic Review identifies potentially substantially dangerous crossing conditions at at-grade railroad crossings caused by the project, measures relative to the project's traffic contribution to the crossings shall be applied through project redesign and/or incorporation of the appropriate measures to reduce potential adverse impacts at the crossings. These measures may include, without limitation, the following: a. Installation of grade separations at crossings, i.e., physically separating roads and railroad tracks by constructing overpasses or underpasses b. Improvements to warning devices at existing highway rail crossings that are impacted by project traffic c. Installation of additional warning signage d. Improvements to traffic signaling at intersections adjacent to crossings, e.g., signal preemption e. Installation of median separation to prevent vehicles from driving around railroad crossing gates f. Where sound walls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains g. Prohibition of parking within 100 feet of the crossings to improve the visibility of warning devices and approaching trains h. Construction of pull-out lanes for buses and vehicles transporting hazardous materials	Prior to approval of construction-related permit	Bureau of Building; Public Works Department, Transportation Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
i. Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way j. Elimination of driveways near crossings k. Increased enforcement of traffic laws at crossings l. Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings Any proposed improvements must be coordinated with California Public Utility Commission (CPUC) and affected railroads and all necessary permits/approvals obtained, including a GO 88-B Request (Authorization to Alter Highway Rail Crossings). The project applicant shall implement the approved measures during construction of the project.			
Tribal Cultural Resources			
Refer to **SCA CUL-1** *Archaeological and Paleontological Resources—Discovery During Construction* (#29); **SCA CUL-2** *Archaeologically Sensitive Areas—Pre-construction Measures* (#30); and **SCA CUL-3,** *Human Remains—Discovery During Construction* (#31) for actions to address potential impacts to Tribal Cultural Resources			
Utilities and Services			
SCA UTL-1 (Standard Condition of Approval 74) *Construction and Demolition Waste Reduction and Recycling* Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.	Prior to approval of construction-related permit	City of Oakland Public Works Department, Environmental Services Division	City of Oakland Public Works Department, Environmental Services Division
SCA UTL-2 (Standard Condition of Approval 77) *Green Building Requirements* *a. Compliance with Green Building Requirements During Plan-Check*	a. Prior to approval of construction-related permit.	a. City of Oakland Bureau of Building	a. N/A b. City of Oakland Bureau of Building

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. • Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: • CALGreen mandatory measures. • All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit.	b. During construction. c. Prior to final approval.	Services Division b. N/A c. City of Oakland Bureau of Planning and Building	Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
• LEED Silver (minimum 50 points) (except the cool roof requirement) per the appropriate checklist approved during the Planning entitlement process. • CALGreen mandatory measures for non-residential construction • Green Building Certification (Green Building Certification Institution and City staff for CALGreen)			
• All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. • The required green building point minimums in the appropriate credit categories. *b. Compliance with Green Building Requirements During Construction* Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. *c. Compliance with Green Building Requirements After Construction* Requirement: Prior to the finagling of the building permit, the Green Building Certifier shall submit the appropriate documentation to City staff and attain the minimum required point level.			
SCA UTL-5 (Standard Condition of Approval 79) *Sanitary Sewer System* Requirement: The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City	Prior to approval of construction-related permit.	City of Oakland Public Works Department, Department of	N/A

	Implementation/Monitoring		
Standard Condition of Approval	**When Required**	**Initial Approval**	**Monitoring Inspection**
of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.		Engineering and Construction	
SCA UTL-6 (Standard Condition of Approval 80) *Storm Drain System* Requirement: The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division	City of Oakland Bureau of Building Services Division, Zoning Inspections

#919354-77-10/[illegible]-Visa Card 1388.48 OK to collect TCO 10/22/18 (1 EACH)

PLANNING & BUILDING DEPARTMENT

250 FRANK H. OGAWA PLAZA. SECOND FLOOR. OAKLAND, CA. 94612

TEMPORARY CERTIFICATE OF OCCUPANCY REQUEST

*Non-Refundable * 694.24 Application fee*

JOBSITE ADREESS	735 105TH AVE Bldg #1 & #2 B1704469 & B1704467						
PERMIT NUMBERS	B1704469 B1704467						
USE OF PREMISSES	EDUCATIONAL						
ADDRESS		CITY	OAKLAND	STATE CA		ZIP	94603
TELEPHONE		EMAIL					
PROPERTY OWNER							
REQUESTOR	PCSD	DURATION REQUESTED	90 days	DAYS 90		VACATE DATE	2/12/19

We request temporary approval to occupy the premises before final approval.
We understand that Final inspection approvals must be obtained before expiration of a temporary occupancy certificate ("vacate date"). Otherwise, the premises must be vacated immediately, or the occupants and owner will be subject to citation and fines and the utilities may be disconnected without further notice.

Describe area if partial occupancy is requested

PERMITEE		DATE		OWNER/TENANT		DATE	

For Official Use Only

DEPARTMENT	APPROVAL	SIGNATURE	DATE	CONDITIONS FOR TEMPORARY OCCUPANCY
Transportation				
Public Works				
Fire Prevention				
Planning				
Plumbing	FINAL			
Mechanical	↓			
Electrical				
Engineering Services	↓			
Building				
[illegible]				

** fees include 9.5% Records and Management Fee and 5.25% Technology Enhancement Fee*

LIGHTHOUSE Community Public Schools

Brandon Paige <brandon.paige@lighthousecharter.org>

Code References

Nina Idzerda <nidzerda@hy-arch.com> Thu, Aug 2, 2018 at 3:02 PM
To: Brandon Paige <brandon.paige@lighthousecharter.org>
Cc: Arlene Aldrette <arlene.aldrette@lighthousecharter.org>

Brandon,

Attached are code references you can send to the district. For the bathroom, the code uses words like "suggested" and "shall be permitted" which means that if you would like to, you can stray from the standard. I've also attached an excerpt from the existing structures chapter that states that systems that were compliant at the time of their construction can remain. Let me know if you need more information.

Nina Idzerda

HIBSER YAMAUCHI Architects, Inc.

Oakland 510.446.2222

Davis 530.758.1270

Los Angeles 310.821.4500

www.hy-arch.com

2 attachments

Chp 34 Existing Structures.pdf
138K

Chp 11B-6 Plumbing.pdf
251K

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 34*A* – EXISTING STRUCTURES

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.
See Chapter 1 for state agency authority and building applications.)

Adopting agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
Adopt entire chapter										X											
Adopt entire chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below																					
Chapter / Section																					

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 34A

EXISTING STRUCTURES

SECTION 3401A
GENERAL

3401A.1 Scope. *The provisions of this chapter shall control the alteration, repair, addition and change of occupancy of existing structures for applications listed in Sections 1.10.1 **[OSHPD 1]** regulated by the Office of Statewide Health Planning and Development (OSHPD).*

SFM and DSA-AC requirements for existing structures shall be enforced by the Office of Statewide Health Planning and Development (OSHPD).

[DSA-AC] For applications listed in Section 1.9.1 regulated by the Division of the State Architect-Access Compliance for accessibility requirements, see Chapter 11B.

3401A.1.1 Additions, alterations and repairs. *The additions, alterations and repairs shall follow one of the three procedures listed below:*

1. *Provisions in Sections 3403A, 3404A and 3405A; or*
2. *Nonconforming buildings provisions in Section 3411A; or*
3. *Performance based or prescriptive provisions in Section 3412A.*

Items 1 through 3 above shall not be applied in combination with each other, except when explicitly permitted.

The services/systems, utilities and means of egress shall satisfy requirements in Sections 3416A and 3417A.

3401A.2 Maintenance. *Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by this code shall be maintained in conformance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. To determine compliance with this subsection, the building official shall have the authority to require a building or structure to be reinspected. The requirements of this chapter shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures.*

3401A.3 Compliance. *Alterations, repairs, additions and changes of occupancy to, or relocation of, existing buildings and structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy or relocation, respectively, in the California Energy Code, California Fire Code, California Mechanical Code, California Plumbing Code and California Electrical Code, California Residential Code and NFPA 70. Where provisions of the other codes conflict with provisions of this chapter, the provisions of this chapter shall take precedence.*

3401A.4 Building materials, equipment and systems. *Building materials, equipment, and systems shall comply with the requirements of this section.*

3401A.4.1 Existing materials and equipment. *Materials and equipment already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the building official to be unsafe in accordance with Section 116.*

3401A.4.2 New and replacement materials and equipment. *Except as otherwise required or permitted by this code, materials and equipment permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided no hazard to life, health or property is created. Hazardous*

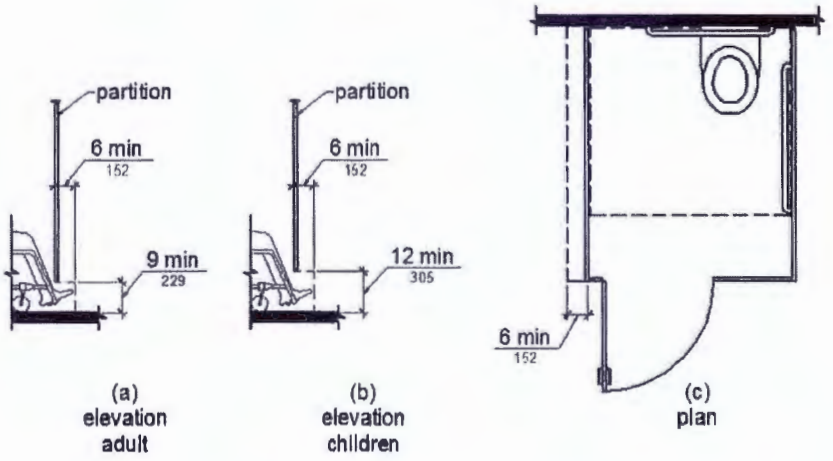
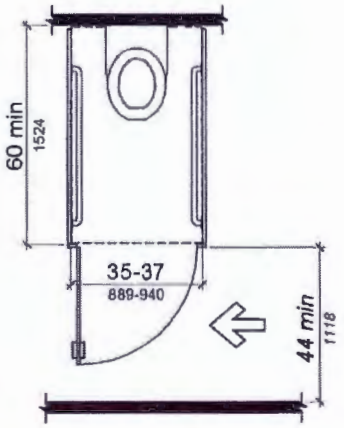


FIGURE *11B*-604.8.1.4
WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT TOE CLEARANCE

***11B*-604.8.2 Ambulatory accessible compartments.** Ambulatory accessible compartments shall comply with *Section 11B*-604.8.2.



11B-604.8.2
AMBULATORY ACCESSIBLE TOILET COMPARTMENT

***11B*-604.8.2.1 Size.** Ambulatory accessible compartments shall have a depth of 60 inches (*1524* mm) minimum and a width of 35 inches (*889* mm) minimum and 37 inches (940 mm) maximum.

***11B*-604.8.2.2 Doors.** Toilet compartment doors, including door hardware, shall comply with *Section 11B*-404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be *44 inches (1118 mm)* minimum. The door shall be self-closing. A door pull complying with *Section 11B*-404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

***11B*-604.8.2.3 Grab bars.** Grab bars shall comply with *Section 11B*-609. A side-wall grab bar complying with *Section 11B*-604.5.1 shall be provided on both sides of the compartment.

***11B*-604.8.3 Coat hooks and shelves.** Coat hooks shall be located within one of the reach ranges specified in *Section 11B*-308. Shelves shall be located 40 inches (*1016* mm) minimum and 48 inches (*1219* mm) maximum above the finish floor.

***11B*-604.9 Water closets and toilet compartments for children's use.** Water closets and toilet compartments for children's use shall comply with *Section 11B*-604.9. *When the exception in Section 11B-604.1 is used, the suggested dimensions of Table 11B-604.9 for a single age group shall be applied consistently to the installation of a water closet and all associated components.*

***11B*-604.9.1 Location.** The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 12 inches (305 mm) minimum and 18 inches (*457* mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (*432* mm) minimum and 19 inches (*483* mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in *Section 11B*-604.8.2. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

***11B*-604.9.2 Clearance.** Clearance around a water closet shall comply with *Section 11B*-604.3.

***11B*-604.9.3 Height.** The height of water closets shall be 11 inches (*279* mm) minimum and 17 inches (*432* mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

***11B*-604.9.4 Grab bars.** Grab bars for water closets shall comply with *Section 11B*-604.5.

***11B*-604.9.5 Flush controls.** Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with *Sections 11B*-309.2 and *11B*-309.4 and shall be installed 36 inches (*914* mm) maximum above the finish floor. Flush controls shall be located on the open side

TABLE 11B-604.9
SUGGESTED DIMENSIONS FOR CHILDREN'S USE

SUGGESTED DIMENSIONS FOR WATER CLOSETS SERVING CHILDREN AGES 3 THROUGH 12			
	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
Water Closet Centerline	12 inches (305 mm)	12 to 15 inches (305 to *381* mm)	15 to 18 inches (*381* to *457* mm)
Toilet Seat Height	11 to 12 inches (*279* to 305 mm)	12 to 15 inches (305 to *381* mm)	15 to 17 inches (*381* to *432* mm)
Grab Bar Height	18 to 20 inches (*457* to *508* mm)	20 to 25 inches (*508* to 635 mm)	25 to 27 inches (635 to *686* mm)
Dispenser Height	14 inches (*356* mm)	14 to 17 inches (*356* to *432* mm)	17 to 19 inches (*432* to *483* mm)

of the water closet except in ambulatory accessible compartments complying with *Section 11B*-604.8.2.

***11B*-604.9.6 Dispensers.** Toilet paper dispensers shall comply with *Section 11B*-309.4 and shall be 7 inches (*178* mm) minimum and 9 inches (*229* mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 14 inches (*356* mm) minimum and 19 inches (*483* mm) maximum above the finish floor. There shall be a clearance of $1^1/_2$ inches (38 mm) minimum below the grab bar. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

***11B*-604.9.7 Toilet compartments.** Toilet compartments shall comply with *Section 11B*-604.8.

11B-605 Urinals

***11B*-605.1 General.** Urinals shall comply with *Section 11B*-605.

***11B*-605.2 Height and depth.** Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (*432* mm) maximum above the finish floor or ground. Urinals shall be $13^1/_2$ inches (*343* mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.

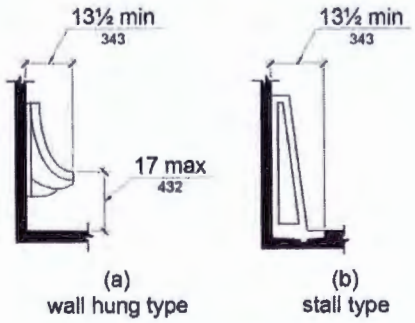


FIGURE *11B*-605.2
HEIGHT AND DEPTH OF URINALS

***11B*-605.3 Clear floor space.** A clear floor or ground space complying with *Section 11B*-305 positioned for forward approach shall be provided.

***11B*-605.4 Flush controls.** Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with *Section 11B*-309 *except that the flush control shall be mounted at a maximum height of 44 inches (1118 mm) above the finish floor.*

11B-606 Lavatories and sinks

***11B*-606.1 General.** Lavatories and sinks shall comply with *Section 11B*-606.

***11B*-606.2 Clear floor space.** A clear floor space complying with *Section 11B*-305, positioned for a forward approach, and knee and toe clearance complying with *Section 11B*-306 shall be provided.

Exceptions:

1. A parallel approach complying with *Section 11B*-305 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars.
2. ***Reserved.***
3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:
   (a) the cabinetry can be removed without removal or replacement of the fixture;
   (b) the finish floor extends under the cabinetry; and
   (c) the walls behind and surrounding the cabinetry are finished.
4. A knee clearance of 24 inches (610 mm) minimum above the finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches (*787* mm) maximum above the finish floor or ground.
5. A parallel approach complying with *Section 11B*-305 shall be permitted to lavatories and sinks used primarily by children 5 years and younger.
6. The dip of the overflow shall not be considered in determining knee and toe clearances.
7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with *Section 11B*-306.

***11B*-606.3 Height.** Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (*864* mm) maximum above the finish floor or ground.

Exceptions:

1. ***Reserved.***
2. In residential dwelling unit kitchens, sinks that are adjustable to variable heights, 29 inches (*737* mm) minimum and 36 inches (*914* mm) maximum, shall be permitted where rough-in plumbing permits connections of supply and drain pipes for sinks mounted at the height of 29 inches (*737* mm).

***11B*-606.4 Faucets.** Controls for faucets shall comply with *Section 11B*-309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

***11B*-606.5 Exposed pipes and surfaces.** Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks.

***11B-606.6 Adjacent side wall or partition.** Lavatories, when located adjacent to a side wall or partition, shall be a minimum of 18 inches (457 mm) to the centerline of the fixture.*

***11B-606.7 Sink depth.** Where a forward approach is required at a sink, knee and toe clearance shall be provided in compliance with Section 11B-306.*

***11B*-607 Bathtubs**

***11B*-607.1 General.** Bathtubs shall comply with *Section 11B*-607.

***11B*-607.2 Clearance.** Clearance in front of bathtubs shall extend the length of the bathtub and shall be *48 inches (1219 mm) wide minimum for forward approach and* 30 inches (*762* mm) wide minimum *for parallel approach.* A lavatory complying with *Section 11B*-606 shall be permitted at the control end of the clearance. Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

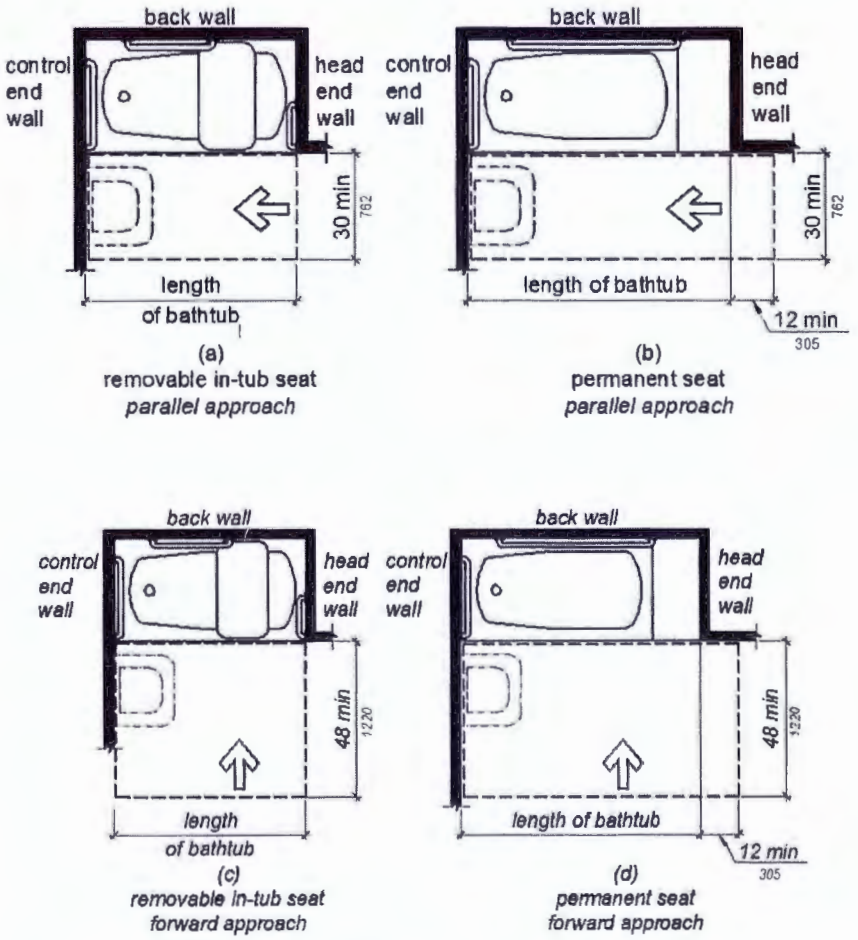


FIGURE *11B*-607.2
CLEARANCE FOR BATHTUBS

Lighthouse School
Transportation Impact Analysis

Oakland, California

FINAL REPORT

September 18, 2017

Lighthouse School Transportation Impact Analysis Final Report

Oakland, California

Prepared For:
City of Oakland
Planning and Building Department
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KAI Project No. 21061.0

September 18, 2017

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Section 1 Introduction

1. INTRODUCTION

Kittelson & Associates, Inc. prepared this transportation impact analysis (TIA) report for the proposed Lighthouse School's Lodestar Campus (project) for Lighthouse Community Schools (project sponsor). This transportation study was prepared consistent with the City of Oakland's *Transportation Impact Review Guidelines* (TIRG) (April 14, 2017). The scope of work is included as Appendix A.

The topics addressed in this transportation analysis include:

- Existing conditions for people walking, biking, driving, and taking transit near the project site;
- Site access and circulation for people walking, biking, driving, and taking transit;
- Crash history for study intersections and streets within the study area;
- Project multimodal trip generation estimates and vehicle-miles traveled;
- Travel demand management program strategies and anticipated vehicle trip reductions;
- Student drop-off and pick-up activity and circulation;
- Oakland Municipal Code compliance and consistency with local plans and policies; and,
- Temporary conditions during the project construction period.

1.1. PROJECT DESCRIPTION

The Lighthouse School's Lodestar Campus is proposed to be located at 735 105th Avenue in Oakland, CA at the current location of the School of Urban Missions Bible College & Theological Seminary (SUM), as presented in Figure 1. The SUM is an active post-graduate institution with on-site enrollment of approximately 70 students. The site is zoned as Business Mix (CIX-2).

The proposed project is a K-12 charter school with a maximum enrollment of 850 students. Approximately 65-70 students are planned for each grade level. The project will be constructed in two phases. Phase 1, occurring from fall 2017 through 2019, involves improvement of the existing buildings on the campus. Student enrollment during Phase 1 will be 500 students, and enrollment will increase by 350 students for Phase 2. Phase 2 of the project involves construction of a new parking lot in the northwestern portion of the site (number of parking spaces yet to be determined), construction of a third building at the northwest side of the existing parking lot, and construction of an outdoor recreation area within the southern portion of the existing parking lot.

Table 1 presents the current on-site enrollment of the SUM and the proposed enrollment for the Lodestar project. The table also presents the current gross square footage of the SUM buildings and the proposed gross square footage after completion of Phase 2. Figure 2 presents the project site plan.

Table 1: Gross Square Footage and Student Enrollment

Building or Parking	Size of Buildings	Unit	On-Site Enrollment
Existing SUM			
Post Graduate School, Building 1	15,176	Sq. Ft.	70
Post Graduate School, Building 2	20,160	Sq. Ft.	-
Gross Area/Total Students			**70**
Project			
Building I Elementary	15,176	Sq. Ft.	333
Building II Middle & Admin	20,160	Sq. Ft.	167
Building III High School	23,600	Sq. Ft.	350
Gross Area/Total Students	**58,936**	**Sq. Ft.**	**850**
Parking, Phase 1	76[1]	Spaces	-
Parking, Phase 2	To be determined	Spaces	-

Source: Hibser Yamaichi Architects, Inc., project site plan dated June 7th, 2017
[1] 72 standard spaces, 4 Accessible Spaces; 24' drive aisle
Sq. Ft. = square feet

1.1.1. Transportation and Parking Demand Management Plan

The project sponsor developed a transportation and parking demand management (TDM) plan for the project. The TDM plan includes measures identified in the City of Oakland *Transportation Impact Report Guidelines* and Standard Conditions of Approval, as applicable. The project incorporates the following TDM measures to reduce the estimated number of vehicle trips generated by the project:

- TDM-1: TDM Coordinator
- TDM-2: Bike parking
- TDM-3: Transit and bicycle incentives
- TDM-4: School pool program
- TDM-5: Pedestrian network improvements

Other, or alternative, TDM measures may be employed in the future should the project not meet the estimated vehicle trip reductions. These vehicle trip reduction estimates are presented in Table 12 in Section 4.6.2.

Site Vicinity Map
Oakland, California

Figure
1

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

KITTELSON & ASSOCIATES

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Proposed Site Plan
Oakland, California

Figure
2

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

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Section 2 Existing Conditions

2. EXISTING CONDITIONS

This section describes transportation characteristics near the project site. Included in this section are descriptions of the site and adjacent land uses; existing roadway, transit, pedestrian, and bicycle networks; and documentation of the existing traffic, transit, pedestrian, bicycle, commercial loading, railroad crossing, and emergency vehicle access conditions.

2.1. SITE CONDITIONS AND ADJACENT LAND USES

The project site is located on 735 105th Avenue, Oakland, CA, and currently is occupied by the School of Urban Mission Bible College & Theological Seminary (SUM), an active post-graduate institution.

The site has two existing vehicular access points: a full access (entry/exit, all-movement) driveway on 105th Avenue and a gated exit-only (right- and left-out) driveway on Edes Avenue. The existing curb cuts for the 105th Avenue and Edes Avenue driveways are 33 feet and 26 feet wide, respectively.

The site is zoned Business Mix (CIX-2/S-19). The site primarily is surrounded by single-family homes and one- to two-story multifamily developments (zoned RD-1, Detached Unit Residential). Along Edes Avenue and 105th Avenue, retail and light industrial/manufacturing uses are present (zoned CIX-2/S-19, Business Mix).

2.2. DATA COLLECTION

Vehicle, pedestrian, and bicycle counts were collected on Wednesday, May 23, 2017 at eight key intersections in the vicinity of the project site for the weekday a.m. (7:00 a.m. to 9:00 a.m.) and weekday p.m. (4:00 p.m. to 6:00 p.m.) peak periods. The study intersections are identified in Table 2. Study intersection and driveway count locations are presented in Figure 1, and multimodal counts are presented in Figure 3. Detailed multimodal intersection count data are included as Appendix B.

Table 2: Multimodal Count Locations

#	Count Location	Traffic Control
1	98th Avenue/I-880 SB Ramps	Signal
2	98th Avenue/I-880 NB Ramps	Signal
3	98th Avenue/Edes Avenue	Signal
4	98th Avenue/San Leandro Street	Signal
5	98th Avenue/International Boulevard	Signal
6	105th Avenue/Edes Avenue	Signal
7	105th Avenue/San Leandro Street	Signal
8	105th Avenue/International Boulevard	Signal

Source: Quality Counts, 2017; Kittelson & Associates, Inc. 2017.
Notes: Counts were collected on Thursday May 25, 2017. Detailed count data are included in Appendix B.

Intersection and driveway count data were supplemented with field observations to characterize current transportation conditions in and around the project site. Field observations were collected at the project site and along the project frontages (i.e., 105th Avenue and Edes Avenue) on Tuesday, February 7, 2017. Field observations included doorway and driveway counts at the campus access points during the weekday a.m. and weekday p.m. peak periods as well as a review of pedestrian, bicycle, and vehicle access and amenities. During the observation periods on February 7, 2017, only the driveway on 105th Avenue was active; the gate for the Edes Avenue driveway was closed. Observations of the operational and safety considerations for the two nearby at-grade railroad crossings also were conducted on February 7, 2017.

2.1. ROADWAY NETWORK

This section describes the regional and local vehicle access to the project site. The section identifies several types of street classifications according to the City's Land Use and Transportation Element.

2.1.1. Regional Access

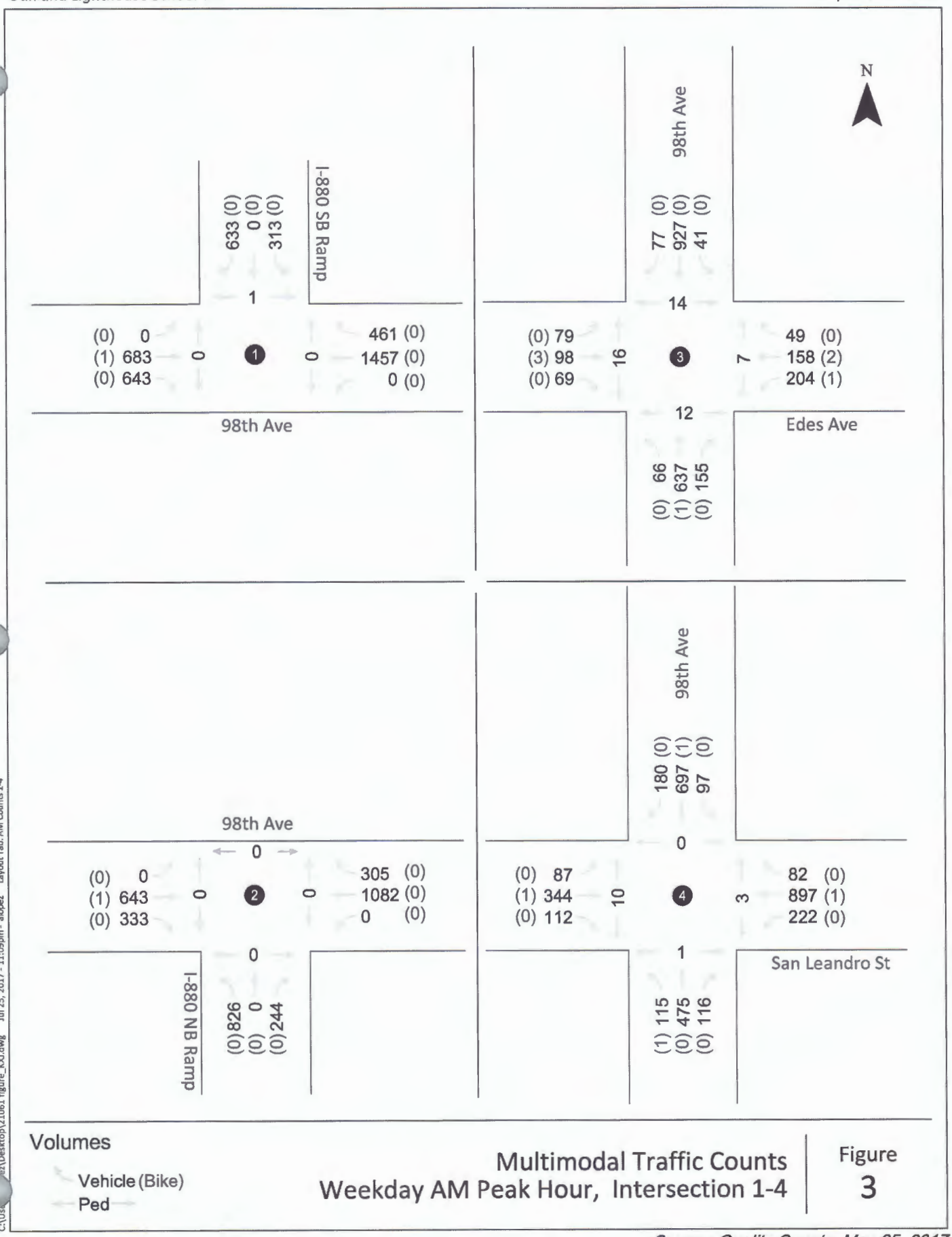
Regional access to and from the project site is provided by Interstate 880 (I-880).

Interstate 880: I-880 is an eight-lane freeway that generally runs in the north-south direction. Access from I-880 to the project site is provided at the 98th Avenue interchange via northbound and southbound ramps.

2.1.2. Local Access

Local access to and from the project site is described in this section.

105th Avenue. One Hundred Fifth Avenue is a north-south local street passing through residential areas near the project site. Single-family homes and one- to two-story multifamily developments front directly on 105th Avenue. Near the project site and to the south, the street has a 36-foot cross section with one vehicle travel lane in each direction and on-street parallel parking with no restrictions on both sides of the street. To the north of Pippin Street, 105th Avenue has a 60-foot cross section with one vehicle travel lane in each direction, a two-way center left-turn lane, class II bike lanes, and on-street parallel parking with no restrictions on both sides of the street. Sidewalks are present on both sides of the street with widths of approximately seven feet. Utility poles and trees are present within the width of the sidewalks, which narrows the effective sidewalk width to less than five feet at most locations. At the railroad crossing to the north of the project site, the sidewalk does not continue through the crossing. (Other pedestrian considerations at this crossing are discussed later in the railroad crossings section.) The posted speed limit is 30 mph.



Volumes

Vehicle (Bike)

Ped

Multimodal Traffic Counts
Weekday AM Peak Hour, Intersection 1-4

Figure 3

Source: Quality Counts, May 25, 2017

KITTELSON & ASSOCIATES

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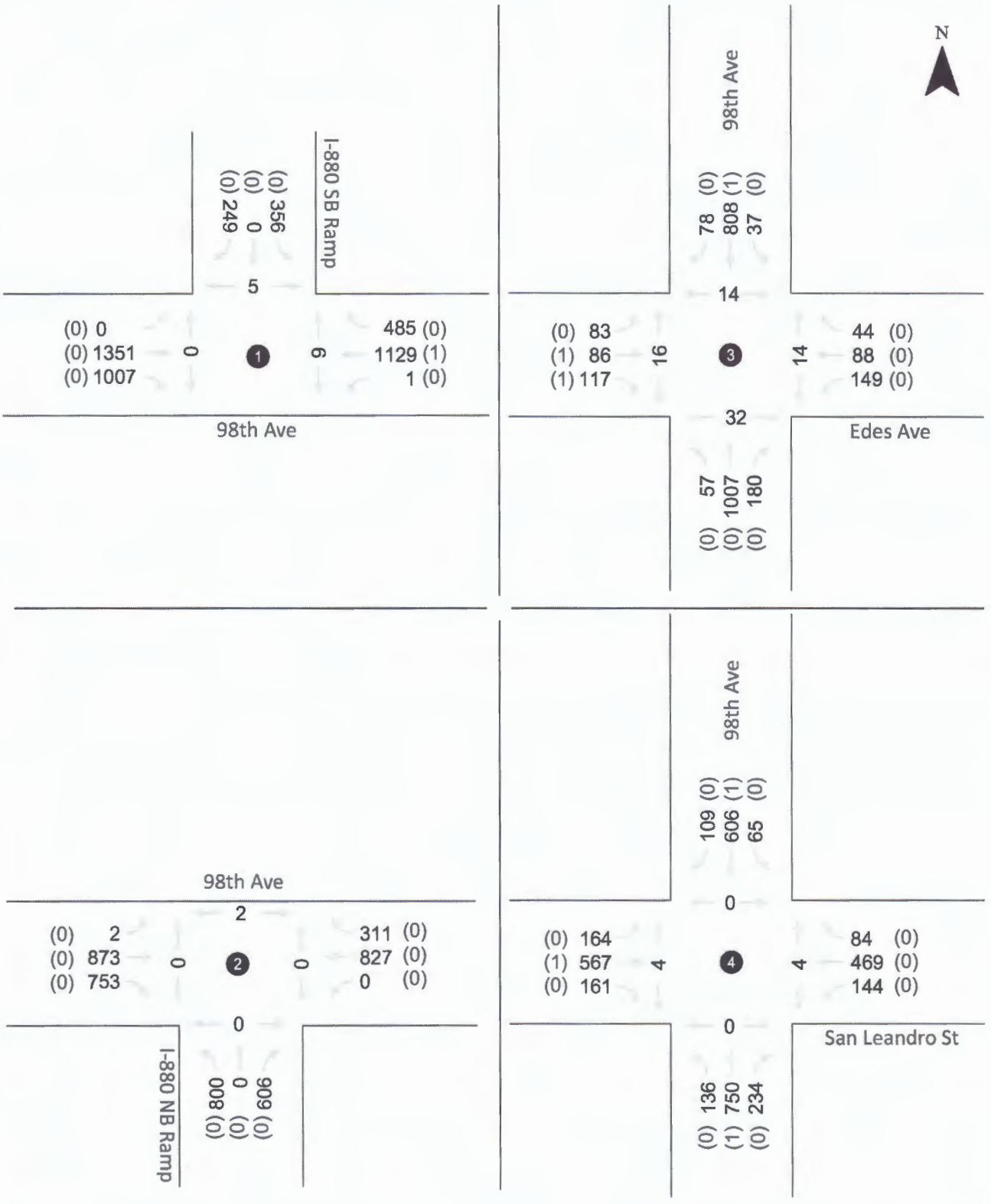

Volumes

Vehicle (Bike)

Ped

Multimodal Traffic Counts
Weekday PM Peak Hour, Intersection 1-4

Figure 5

Source: Quality Counts, May 25 , 2017

KITTELSON & ASSOCIATES

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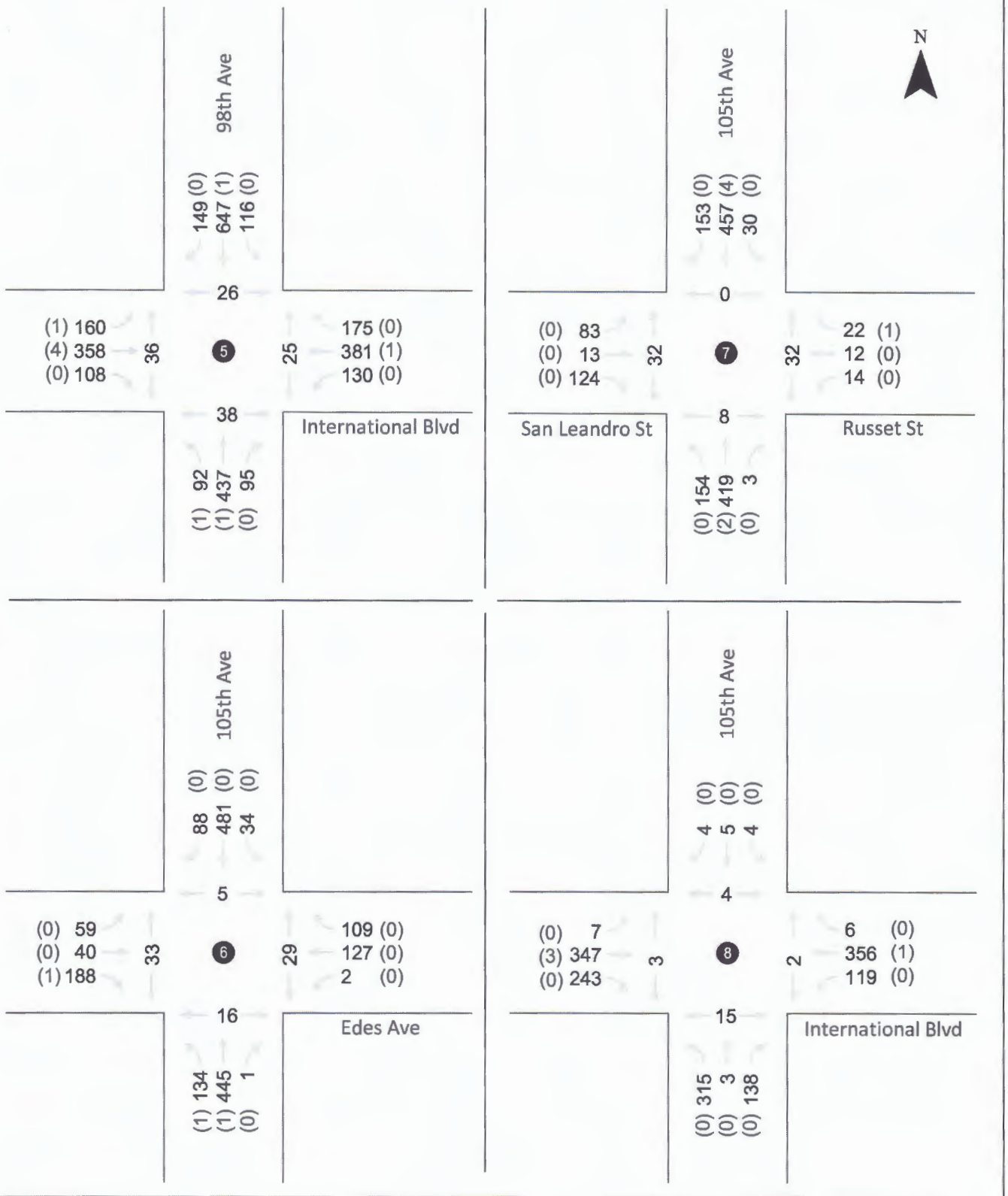

Multimodal Traffic Counts
Weekday AM Peak Hour, Intersection 5-8

Figure 4

Source: Quality Counts, May 25, 2017

KITTELSON & ASSOCIATES

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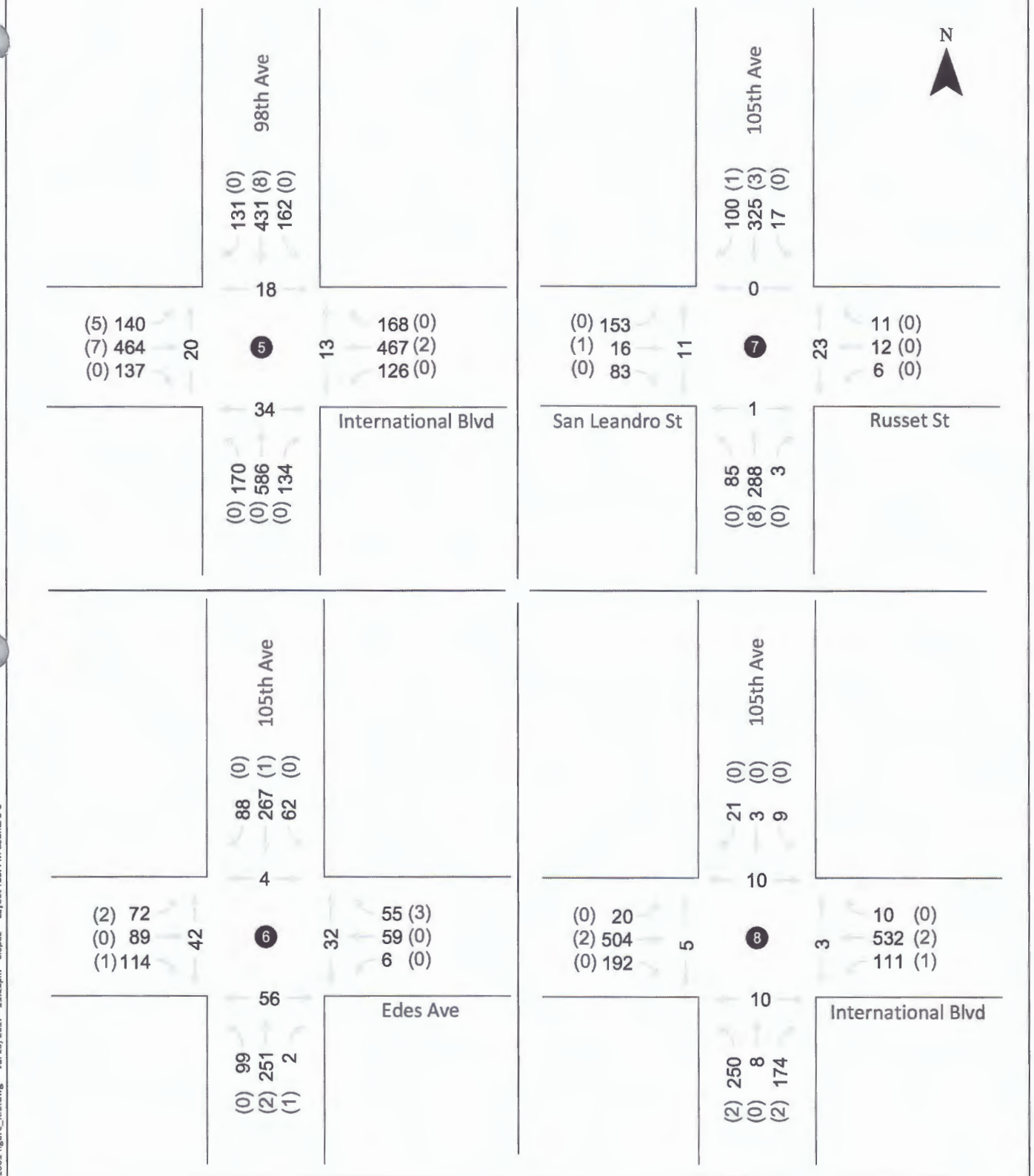

Multimodal Traffic Counts
Weekday PM Peak Hour, Intersection 5-8

Figure 6

Source: Quality Counts, May 25, 2017

KITTELSON & ASSOCIATES

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During the morning observation period (7:30 a.m. to 9:00 a.m.), heavy southbound traffic was observed along 105th Avenue with a queue backing up from the traffic signal at Edes Avenue to the north side of the railroad crossing. During the same period, northbound traffic was light. Minimal queuing was observed during the afternoon period (3:00 p.m. to 5:00 p.m.).

Edes Avenue. Edes Avenue is an east-west local street passing through residential and commercial areas to the east and west of the project site. Single-family homes front directly on Edes Avenue to the east of the project site. Retail, light industrial/manufacturing uses, and single-family homes front on Edes Avenue to the west of the project site. The street has a 36-foot cross section with one vehicle travel lane in each direction and unrestricted on-street parallel parking on both sides of the street. The City of Oakland identifies an existing class III bike route on approximately 0.35 miles of Edes Avenue from south of 98th Avenue to north of 105th Avenue. However, no existing bicycle facilities were observed during the field review. There are sidewalks on both sides of street that are approximately six feet wide. The posted speed limit is 25 mph.

98th Avenue. Ninety-Eighth Avenue is a north-south regional transit street providing access to I-880 to the southwest and I-580 to the northeast of the project site. Near the project site, 98th Avenue has two lanes in each direction with unrestricted on-street parallel parking on both sides of the street and a concrete median. Sidewalks ranging from 7 feet to 10 feet in width are provided along both sides of the road. The sidewalk on the north side of 98th Avenue is wider than the one located on the south side. There are no existing bicycle facilities. The posted speed limit is 30 mph.

2.2. TRANSIT SERVICE

2.2.1. AC Transit

The transit system in the study area includes bus services provided by the Alameda-Contra Costa Transit District (AC Transit), as presented in Table 3 and shown in Figure 7. Routes 45 and 98 provide service within one-quarter mile of the project site.

Route 45 operates daily and on holidays and runs along 105th Avenue to and from the east, along Edes Avenue to and from the north, and makes a loop through the residential neighborhood to the south of the project site along 105th Avenue and Acalanes Drive. The transit stops nearest to the project site serve Route 45 and are located on 105th Avenue at Edes Avenue (Stop ID: 54020) and on Acalanes Drive at 105th Avenue (Stop ID: 58288). The stops are marked by a sign post; no amenities, such as benches or shelters, are present for people waiting for the bus. It is a 13 minute (9 stop) bus ride between the Coliseum BART Station and the project site.

Transit Map
Oakland, California

Figure **7**

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

KITTELSON & ASSOCIATES

H:\21\...\Oakland Lighthouse School TIA\gis\07 Transit Map.mxd - jsommerville - 3:09 PM 9/15/2017

Route 98 operates daily and on holidays and runs east-west along 98th Avenue, connecting to the Coliseum BART Station and the Eastmont Transit Center. The transit stops nearest to the project site serving Route 98 are located on 98th Avenue at Edes Avenue (Stop ID: 59833 and 50167), about a five minute walk from the project site. The stops are marked by a sign post; no amenities, such as benches or shelters, are present for people waiting for the bus. It is a 21 minute (16 stop) bus ride between the Coliseum BART Station and the nearest bus stop and a five minute walk to the project site.

Table 3: AC Transit Bus Routes

Route Number	Route Description	Service Frequency
45	Between Foothill Square and Eastmont Transit Center via San Leandro Street/Coliseum BART Station	Approx. every 20 minutes between 5:30 a.m. and 10:30 p.m. daily and every 40 minutes on weekends and holidays
98	Coliseum BART to Eastmont Transit Center via Oakport Street, Edgewater Drive, 98th Avenue, and MacArthur Boulevard	Approx. every 20 minutes between 6:00 a.m. and 11:30 p.m. daily and every 30 minutes on weekends and holidays

Source: AC Transit website http://www.actransit.org/rider-info/printable-timetables/; accessed February 14, 2017

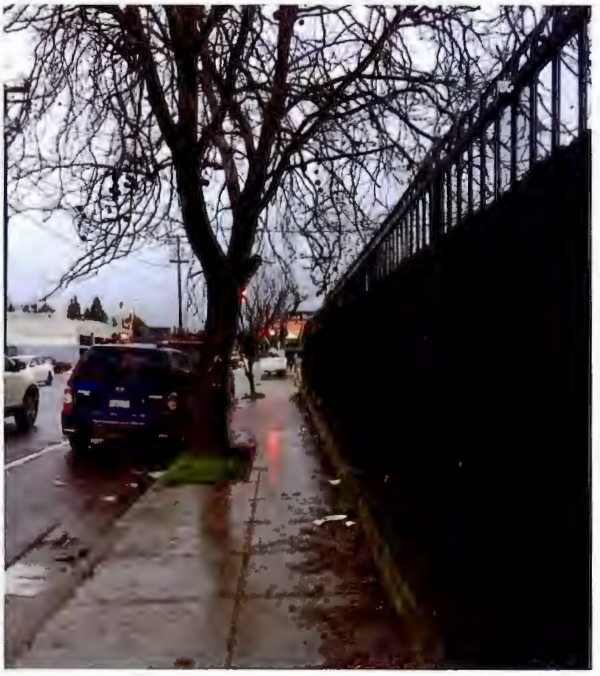
2.3. PEDESTRIAN CONDITIONS

2.3.1. Pedestrian Facilities

Edes Avenue and 105th Avenue provide direct pedestrian access to the project site. Sidewalks are present on both sides of Edes Avenue and 105th Avenue and have a width of five feet. Utility poles and trees narrow the effective width of the sidewalks to approximately three feet wide at locations near the project site, which is the minimum width for a path of travel allowed by the Americans with Disabilities Act (ADA) of 1990. Figure 8 and Figure 9 illustrate the constrained conditions along the sidewalks resulting from the landscaping and utility poles.

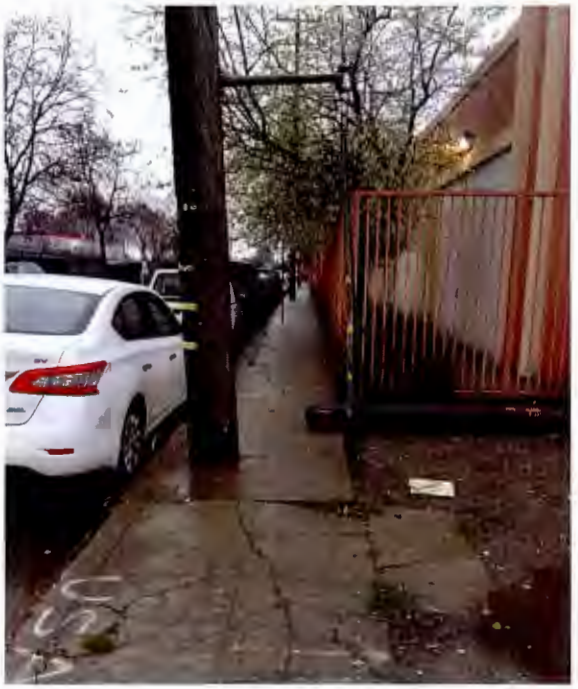
The nearest marked crosswalks are located at the 105th Avenue/Edes Avenue signalized intersection adjacent to the project site. The crosswalks are standard transverse stripes. Two of the four corners have curb ramps with contrasting tactile domes, and one of the corners has directional curb ramps. Pedestrian phases are programmed to be on pedestrian recall; therefore, pedestrian push buttons are not present. The crossing distances for the four legs of the intersection range from 32 to 40 feet in length, which correspond to flashing don't walk crossing times of 9 to 12 seconds for a walking pace of 3.5 feet per second, per the Manual on Uniform Traffic Control Devices California supplement (CA-MUTCD). Countdown signal heads are present, and the flashing don't walk (FDW) crossing time is set at five seconds for all directions at this intersection, which is not sufficient pedestrian clearance time.

Figure 8: Sidewalk along 105th Avenue, Photo 1



Source: Kittelson & Associates, Inc., 2017

Figure 9: Sidewalk along 105th Avenue, Photo 2



Source: Kittelson & Associates, Inc., 2017

The other nearby marked crosswalk is across Acalanes Drive at the side-street stop-controlled 105th Avenue/Acalanes Drive intersection. The crosswalk markings are standard transverse stripes. The markings are faded.

The 98th Avenue/Edes Avenue signalized intersection is located to the northwest of the project site. This intersection has pedestrian push buttons and countdown signal heads. Sidewalks are present on both sides of 98th Avenue and Edes Avenue with widths of eight to ten feet. Curb ramps at the intersection are aligned diagonally, and they do not have high visibility tactile domes. The crosswalk markings are standard transverse stripes.

Observations of conditions for people crossing at the two railroad crossings (at 105th Avenue and at Edes Avenue) are documented in the railroad crossing section.

2.3.2. Pedestrian Activity

Pedestrian counts were conducted at study locations during the weekday a.m. (7:00 a.m. to 9:00 a.m.) and weekday p.m. (4:00 p.m. to 6:00 p.m.) peak periods on Wednesday, May 23, 2017. Observations of pedestrian conditions in the study area were conducted during the a.m. (7:30 a.m. to 9:00 a.m.) and weekday p.m. (4:00 p.m. to 6:00 p.m.) peak periods on Tuesday February 7, 2017. Pedestrian weekday a.m. peak hour and weekday p.m. peak hour counts are shown in Figure 3 and are included in Appendix B.

Pedestrian activity at the study intersections ranged from low to moderately high by location. As presented in Figure 3, pedestrian activity was highest during weekday a.m. and weekday p.m. peak hours, with pedestrian crossings during one or both peak hours ranging from approximately 50 to 135 crossings, at the following intersections:

- 105th Avenue/Edes Avenue (adjacent to the project site)
- 105th Avenue/San Leandro Street/Russet Street
- 98th Avenue/Edes Avenue
- 98th Avenue/International Boulevard

The I-880 ramp terminals had the least amount of pedestrian activity with zero to 11 total crossings during a peak hour.

2.4. BICYCLE CONDITIONS

2.4.1. Bicycle Facilities

Bicycle facilities are defined by the following four classes in Chapter 1000 of the California Department of Transportation (Caltrans) *Highway Design Manual* and *Design Information Bulletin 89*:

Class I bikeway (bike path) – This is a dedicated path for bicyclists and/or pedestrians that does not permit motorized travel.

Class II bikeway (bike lane) – This is a portion of the roadway network that has been striped and signed for bicycle use. Implementation of class II bicycle facilities requires sufficient right-of-way between the vehicle stream and the curb or curbside parking. Bicycle lanes are typically used along collector or arterial streets with medium to high traffic volumes, providing additional travel space for bicyclists along busy roadway segments.

Class III bikeway (bike route) – This is a bikeway that primarily serves to connect other facilities and destinations in the bikeway network. These routes include signage but do not have roadway markings or striping to indicate reserved space for the bicyclists. Bicyclists traveling on class III facilities must share travel lanes with vehicle traffic.

Class IV bikeway (cycle track) – This is a dedicated, separated and protected on-street lane for bicyclists. Cycle tracks (or protected bike lanes) typically are used along streets with high traffic volumes and high speeds, providing additional protection for bicyclists using vertical separation, such as concrete curb or safe-hit posts.

2.4.2. Existing Bicycle Facilities

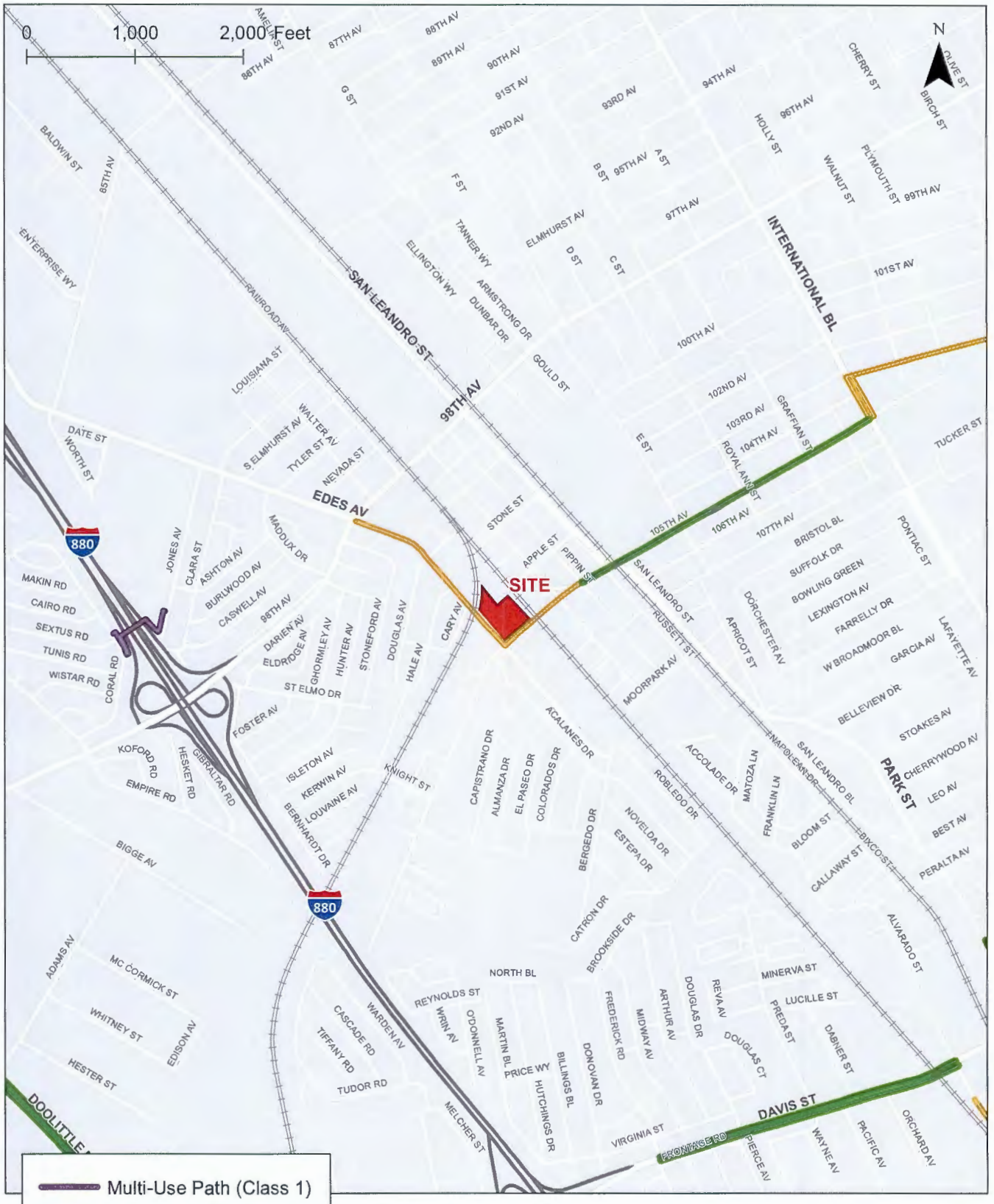
Existing citywide bicycle routes and bicycle parking facilities and other amenities within the study area are described in this section. Figure 10 presents the bicycle facilities network in the study area.

The City of Oakland Bicycle Master Plan (2007) identifies 105th Avenue to the north of Edes Avenue and Edes Avenue to the west of 105th Avenue as class III bike routes. Neither bike route signage nor pavement markings were observed along either street near the project site. Class II bike lanes are present to the north along 105th Avenue beginning at Pippin Street, which is approximately 1,000 feet north of Edes Avenue.

The existing SUM campus provides secure on-site bicycle racks for approximately ten bikes. These bike racks are uncovered and are suitable for short-term parking.

2.4.3. Bicycle Activity

Bicycle counts were collected at the eight study locations on Wednesday, May 23, 2017 for the weekday a.m. (7:00 a.m. to 9:00 a.m.) and weekday p.m. (4:00 p.m. to 6:00 p.m.) peak periods. Observations of existing bicycling activity at the SUM campus and bicycling conditions in the study area were conducted on Tuesday February 7, 2017 during the weekday a.m. (7:30 a.m. to 9:00 a.m.) and p.m. (3:00 p.m. to 5:00 p.m.) peak periods. Bicycle counts at the study intersections for the weekday a.m. and weekday p.m. peak hours are shown in Figure 3.



Bike Network
Oakland, California

Figure **10**

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

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During the weekday a.m. peak hour, fewer than 10 bicyclists were observed traveling through any of the study intersections, with most intersections having fewer than five bicyclists. During the p.m. peak hour, bicyclist volumes were higher at some locations (e.g., 22 total bicyclists at the 98th Avenue/International Boulevard intersection and 13 total bicyclists at the 105th Avenue/ San Leandro Boulevard intersection) while most locations had 10 or fewer total bicyclists.

2.5. RAILROAD CROSSINGS

Two railroad crossings are located near the project site. The 105th Avenue crossing is 350 feet north of the 105th Avenue/Edes Avenue intersection. The Edes Avenue crossing is 400 feet west of this intersection. The two crossings were reviewed for compliance with the CA-MUTCD.

CA-MUTCD Pavement Markings. Pavement markings required per the CA-MUTCD for at-grade railroad crossings with automatic gates are shown in Appendix C. Such markings are not present for the 105th Avenue crossing nor for the Edes Avenue crossing.

CA-MUTCD Automatic Gates. Appendix C also presents two example locations of automatic gates where sidewalks are present. At both railroad crossings near the project site, the path of travel for people crossing the tracks is around the outside of the automatic gate, and no physical barriers are present to prevent people from walking across the tracks when a train is approaching.

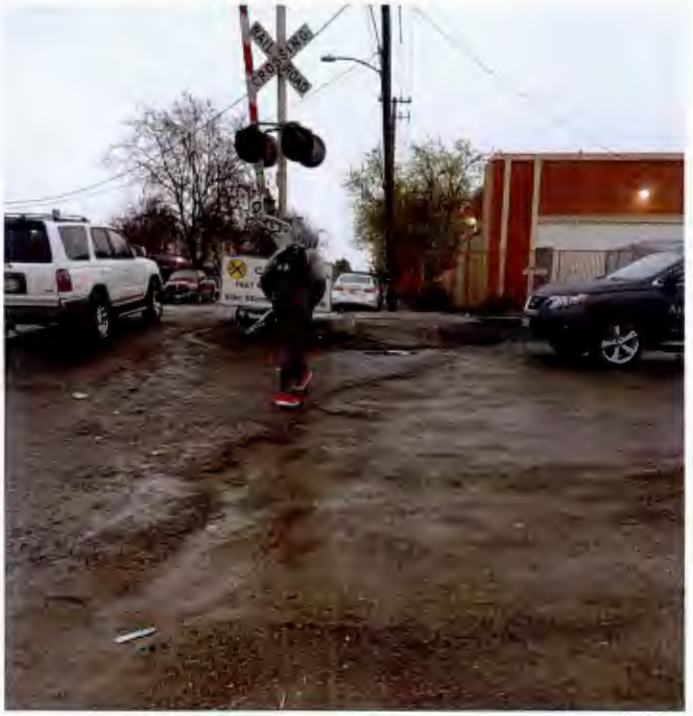
2.5.1. 105th Avenue Crossing

The 105th Avenue crossing has automatic gates; however, it lacks railroad crossing pavement markings and ADA compliant sidewalks. Figure 11 and Figure 12 illustrate the conditions for walking across the tracks at the 105th Avenue crossing. On the east side of the street (see Figure 12), the automatic gate directly obstructs the path for people walking across the tracks.

2.5.2. Edes Avenue Crossing

The Edes Avenue crossing has automatic gates and ADA compliant sidewalks; however, it lacks railroad crossing pavement markings. Figure 13 and Figure 14 illustrate the conditions for walking across the tracks at the Edes Avenue crossing.

Figure 11: 105th Avenue Crossing, Looking South on West Side of Street



Source: Kittelson & Associates, Inc., 2017

Figure 12: 105th Avenue Crossing, Looking North on East Side of Street

Source: Kittelson & Associates, Inc., 2017

Figure 13: Edes Avenue Crossing, Looking East at North Side of Street

Source: Kittelson & Associates, Inc., 2017

Figure 14: Edes Avenue Crossing, Looking East at South Side of Street

Source: Kittelson & Associates, Inc., 2017

2.6. CRASH ANALYSIS

To identify potential intersection safety issues, a three-year crash history was analyzed for the eight study intersections as well as the four following intersections that are along the primary pedestrian paths of travel between the study intersections on 98th Avenue and 105th Avenue near the project site:

- 98th Avenue/Pearmain Street
- 98th Avenue/Pippin Street
- 105th Avenue/Pearmain Street
- 105th Avenue/Pippin Street

Crash data for the study intersections were obtained from the Statewide Integrated Traffic Records System (SWITRS) for January 1, 2014 through December 31, 2016. Table 4 summarizes the crashes by type for all analyzed intersections. Table 5 summarizes the crash severity as well as the number of person-injuries and fatalities by location. Appendix D contains the SWITRS crash data.

Table 4: Crashes by Type

Head-on	Sideswipe	Rear End	Broadside	Hit Object	Pedestrian-Involved	Other	Total Crashes
10	9	12	27	5	5	1	69

Source: SWITRS, 2017; Kittelson & Associates, Inc., 2017

As presented in Table 4, 69 total crashes occurred at the 12 intersections between 2014 and 2016. Broadside crashes were the most prevalent accounting for 27 crashes. Head-on and rear end were the next most common crash types with ten and 12 crashes of those types occurring, respectively.

As presented in Table 5, 48 person-injuries and one fatality occurred at the 12 intersections between 2014 and 2016. Of the 48 people injured, two were bicyclists and five were pedestrians. The fatality resulted from a vehicle-vehicle crash.

The highest occurrences of crashes were at the 105th Avenue/Edes Avenue intersection (14 crashes,), which is adjacent to the project site, the 98th Avenue/Edes Avenue intersection (13 crashes), and the 98th Avenue/San Leandro Street intersection (11 crashes). The fatality occurred at the 98th Avenue/San Leandro Street intersection.

The two bicyclist-involved crashes occurred at the 98th Avenue/San Leandro Street intersection. Four of the five pedestrian-involved crashes occurred at the 105th Avenue/Edes Avenue intersection, which is adjacent to the project site. The other pedestrian crash occurred at the 105th Avenue/International Boulevard intersection.

Table 5: Summary of Crash Data by Location

Intersection	Property Damage Only Crashes	Injury Crashes	Fatality Crashes	Total Crashes	Person-Injuries			
					Bike	Ped	Driver/ Passenger	Total
98th Avenue/I-880 SB Ramps	2	0	0	2	0	0	0	0
98th Avenue/I-880 NB Ramps	2	0	0	2	0	0	0	0
98th Avenue/Edes Avenue	3	10	0	13	0	0	15	15
98th Avenue/San Leandro Street	6	4	1	11	2	0	2	4
98th Avenue/International Boulevard	5	3	0	8	0	0	4	4
105th Avenue/Edes Avenue	5	9	0	14	0	4	5	9
105th Avenue/San Leandro Street	1	3	0	4	0	0	3	3
105th Avenue/International Boulevard	3	4	0	7	0	1	5	6
98th Avenue/Pearmain Street	2	0	0	2	0	0	0	0
98th Avenue/Pippin Street	1	2	0	3	0	0	3	3
105th Avenue/Pearmain Street	0	3	0	3	0	0	4	4
105th Avenue/Pippin Street	0	0	0	0	0	0	0	0
Total	**30**	**38**	**1**	**69**	**2**	**5**	**41**	**48**

Source: SWITRS, 2017; Kittelson & Associates, Inc., 2017

2.7. LOADING CONDITIONS

Existing passenger and freight loading conditions along 105th Avenue and Edes Avenue adjacent to the project site were qualitatively assessed. General on-street and off-street loading conditions, including regulations and any illegal and double-parking, are summarized in this section.

2.7.1. Freight Loading

On-street commercial loading (yellow curb) zones are provided to allow commercial vehicles (such as delivery vehicles, trucks, and service vehicles) to park along the curb to load or unload goods. Commercial loading (yellow curb) zones are frequently used by building service vehicles, contractors, and delivery vehicles such as FedEx. Near the project site, an approximately 25-foot on-street commercial loading (yellow curb) zone is located on the west side of 105th Avenue along the frontage of the Bayview Market & Liquor retail store. During weekday a.m. and weekday p.m. peak period observations on Tuesday February 7, 2017, no instances of double-parking were observed on 105th Avenue or Edes Avenue. No other commercial loading activity was observed in the area during the weekday a.m. and weekday p.m. peak periods.

2.7.2. Passenger Loading

Passenger (white curb) loading zones are provided to allow passenger vehicles (e.g., privately owned vehicles, transportation network companies, and traditional taxis) to stop along the curb temporarily to load or unload passengers. Passenger loading zones have limited hours of operation, typically corresponding to business hours. There are no passenger (white curb) loading zones in the immediate vicinity of the project site on 105th Avenue or Edes Avenue.

Passenger drop-off and pick-up for the existing SUM can be accommodated on-site within the parking lot. No drop-off or pick-up activity occurred during the weekday a.m. and weekday p.m. peak period observations.

2.8. EMERGENCY VEHICLE ACCESS

Emergency vehicle access to the project site currently is provided via the full-access driveway on 105th Avenue. Fire Station No. 20, located at 98th Avenue and International Boulevard, is the nearest fire station (about 1.2 miles northeast of the project site). There are multiple routes to access the project site from Fire Station No.20. Emergency vehicles could exit the fire station and travel 0.4 miles east on International Boulevard, turn right onto 105th Avenue and travel south 0.8 miles to reach the project site. Alternatively, vehicles could exit the fire station and travel 0.6 miles south on 98th Avenue, turn left onto San Leandro Street and travel 0.4 miles east, then turn right onto 105th Avenue and travel 0.2 miles south to arrive at the project site.

The Oakland Police Department is located at 455 7th Street in downtown Oakland. Emergency vehicles traveling to the project site from the police department would travel 7 miles south on I-880, exit to 98th Avenue going north for 0.5 miles, then make a right turn on Edes Avenue and travel 0.3 miles to the project site.

All streets that comprise the route from the fire station and police department to the project site are sufficiently wide enough to provide adequate emergency vehicle access to the site (travel lanes generally are ten to 12 feet wide). During peak commute times, general traffic congestion throughout the project area may result in delays to emergency responders.

Section 3 Project Travel Demand

3. PROJECT TRAVEL DEMAND

3.1. TRIP GENERATION ESTIMATES

This section summarizes the travel demand estimates for the proposed project. The travel demand estimate accounts for new vehicle, transit, pedestrian, and other trips generated by the proposed Project. The transportation analysis accounts for the displacement of the SUM, which currently operates on the project site, and it accounts for the vehicle trip reductions (VTRs) that would result from implementation of the transportation and parking demand management program (Section 4.5).

Vehicle trip generation for the project was estimated using trip generation rates published in the current Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition, 2012). The average rates for Elementary School, Middle School, and High School land uses were used to estimate daily, weekday a.m. peak hour, and weekday p.m. peak hour vehicle trips generated by the project. These rates account for trips made by both students and staff members. Detailed trip generation calculations are included as Appendix E.

Doorway and driveway counts (Appendix F) were collected at existing SUM access points during the weekday a.m. (7 a.m. to 9 a.m.) and p.m. peak period (4:00 p.m. to 6:00 p.m.) on Tuesday February 7, 2017 to determine the level of activity on the site. Based on observations of trip-making activity at the existing SUM, a trip generation credit was incorporated to account for trips people currently make when traveling to and from the SUM.

Table 6 presents the estimated project vehicle trip generation and trip credits used to estimate the net new vehicle trips generated by the project. With the trip credit for existing trips, the project is estimated to produce 884 net new daily vehicle trips, 212 net new weekday a.m. peak hour vehicle trips, and 68 net new weekday p.m. peak hour vehicle trips.

3.1.1. Mode Share and Trip Distribution/Assignment

The project is in an area with population density greater than 10,000 people per square mile, and it is located more than one mile from a BART or Amtrak station. Mode share for project trips is based on the mode split adjustments provided in the TIRG for a project with these location characteristics. The mode split adjustments are presented in Table 6.

The project sponsor provided approximate origin locations for students who will attend school at the project site in the fall of 2017. Based on these approximate origin locations, project trips were distributed as presented in Table 7 and Figure 15. Project-only vehicle trips are presented in Figure 16 and Figure 17. Existing plus project vehicle volumes are presented in Figure 18 and Figure 19.

Table 6: Trip Generation of the Project

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
			Total	Ins	Outs	Total	Ins	Outs	Total
Vehicle-Trips, per *ITE Trip Generation Manual, 9th Edition*									
Project Generated Trips									
Elementary (ITE Land Use 520)	333	Student	430	83	67	150	25	25	50
Middle (ITE Land Use 522)	167	Student	271	51	40	91	13	14	27
High School (ITE Land Use 530)	350	Student	599	103	48	151	21	25	46
Total ITE Project Trips	*850*		*1,299*	*237*	*155*	*392*	*59*	*64*	*123*
Trips by Mode, per *City of Oakland TIS Guidelines*									
Vehicle Trips	----	----	999	182	119	301	45	49	94
Transit Trips	----	----	232	42	28	70	11	11	22
Bicycle Trips	----	----	25	5	3	8	1	1	2
Walk / Other Trips	----	----	26	5	3	8	1	1	2
Total Trips	----	----	*1,282*	*234*	*153*	*387*	*58*	*62*	*120*
Vehicle Trip Credit									
Credit for Existing Vehicle Trips	----	----	-29	-24	0	-24	-2	-3	-5
New Project Vehicle Trips	----	----	*970*	*158*	*119*	*277*	*43*	*46*	*89*
Trip Changes by Mode per TDM Plan									
Vehicle Trips	----	----	-86	-33	-32	-65	-10	-11	-21
Transit Trips	----	----	22	17	0	17	0	5	5
Bicycle Trips	----	----	3	2	0	2	0	1	1
Walk / Other Trips	----	----	8	6	0	6	0	2	2
Net New Trips by Mode									
Vehicle Trips	----	----	884	125	87	212	33	35	68
Transit Trips	----	----	254	59	28	87	11	16	27
Bicycle Trips	----	----	28	7	3	10	1	2	3
Walk / Other Trips	----	----	34	11	3	14	1	3	4
Net New Project Trips	**----**	**----**	**1,200**	**202**	**121**	**323**	**46**	**56**	**102**

Sources: Kittelson & Associates, Inc. 2017; Institute of Transportation Engineers' *Trip Generation Manual*, 9th Edition, 2012; City of Oakland's *Traffic Impact Analysis Guidelines*, 2013; Metropolitan Transportation Commission, *2000 Bay Area Travel Survey*, 2000., City of Oakland *Transportation Impact Review Guidelines*

Notes:

[1]Total trip generation does not add up to 100 percent and is not constant, as the mode split of "Other" mode varies slightly by land use category.

[2]ITE Trip Generation Rates

Elementary (ITE Land Use 520)

Daily: **1.29** A.M. Peak Hour: **0.45** (55% in; 45% out) P.M. Peak Hour: **0.15** (49% in; 51% out)

Middle (ITE Land Use 522)

Daily: **1.62** A.M. Peak Hour: **0.54** (55% in; 45% out) P.M. Peak Hour: **0.16** (49% in; 51% out)

High School (ITE Land Use 530)

Daily: **1.71** A.M. Peak Hour: **0.43** (68% in; 32% out) P.M. Peak Hour: **0.13** (47% in; 53% out)

Table 7: Trip Distribution Percentages

Location Relative to Project Site	Share of Trips
North	77%
South	6%
East	13%
West	4%

Source: Lighthouse Community Schools, 2017; Kittelson & Associates, Inc., 2017

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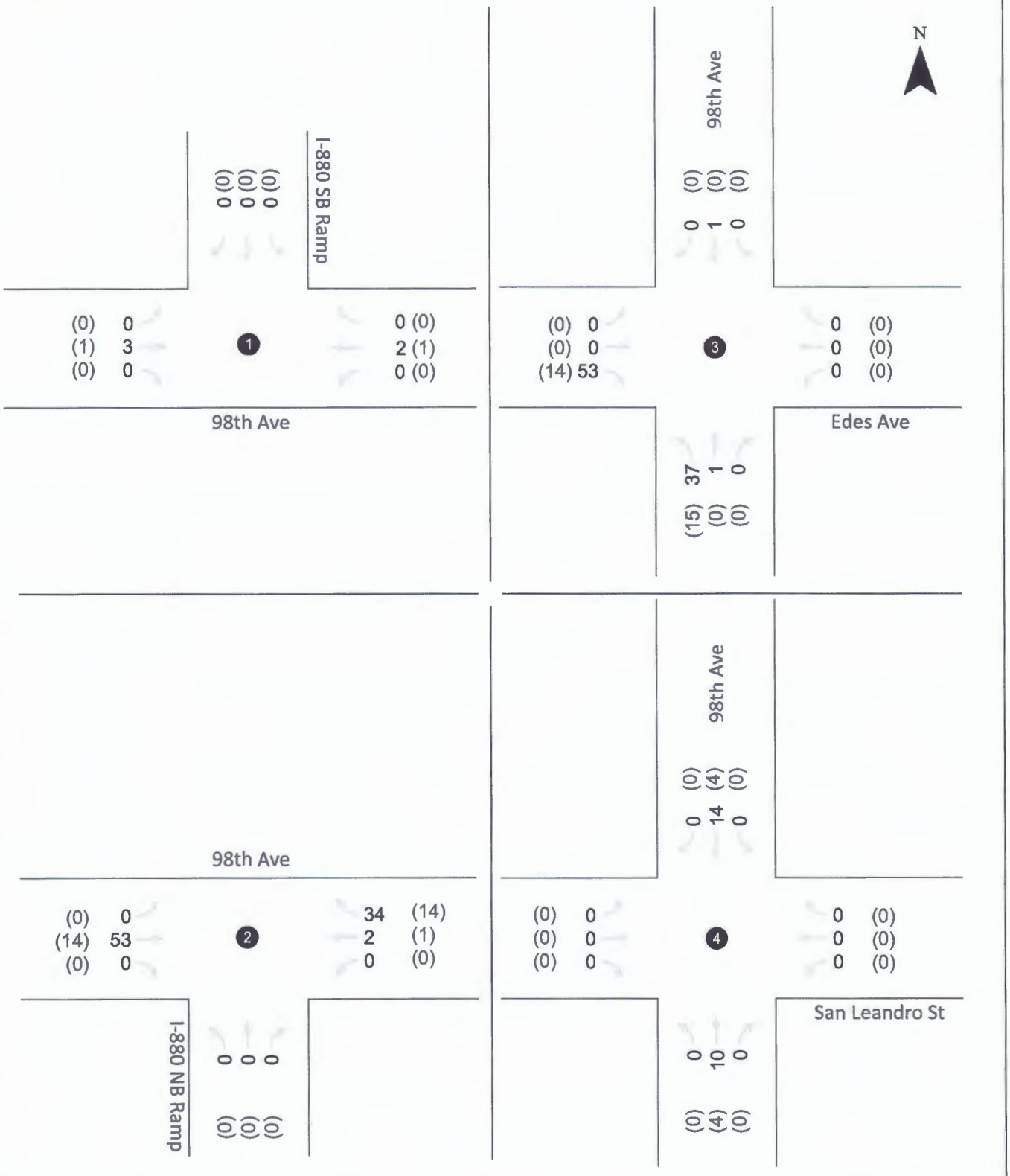
Vehicle Trip Distribution
Oakland, California

Figure
15

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet



Vehicle Volumes
AM (PM)

Project-Only Vehicle Volumes
Weekday AM (PM) Peak Hour, Intersection 1-4

Figure
16

Source: Quality Counts, May 25, 2017

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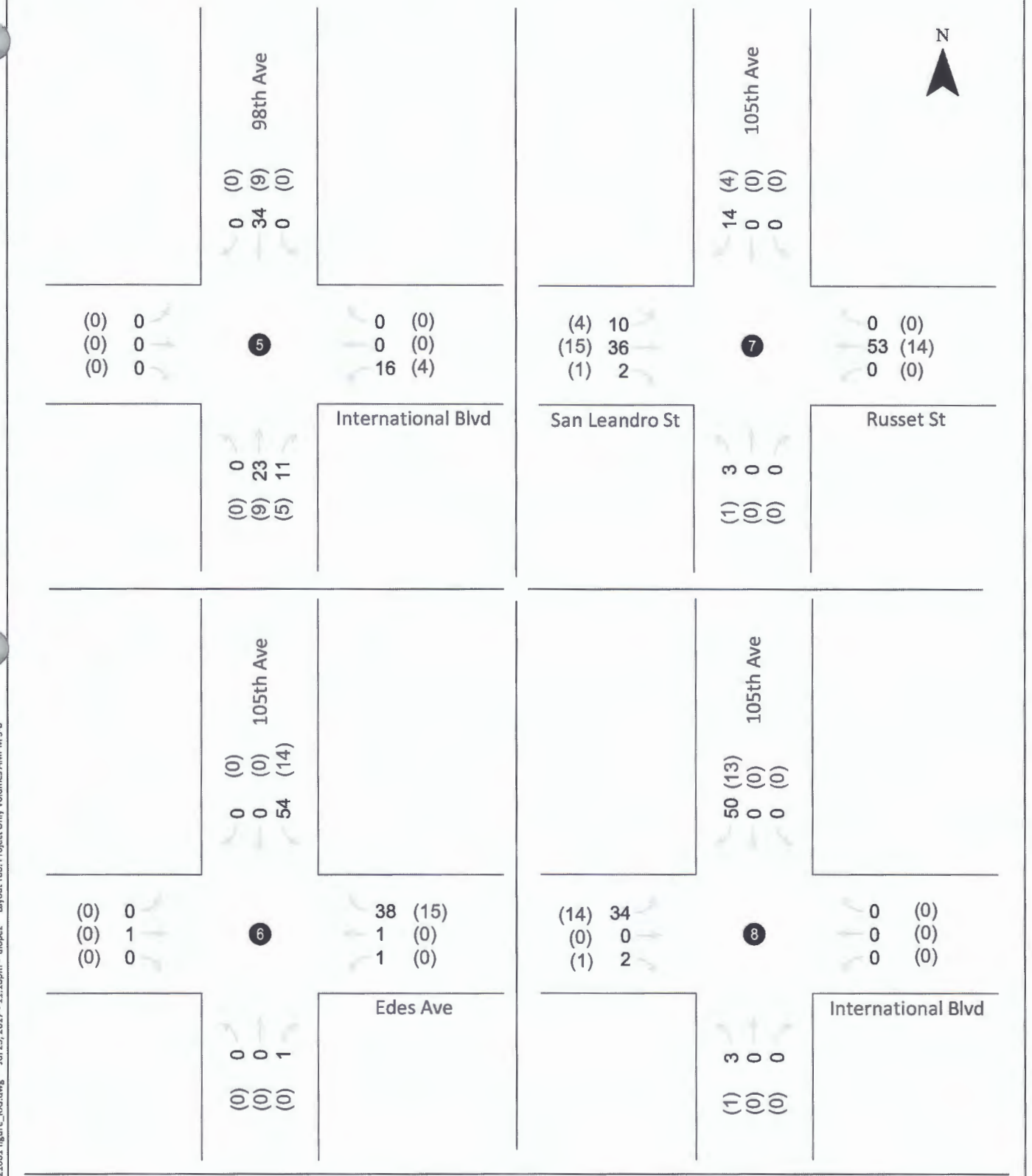

Vehicle Volumes

AM (PM)

Project-Only Vehicle Volumes
Weekday AM (PM) Peak Hour, Intersection 5-8

Figure 17

Source: Quality Counts, May 25, 2017

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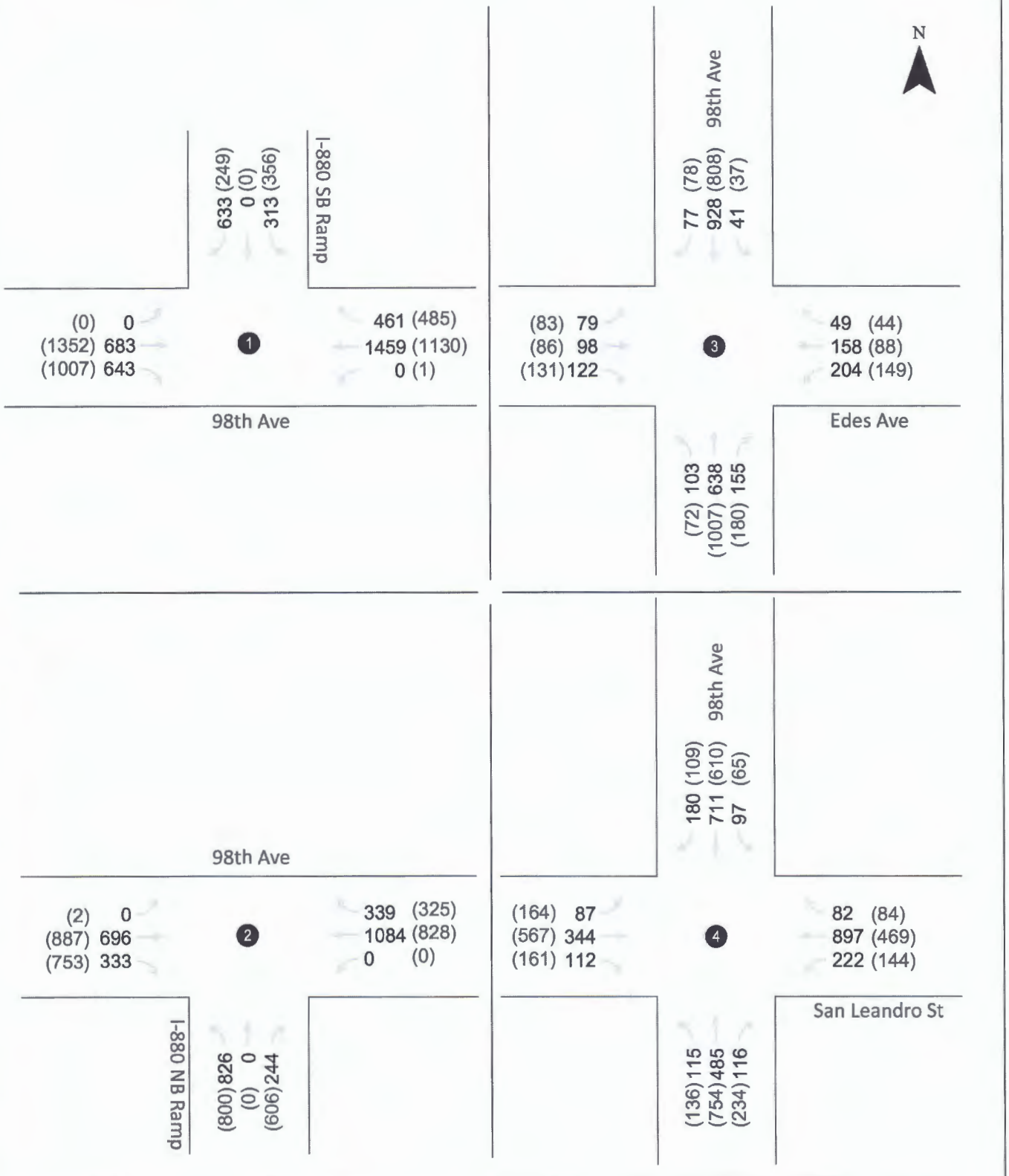

Vehicle Volumes
AM (PM)

Existing Plus Project Vehicle Volumes
Weekday AM (PM) Peak Hour, Intersection 1-4

Figure
18

Source: Quality Counts, May 25, 2017

KITTELSON & ASSOCIATES

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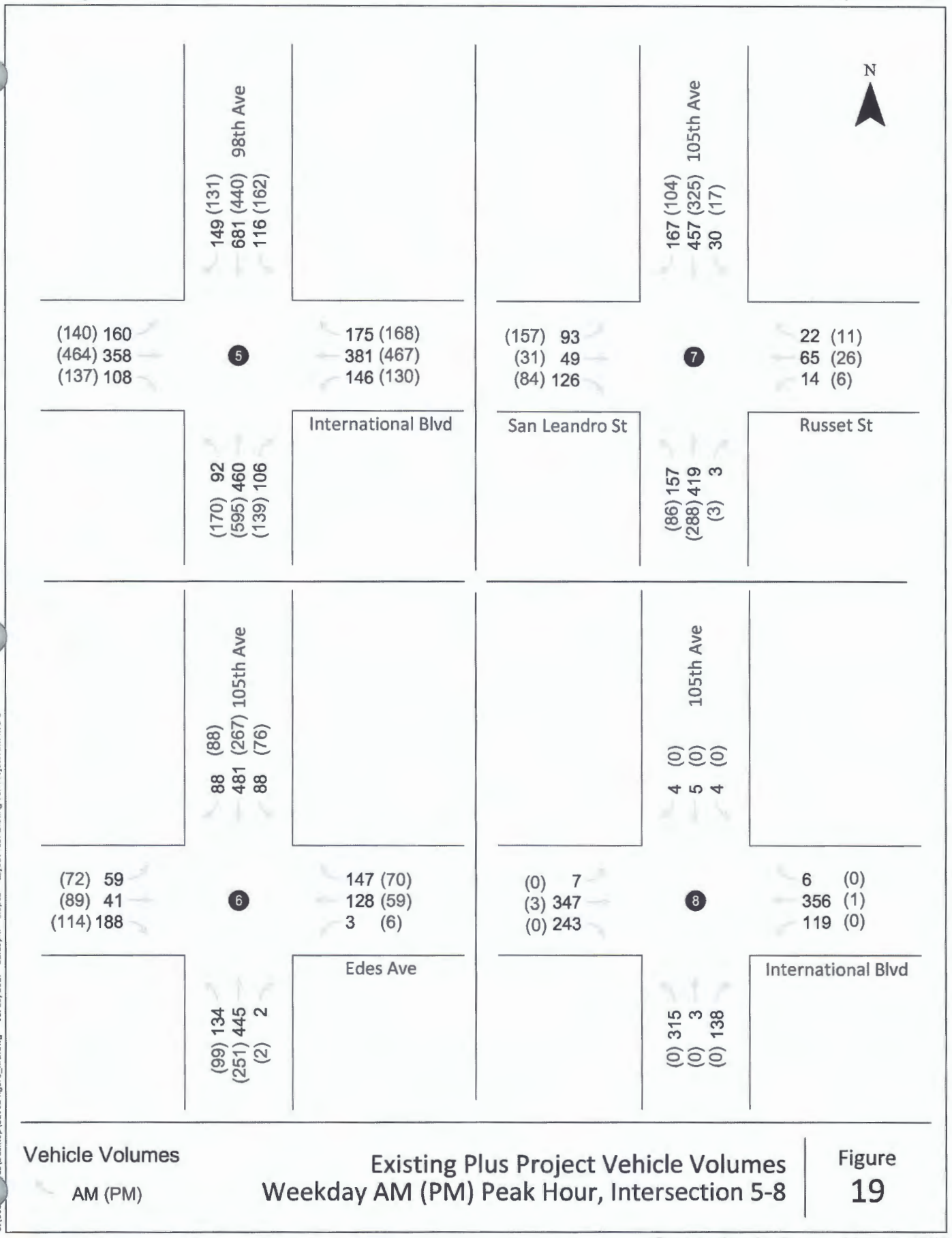

Vehicle Volumes

AM (PM)

Existing Plus Project Vehicle Volumes
Weekday AM (PM) Peak Hour, Intersection 5-8

Figure 19

Source: Quality Counts, May 25, 2017

KITTELSON & ASSOCIATES

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Section 4 Transportation Impact Analysis

4. TRANSPORTATION IMPACT ANALYSIS

This chapter presents the regulatory setting and applicable significance thresholds and evaluates potential impacts of the project.

4.1. SIGNIFICANCE CRITERIA

The following are the significance criteria used by the City of Oakland for the determination of impacts associated with a project. The project would have a significant effect on the environment if it would:[1]

- Conflict with a plan, ordinance or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay); or
- Cause substantial additional VMT per capita, per service population, or other appropriate efficiency measure; or
- Substantially induce automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network.

4.2. THRESHOLDS OF SIGNIFICANCE

The following are thresholds of significance related to substantial additional VMT per capita:

- For residential projects, a project would cause substantial VMT if it exceeds existing regional household VMT per capita minus 15 percent.
- For office projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per employee minus 15 percent.
- For retail projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per employee minus 15 percent.

The Oakland Planning and Building Department has provided screening criteria and thresholds of significance to determine if land uses similar in function to residential, office, and retail would result in significant impacts as it relates to VMT.[2] Under this expanded screening criteria, the Project's proposed land use (K-12 school) should be treated as office.

[1] The project is subject to Senate Bill (SB) 743, which provides that "aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment". (CEQA Update: Senate Bill 743 Summary – Aesthetics, Parking and Traffic [November, 26, 2013])

[2] A project is considered inconsistent with the Sustainable Communities Strategy if development is located outside of areas contemplated for development in the Sustainable Communities Strategy.

4.3. REGULATORY FRAMEWORK

Oakland's adopted plans and policies shape the transportation analysis framework. The overall goals of these policies are to achieve an effective, sustainable, multi-modal transportation system for the City, including the City's "Complete Streets Policy" (Resolution No. 84204 C.M.S.) which affirms that the City will provide streets that are safe and convenient for all users of the roadway, including pedestrians, bicyclists, motorists, persons with disabilities, users and operators of public transit, seniors, children, and movers of commercial goods. The proposed project has been evaluated against the following relevant plans, policies and regulations adopted by the City of Oakland.

City of Oakland General Plan. The City of Oakland General Plan (General Plan) is a comprehensive plan for growth and development of the City. The General Plan includes policies related to: land use and transportation; open space, conservation and recreation; housing; historic resources; noise; and bikes and pedestrians. These topics are addressed within individual elements of the General Plan.

Land Use and Transportation Element. The Land Use and Transportation Element (LUTE) was adopted in March 1998 and addresses land use and transportation issues. In order to accomplish a more integrated planning process that incorporates City-wide infrastructural needs with neighborhood decision-making, the LUTE includes general development policies for the City, in addition to district-specific policies. The overriding vision for the City that is outlined in the LUTE involves creating: "clean and attractive neighborhoods rich in character and diversity, each with its own distinctive identity, yet well-integrated into a cohesive urban fabric" in addition to "a diverse and vibrant downtown with around-the-clock activity." The LUTE includes land use designations for all land within the City of Oakland. The land use designation for the portion of the project site in Oakland is in the Commercial Industrial Mix-2 (CIX-2) Health and Safety Protection Overlay Zone (S-19).

Pedestrian Master Plan. The Pedestrian Master Plan (PMP) was adopted in June 2017. The vision of the PMP is to make Oakland "a place where vibrant, safe and attractive streets give everyone the opportunity to walk to their destinations and to enjoy the convenience and health benefits of walking". The four goals identified in the PMP are:

- Equity: Recognizing a historical pattern of disinvestment, focus investment and resources to create equitable, accessible walking conditions to meet the needs of Oakland's diverse communities.
- Holistic Community Safety: Make Oakland's pedestrian environment safe and welcoming.
- Vitality: Ensure that Oakland's pedestrian environment is welcoming and well connected, supports the local economy, and sustains healthy communities.
- Responsiveness: Develop and provide tools to ensure that Oakland creates and maintains a vibrant pedestrian environment.

The PMP outlines an action plan to invest in and improve safety in the high injury network and to implement the key policy and programmatic improvements that will make streets safer and more inviting for walking throughout the City. The PMP identifies a targeted set of improvements (38

recommended actions) that can be accomplished in five years. Recommended actions that are applicable to the project include:

- Implement a pedestrian signal policy that prioritizes pedestrian safety
- Implement a temporary traffic control protocol for new developments that impact the pedestrian environment
- Implement the pedestrian safety toolkit
- Maintain roadway features that reduce speeds and make pedestrian crossings safer
- Develop a prioritization strategy for implementing the City's Safe Routes to School Program

Bicycle Master Plan. The Bicycle Master Plan (BMP) was adopted in 2007 and is currently being updated. The BMP is the official policy document addressing the development of facilities and programs to enhance the role of bicycling as a viable transportation choice in Oakland. The BMP is part of the LUTE of the General Plan. The BMP defines new City policies and recommends actions that would encourage and support bicycle travel improvements. The goals of the BMP include the following:

- Infrastructure: Develop the physical accommodations, including a network of bikeways and support facilities, to provide for safe and convenient access by bicycle.
- Education: Improve the safety of bicyclists and promote bicycling skills through education, encouragement, and community outreach.
- Coordination: Provide a policy framework and implementation plan for the routine accommodation of bicyclists in Oakland's projects and programs.

As presented in Figure 20, the Bicycle Master Plan identifies the following improvements to facilities in the vicinity of the project site:

- Installation of a class I bikeway from Fruitvale Avenue to San Leandro border (East Bay Greenway)
- Installation of a class II bikeway on San Leandro Street from 75th Avenue to the San Leandro border
- Installation of a class III bikeway on Edes/Jones/Cairo/Hegenberger Loop/Edgewater between 105th Avenue and the Bay Trail
- Installation of a class III bikeway on 105th Avenue between Edes Avenue and San Leandro Street

Figure 20: Planned Improvements to Bicycle Network

Source: Bicycle Master Plan, 2007.

Oakland Department of Transportation Strategic Plan. The Oakland Department of Transportation Strategic Plan was published in October 2016. The Strategic Plan defines new City policies and recommends actions that would encourage and support the following goals established for the Oakland Department of Transportation:

- Equitable jobs and housing
- Holistic community safety
- Vibrant sustainable infrastructure
- Responsive trustworthy government

Transit First Ordinance. The Transit First Ordinance (Resolution No. 73036 C.M.S.) adopted in October 1996 declares that it shall be the official City policy to encourage and promote the use of public transit and bicycle and pedestrian travel in Oakland.

Complete Streets Policy. The Complete Streets Policy (Resolution No. 84204 C.M.S.) adopted in February 2013 recognizes the necessity of providing safe and convenient pedestrian, bicycle, and public transportation travel options. As such, the City will plan, design, construct, operate, and maintain appropriate facilities for pedestrians, bicyclists, transit users of all abilities, children, elderly, and people with disabilities as a routine component of new construction, reconstruction, retrofit, and maintenance projects (subject to some exceptions).

Planning Code. The Oakland Planning Code (Title 17 of the Oakland Municipal Code) implements the policies of the General Plan and certain other of the City's plans, policies, and ordinances. The Planning Code divides the City into zones, each of which is assigned different regulations. These regulations direct the construction, nature, and extent of building use. The land use designation for the portion of the project site in Oakland is in the Commercial Industrial Mix-2 (CIX-2) Health and Safety Protection Overlay Zone (S-19).

The CIX-2 zone is intended to create, preserve, and enhance areas of the Central and Eastern portions of the City that are appropriate for a wide variety of heavy commercial and industrial establishments. Uses with greater off-site impacts may be permitted provided they meet specific performance standards and are buffered from residential areas. Property development standards within CIX-2 zones include: requirement for pedestrian walkways, maximum driveway width of 35 feet. The intent of the S-19 Health and Safety Protection Combining Zone is to promote the public health, safety and welfare by ensuring that activities which use hazardous material substances or store hazardous materials, hazardous waste, or explosives locate in appropriate locations and develop in such a manner as not to be a serious threat to the environment, or to public health, particularly to residents living adjacent to industrial areas where these materials are commonly used, produced or found.

4.4. CONSISTENCY WITH PLANS AND POLICIES

This section discusses the project's conformance with applicable plans or policies adopted for the purposes of mitigating an environmental effect. As described this section, the proposed project would not substantially conflict with any such applicable plans or policies. As such, development of the proposed project would result in a less-than-significant impact on adopted land use plans and policies.

General Plan. The General Plan contains many policies, which may in some cases address different goals; thus some policies may compete with each other. The Planning Commission/City Council, in deciding whether to approve the proposed project, must decide whether, on balance, the project is consistent (i.e., in general harmony) with the General Plan.

Land Use and Transportation Element. The proposed project is generally consistent with the development parameters established for the CIX-2/S-19 designation.

Pedestrian Master Plan. The proposed project is generally consistent with the Pedestrian Master Plan, as it incorporates features that would enhance and facilitate pedestrian access to and within the project site.

Bicycle Master Plan. The proposed project is generally consistent with Bicycle Master Plan. Bicycle parking facilities will be provided on site. The proposed project would not conflict with any of the bike facilities proposed in the Bicycle Master Plan.

Oakland Department of Transportation Strategic Plan. The proposed project is generally consistent with the Strategic Plan.

Transit First Ordinance. The proposed project is generally consistent with Transit First Ordinance and would encourage and promote the use of public transit and bicycle and pedestrian travel through implementation of various strategies as outlined in the TDM Plan.

Complete Streets Policy. The proposed project is generally consistent with Complete Streets Policy and would design, construct, operate, and maintain appropriate facilities for pedestrians, bicyclists, and transit users.

Planning Code. The proposed project would be generally consistent with the CIX-2/S-19 zone designation and would meet the property development standards and code requirements for vehicle parking, commercial loading, driveway width, and pedestrian walkways.

4.5. VEHICLE-MILES TRAVELED ANALYSIS

A vehicle-miles traveled (VMT) screening analysis was conducted to assess whether the project meets the City's established screening criteria. The results of the VMT screening analysis are shown in Table 8 and are summarized in this section.

Table 8: VMT Screening Analysis

Criteria	Description	Screening Criteria Met?
Small size	Project would generate less than 100 daily vehicle trips	No
Near transit station	Project is located within one-half mile of an existing major transit stop or existing stop along a high-quality transit corridor.	No
Low-VMT area	Project is located within a low-VMT area	No

Source: Kittelson & Associates, Inc. 2017; City of Oakland *Transportation Impact Review Guidelines*, April 2017.

4.5.1. Small Size Criterion – Project Trip Generation Estimates

Vehicle trip generation for the project is discussed in Section 3.1. Table 6 in that section presents the estimated vehicle trip generation of the project. As the table shows, the project is estimated to generate 884 net new daily vehicle trips, 212 net new weekday a.m. peak hour vehicle trips, and 68 net new weekday p.m. peak hour vehicle trips. Because the project would generate more than 100 daily vehicle trips, the project would not meet the established screening criteria for a small size project.

4.5.2. Near Transit Station Criterion

The project is located 1.2 miles from the San Leandro BART station and 1.7 miles from the Coliseum BART station. Therefore, the project does not meet the screening criterion for being located within one-half mile of an existing major transit stop or existing stop along a high-quality transit corridor.

4.5.3. Low-VMT Area Criterion – Map-Based Screening Analysis

The Oakland Planning and Building Department has developed screening criteria and thresholds of significance to determine if land uses similar in function to residential, office, and retail would result in significant impacts related to VMT. For purposes of VMT screening and analysis, K-12 schools are treated as an office use. Therefore, the per-worker VMT for transportation analysis zone (TAZ) 877, where the project is located, is applicable to the project. The City of Oakland VMT screening results for TAZ 877 are summarized in Table 9.

Table 9: VMT Screening Results for TAZ 877

Description	TAZ 877	Regional Average	Regional Threshold
Daily VMT Per Worker	25.5	23.2	19.7
TAZ Percent Difference	-	+9.0%	+22.8%

Source: Kittelson & Associates, Inc. 2017; City of Oakland VMT Layers.gdb.

As shown in Table 9, the average daily VMT per worker in TAZ 877 is 25.5 miles. The regional average daily VMT per worker is 23.2 miles, and the regional threshold (15 percent below the regional average) is 19.7 miles. Daily VMT per worker within TAZ 877 is nine percent (9%) above the regional average and 22.8 percent above the regional threshold. Since the project is located in a high-VMT area and would exceed the established VMT threshold without application of proposed TDM measures, the project would not meet the established map-based screening criteria for a project in a low-VMT area. Therefore, the project must include a transportation and parking demand management plan.

4.6. TRANSPORTATION AND PARKING DEMAND MANAGEMENT

Per the City's standard conditions of approval, all land use projects that generate more than 50 net new a.m. or p.m. peak hour vehicle trips must prepare a transportation and parking demand management plan. As shown in Table 11, the project is expected to generate more than 50 net vehicle trips during both peak hours (277 a.m. peak hour vehicle trips and 89 p.m. peak hour vehicle trips). Per the TDM plan goals included in the City's TIRG, the TDM plan should:

- Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project;
- Achieve 20 percent vehicle trip reductions (VTRs);
- Incorporate location-dependent TDM features per Table 4 of the TIRG;
- Increase pedestrian, bicycle, transit, and carpool modes of travel; and
- Enhance the City's transportation system.

A TDM plan was developed for the project that would:

- Reduce the number of vehicle trips generated by the project by 22.8 percent, which has the effect of reducing VMT per capita for the project below the regional threshold (15 percent below the regional average);

- Include location-dependent pedestrian network improvements;
- Increase pedestrian, bicycle, transit, and carpool modes of travel; and
- Enhance the City's transportation system.

This section discusses the TDM measures that compose the TDM plan and the anticipated VTRs associated with each measure. The TDM plan includes strategies identified in the City of Oakland *Transportation Impact Report Guidelines* and Standard Conditions of Approval, as applicable.

4.6.1. TDM Measures

The following five TDM measures comprise the recommended TDM strategies to be implemented by the project. These measures have been recommended based on their anticipated ability to meet the required VMT reduction. However, the TDM plan is flexible. The effectiveness of the TDM Plan will be evaluated as part of the monitoring and reporting program and strategies can be substituted or altered throughout the life of the project if alternate measures are preferable or deemed more effective.

TDM-1: TDM Program Coordinator

Description: The TDM Program Coordinator is responsible for implementation, monitoring, and reporting of the TDM Plan. The TDM Coordinator would facilitate site inspections by City staff to verify that the standards specified as conditions of approval are met. This person(s) can be a school employee or a third party provider that runs the program.

Target Users: Not applicable

Range of Effectiveness: Not applicable

Estimated Vehicle Trip Reduction: Not applicable

TDM-2: Bike Parking

Description: The project would provide short-term and long-term bicycle parking facilities to meet maximum estimated demand. The maximum estimated demand is calculated as 200 percent of the highest peak hour demand based on the bike mode share and estimated travel demand and the increase in bike trips resulting from implementation of this TDM strategy. The project shall include at least 20 short-term and 20 long-term bicycle parking spaces. The number of bicycle parking spaces would be equitably adjusted (increased) based on observed demand.

Target Users: All staff and students

Range of Effectiveness: 0.625% VMT reduction

Estimated Vehicle Trip Reduction: 0.625% VTR (2 weekday AM peak hour, 1 weekday PM peak hour)

TDM-3: Transit and Bicycle Incentives

Description: The project would provide subsidized/discounted daily or monthly public transit or bike share passes. The project would provide the equivalent of a $1.50 per trip subsidy for these modes.

Target Users: High school students and staff

Range of Effectiveness: 0.3% to 20% VMT reduction

Estimated Vehicle Trip Reduction: 12.9% VTR (17 weekday AM peak hour, 5 weekday PM peak hour)

TDM-4: School Pool Program

Description: The project would develop and implement a ridesharing program for students. The ridesharing "School Pool" program will help to match parents to transport students to/from campus. The VMT reduction calculation assumes aggressive implementation with a 35 percent adoption rate.

Target Users: All students

Range of Effectiveness: 7.2% to 15.8% VMT reduction

Estimated Vehicle Trip Reduction: 15.8% VTR (40 weekday AM peak hour, 13 weekday PM peak hour)

TDM-5: Pedestrian Network Improvements

Description: The project would implement on-site and off-site improvements to the pedestrian network and link areas of the project site and encourage people to walk instead of drive. The project would also minimize barriers to pedestrian access and interconnectivity. The project would implement the following improvements:

- Modify signal timing at 105th Avenue/Edes Avenue to increase pedestrian walk time across 105th Avenue (Improvement Measure TR-3);[3]
- Pay a fair share contribution to upgrades of the nearby railroad crossings at 105th Avenue and Edes Avenue;[4] and,
- Provide pedestrian access points to reduce out of direction travel and allow people to enter the campus from multiple directions (Improvement Measure TR-4).

Target Users: All students

Range of Effectiveness: 0 to 2% VMT reduction

Estimated Vehicle Trip Reduction: 2% VTR (6 weekday AM peak hour, 2 weekday PM peak hour)

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[3] The extent of the signal modifications/upgrades required by the project is currently under investigation by City staff. The SCAMMRP will include additional detail about the project's required contribution to the modifications/upgrades.

[4] The extent of the railroad crossing upgrades (near-term and long-term improvements) is currently under review by City staff. The SCAMMRP will include additional detail about the improvements and the project's required contribution to the upgrades.

4.6.2. Vehicle Trip Reductions

Vehicle trip reductions (VTRs) for the TDM measures are based on the estimated VTR rates developed by the California Air Pollution Control Officers Association (CAPCOA) and documented in the report *Quantifying Greenhouse Gas Mitigation Measures* (August 2010). The selected TDM strategies and estimated vehicle trip reduction calculations are described in this section and summarized in Table 10.

Table 10: TDM Measures and Estimated Vehicle Trip Reduction Rate

TDM Measures[1]	Target User Group	Range of Vehicle Trip Reduction Rate	Estimated Vehicle Trip Reduction Rate[2]
TDM-1: TDM Coordinator	-	-	-
TDM-2: Bike Parking	All	0.625%	0.625%
TDM-3: Transit and Bicycle Subsidies	High School Students and Staff	0.3% to 20%	12.9%
TDM-4: School Pool Program	All Students	7.2% to 15.8%	15.8%
TDM-5: Pedestrian Network Improvements	All	0% to 2%	2%
All Strategies	-	-	**23.5%**

Source: Kittelson & Associates, Inc. 2017; California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, August 2010.
Notes:
[1] The TDM measures and estimated vehicle trip reduction rates were obtained from CAPCOA: Bike Parking, SDT-6; Transit Subsidies, TRT-4, School Pool Program, TRT-10, Pedestrian Network Improvements, SDT-1.
[2] Vehicle trip reduction rate estimated based on the estimated level of adoption and aggressiveness of implementation of a given strategy.
[3] Vehicle trip reduction estimated by applying the estimated vehicle trip reduction rate to the vehicle trips generated by the target user group.

As shown in Table 10, the selected TDM measures would achieve a 23.5 percent reduction in vehicle trips generated by the project. Table 11 presents the number of net new vehicle trips generated by the project as well as the breakdown of those trips by subset of people at the school.

Table 11: Net New Vehicle Trips by Subset of People at Lighthouse School

Subset of People at Lighthouse School	People	% of Total	Daily Vehicle Trips	A.M. Peak Hour Vehicle Trips	P.M. Peak Hour Vehicle Trips
All People	935	100%	970	277	89
All Students	850	91%	882	252	81
High School Students	350	37%	363	104	33
Staff Full-Time Equivalent	85	9%	88	25	8

Source: Kittelson & Associates, Inc. 2017.

As discussed in the Vehicle Miles Traveled Analysis section (Section 4.5), the project must reduce VMT by 22.8 percent to reduce VMT to the regional threshold (15 percent below the regional average). This percentage corresponds to the overall VTR required for the project through the TDM plan and is

equivalent to 63 fewer a.m. peak hour trips and 20 fewer p.m. peak hour trips. The VTR rates developed by CAPCOA pertain to peak hour vehicle trips. These rates were applied to the a.m. peak hour and p.m. peak hour vehicle trips to develop the total a.m. peak hour and total p.m. peak hour VTRs. The analysis assumes the vehicle trip reduction would apply to the mode split and the vehicle trip length and average vehicle occupancy would remain constant. Therefore, the vehicle trip reduction is equivalent to the reduction in VMT. The vehicle trip reduction estimates are shown in Table 12.

Table 12: Vehicle Trip Reduction Estimates

TDM Measure	Target Users	A.M. Peak Hour Vehicle Trips	P.M. Peak Hour Vehicle Trips	VTR Rate[1]	A.M. Peak Hour VTR	P.M. Peak Hour VTR
TDM-1: TDM Coordinator	-	-	-	-	-	-
TDM-2: Bike Parking	All People	283	91	0.63%	2	1
TDM-3: Transit and Bicycle Incentives	Staff and High School Students	132	42	12.90%	17	5
TDM-4: School Pool Program	All Students	257	83	15.80%	40	13
TDM-5: Pedestrian Network Improvements	All People	283	91	2.00%	6	2
				Total	**65**	**21**

Source: Kittelson & Associates, Inc. 2017; CAPCOA, *Quantifying Greenhouse Gas Mitigation Measures*, 2010.
[1] VTR rates developed by CAPCOA and documented in *Quantifying Greenhouse Gas Mitigation Measures*.

As shown in Table 12, the combination of TDM measures would reduce a.m. peak hour vehicle trips by 65 trips and p.m. peak hour trips by 21 trips. Given that the project is located within a TAZ where the average daily VMT is 22.8 percent above the regional threshold and the TDM measures would effectively reduce VMT by 23.5 percent, with implementation of the recommended TDM plan, the project would have a less-than-significant VMT-related impact.

4.6.3. TDM Monitoring and Reporting Program

The project sponsor is required to submit an annual compliance report for review and approval by the City. This report will be submitted within one year of occupancy and every following year for a total of at least five years. The report will be reviewed either by City staff (or a peer review consultant, chosen by the City and paid for by the sponsor). If timely reports are not submitted, the reports indicate a failure to achieve the stated policy goals, or the required alternative mode split is still not achieved, staff will work with the project sponsor to find ways to meet their commitments and achieve trip reduction goals. If the issues cannot be resolved, the matter may be referred to the Planning Commission for resolution. Project sponsors shall be required, as a condition of approval to reimburse

the City for costs incurred in maintaining and enforcing the trip reduction program for the approved project.

4.7. SITE ANALYSIS

4.7.1. Vehicle Access and Circulation

For Phase 1 conditions, the length of the existing curb cut along 105th Avenue would remain 35 feet, and the active driveway would remain a full-access driveway. The length of the existing curb cut along Edes Avenue would remain 20 feet, and the active driveway would remain an outbound-only driveway. For Phase 1 conditions, the existing parking lot would remain, and vehicles would continue to circulate through the parking lot within the 24-foot drive aisle.

Phase 1 conditions would not create a new hazard or substantial conflict to vehicles. Therefore, Phase 1 of the project would have a less than significant impact on vehicle access and circulation.

Vehicle access, parking, and on-site circulation have not been developed yet for Phase 2; however, preliminary information is presented in Figure 2. Two new curb cuts would be constructed on Edes Avenue at the northwest corner of the project site to provide one inbound-only driveway and one outbound-only driveway. The existing curb cuts and adjacent sidewalk on Edes Avenue and on 105th Avenue would be reconstructed. A new parking lot would be constructed on the northwest portion of the project site. In some instances, vehicles on Edes Avenue waiting to turn left into the new inbound-only project driveway could form a queue that builds to the railroad crossing. The tendency for such queueing to occur should be taken into consideration as the site plan for Phase 2 is refined. If vehicle queuing to the railroad tracks occurs, the vehicle queue may create a hazardous condition.

Improvement Measure TR-1 has been identified to reduce the potential under Phase 2 conditions for queues on Edes Avenue to back-up across the railroad tracks:

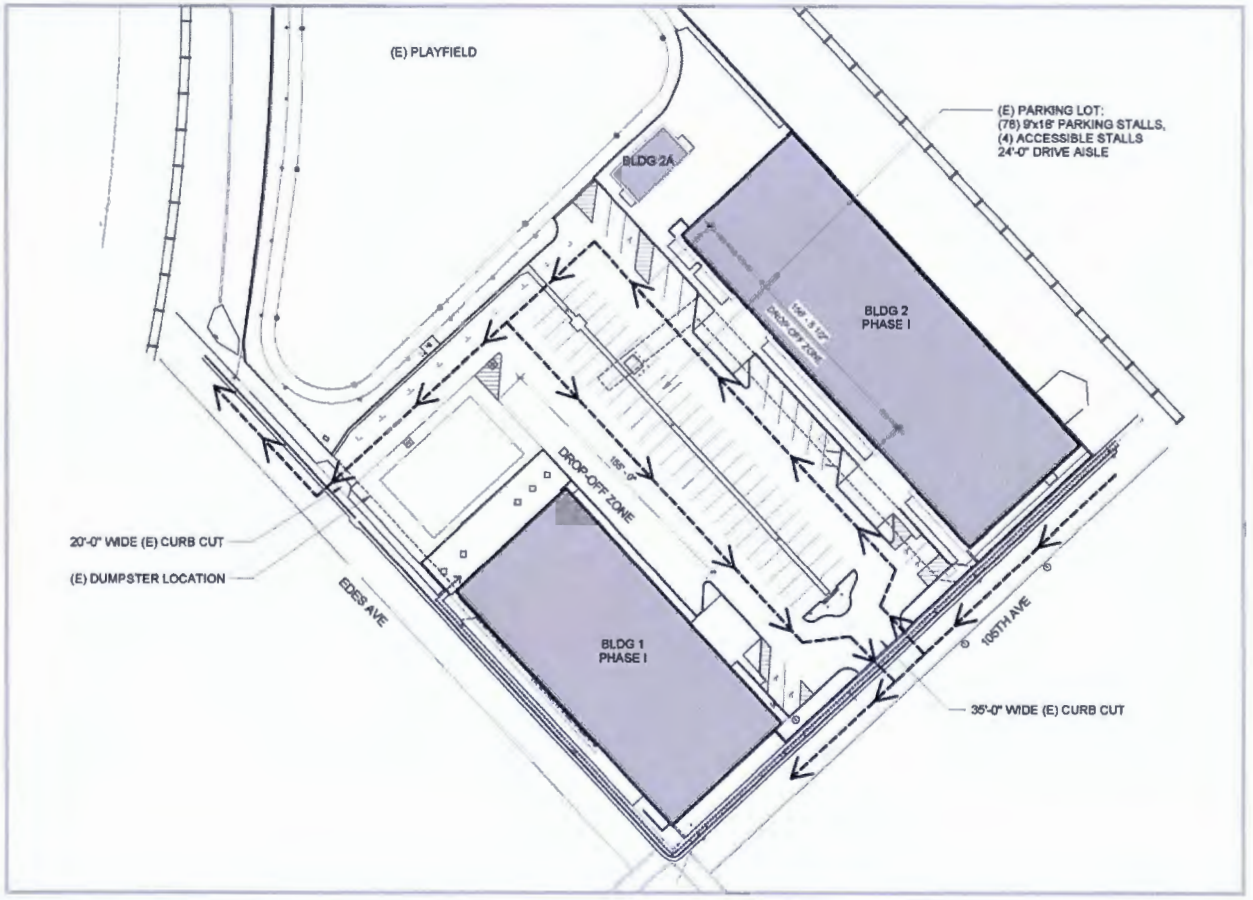
> **Improvement Measure TR-1: Entering Queue Abatement**
>
> For Phase 2 conditions, as an improvement measure to minimize the tendency for vehicles on Edes Avenue to queue across the railroad tracks, the project would work with City staff to identify appropriate street markings and signage, compliant with the MUTCD, to warn drivers where to wait in advance of the tracks when a downstream queue is present.

4.7.2. Passenger Drop Off and Pick Up

Phase 1 Conditions

Figure 21 illustrates the circulation route for on-site student drop off and pick up activity within the parking lot for Phase 1 conditions.

Figure 21: Drop Off and Pick Up Circulation Routes



Source: Project Sponsor, 2017.

As shown, vehicles would enter on 105th Avenue, circulate counterclockwise around the parking lot, and drop off students along the designated drop-off zone along Building 1.

The project sponsor has implemented student drop off and pick up procedures at other school sites. The project sponsor prepared the following set of procedures for drop off and pick up activities at the project site:

> Student drop-off zone is provided to allow parents/passengers to stop at dropping point temporarily to unload/load their children. The student drop-off zone has limited hours of operation, typically limited from 7:30 a.m. for all grades. Drop-off zone is located inside the parking lot where the front entrance to the student building is located. The applicant also provides the instruction in dropping off the students for all grades
>
> Parents are required to form a single queue within the parking lot to the drop-off zone for the lower grades. Parents may not double park to drop off their children at other locations within the parking lot.

Student pick up also occurs in the designated "drop-off zone." The student pick-up period begins at 3:30 p.m. on typical school days and at 1:30 p.m. on Fridays. For the after school program, the student pick up period begins at 6:00 p.m.

Based on the vehicle stacking length assumption of 1.5 feet per student enrolled[5] and a maximum enrollment of 500 students for Phase 1 conditions, it is expected that the maximum queue during drop off and pick up activity would reach a length of 750 feet, or 30 vehicles assuming 25 feet per vehicle. Based on the dimensions of the drop-off zone in Figure 21, the project would provide approximately 500 feet of on-site queuing length within the parking lot—entering from the 105th Avenue driveway, circulating through the parking lot, and exiting at the 105th Avenue driveway—which would accommodate a queue of up to 20 vehicles. In instances when the queue temporarily exceeds the on-site queue capacity, a queue of up to ten vehicles may extend onto 105th Avenue and impede circulation of traffic.

Improvement Measure TR-2 has been identified to reduce the potential under Phase 1 conditions for a vehicle queue to spillback onto 105th Avenue:

Improvement Measure TR-2: Spillback Queue Abatement

For Phase 1 and Phase 2 conditions, as an improvement measure to minimize the tendency for vehicles in queue to drop off or pick up students to spillback onto the local street network, the project sponsor should designate staff members to help manage the flow of traffic during drop off and pick up periods to ensure the queue continues to flow.

Phase 2 Conditions

The route for drop off and pick up activity under Phase 2 conditions has not been developed yet. As the project sponsor develops the detailed site plan for Phase 2, consideration should be given to the estimated maximum queue length for drop off and pick up activity. With a maximum enrollment of 850 students under Phase 2 conditions, the estimated maximum queue would be 1,275 feet, or 51 vehicles.

4.7.3. Vehicle Parking

Parking conditions are not static, as parking supply and demand varies from day to day, from day to night, from month to month, etc. Hence, the availability of parking spaces (or lack thereof) is not a permanent physical condition, but changes over time as people change their modes and patterns of travel. Parking deficits are considered social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment.

[5] Cooner, Scott et al, *Traffic Operations and Safety at Schools: Recommended Guidelines*, Texas Transportation Institute, January 2004, Texas Department of Transportation Report 4286-2.

For the use "Community Education: high schools" in the City Planning Code (section 17.116.070), the code states the Director of City Planning must prescribe the number of parking spaces.

The project provides 82 parking spaces in the existing parking lot for Phase 1 (78 standard spaces and four ADA spaces). The amount of parking provided for Phase 2 is yet to be determined. Parking inside the gates is limited to staff-use only. Parents who are visiting the campus will need to arrive after drop-off ends and park in available spots in the loading zone. Parent parking is available until 2:00 p.m.

The Lighthouse School – Lodestar Campus would have 85 full-time-equivalent (FTE) staff members for Phase 2. The number of FTE staff members for Phase 1 has not been determined. However, the number of FTE staff members for Phase 1, when high school students are not enrolled, is expected to be lower than the number of FTE staff members for Phase 2 with full enrollment. Travel mode split assumptions are presented in Table 6. Vehicle trip reductions resulting from the TDM plan for the project are presented in Table 12. It is assumed the TDM plan would reduce the number of personal-vehicle trips made by staff members. Given the mode split assumptions, the vehicle trip reductions resulting from the TDM plan, and the assumption that fewer than 85 FTE staff members will be present when the school operates under Phase 1 conditions, the provision of 82 parking spaces in the existing parking lot is expected to meet the parking demand for Phase 1.

After implementation of the TDM plan for Phase 1, a parking study should be conducted to determine the estimated demand for parking for Phase 2 conditions. The project sponsor should work with the City Planning Department to determine the required amount of parking for Phase 2. Through such coordination with the City

4.7.4. Transit Access

As discussed in section 2.4, AC Transit provides bus services in Oakland. AC Transit Route 45 runs adjacent to the project site, as shown in Figure 7. The transit stops nearest to the project site are located on 105th Avenue at Edes Avenue and on Acalanes Drive at 105th Avenue. The stops are marked by a sign post; no amenities, such as benches or shelters, are present for people waiting for the bus.

As part of the TDM plan for the project, the project sponsor would provide subsidized/discounted daily or monthly public transit and/or bicycle passes. These passes may be partially or wholly subsidized by the project sponsor. *Improvement Measure TR-3* has also been identified to encourage provision of subsidized transit passes:

> **Improvement Measure TR-3: Transit Subsidy**
>
> As an improvement measure to encourage use of transit, the project sponsor should provide subsidized transit passes to all students and staff. The value of the student passes should be equivalent to the monthly pass value of an AC Transit local youth 31-day pass (currently $26.50). The value of the staff passes should be equivalent to the monthly pass value of the adult local 31-day pass (currently $81).

Pedestrian Access and Circulation

Impacts to pedestrian conditions and facilities as a result of project-generated activities were assessed, including the number of new pedestrian trips that would be added to the network. The adequacy of pedestrian connections to nearby transit routes, safety, and right of way issues were qualitatively assessed. The results of this evaluation are summarized in this section.

Pedestrian trips generated by the project would include walk trips to and from the project site and walk trips to and from transit lines. As shown in Table 6, the project would add approximately 101 pedestrian trips (87 transit trips and 14 walk trips) during the weekday a.m. peak hour and 31 pedestrian trips (27 transit trips and 4 walk trips) during the weekday p.m. peak hour.

The new pedestrian trips would be spread out over several adjacent sidewalks and crosswalks. Based on the current levels of pedestrian activity in the study area, the new pedestrian trips generated by the project could be accommodated on existing facilities and would not substantially increase pedestrian crowding at street corners or on nearby sidewalks and crosswalks. The incremental increase in project-generated pedestrian traffic would not have a substantial adverse effect on surrounding pedestrian facilities, including routes to transit.

Although the Project would increase the number of vehicles accessing the site, the proposed driveway would be designed with adequate sight distance for pedestrians. The project would not create potential collision risks through increased vehicle conflicts, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.

However, there are deficiencies at the nearby signalized 105th Avenue/Edes Avenue intersection. *Improvement Measure TR-4* has been identified to provide more crossing opportunities and longer walk times across this intersection:

> **Improvement Measure TR-4: Signal Timing Modifications at 105th Avenue/Edes Avenue**
>
> For Phase 1 and Phase 2 conditions, since the pedestrian crossings at the intersection are approximately 32 feet to 40 feet in length, the pedestrian clearance time should be increased to 10 to 12 seconds, relative to the crossing distance. The MUTCD standard assumption of 3.5 feet per second crossing speed should be used to compute the pedestrian clearance time for each crossing.

In addition, the project would better accommodate pedestrian access to the project site with the inclusion of pedestrian-specific access points. *Improvement Measure TR-5* has been identified for the project to provide pedestrian-specific access points to the site:

> **Improvement Measure TR-5: Pedestrian-Specific Points of Access to Project Site**
>
> As the site plan is refined for Phase 1 and Phase 2, pedestrian-specific access points should be incorporated into the site plan. For example, pedestrian-only gates should be installed in the existing perimeter fence along 105th Avenue and Edes Avenue so that pedestrians can enter and exit the project site via pathways other than the vehicle driveways.

4.7.5. Bicycle Access and Circulation

Impacts to bicycle conditions and facilities as a result of project-generated activities were assessed for the project, including the number of new biking trips that would be added to the network, the adequacy of bicycle connections to nearby bicycle facilities, safety, and right of way issues. The results of this evaluation are summarized in this section.

A portion of the total "Other" trips shown in Table 6, would be bike trips. Assuming all of the "Other" trips are bike trips, the project would generate up to 10 bike trips (7 inbound, 3 outbound) during the weekday a.m. peak hour and 3 bike trips (1 inbound, 2 outbound) during the weekday p.m. peak hour.

Bicyclists would travel along a combination of designated bicycle routes and other streets to access the project site. The project site is located immediately adjacent to a class III bike route on Edes Avenue and 105th Avenue. However, as discussed in Section 2.6.2, class III bike route signage and street markings are not present near the project site. Class II bike lanes are present to the north along 105th Avenue beginning at Pippin Street, which is approximately 1,000 feet north of Edes Avenue. Although the project would add up to 10 bicycle trips to the network during the peak hour, this increase would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent facilities. There would be sufficient capacity on existing bikeways and at end of trip facilities to handle the project-generated additional bicycle trips.

The project would not increase vehicle or bicycle traffic to a level that adversely affects bicycle facilities in the area, nor would the project create a new hazard or substantial conflict to bicycling.

4.7.6. Bicycle Parking and Amenities

The following are the Oakland Municipal Code requirements for bicycle parking facilities for public and private elementary, junior high, and high schools (Section 17.117.100):

- **Long-Term Bicycle Parking**[6]**:** One space per ten employees plus one space per 20 students of planned capacity. Minimum requirement is 2 spaces.
- **Short-Term Bicycle Parking**[7]**:** One space per 20 students of planned capacity. Minimum requirement is two spaces.

Based on the bicycle parking requirements, the project is required to provide a minimum of 52 long-term bicycle parking spaces (nine for employees and 43 for students) and 43 short-term bicycle parking spaces.

[6] Long-term Bicycle Parking. Each long-term bicycle parking space shall consist of a locker or locked enclosure providing protection for each bicycle from theft, vandalism and weather. Long-term bicycle parking is meant to accommodate employees, students, and others expected to park more than two hours.

[7] Short-term Bicycle Parking. Short-term bicycle parking shall consist of a bicycle rack or racks and is meant to accommodate visitors, messengers, and others expected to park not more than two hours.

Per Oakland Municipal Code requirements, long-term parking spaces would be located within 500 feet, as feasible, of main pedestrian entrances to the uses to which they are accessory and not publicly accessible and within 50 feet for short-term parking spaces. This supply would meet the Oakland Municipal Code requirements.

The site plan presented in Figure 2 does not indicate the number or location of long-term or short-term bicycle parking spaces. Assuming the project provides bicycle parking in the amount and location required by the City code, the project would not cause any significant bicycle impacts or generate potential conflicts between bicyclists and vehicles on the project site.

4.7.7. Emergency Vehicle Access

Emergency vehicle access to the project site for Phase 1 is provided via the full-access driveway on 105th Avenue. For Phase 2, emergency vehicle access would be provided via the two planned driveways on Edes Avenue. Emergency vehicle routes to the project site are discussed in Section 2.10.

The project does not propose any modifications to the existing roadway network or major modifications (circulation patterns or design features) to 105th Avenue or Edes Avenue that would preclude or otherwise alter access by emergency vehicles. Additionally, any changes proposed in the public right-of-way would be subject to review and approval by the Oakland Department of Transportation and the Oakland Fire Department prior to implementation.

During peak commute times, general traffic congestion throughout the project area may result in delays to emergency responders. As shown in Table 6, the project would add approximately 212 vehicle trips (125 inbound, 87 outbound) to the surrounding street network during the weekday a.m. peak hour and approximately 68 vehicle trips (33 inbound, 35 outbound) to the surrounding street network during the weekday p.m. peak hour. Given the level of existing traffic in the area (about 1,700 vehicles during the a.m. peak hour and 1,150 vehicles during the p.m. peak hour at the 105th Avenue/Edes Avenue intersection), the project's contribution to existing traffic would not be substantial.

4.8. CONSTRUCTION IMPACTS

Detailed construction plans have not been finalized. However, preliminary information regarding construction activity has been provided by the project sponsor. Table 13 presents trip estimates for construction activity for Phase 1 and Phase 2.

Table 13: Construction Activity Trip Estimates

	Construction Activity	Duration in Months	Average Daily Trips		
			Heavy Trucks	Delivery Trucks and Vans	Personal Vehicles
Phase 1	Soil Remediation	3	5	1	4
	Demolition	0.5	1	1	10
	New Walls, Finishes, MEP Upgrades	3	0.25	2	20
	Exterior Skin	0.5	0.5	0.5	8
Phase 2	Clear Site/Demo/Grade/Excavation	1	4	2	14
	Structure	3	2	3	16
	Exterior Skin and Roof	3	0.5	3	18
	Interior	4	0.5	4	20
	Sitework /Landscaping /Playground	2	2	3	14

Source: Project Sponsor, 2017

Implementation of Phase 1 of the project would involve rehabilitation of the existing buildings on the project site. The project sponsor estimates this construction effort will last seven months. As presented in Table 13 for Phase 1, up to five heavy trucks, two delivery trucks/vans, and 20 personal vehicles would arrive to the project site daily, contingent up on the stage in the construction process. The existing parking lot could accommodate the number of personal vehicles expected to arrive at the site during Phase 1 construction. The project sponsor did not provide information regarding time of day restrictions or day of week restrictions for construction activity during Phase 1 construction. Construction staging is expected to occur fully with in the project site. The project sponsor should require all contractors to maintain adequate bicycle and pedestrian circulation at all times during construction.

Implementation of Phase 2 of the project would involve demolition, excavation, and grading; concrete foundation construction; building construction; asphalt parking lot construction; and landscaping and playground construction. The project sponsor estimates this construction effort will last 13 months. As presented in Table 13 for Phase 2, up to four heavy trucks, four delivery trucks/vans, and 20 personal vehicles would arrive to the project site daily, contingent up on the stage in the construction process. The existing parking lot could accommodate the number of personal vehicles expected to arrive at the site during Phase 2 construction. The project sponsor did not provide information regarding time of day restrictions or day of week restrictions for construction activity during Phase 2 construction.

Construction staging would occur primarily within the confines of the project site, but would occasionally use portions of the public right-of-way along both 105th Avenue and Edes Avenue. As the project sponsor more fully develops the plans and timeline for Phase 2 construction, the project sponsor would coordinate with City staff to arrange for use of public right-of-way only during those periods when construction staging cannot be contained within the confines of the project site. The project would be required to meet requirements of Standard Conditions of Approval #68 for construction activity in the public right-of-way.

The effects of construction traffic on the circulation network would be a temporary lessening of the capacities on surrounding roadways and truck routes, as well as connecting local streets, due to the slower movement and larger turning radii of trucks. Construction truck and worker vehicle traffic could result in minor congestion and conflicts with vehicles, transit, pedestrians and bicyclists. Construction activities would be temporary and limited in duration. The project sponsor could schedule the majority of construction activity to occur during off-peak hours when traffic volumes are minimal, which would lessen the potential for conflicts with existing travel patterns.

Section 5 Conditions of Approval/Mitigations

5. CONDITIONS OF APPROVAL/MITIGATIONS

This chapter summarizes the standard conditions of approval and mitigation measures required to reduce any significant impacts generated by the project to less than significant levels. In addition, recommendations improvement measures (or project-specific recommendations) have been proposed in situations where conditions could be improved, or measures implemented to meet City policy objectives, but no significant impacts have been identified.

5.1.1. Standard Conditions of Approval

The project is subject to the City's Standard Conditions of Approval (SCA) for transportation and traffic, including:

SCA 68: Construction Activity in the Public Right-of-Way

This SCA would apply during construction activity associated with Phase 2 construction. If all construction staging cannot be accommodated on-site, the project sponsor must comply with SCA 68 to arrange for use of public right-of-way during construction.

SCA 69: Bicycle Parking

This project sponsor must provide bicycle parking in compliance with the Oakland Municipal Code, as described in Section 4.7.7.

SCA 70: Transportation Improvements

The project sponsor must make the recommended improvements discussed in this study and summarized in Section 5.1.3.

SCA 71: Transportation and Parking Demand Management

The project sponsor must implement the transportation and parking demand management plan prepared as part of this transportation impact analysis. The TDM plan is discussed in Section 4.6 and Section 5.1.3 of this report. The project sponsor will need to designate an on-site TDM plan coordinator to facilitate implementation, monitoring, and reporting of the plan.

SCA 73: Railroad Crossings

Upon preparation of a detailed site plan, including details of curb cuts and site access, for Phase 2 of the project, the project sponsor may need to complete a Diagnostic Review to evaluate potential impacts to the at-grade railroad crossings on Edes Avenue resulting from project-related traffic.

5.1.2. Mitigation Measures

The project would not have a significant impact on any transportation-related topics, including vehicle miles traveled, induced automobile traffic, or conflicts with existing plans and policies, and no mitigation measures are required.

5.1.3. Improvement Measures/Project-Specific Recommendations

The following improvement measures (or project-specific recommendations) have been identified to further reduce the less than significant transportation-related impacts related to vehicle access and circulation, bicycle access, and pedestrian access:

Improvement Measure TR-1: Entering Queue Abatement

For Phase 2 conditions, as an improvement measure to minimize the tendency for vehicles on Edes Avenue to queue across the railroad tracks, the project would work with City staff to identify appropriate street markings and signage, compliant with the MUTCD, to warn drivers where to wait in advance of the tracks when a downstream queue is present.

Improvement Measure TR-2: Spillback Queue Abatement

For Phase 1 and Phase 2 conditions, as an improvement measure to minimize the tendency for vehicles in queue to drop off or pick up students to spillback onto the local street network, the project sponsor should designate staff members to help manage the flow of traffic during drop off and pick up periods to ensure the queue continues to flow.

Improvement Measure TR-3: Transit Subsidy

As an improvement measure to encourage use of transit, the project sponsor should provide subsidized transit passes to all students and staff. The value of the student passes should be equivalent to the monthly pass value of an AC Transit local youth 31-day pass (currently $26.50). The value of the staff passes should be equivalent to the monthly pass value of the adult local 31-day pass (currently $81).

Improvement Measure TR-5: Signal Timing Modifications at 105th Avenue/Edes Avenue

For Phase 1 and Phase 2 conditions, since the pedestrian crossings at the intersection are approximately 32 feet to 40 feet in length, the pedestrian clearance time should be increased to 10 to 12 seconds, relative to the crossing distance. The MUTCD standard assumption of 3.5 feet per second crossing speed should be used to compute the pedestrian clearance time for each crossing.

Improvement Measure TR-5: Pedestrian-Specific Points of Access to Project Site

As the site plan is refined for Phase 1 and Phase 2, pedestrian-specific access points should be incorporated into the site plan. For example, pedestrian-only gates should be installed in the existing perimeter fence along 105th Avenue and Edes Avenue so that pedestrians can enter and exit the project site via pathways other than the vehicle driveways.

5.1.4. Transportation and Parking Demand Management Plan

The following transportation demand management measures have been recommended as part of the TDM plan:

TDM-1: TDM Program Coordinator. The TDM Program Coordinator is responsible for implementation, monitoring, and reporting of the TDM Plan. The TDM Coordinator would facilitate site inspections by City staff to verify that the standards specified as conditions of approval are met. This person(s) can be a school employee or a third party provider that runs the program.

TDM-2: Bike Parking. The project would provide short-term and long-term bicycle parking facilities to meet maximum estimated demand. The maximum estimated demand is calculated as 200 percent of the highest peak hour demand based on the bike mode share and estimated travel demand and the increase in bike trips resulting from implementation of this TDM strategy. The project shall include at least 20 short-term and 20 long-term bicycle parking spaces. The number of bicycle parking spaces would be equitably adjusted (increased) based on observed demand.

TDM-3: Transit and Bicycle Incentives. The project would provide subsidized/discounted daily or monthly public transit or bike share passes. The project would provide the equivalent of a $1.50 per trip subsidy for these modes.

TDM-4: School Pool Program. The project would develop and implement a ridesharing program for students. The ridesharing "School Pool" program will help to match parents to transport students to/from campus. The VMT reduction calculation assumes aggressive implementation with a 35 percent adoption rate.

TDM-5: Pedestrian Network Improvements. The project would implement on-site and off-site improvements to the pedestrian network and link areas of the project site and encourage people to walk instead of drive. The project would also minimize barriers to pedestrian access and interconnectivity. The project would implement the following improvements:

- Modify signal timing at 105th Avenue/Edes Avenue to increase pedestrian walk time across 105th Avenue (Improvement Measure TR-3);[8]
- Pay a fair share contribution to upgrades of the nearby railroad crossings at 105th Avenue and Edes Avenue;[9] and,
- Provide pedestrian access points to reduce out of direction travel and allow people to enter the campus from multiple directions (Improvement Measure TR-4).

As discussed in Section 4.6.3, the project sponsor shall submit an annual compliance report for review and approval by the City. This report will be submitted within one year of occupancy and every following year for a total of at least five years. If timely reports are not submitted, the reports indicate a failure to achieve the stated policy goals, or the required alternative mode split is still not achieved, staff will work with the project sponsor to find ways to meet their commitments and achieve trip reduction goals. If the issues cannot be resolved, the matter may be referred to the Planning Commission for resolution. Project sponsors shall be required, as a condition of approval to reimburse the City for costs incurred in maintaining and enforcing the trip reduction program for the approved project.

[8] The extent of the signal modifications/upgrades required by the project is currently under investigation by City staff. The SCAMMRP will include additional detail about the project's required contribution to the modifications/upgrades.
[9] The extent of the railroad crossing upgrades (near-term and long-term improvements) is currently under review by City staff. The SCAMMRP will include additional detail about the improvements and the project's required contribution to the upgrades.

Appendix A Scope of Work

AUTHORIZATION FOR PROFESSIONAL SERVICES

May 22, 2017

Kittelson & Associates, Inc.
155 Grand Avenue, Suite 900
Oakland, CA 94612
510.839.1742 (P)
510.839.0871 (F)

Lighthouse Community Public Schools, with an office at 444 Hegenberger Road, Oakland, CA 94621 hereby requests and authorizes Kittelson & Associates, Inc. to perform the services as described in Part "A" - Scope of Work to this authorization and subject to all of the provisions described in Part "B" Terms and Conditions.

PART A - SCOPE OF WORK

PHASE 2: TRANSPORTATION IMPACT ANALYSIS

The scope of the Transportation Impact Analysis (Phase 2) is subject to change based on discussions with City staff. As such, the scope and budget for Phase 2 cannot be accurately finalized at this time. In general, there are currently numerous unknowns, such as the number of intersections to be studied, that can increase the level of effort and associated cost. Based on the scope of work outlined in this section, the overall Phase 2 cost is estimated at $39,210. A detailed budget is included in "Part B".

Phase 2 is intended to build upon the analysis from Phase 1 and provide a detailed transportation impact analysis to identify impacts and mitigation measures to reduce these impacts to less-than-significant levels. Based on our understanding of the City of Oakland's *Transportation Impact Review Guidelines (TIRG)* it is anticipated to include the following tasks:

Task 0: Project Scoping

KAI will prepare a draft scope of work under the direction of City staff. Upon receiving a written notice to proceed, KAI will schedule a scoping meeting with City staff to discuss and finalize the scope of work for the transportation study. The draft scope of work will document key project assumptions.

Task 1: Data Collection

Task 1.1 – Multimodal Intersection Counts

Per the *TIRG*, transportation counts, including bicycle, pedestrian, and vehicle volumes, shall be conducted on study intersections. Study intersections are defined as:

- all intersection(s) of streets adjacent to the project site;
- all signalized intersection(s), all-way stop-controlled intersection(s) or roundabouts where 100 or more peak hour trips are added by the project;
- all signalized intersection(s) with 50 or more project-related peak hour trips and existing LOS D-E-F; and
- side-street stop-controlled intersection(s) where 50 or more peak hour trips are added by the project to any individual movement other than the major-street through movement.

Based on the estimated project trip generation and distribution and the criteria listed above, multimodal (vehicle, pedestrian, bicycle) counts will be collected at the following locations.

1. 98th Avenue/I-880 SB Ramps
2. 98th Avenue/I-880 NB Ramps
3. 98th Avenue/Edes Avenue
4. 98th Avenue/San Leandro Street
5. 98th Avenue/International Boulevard
6. 105th Avenue/Edes Avenue
7. 105th Avenue/San Leandro Street
8. 105th Avenue/International Boulevard

Count locations will be finalized during the scoping process in consultation with City staff. Given that School of the Urban Mission and Oakland Unified School District are soon to be on summer break, KAI will proceed with data collection at these locations within one week after receiving a written notice to proceed. Data will be collected during the weekday AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak periods on Tuesday, May 22, 2017 when classes are in session. If City staff determines additional study locations are needed, KAI will collect count data at a later date. Additional counts would be considered an out-of-scope work request and will be billed on a time-and-materials basis and subject to additional change orders.

Task 1.2 – Doorway/Driveway Counts

The proposed project would replace the existing School of Urban Missions Bible College and Theological Seminary (SUM). SUM is a private educational institution with a full-time enrollment of approximately

234 students at the Oakland campus.[1] To account for the elimination of this use, as part of Phase 1 scope of work, KAI collected doorway and driveway counts at the campus access points during the weekday AM (7:00 a.m. to 9:00 a.m.) and weekday PM (4:00 p.m. to 6:00 p.m.) periods. These doorway/driveway counts will be used in the transportation analysis conducted as part of Task 3. No new doorway/driveway counts will be collected as part of Phase 2.

Task 1.3 – Field Observations

As part of Phase 1, KAI collected field observations at the project site and along the project frontages (i.e., 105th Avenue and Edes Avenue). Field observations included a review of pedestrian, bicycle, and vehicle access and amenities, as well as a detailed review of the operational and safety implications of the at-grade railroad crossing. No new field observations will be conducted as part of Phase 2.

Task 2: Travel Demand Estimates

During scoping (Task 0), KAI will review the results of the Phase 1 travel demand estimates with City staff to confirm the approach and methodology and application of trip credits for existing uses. If City staff approves the travel demand estimates, KAI will proceed with trip distribution based on staff/student origin/destination and mode share information previously provided by the CLIENT.

Task 3: Transportation Analysis

Task 3.1: Project Description

KAI will describe the project in a Project Description section. This section will include a summary of the existing uses at the project site, as well as the surrounding uses in the vicinity of the project. It will also describe the proposed project, including its land uses, and provision and operation of on-site vehicular parking, bicycle parking, and pick-up and drop-off procedures. The following information will be included:

- Site plan including address, cross streets, lot area, existing and proposed zoning, Assessor's Number(s), and a figure showing the lot on the Assessor's map;
- Existing and proposed total gross square footage for each land use type and the number of students and employees planned for each section of the proposed school;
- Existing and proposed number of off-street motor vehicle and bicycle parking spaces including net changes to on-street or off-street parking spaces as a result of the project;
- Existing and proposed number of off-street and on-street freight loading spaces as well as any proposed changes affecting on-street loading spaces;

[1] Online: https://www.cappex.com/colleges/School-of-Urban-Missions. Website accessed January 18, 2017.

- Description and plans for use of public rights-of-way by present and proposed uses, either above or below grade (e.g., air rights, surface or subsurface revocable permits, etc.) including changes to sidewalk width, and the number, width, direction and channelization of travel lanes;
- Scale plans showing site access for all transportation modes, the location of curb cuts for existing and proposed uses, and internal site circulation (including pedestrian, motor vehicles, and deliveries);
- Figure identifying the quantity, dimensions, and location of parking spaces for motor vehicles and bicycles, proposed egress and ingress to the parking lot, circulation within the facility, and quantity and location of parking spaces for persons with disabilities, including specification of supply relative to Planning Code requirements; and,
- Figure showing the location, dimensions, access to off-street freight loading spaces, and the on-site location for storage of refuse and recycling.

KAI assumes the CLIENT will provide a scaled project site plan that clearly indicates the dimensions of existing and proposed curb cuts, location of the pedestrian, bicycle, and vehicular access points, as well as the location of any off-street parking spaces for vehicles (including car share and ADA spaces), bicycle parking (Class 1 and Class 2), and pick-up and drop-off area.

As part of this task, the project will be evaluated for compliance with the City of Oakland Municipal Code requirements for vehicle parking, commercial loading, and bicycle parking for the proposed land use. KAI will also evaluate the proposed project against the City's adopted plans and policies.

Task 3.2 Drop-Off and Pick-Up Procedures

The CLIENT will provide KAI with a description of proposed drop-off and pick-up procedures. KAI will review the site access and circulation plan with respect to drop-off and pick-up procedures and provide recommendations, as appropriate.

Task 3.3 Study Area

KAI will update the existing pedestrian, bicycle, vehicle, local and regional transit, and emergency vehicle access conditions described in the Phase 1 memo to reflect data obtained as part of Task 1. The Study Area description will include the following information in both narrative and graphic form:

- Priority networks for pedestrian, bicycle, and transit as identified in the City's Complete Streets Design Guidelines;
- Street classifications as identified in the City's Land Use and Transportation Element, Pedestrian Master Plan and Bicycle Master Plan, the Alameda County Transportation Commission's Congestion Management Program Network and Metropolitan Transportation System, and the Federal Highway Administration's functional classification system;
- street access including routes to highways and freeways (including location of on-ramps and off-ramps), and existing bikeways by facility type;
- Public transit within the study area including routes, stop/station locations, service areas, hours of operation, peak period headways, boardings/alightings by stop and vehicle type;

- Street characteristics including number and width of lanes, direction of flow, average daily traffic volumes (where known from studies performed within the past three years), intersection and mid-block traffic control devices (e.g., signals, stop signs, flashing beacons, marked crosswalks), traffic calming devices (e.g., traffic circles, bulb-outs and speed bumps);
- Sidewalk characteristics including actual and effective widths adjacent to the project site and connections to transit stops serving the site; and,
- Parking characteristics within the study area.

Task 3.4 Vehicle Miles Traveled Analysis

KAI will provide a discussion of vehicle miles traveled (VMT) for the region and the project's transportation analysis zones for the proposed use based on the VMT screening maps obtained from the City. KAI will review the City's map-based screening criteria for VMT to assess whether or not the project screens out of a detailed VMT analysis. KAI will document compliance with these screening criteria and established thresholds for the proposed use.

Task 3.5 Collision Analysis

KAI will evaluate the most recent three years of vehicle, pedestrian, and bicycle collision data for all study intersections and roadway segments within a two block radius of the project site. KAI will obtain data from the Statewide Integrated Traffic Records System and through a data request from the City. Using these data, KAI will identify if there are crash patterns or trends and summarize findings in text and tables. Through this analysis, KAI will determine if the project would contribute to an existing problem or if any improvements are recommended to alleviate potential effects of the project.

Task 3.6 Transit Analysis

KAI will conduct a qualitative assessment of the effect of the proposed project on local and regional transit operations. KAI will qualitatively identify potential conflicts between transit operations and people accessing the site. Access to nearby transit stops and potential for overcrowding on routes serving the site will be qualitatively assessed and described based on field observations and available transit data. KAI assumes a quantitative transit ridership analysis will not be conducted. This scope of work assumes there is no quantitative evaluation of project impacts on transit travel time or overcrowding on local or regional transit lines. The approach and methodology for the transit analysis will be discussed during scoping.

Task 3.7 Construction Conditions

This section will include a description of the anticipated transportation-related construction activities such as duration, phasing, staging areas, anticipated workers and truck trips. This assessment will be based on construction conditions information provided by the CLIENT. KAI will qualitatively evaluate potential transportation-related construction impacts that would be generated as part of the buildout of the project, such as any temporary street or sidewalk closures or modifications to AC Transit bus

facilities or operations. Evaluation of construction impacts will address the displacement of existing parking, the staging and duration of construction activity, construction truck routing, estimated daily truck volumes, street and/or sidewalk closures, impacts on transit operations, and construction worker parking.

Task 3.8 Transportation Demand Management Plan

KAI will work with the CLIENT to develop a Transportation and Parking Demand Management (TDM) Plan for the project. Per City of Oakland Standard Conditions of Approval, all land use projects that generate more than 50 net new AM or PM peak hour vehicle trips must prepare a TDM Plan as early as feasible in the planning process. The TDM Plan records the project sponsor's commitment to implement strategies to achieve reductions in vehicle traffic and parking demand and increase sustainable modes of travel.

Task 3.9 Mitigations and Standard Conditions of Approval

KAI will identify mitigation measures and standard conditions of approval, as necessary. KAI will provide information sufficient for the Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCA/MMRP) by identifying when mitigation is required for the project.

Task 4: Draft and Final Transportation Impact Study

KAI will prepare one draft transportation impact study report summarizing the work completed under Tasks 1 through 3 and submit the draft 1 report to City staff and the CLIENT for review. KAI anticipates submitting the draft 1 report within eight weeks of receiving an approved scope of work from the City. KAI will respond to one set of consolidated and non-contradictory comments on the draft 1 report to prepare the final transportation impact study report. Additional drafts and revisions would be prepared on a time-and-materials basis and subject to additional change orders.

Task 5: Project Management and Administration

Throughout the study duration, KAI staff will be available to undertake a variety of general project management and administration activities, including a kick-off meeting, and coordination calls with the client and project team. This task assumes participation in up to 4 hours of meetings or conference calls with the CLIENT and/or City staff to refine the scope of work, discuss findings from the technical analysis, and ensure all transportation issues are adequately addressed in the work program.

KAI will utilize in-house resources to actively manage the project, including our internal project, budget, and schedule management systems. KAI will prepare monthly progress reports to keep the project team informed on our budget and schedule status and to highlight any modifications needed to address unexpected changes (such as alterations to the project description or site plan).

Appendix B Multimodal Intersection Counts

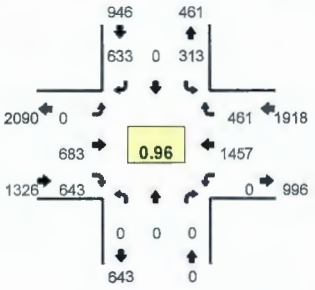
Type of peak hour being reported: Intersection Peak

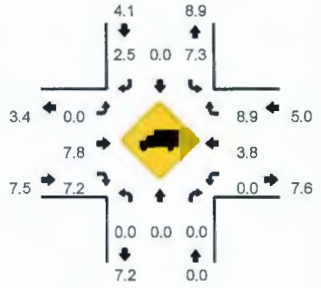
Method for determining peak hour: Total Entering Volume

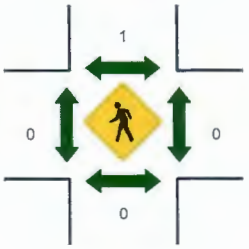
LOCATION: 5. I-880 SB Ramps -- 98th Ave
CITY/STATE: Oakland, CA

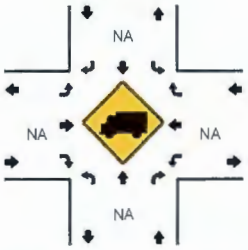
QC JOB #: 14429409
DATE: Thu, May 25 2017

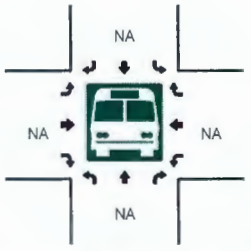
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 8:20 AM -- 8:35 AM











5-Min Count Period Beginning At	5. I-880 SB Ramps (Northbound)				5. I-880 SB Ramps (Southbound)				98th Ave (Eastbound)				98th Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	14	0	38	0	0	62	51	0	0	85	42	0	292	
7:05 AM	0	0	0	0	8	0	35	0	0	61	51	0	1	121	43	0	320	
7:10 AM	0	0	0	0	11	0	44	0	0	50	41	0	0	109	42	0	297	
7:15 AM	0	0	0	0	16	0	31	0	0	58	53	0	0	123	35	0	316	
7:20 AM	0	0	0	0	16	0	49	0	0	63	39	0	0	105	60	0	332	
7:25 AM	0	0	0	0	9	0	42	0	0	63	57	0	0	103	50	0	324	
7:30 AM	0	0	0	0	19	0	62	0	0	52	48	0	0	118	33	0	332	
7:35 AM	0	0	0	0	16	0	55	0	0	52	47	0	0	101	47	0	318	
7:40 AM	0	0	0	0	20	0	42	0	0	59	46	0	0	131	48	0	346	
7:45 AM	0	0	0	0	12	0	62	0	0	75	48	0	0	117	39	0	353	
7:50 AM	0	0	0	0	14	0	52	0	0	69	54	0	0	131	45	0	365	
7:55 AM	0	0	0	0	34	0	57	0	0	35	43	0	0	82	32	0	283	3878
8:00 AM	0	0	0	0	20	0	56	0	0	60	70	0	0	128	38	0	372	3958
8:05 AM	0	0	0	0	35	0	54	0	0	49	38	0	0	120	27	0	323	3961
8:10 AM	0	0	0	0	37	0	44	0	0	52	53	0	0	108	40	0	334	3998
8:15 AM	0	0	0	0	30	0	50	0	0	65	68	0	0	132	35	0	380	4062
8:20 AM	0	0	0	0	27	0	50	0	0	65	54	0	0	131	33	0	360	4090
8:25 AM	0	0	0	0	17	0	51	0	0	60	43	0	0	146	35	0	352	4118
8:30 AM	0	0	0	0	38	0	61	0	0	46	64	0	0	124	47	0	381	4167
8:35 AM	0	0	0	0	28	0	54	0	0	48	62	0	0	107	42	0	341	4190
8:40 AM	0	0	0	0	14	0	46	0	0	57	44	0	0	109	26	0	296	4140
8:45 AM	0	0	0	0	29	0	55	0	0	52	42	0	0	112	35	0	325	4112
8:50 AM	0	0	0	0	22	0	40	0	0	72	60	0	0	128	32	0	354	4101
8:55 AM	0	0	0	0	24	0	43	0	0	41	45	0	0	124	32	0	309	4127

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	332	0	648	0	0	684	644	0	0	1604	460	0	4372
Heavy Trucks	0	0	0		32	0	24		0	52	40		0	64	48		260
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	1	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

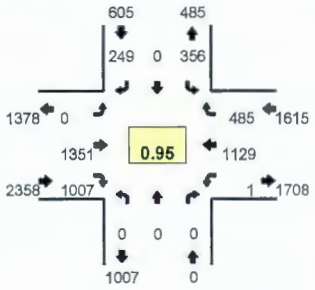
Type of peak hour being reported: Intersection Peak

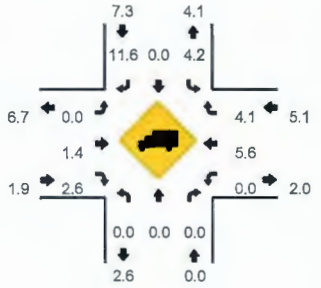
Method for determining peak hour: Total Entering Volume

LOCATION: 5. I-880 SB Ramps -- 98th Ave
CITY/STATE: Oakland, CA

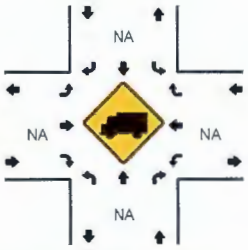
QC JOB #: 14429410
DATE: Thu, May 25 2017

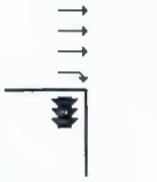
Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

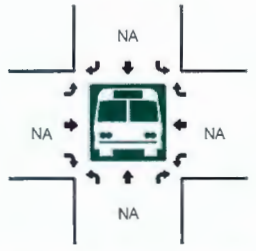




Quality Counts
TRANSPORTATION DATA COLLECTION SERVICE







5-Min Count Period Beginning At	5. I-880 SB Ramps (Northbound)				5. I-880 SB Ramps (Southbound)				98th Ave (Eastbound)				98th Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	33	0	29	0	0	76	75	0	0	79	30	0	322	
4:05 PM	0	0	0	0	16	0	27	0	0	94	71	0	0	90	41	0	339	
4:10 PM	0	0	0	0	30	0	25	0	0	97	61	0	0	109	38	0	360	
4:15 PM	0	0	0	0	28	0	23	0	0	99	79	0	0	103	34	0	366	
4:20 PM	0	0	0	0	37	0	17	0	0	99	78	0	0	98	29	0	358	
4:25 PM	0	0	0	0	23	0	19	0	0	82	89	0	0	91	43	0	347	
4:30 PM	0	0	0	0	21	0	27	0	0	88	72	0	0	119	38	0	365	
4:35 PM	0	0	0	0	20	0	19	0	0	120	80	0	0	108	60	0	407	
4:40 PM	0	0	0	0	39	0	17	0	0	92	76	0	0	110	39	0	373	
4:45 PM	0	0	0	0	31	0	21	0	0	149	96	0	0	95	44	0	436	
4:50 PM	0	0	0	0	55	0	20	0	0	105	91	0	0	68	25	0	364	
4:55 PM	0	0	0	0	27	0	23	0	0	114	96	0	0	103	48	1	412	4439
5:00 PM	0	0	0	0	29	0	13	0	0	117	88	0	0	97	34	0	378	4495
5:05 PM	0	0	0	0	22	0	17	0	0	131	84	0	0	90	44	0	388	4544
5:10 PM	0	0	0	0	31	0	24	0	0	100	85	0	0	85	30	0	355	4539
5:15 PM	0	0	0	0	25	0	30	0	0	139	94	0	0	69	47	0	404	4577
5:20 PM	0	0	0	0	43	0	19	0	0	114	56	0	0	94	33	0	359	4578
5:25 PM	0	0	0	0	20	0	13	0	0	110	90	0	0	60	44	0	337	4568
5:30 PM	0	0	0	0	33	0	16	0	0	97	91	0	0	82	32	0	351	4554
5:35 PM	0	0	0	0	29	0	22	0	0	90	61	0	0	80	45	0	327	4474
5:40 PM	0	0	0	0	25	0	19	0	0	111	81	0	0	105	30	0	371	4472
5:45 PM	0	0	0	0	25	0	19	0	0	79	76	0	0	84	36	0	319	4365
5:50 PM	0	0	0	0	34	0	21	0	0	83	68	0	0	109	28	0	343	4344
5:55 PM	0	0	0	0	20	0	19	0	0	119	85	0	0	91	36	0	370	4302

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	320	0	228	0	0	1444	1008	0	0	1252	572	0	4824
Heavy Trucks	0	0	0		16	0	32		0	16	28		0	76	16		184
Pedestrians		0				4				0				4			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

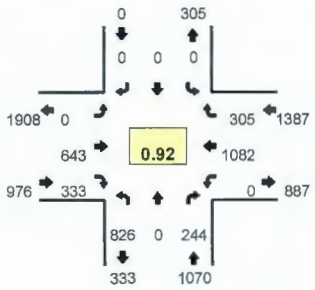
Type of peak hour being reported: Intersection Peak

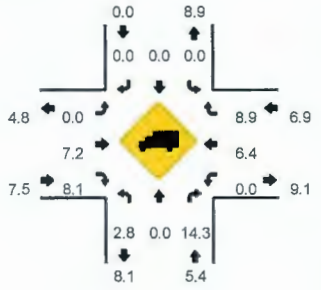
Method for determining peak hour: Total Entering Volume

LOCATION: 6. I-880 NB Ramps -- 98th Ave
CITY/STATE: Alameda, CA

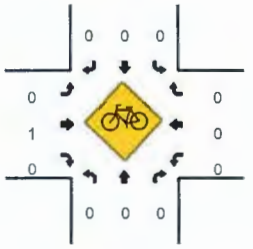
QC JOB #: 14429411
DATE: Thu, May 25 2017

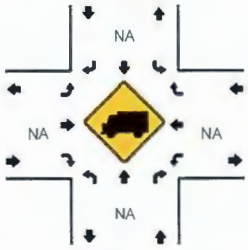
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

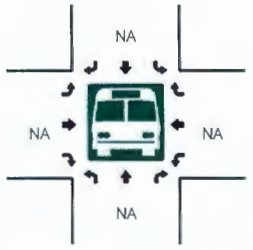




Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES







5-Min Count Period Beginning At	6. I-880 NB Ramps (Northbound)				6. I-880 NB Ramps (Southbound)				98th Ave (Eastbound)				98th Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	75	0	15	0	0	0	0	0	0	28	43	0	0	58	38	0	257	
7:05 AM	82	0	18	0	0	0	0	0	0	32	46	0	0	72	38	0	288	
7:10 AM	95	0	21	0	0	0	0	0	0	17	31	0	0	72	48	0	284	
7:15 AM	63	0	17	0	0	0	0	0	0	42	41	0	0	92	40	0	295	
7:20 AM	82	0	13	0	0	0	0	0	0	25	49	0	0	74	43	0	286	
7:25 AM	50	0	19	0	0	0	0	0	0	39	37	0	0	109	41	0	295	
7:30 AM	78	0	11	0	0	0	0	0	0	41	35	0	0	84	41	0	290	
7:35 AM	77	0	12	0	0	0	0	0	0	40	25	0	0	74	36	0	264	
7:40 AM	55	0	20	0	0	0	0	0	0	51	34	0	0	99	40	0	299	
7:45 AM	84	0	14	0	0	0	0	0	0	49	34	0	0	92	30	0	303	
7:50 AM	52	0	16	0	0	0	0	0	0	53	29	0	0	104	23	0	277	
7:55 AM	72	0	19	0	0	0	0	0	0	53	22	0	0	59	24	0	249	3387
8:00 AM	85	0	20	0	0	0	0	0	0	40	27	0	0	71	32	0	275	3405
8:05 AM	46	0	14	0	0	0	0	0	0	65	28	0	0	89	25	0	267	3384
8:10 AM	83	0	21	0	0	0	0	0	0	56	14	0	0	82	18	0	274	3374
8:15 AM	58	0	15	0	0	0	0	0	0	73	39	0	0	57	16	0	258	3365
8:20 AM	71	0	31	0	0	0	0	0	0	54	33	0	0	114	22	0	325	3404
8:25 AM	54	0	29	0	0	0	0	0	0	45	30	0	0	105	28	0	321	3430
8:30 AM	49	0	14	0	0	0	0	0	0	69	17	0	0	94	24	0	267	3407
8:35 AM	89	0	31	0	0	0	0	0	0	35	26	0	0	86	23	0	290	3433
8:40 AM	48	0	18	0	0	0	0	0	0	55	34	0	0	64	16	0	235	3369
8:45 AM	91	0	23	0	0	0	0	0	0	55	25	0	0	85	18	0	297	3363
8:50 AM	60	0	28	0	0	0	0	0	0	59	37	0	0	70	14	0	268	3354
8:55 AM	89	0	35	0	0	0	0	0	0	32	28	0	0	81	12	0	277	3382

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	844	0	300	0	0	0	0	0	0	688	408	0	0	1224	264	0	3728
Heavy Trucks	20	0	28		0	0	0		0	64	28		0	92	36		268
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	1	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

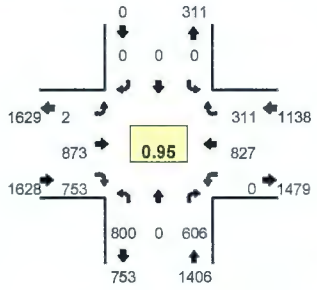
Type of peak hour being reported: Intersection Peak

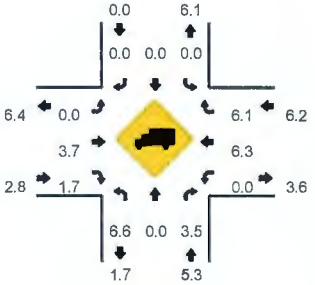
Method for determining peak hour: Total Entering Volume

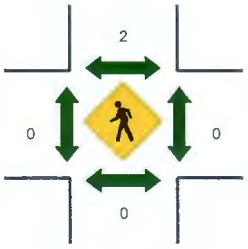
LOCATION: 6. I-880 NB Ramps -- 98th Ave
CITY/STATE: Alameda, CA

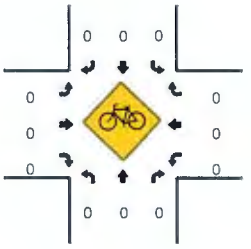
QC JOB #: 14429412
DATE: Thu, May 25 2017

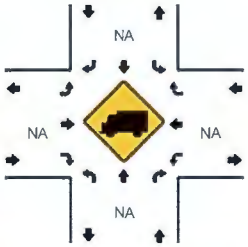
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

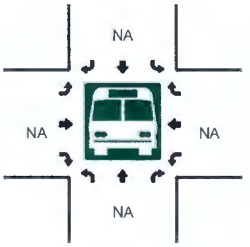












5-Min Count Period Beginning At	6. I-880 NB Ramps (Northbound)				6. I-880 NB Ramps (Southbound)				98th Ave (Eastbound)				98th Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	50	0	46	0	0	0	0	0	0	77	38	0	0	66	33	0	310	
4:05 PM	61	0	64	0	0	0	0	0	0	50	56	0	0	65	19	0	315	
4:10 PM	69	0	56	0	0	0	0	0	0	72	52	0	0	74	27	0	350	
4:15 PM	72	0	45	0	0	0	0	0	0	68	58	0	0	64	31	0	338	
4:20 PM	66	0	61	0	0	0	0	0	0	76	58	0	0	58	27	0	346	
4:25 PM	63	0	46	0	0	0	0	0	0	68	48	0	0	62	32	0	319	
4:30 PM	102	0	50	0	0	0	0	0	0	55	51	0	0	68	25	0	351	
4:35 PM	56	0	44	0	0	0	0	0	0	70	67	0	0	100	26	0	363	
4:40 PM	87	0	55	0	0	0	0	0	0	63	57	0	0	68	25	0	355	
4:45 PM	60	0	57	0	0	0	0	0	0	102	80	0	0	62	16	0	377	
4:50 PM	55	0	53	0	0	0	0	0	0	76	72	0	0	57	24	0	337	
4:55 PM	53	0	45	0	0	0	0	0	0	84	66	2	0	85	25	0	360	4121
5:00 PM	61	0	46	0	0	0	0	0	0	64	69	0	0	57	26	0	323	4134
5:05 PM	56	0	48	0	0	0	0	0	0	75	75	0	0	72	27	0	353	4172
5:10 PM	56	0	41	0	0	0	0	0	0	72	61	0	0	58	22	0	310	4132
5:15 PM	55	0	31	0	0	0	0	0	0	91	74	0	0	61	22	0	334	4128
5:20 PM	55	0	44	0	0	0	0	0	0	84	72	0	0	73	31	0	359	4141
5:25 PM	52	0	58	0	0	0	0	0	0	69	57	0	0	56	25	0	317	4139
5:30 PM	44	0	54	0	0	0	0	0	0	57	76	0	0	68	22	0	321	4109
5:35 PM	58	0	25	0	0	0	0	0	0	90	45	0	0	67	24	0	309	4055
5:40 PM	68	0	62	0	0	0	0	0	0	59	66	0	0	57	29	0	341	4041
5:45 PM	74	0	43	0	0	0	0	0	0	65	48	0	0	56	26	0	312	3976
5:50 PM	83	0	45	0	0	0	0	0	0	56	56	0	0	55	26	0	321	3960
5:55 PM	70	0	45	0	0	0	0	0	0	67	74	0	0	54	22	0	332	3932

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	812	0	624	0	0	0	0	0	0	940	816	0	0	920	268	0	4380
Heavy Trucks	44	0	12		0	0	0		0	20	8		0	52	12		148
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

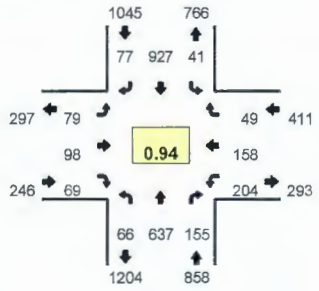
Type of peak hour being reported: Intersection Peak

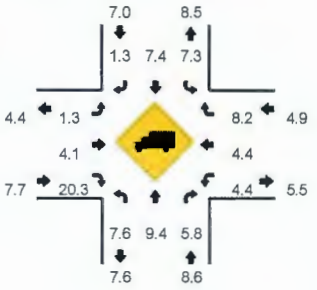
Method for determining peak hour: Total Entering Volume

LOCATION: 7. 98th -- Edes Ave
CITY/STATE: Alameda, CA

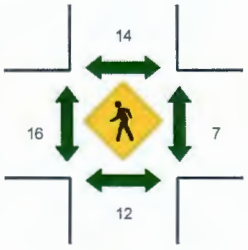
QC JOB #: 14429413
DATE: Thu, May 25 2017

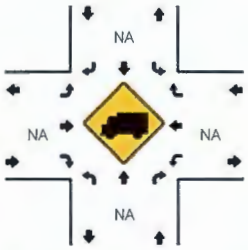
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

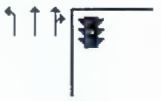


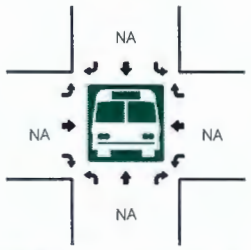


Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES









5-Min Count Period Beginning At	7. 98th (Northbound)				7. 98th (Southbound)				Edes Ave (Eastbound)				Edes Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	8	36	8	0	1	69	2	0	1	2	3	0	14	8	2	0	154	
7:05 AM	2	30	6	0	3	79	2	0	1	3	2	0	13	5	0	0	146	
7:10 AM	2	27	5	0	5	76	4	0	6	2	4	0	20	8	4	0	163	
7:15 AM	6	46	11	0	1	90	8	0	1	1	3	0	18	5	0	0	190	
7:20 AM	4	46	4	0	2	96	4	0	0	4	9	0	14	8	3	0	194	
7:25 AM	1	30	5	0	1	72	3	0	2	5	3	0	25	19	0	0	166	
7:30 AM	4	49	9	2	0	76	9	1	2	6	3	0	13	15	2	0	191	
7:35 AM	5	39	13	0	1	84	5	0	1	1	6	0	16	12	4	0	187	
7:40 AM	3	38	15	0	1	80	7	0	5	11	6	0	14	19	3	0	202	
7:45 AM	8	49	17	0	5	81	7	0	4	7	8	0	20	10	1	0	217	
7:50 AM	4	40	17	0	3	88	2	0	11	10	8	0	20	10	8	0	221	
7:55 AM	11	52	20	0	3	49	8	0	1	2	3	0	9	12	7	0	177	2208
8:00 AM	5	45	7	0	0	49	4	0	13	17	7	0	22	19	5	0	193	2247
8:05 AM	4	65	14	1	5	80	7	1	4	12	8	0	10	15	6	0	232	2333
8:10 AM	3	55	8	1	3	80	5	0	12	8	7	0	19	11	4	0	216	2386
8:15 AM	6	76	11	1	3	83	4	0	2	5	3	0	14	13	4	0	225	2421
8:20 AM	1	53	16	0	7	98	7	0	11	10	6	0	14	9	3	0	235	2462
8:25 AM	9	58	13	0	4	81	9	0	5	4	1	0	23	14	3	0	224	2520
8:30 AM	3	48	9	1	4	85	10	0	5	6	8	0	21	13	3	0	216	2545
8:35 AM	5	58	8	0	2	73	7	0	6	6	4	0	18	13	2	0	202	2560
8:40 AM	5	50	12	0	1	39	7	1	10	4	7	0	5	7	1	0	149	2507
8:45 AM	4	57	6	0	3	76	12	0	5	3	7	0	25	17	2	0	217	2507
8:50 AM	3	57	12	1	3	64	5	1	4	7	6	0	14	13	0	0	190	2476
8:55 AM	7	52	10	0	1	79	8	0	7	4	7	0	8	5	2	0	190	2489

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	64	748	160	4	56	1048	80	0	72	76	40	0	204	144	40	0	2736
Heavy Trucks	12	72	8		4	88	0		0	4	12		0	0	4		204
Pedestrians		4				16				24				8			52
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

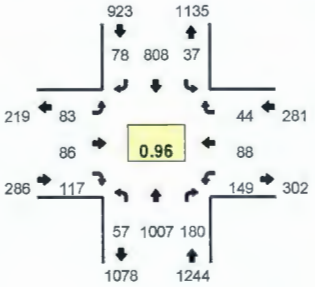
Type of peak hour being reported: Intersection Peak

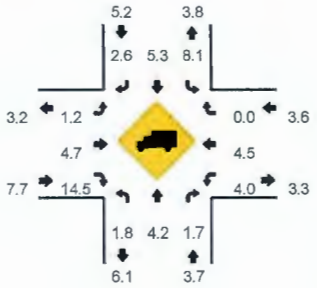
Method for determining peak hour: Total Entering Volume

LOCATION: 7. 98th -- Edes Ave
CITY/STATE: Alameda, CA

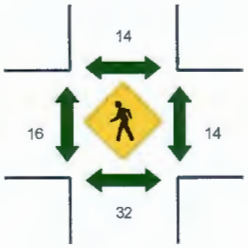
QC JOB #: 14429414
DATE: Thu, May 25 2017

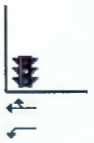
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:20 PM -- 4:35 PM

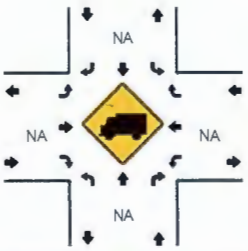


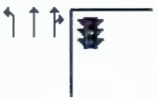


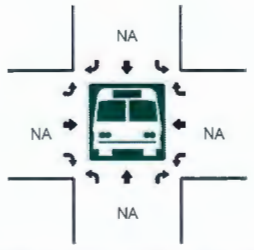
Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES











5-Min Count Period Beginning At	7. 98th (Northbound)				7. 98th (Southbound)				Edes Ave (Eastbound)				Edes Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	4	88	12	0	3	64	8	0	10	9	10	0	16	11	3	0	238	
4:05 PM	1	84	18	2	4	70	5	0	4	11	14	0	9	7	3	0	232	
4:10 PM	4	83	16	0	2	66	4	0	3	6	9	0	15	3	5	0	216	
4:15 PM	6	74	17	0	5	47	6	0	6	6	13	0	14	6	6	1	207	
4:20 PM	5	85	20	0	3	75	10	1	1	6	6	0	8	5	2	0	237	
4:25 PM	3	101	10	0	1	74	8	0	5	6	6	0	15	4	3	0	236	
4:30 PM	2	72	13	1	5	83	5	0	8	8	12	0	14	9	3	0	236	
4:35 PM	4	61	12	0	2	66	4	0	10	8	15	0	17	10	3	0	212	
4:40 PM	8	99	25	0	0	77	5	1	10	10	2	0	8	4	3	0	252	
4:45 PM	6	99	16	0	4	62	11	0	7	3	8	1	9	6	4	0	236	
4:50 PM	5	67	12	1	2	43	3	0	8	10	11	0	13	8	6	0	189	
4:55 PM	4	84	9	1	4	81	9	0	9	3	11	0	10	15	3	0	243	2734
5:00 PM	6	77	11	0	5	61	8	0	10	5	7	0	10	4	3	0	207	2703
5:05 PM	2	80	8	1	3	70	4	0	5	9	10	0	18	8	2	0	220	2691
5:10 PM	2	67	7	1	3	60	6	0	4	12	6	0	9	6	2	0	185	2660
5:15 PM	2	81	17	0	2	56	5	1	4	11	11	0	6	4	3	0	203	2656
5:20 PM	5	98	10	1	2	65	6	0	4	11	4	0	9	6	3	0	224	2643
5:25 PM	1	79	7	0	5	79	12	0	8	6	6	0	6	7	6	0	222	2629
5:30 PM	3	86	11	0	2	62	6	0	4	9	10	0	11	8	1	0	213	2606
5:35 PM	1	60	12	0	1	49	3	0	6	8	7	0	18	8	1	0	174	2568
5:40 PM	4	78	14	1	3	61	7	0	6	8	6	0	12	6	3	0	209	2525
5:45 PM	4	86	9	0	1	66	8	1	7	8	6	0	6	4	8	0	214	2503
5:50 PM	2	95	11	2	4	66	6	0	4	8	4	0	17	4	1	0	224	2538
5:55 PM	1	67	14	0	7	44	2	0	10	5	4	0	13	6	5	0	178	2473

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	40	1072	172	4	36	928	92	4	60	80	96	0	148	72	32	0	2836
Heavy Trucks	0	52	4		0	40	0		0	8	20		12	0	0		136
Pedestrians		28				0				16				8			52
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

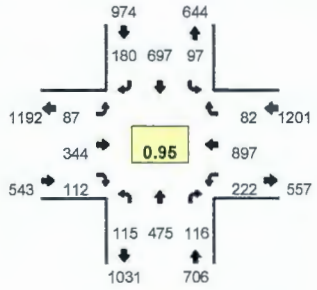
Type of peak hour being reported: Intersection Peak

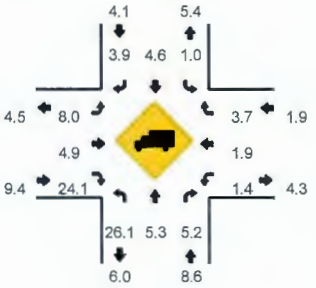
Method for determining peak hour: Total Entering Volume

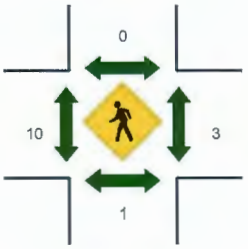
LOCATION: 8. 98th -- San Leandro St
CITY/STATE: Alameda, CA

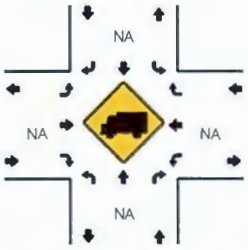
QC JOB #: 14429415
DATE: Thu, May 25 2017

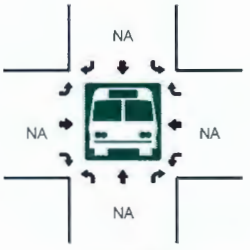
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:50 AM -- 8:05 AM











5-Min Count Period Beginning At	8. 98th (Northbound)				8. 98th (Southbound)				San Leandro St (Eastbound)				San Leandro St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	10	30	10	0	2	59	9	0	4	10	6	0	16	13	1	0	170	
7:05 AM	8	21	2	0	1	50	15	0	1	14	11	0	15	21	2	0	161	
7:10 AM	4	33	11	0	1	62	18	0	2	8	13	0	16	27	2	0	197	
7:15 AM	6	28	11	0	2	53	7	0	6	16	14	0	17	41	1	0	202	
7:20 AM	5	17	8	0	7	71	19	0	6	11	8	0	21	45	5	0	223	
7:25 AM	9	39	4	0	2	41	9	0	1	29	8	0	18	49	5	0	214	
7:30 AM	5	25	5	0	5	71	13	0	7	14	9	0	23	42	2	0	221	
7:35 AM	10	36	9	0	6	56	15	0	8	32	6	0	23	61	5	0	267	
7:40 AM	8	25	5	0	10	65	11	0	7	32	3	0	21	80	7	0	274	
7:45 AM	9	35	12	0	10	67	16	0	4	31	12	0	19	69	5	0	289	
7:50 AM	7	48	17	0	14	71	22	0	11	25	14	0	17	71	10	0	327	
7:55 AM	5	8	2	0	8	41	14	0	12	29	8	0	18	81	4	0	230	2775
8:00 AM	12	38	14	0	10	64	15	0	5	47	15	0	13	85	8	0	347	2952
8:05 AM	8	40	8	0	12	50	14	0	5	26	6	0	22	62	10	0	263	3054
8:10 AM	6	49	11	0	10	59	19	0	9	21	8	0	14	66	11	0	283	3140
8:15 AM	12	38	7	0	5	62	11	0	4	22	12	0	18	79	5	0	275	3213
8:20 AM	14	58	14	0	4	60	18	0	9	21	9	0	16	72	7	0	302	3292
8:25 AM	12	34	5	0	6	58	12	0	8	30	13	0	24	74	5	0	281	3359
8:30 AM	12	36	12	0	2	54	13	0	5	28	6	0	17	97	4	0	286	3424
8:35 AM	5	45	6	0	3	53	9	0	5	18	15	0	19	66	6	0	250	3407
8:40 AM	10	33	6	0	10	28	8	0	7	20	9	0	16	42	1	0	190	3323
8:45 AM	10	63	12	0	7	74	21	0	3	23	4	0	14	31	1	0	263	3297
8:50 AM	4	34	16	0	7	43	5	0	11	39	10	0	16	57	3	0	245	3215
8:55 AM	16	51	9	0	3	57	13	0	9	18	9	0	19	58	2	0	264	3249

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	96	496	132	0	128	664	204	0	112	404	148	0	192	948	92	0	3616
Heavy Trucks	20	24	4		0	40	8		8	32	44		4	12	0		196
Pedestrians		4				0				12				12			28
Bicycles	0	0	0		0	0	0		0	1	0		0	0	0		1
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

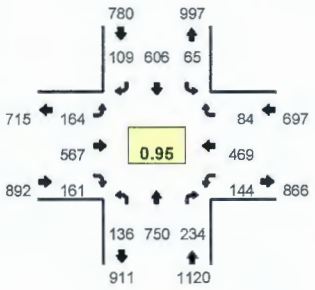
Type of peak hour being reported: Intersection Peak

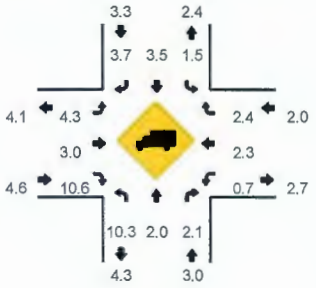
Method for determining peak hour: Total Entering Volume

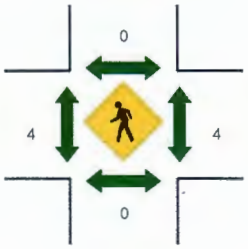
LOCATION: 8. 98th -- San Leandro St
CITY/STATE: Alameda, CA

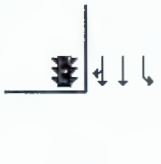
QC JOB #: 14429416
DATE: Thu, May 25 2017

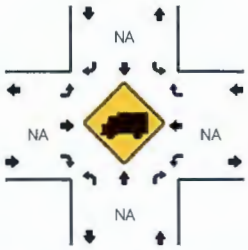
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

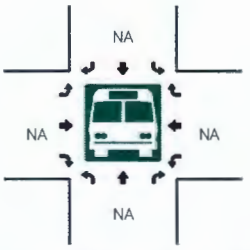












5-Min Count Period Beginning At	8. 98th (Northbound)				8. 98th (Southbound)				San Leandro St (Eastbound)				San Leandro St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	18	80	15	0	4	36	8	0	12	54	9	0	13	55	9	0	313	
4:05 PM	7	39	13	0	7	53	11	0	16	57	12	0	12	38	6	0	271	
4:10 PM	14	67	17	0	2	46	11	0	13	38	11	1	12	32	3	0	267	
4:15 PM	14	68	18	0	4	52	9	0	10	53	8	0	7	43	8	0	294	
4:20 PM	19	63	16	0	6	46	8	0	12	37	19	0	10	41	9	0	286	
4:25 PM	10	57	20	0	7	56	8	0	12	34	10	0	17	42	7	0	280	
4:30 PM	11	69	27	0	6	70	12	0	13	50	14	0	15	33	1	0	322	
4:35 PM	9	53	16	0	3	43	5	0	14	55	23	0	12	47	12	0	292	
4:40 PM	9	67	20	0	4	58	8	0	14	46	8	0	10	47	12	0	305	
4:45 PM	6	62	27	0	8	53	12	0	15	47	17	0	13	24	5	0	289	
4:50 PM	6	70	24	0	6	52	11	0	15	45	12	0	11	31	7	0	290	
4:55 PM	13	58	21	0	6	41	6	0	15	49	20	0	12	36	5	0	282	3489
5:00 PM	5	67	8	0	6	50	11	0	15	35	15	0	18	32	7	0	269	3445
5:05 PM	5	53	20	0	4	41	5	0	16	73	9	0	5	33	3	0	267	3441
5:10 PM	8	76	18	0	6	51	9	0	8	38	13	0	8	33	4	0	272	3446
5:15 PM	7	59	15	0	4	59	9	0	16	48	13	0	10	22	9	0	271	3423
5:20 PM	7	59	21	0	13	58	9	0	11	57	7	0	12	20	4	0	278	3415
5:25 PM	6	59	27	0	9	41	10	0	23	56	19	0	12	33	4	0	299	3434
5:30 PM	13	63	14	0	5	47	6	0	18	45	12	0	14	30	8	0	275	3387
5:35 PM	3	76	18	0	6	39	10	0	13	56	15	0	15	37	8	0	296	3391
5:40 PM	5	56	25	0	5	64	6	0	11	53	6	0	15	33	7	0	286	3374
5:45 PM	5	60	16	0	12	36	7	0	16	51	16	0	17	31	11	0	278	3363
5:50 PM	8	56	25	0	6	42	8	0	19	67	17	0	9	41	5	0	303	3376
5:55 PM	9	60	24	0	4	31	7	0	7	65	17	0	9	37	8	0	278	3372

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	116	744	252	0	60	684	100	0	172	612	172	0	148	508	100	0	3668
Heavy Trucks	8	28	8		0	24	4		8	16	20		0	24	0		140
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

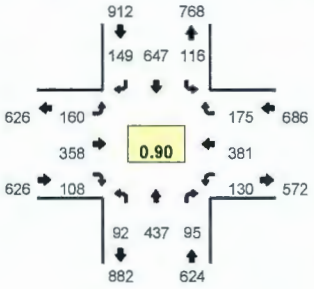
Type of peak hour being reported: Intersection Peak

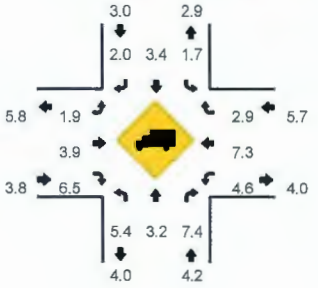
Method for determining peak hour: Total Entering Volume

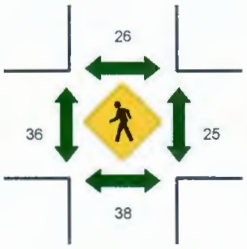
LOCATION: 11. 98th -- International Blvd
CITY/STATE: Alameda, CA

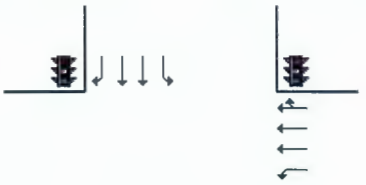
QC JOB #: 14429421
DATE: Thu, May 25 2017

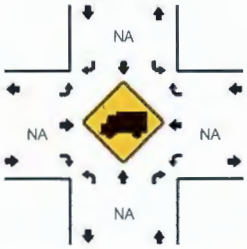
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:10 AM -- 8:25 AM

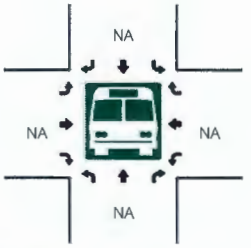












5-Min Count Period Beginning At	11. 98th (Northbound)				11. 98th (Southbound)				International Blvd (Eastbound)				International Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	8	22	6	0	5	17	4	0	14	7	19	0	11	25	11	0	149	
7:05 AM	8	19	3	0	10	47	2	0	12	12	9	1	8	6	5	0	142	
7:10 AM	7	25	9	0	4	48	4	0	5	12	13	0	6	15	3	0	151	
7:15 AM	5	20	4	0	11	29	3	0	10	24	12	0	16	22	8	0	164	
7:20 AM	4	25	10	0	7	29	6	0	14	20	10	1	14	21	10	0	171	
7:25 AM	8	37	4	0	5	38	6	0	12	17	7	1	11	9	8	0	163	
7:30 AM	3	34	4	0	4	45	6	0	11	25	13	1	10	20	16	0	192	
7:35 AM	4	34	7	0	9	37	11	0	11	30	15	1	6	28	15	0	208	
7:40 AM	8	40	7	0	10	48	8	0	16	19	12	1	15	20	16	0	220	
7:45 AM	8	38	10	0	9	57	7	0	5	25	10	1	5	25	12	0	212	
7:50 AM	6	26	6	0	11	59	4	0	11	33	11	0	12	23	7	0	209	
7:55 AM	7	41	12	0	4	47	8	0	7	41	13	2	12	38	20	1	253	2234
8:00 AM	3	36	13	0	10	69	19	0	18	29	6	0	11	24	10	0	248	2333
8:05 AM	8	51	9	0	10	56	12	0	13	32	13	0	7	38	19	0	268	2459
8:10 AM	11	39	8	0	13	43	16	0	21	26	8	0	10	29	16	0	235	2543
8:15 AM	13	50	10	0	10	35	8	0	20	40	11	0	12	55	15	0	279	2658
8:20 AM	5	40	6	0	16	68	19	0	20	20	9	0	17	26	21	0	307	2796
8:25 AM	3	32	9	0	6	49	4	0	10	28	4	0	10	29	16	0	200	2803
8:30 AM	10	28	4	0	5	49	20	0	8	26	8	0	9	42	16	0	225	2836
8:35 AM	8	36	5	0	8	49	10	0	12	22	6	1	16	27	13	2	215	2843
8:40 AM	10	20	6	0	14	66	22	0	11	26	9	0	6	25	10	0	225	2848
8:45 AM	9	21	7	0	13	59	11	0	8	24	9	0	11	30	9	0	211	2847
8:50 AM	14	29	3	0	12	24	13	0	10	31	8	1	7	28	10	1	191	2829
8:55 AM	16	38	15	0	15	38	12	0	7	25	10	1	6	19	7	1	210	2786

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	116	516	84	0	156	584	172	0	244	384	112	0	156	440	208	0	3172
Heavy Trucks	4	24	8		4	16	0		4	12	12		0	24	12		120
Pedestrians		28				40				64				12			144
Bicycles	0	0	0		0	1	0		1	1	0		0	1	0		4
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

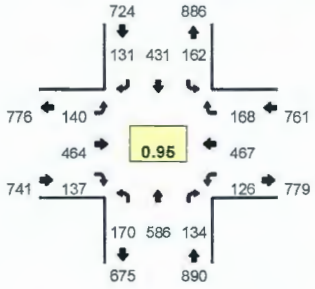
Type of peak hour being reported: Intersection Peak

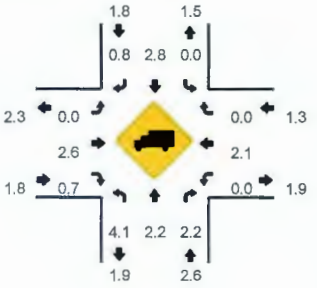
Method for determining peak hour: Total Entering Volume

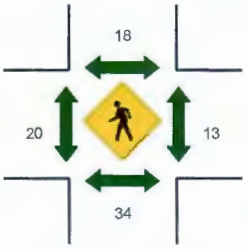
LOCATION: 11. 98th -- International Blvd
CITY/STATE: Alameda, CA

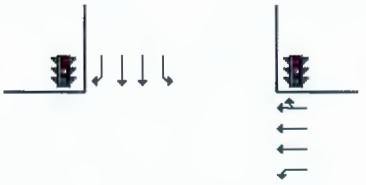
QC JOB #: 14429422
DATE: Thu, May 25 2017

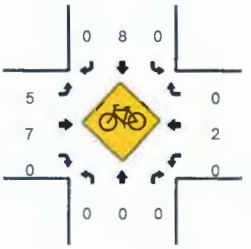
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

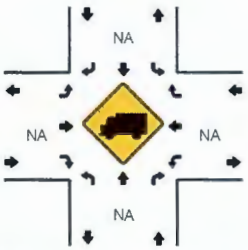


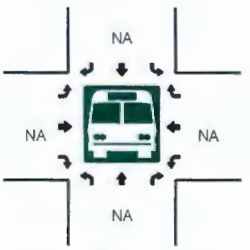












5-Min Count Period Beginning At	11. 98th (Northbound)				11. 98th (Southbound)				International Blvd (Eastbound)				International Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	7	48	11	0	8	44	10	0	12	26	10	0	7	43	19	1	246	
4:05 PM	17	40	15	0	11	29	15	0	13	46	12	0	9	30	11	0	248	
4:10 PM	22	43	11	0	16	40	12	0	11	25	7	1	13	33	13	1	248	
4:15 PM	13	42	11	0	13	50	11	0	9	30	10	0	5	54	18	1	267	
4:20 PM	13	41	7	0	15	46	16	0	10	47	7	0	10	43	19	3	277	
4:25 PM	18	47	18	0	11	25	5	0	12	35	18	0	11	43	9	1	253	
4:30 PM	13	48	11	0	22	36	15	0	7	24	15	0	8	31	17	2	249	
4:35 PM	10	43	9	0	12	46	11	0	10	46	12	0	9	38	17	0	263	
4:40 PM	14	32	8	0	12	28	10	0	11	36	18	0	12	42	5	2	228	
4:45 PM	17	43	15	0	13	30	8	0	9	38	11	0	11	41	20	1	257	
4:50 PM	13	51	17	0	11	30	11	0	4	36	11	0	8	29	16	1	238	
4:55 PM	11	50	14	0	16	37	9	0	8	34	12	0	5	42	16	3	257	3031
5:00 PM	15	47	9	0	15	15	10	0	12	37	17	2	11	31	11	4	236	3021
5:05 PM	15	55	10	0	16	50	15	0	14	28	11	1	18	28	13	0	274	3047
5:10 PM	13	49	11	0	14	43	8	0	6	56	3	0	7	47	8	1	266	3065
5:15 PM	12	40	9	0	12	21	6	0	12	40	9	0	10	46	15	0	232	3030
5:20 PM	17	58	8	0	12	38	13	0	16	35	19	0	10	40	13	1	280	3033
5:25 PM	11	54	14	0	7	38	14	0	14	31	11	1	8	33	18	2	256	3036
5:30 PM	10	52	15	0	17	37	10	0	12	36	12	0	7	45	14	2	272	3058
5:35 PM	21	36	7	0	13	59	16	0	14	51	11	1	9	39	9	3	289	3085
5:40 PM	15	51	5	0	16	33	11	0	11	42	10	3	3	43	15	1	259	3116
5:45 PM	12	48	18	0	12	40	19	0	2	27	12	0	6	40	17	2	255	3114
5:50 PM	7	28	4	0	17	24	11	0	18	47	13	0	3	43	15	1	231	3107
5:55 PM	15	41	17	0	9	24	11	0	8	42	11	1	12	50	17	0	258	3108

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	184	556	108	0	184	516	148	0	148	516	132	16	76	520	152	24	3280
Heavy Trucks	20	8	4		0	20	0		0	12	4		0	12	0		80
Pedestrians		40				28				24				8			100
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

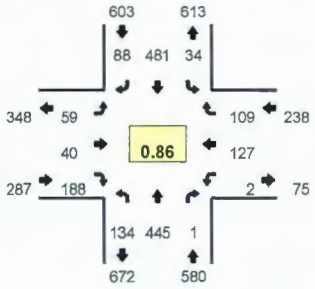
Type of peak hour being reported: Intersection Peak

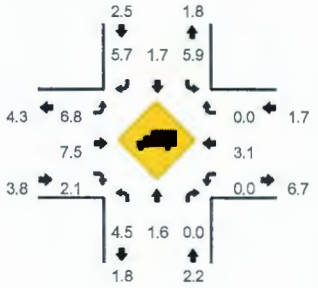
Method for determining peak hour: Total Entering Volume

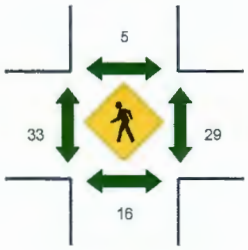
LOCATION: 1. 105th -- Edes Ave
CITY/STATE: Oakland, CA

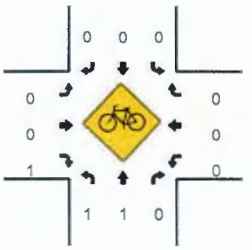
QC JOB #: 14429401
DATE: Thu, May 25 2017

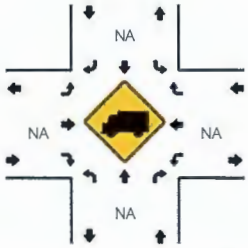
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

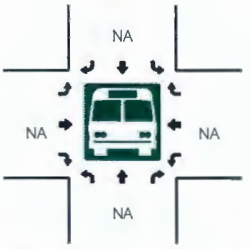












5-Min Count Period Beginning At	1. 105th (Northbound)				1. 105th (Southbound)				Edes Ave (Eastbound)				Edes Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	7	1	0	1	9	8	0	2	2	4	0	1	7	0	0	47	
7:05 AM	2	18	0	0	2	10	3	0	1	3	3	0	0	10	7	0	59	
7:10 AM	8	9	0	0	0	2	6	0	3	2	4	0	0	11	9	0	54	
7:15 AM	5	10	1	1	2	10	11	0	7	0	3	0	0	5	6	0	61	
7:20 AM	7	9	0	0	4	10	9	0	1	1	8	0	0	6	9	0	64	
7:25 AM	13	16	1	0	4	8	8	0	4	1	3	0	0	15	8	0	81	
7:30 AM	15	14	0	0	2	12	6	0	1	3	7	0	0	8	5	0	73	
7:35 AM	14	14	1	0	6	18	9	0	4	3	14	0	0	10	4	0	97	
7:40 AM	9	25	0	0	2	40	6	0	5	1	18	0	0	17	7	0	130	
7:45 AM	10	44	0	0	1	40	5	0	5	5	18	0	0	11	12	0	151	
7:50 AM	11	44	0	0	3	46	7	0	6	6	20	0	0	12	11	0	166	
7:55 AM	5	41	0	1	0	49	3	0	2	1	10	0	0	13	17	0	142	1125
8:00 AM	12	44	0	0	2	52	5	0	6	10	22	0	0	14	10	0	177	1295
8:05 AM	9	47	0	0	3	49	4	0	6	1	19	0	1	7	13	0	159	1355
8:10 AM	11	47	0	0	4	53	5	0	4	4	14	0	1	10	6	0	159	1460
8:15 AM	10	49	0	0	3	37	3	0	3	1	18	0	0	11	9	0	144	1543
8:20 AM	12	30	0	0	3	50	12	0	5	3	9	0	0	4	7	0	135	1614
8:25 AM	15	41	0	0	5	26	8	0	6	1	15	0	0	13	9	0	139	1672
8:30 AM	15	19	0	0	2	21	21	0	7	4	11	0	0	5	4	0	109	1708
8:35 AM	7	16	0	0	5	26	11	0	8	4	6	0	0	4	7	0	94	1705
8:40 AM	7	16	0	0	3	13	11	0	5	1	4	0	0	5	3	0	68	1643
8:45 AM	15	14	0	0	6	25	15	0	4	14	12	0	0	10	5	0	120	1612
8:50 AM	3	17	0	0	3	19	11	0	6	3	9	0	0	1	4	0	76	1522
8:55 AM	8	15	0	0	1	11	9	0	6	2	6	0	0	2	4	0	64	1444

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	552	0	0	36	616	56	0	64	60	220	0	8	124	116	0	1980
Heavy Trucks	8	4	0		4	4	4		0	0	0		0	4	0		28
Pedestrians		4				0				60				40			104
Bicycles	0	0	0		0	0	0		0	0	1		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

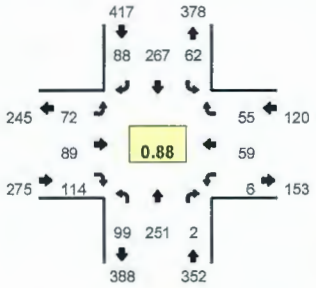
Type of peak hour being reported: Intersection Peak

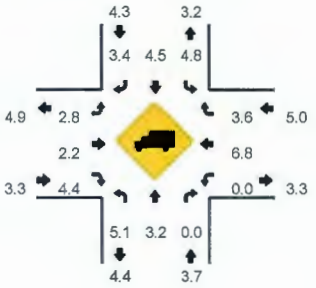
Method for determining peak hour: Total Entering Volume

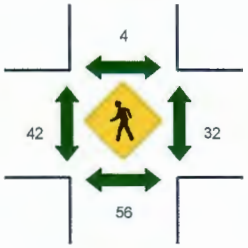
LOCATION: 1. 105th -- Edes Ave
CITY/STATE: Oakland, CA

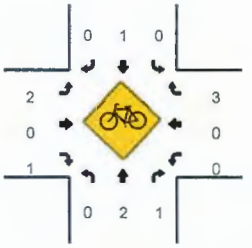
QC JOB #: 14429402
DATE: Thu, May 25 2017

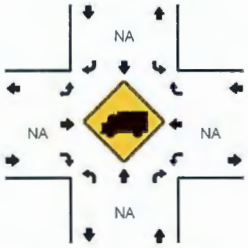
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

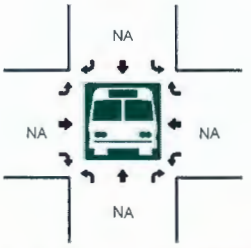












5-Min Count Period Beginning At	1. 105th (Northbound)				1. 105th (Southbound)				Edes Ave (Eastbound)				Edes Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	14	32	0	0	4	30	7	0	8	2	12	0	0	5	4	0	118	
4:05 PM	9	31	1	1	9	16	8	0	9	9	8	0	0	2	3	0	106	
4:10 PM	8	25	0	0	6	29	9	0	8	6	12	0	1	2	2	0	108	
4:15 PM	3	24	1	0	7	21	5	0	3	11	11	0	1	5	4	0	96	
4:20 PM	10	27	0	0	3	18	4	0	7	8	10	0	1	6	5	0	99	
4:25 PM	6	16	0	0	2	36	8	0	2	11	4	0	0	8	7	0	100	
4:30 PM	9	23	0	0	4	20	8	0	8	8	10	0	1	8	2	0	101	
4:35 PM	10	18	0	0	3	19	8	0	6	7	6	0	0	3	3	0	83	
4:40 PM	4	17	0	0	4	16	12	0	5	7	10	0	0	3	4	0	82	
4:45 PM	4	15	0	0	6	26	6	0	6	6	11	0	1	4	9	0	94	
4:50 PM	12	14	0	0	8	19	7	0	6	8	13	0	1	4	7	0	99	
4:55 PM	8	9	0	0	6	17	7	0	4	6	7	0	0	9	5	0	78	1164
5:00 PM	3	25	0	0	2	14	11	0	5	7	7	0	1	8	3	0	86	1132
5:05 PM	10	15	0	0	8	16	9	0	3	3	7	0	0	3	4	0	78	1104
5:10 PM	4	21	0	0	11	19	5	0	6	7	4	0	0	3	9	0	89	1085
5:15 PM	7	12	0	0	4	18	5	0	5	6	10	0	1	5	3	0	76	1065
5:20 PM	7	15	0	0	9	26	5	0	0	8	16	0	0	6	4	0	96	1062
5:25 PM	11	22	0	0	6	20	5	0	3	7	10	0	0	2	3	0	89	1051
5:30 PM	5	20	1	0	2	28	5	0	2	3	6	0	2	9	5	0	88	1038
5:35 PM	9	22	0	0	3	28	10	0	8	2	11	0	1	3	4	0	101	1056
5:40 PM	10	26	0	0	2	15	9	0	8	3	7	0	0	2	6	0	88	1062
5:45 PM	7	20	0	0	8	20	10	0	4	4	11	0	0	5	5	0	94	1062
5:50 PM	7	16	0	1	3	23	9	0	2	4	14	0	0	5	5	0	89	1052
5:55 PM	8	15	0	0	5	21	5	0	9	5	12	0	0	5	4	0	89	1063

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	352	4	4	76	300	92	0	100	68	128	0	4	36	36	0	1328
Heavy Trucks	8	8	0		4	8	0		4	4	8		0	4	0		48
Pedestrians		60				0				16				52			128
Bicycles	0	0	0		0	0	0		0	0	0		0	0	1		1
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

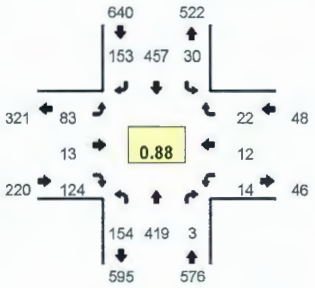
LOCATION: 4. 105th -- San Leandro St/Russet St

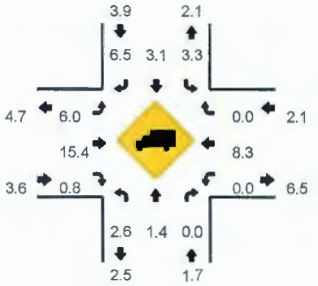
CITY/STATE: Oakland, CA

QC JOB #: 14429407

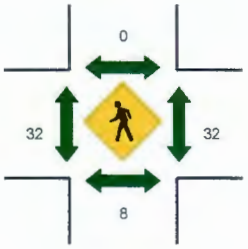
DATE: Thu, May 25 2017

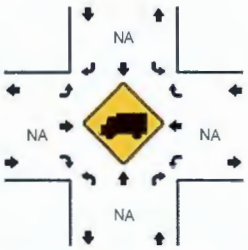
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 8:05 AM -- 8:20 AM

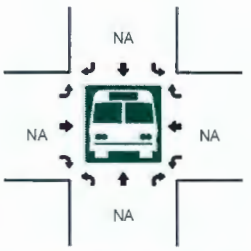




Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES







5-Min Count Period Beginning At	4. 105th (Northbound)				4. 105th (Southbound)				San Leandro St/Russet St (Eastbound)				San Leandro St/Russet St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	5	0	0	1	13	10	0	3	2	2	0	0	3	2	0	47	
7:05 AM	7	18	1	0	0	13	7	0	1	0	1	0	0	0	0	0	48	
7:10 AM	5	16	0	0	1	9	8	0	2	0	0	0	1	1	0	0	43	
7:15 AM	5	15	0	0	1	19	12	0	6	1	7	0	1	3	2	0	72	
7:20 AM	11	14	0	0	2	17	11	0	3	1	5	0	1	0	1	0	66	
7:25 AM	5	23	0	0	0	16	13	0	6	0	7	0	0	0	1	0	71	
7:30 AM	7	15	1	0	1	20	10	0	3	0	2	0	0	1	1	0	61	
7:35 AM	6	18	0	0	0	22	13	0	4	0	13	0	2	1	0	0	79	
7:40 AM	15	23	1	0	2	39	9	0	4	1	6	0	1	0	0	0	101	
7:45 AM	20	34	0	0	2	39	13	0	8	1	15	1	2	0	2	0	137	
7:50 AM	9	42	0	0	1	48	9	0	6	0	15	0	1	0	3	0	134	
7:55 AM	15	41	0	0	3	36	14	0	3	0	11	1	3	1	0	0	128	987
8:00 AM	13	41	1	0	3	39	13	0	12	0	16	0	0	1	2	0	141	1081
8:05 AM	20	39	1	0	1	35	14	0	4	2	16	0	2	1	3	0	138	1171
8:10 AM	14	36	0	0	5	37	9	0	8	3	10	0	3	2	3	0	130	1258
8:15 AM	15	51	0	0	1	47	22	0	4	1	11	0	1	1	1	0	155	1341
8:20 AM	8	29	0	0	1	35	12	0	11	0	5	0	1	3	1	0	106	1381
8:25 AM	11	42	0	0	4	32	16	0	4	0	10	0	0	2	3	0	124	1434
8:30 AM	7	25	0	0	5	36	12	0	10	4	5	0	0	0	3	0	107	1480
8:35 AM	7	16	0	0	2	34	10	0	7	1	4	0	0	1	1	0	83	1484
8:40 AM	3	16	0	0	1	30	10	0	8	0	4	0	2	0	3	0	77	1460
8:45 AM	1	10	0	0	2	30	7	0	6	0	3	0	0	1	0	0	60	1383
8:50 AM	9	17	0	0	1	19	9	0	9	1	4	0	0	0	0	0	69	1318
8:55 AM	5	14	0	0	2	17	9	0	4	1	2	0	0	2	1	0	57	1247

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	196	504	4	0	28	476	180	0	64	24	148	0	24	16	28	0	1692
Heavy Trucks	0	8	0		0	12	12		4	0	0		0	0	0		36
Pedestrians		0				0				56				64			120
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

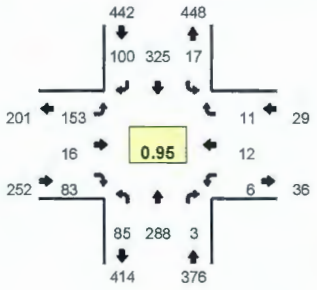
Type of peak hour being reported: Intersection Peak

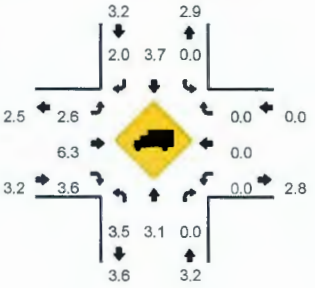
Method for determining peak hour: Total Entering Volume

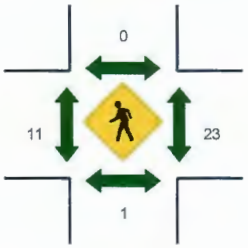
LOCATION: 4. 105th -- San Leandro St/Russet St
CITY/STATE: Oakland, CA

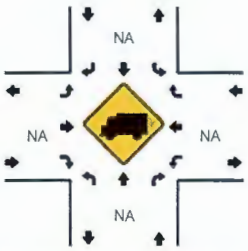
QC JOB #: 14429408
DATE: Thu, May 25 2017

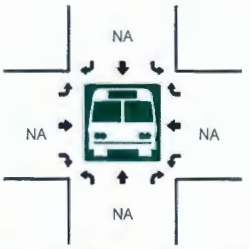
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM











5-Min Count Period Beginning At	4. 105th (Northbound)				4. 105th (Southbound)				San Leandro St/Russet St (Eastbound)				San Leandro St/Russet St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	15	24	0	0	3	25	5	0	19	0	6	0	0	1	0	0	98	
4:05 PM	9	34	0	0	0	28	6	0	10	2	8	0	0	1	1	0	99	
4:10 PM	8	25	0	0	0	28	7	0	10	2	9	0	1	1	1	0	93	
4:15 PM	9	24	0	0	2	30	8	0	15	1	6	2	0	0	1	0	98	
4:20 PM	5	29	1	0	1	21	9	0	11	2	7	0	1	0	1	0	88	
4:25 PM	6	25	0	0	1	32	11	0	12	3	5	0	3	1	0	0	99	
4:30 PM	7	27	0	0	1	19	9	0	15	2	13	0	0	2	1	0	96	
4:35 PM	9	14	0	0	3	23	10	0	13	1	3	1	0	2	1	0	80	
4:40 PM	4	24	0	0	2	31	8	0	11	0	9	0	1	2	0	0	92	
4:45 PM	6	19	2	0	2	34	12	0	10	1	6	0	0	0	3	0	95	
4:50 PM	4	23	0	0	2	25	10	0	11	1	9	1	0	0	0	0	86	
4:55 PM	3	19	0	0	0	29	5	0	12	1	2	0	0	2	2	0	75	1099
5:00 PM	5	26	2	0	3	13	3	0	8	2	5	0	0	1	3	0	71	1072
5:05 PM	2	15	0	0	2	31	4	0	14	1	6	0	0	0	1	0	76	1049
5:10 PM	6	31	0	0	3	31	10	0	8	1	8	0	1	1	2	0	102	1058
5:15 PM	2	15	0	0	1	29	2	0	8	2	5	0	0	0	1	0	65	1025
5:20 PM	5	13	0	0	2	25	6	0	9	3	13	0	0	0	1	0	77	1014
5:25 PM	4	23	0	0	2	31	6	0	18	0	9	0	0	2	0	0	95	1010
5:30 PM	6	26	2	0	1	28	11	0	7	0	5	0	0	1	5	0	92	1006
5:35 PM	12	27	1	0	0	25	10	0	12	0	8	0	0	0	0	0	95	1021
5:40 PM	6	32	1	0	5	25	17	0	10	2	3	0	0	2	0	0	103	1032
5:45 PM	10	18	1	0	3	26	6	0	12	0	9	1	0	0	2	0	88	1025
5:50 PM	4	18	1	0	5	24	7	0	16	3	9	0	0	0	0	0	87	1026
5:55 PM	5	20	0	0	3	32	11	0	16	4	8	0	0	1	0	0	100	1051

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	336	0	0	12	324	72	0	156	16	92	0	4	12	8	0	1160
Heavy Trucks	0	8	0		0	8	0		12	0	4		0	0	0		32
Pedestrians		4				0				12				44			60
Bicycles	0	2	0		0	0	0		0	1	0		0	0	0		3
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

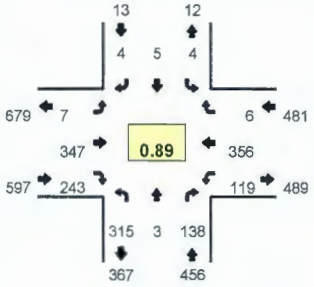
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

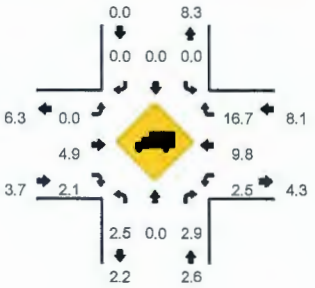
Method for determining peak hour: Total Entering Volume

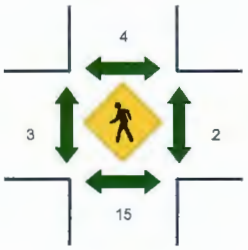
LOCATION: 9. 105th -- International Blvd
CITY/STATE: Alameda, CA

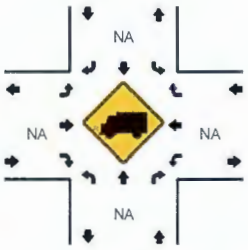
QC JOB #: 14429417
DATE: Thu, May 25 2017

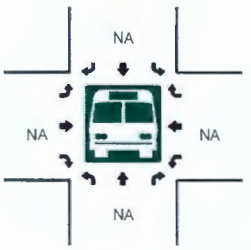


Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:50 AM -- 8:05 AM









5-Min Count Period Beginning At	9. 105th (Northbound)				9. 105th (Southbound)				International Blvd (Eastbound)				International Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	10	0	5	0	0	0	0	0	0	13	7	1	6	15	0	0	57	
7:05 AM	12	0	3	0	0	0	0	0	1	13	8	0	6	13	0	0	56	
7:10 AM	19	0	5	0	0	0	2	0	1	16	11	0	3	19	0	0	76	
7:15 AM	13	0	9	0	0	0	1	0	2	35	9	1	4	21	1	0	96	
7:20 AM	16	0	5	0	0	0	1	0	0	22	9	0	7	16	0	0	76	
7:25 AM	23	0	10	0	0	1	0	0	0	25	7	0	13	18	0	0	97	
7:30 AM	14	0	12	0	0	0	0	0	0	21	7	0	8	21	0	0	83	
7:35 AM	21	0	2	0	0	0	0	0	0	22	23	1	10	18	0	0	97	
7:40 AM	19	0	6	0	0	0	0	0	2	27	22	0	10	24	0	0	110	
7:45 AM	29	0	5	0	0	0	0	0	1	23	26	0	14	24	0	0	122	
7:50 AM	40	0	17	0	0	1	0	0	0	33	31	0	11	28	0	0	162	
7:55 AM	24	0	12	0	1	0	0	0	0	37	23	1	14	32	1	0	145	1168
8:00 AM	31	0	11	0	0	0	0	0	1	28	18	0	12	34	1	0	136	1246
8:05 AM	18	1	10	0	1	0	2	0	1	37	21	0	8	32	0	0	131	1321
8:10 AM	22	0	13	0	1	0	0	0	0	26	25	0	7	37	0	0	131	1376
8:15 AM	29	2	10	0	0	1	0	0	0	34	19	0	9	32	1	0	137	1417
8:20 AM	30	0	16	0	0	1	0	0	0	30	15	1	9	30	0	0	132	1473
8:25 AM	25	0	10	0	1	0	1	0	0	19	20	0	10	31	1	0	118	1494
8:30 AM	28	0	12	0	0	1	0	0	0	19	15	1	9	32	1	0	118	1529
8:35 AM	18	0	13	0	0	1	1	0	0	23	10	1	9	26	0	0	102	1534
8:40 AM	21	0	9	0	0	0	0	0	0	37	22	0	7	26	1	0	123	1547
8:45 AM	13	0	13	0	2	0	2	0	0	36	8	1	7	31	0	0	113	1538
8:50 AM	19	0	11	0	0	0	0	0	0	23	13	0	11	24	0	0	101	1486
8:55 AM	14	0	8	0	0	0	0	0	0	35	12	0	1	24	0	0	94	1435

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	380	0	160	0	4	4	0	0	4	396	280	4	148	344	8	0	1732
Heavy Trucks	4	0	4		0	0	0		0	20	8		0	40	4		80
Pedestrians		20				0				4				0			24
Bicycles	0	0	0		0	0	0		0	1	0		0	0	0		1
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

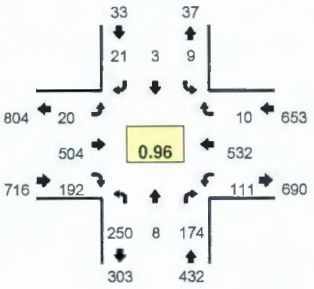
Type of peak hour being reported: Intersection Peak

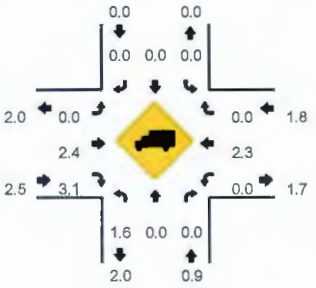
Method for determining peak hour: Total Entering Volume

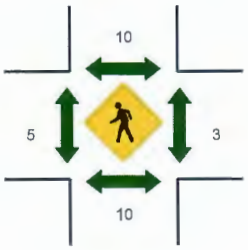
LOCATION: 9. 105th -- International Blvd
CITY/STATE: Alameda, CA

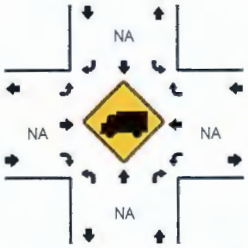
QC JOB #: 14429418
DATE: Thu, May 25 2017

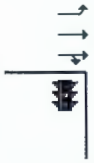
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

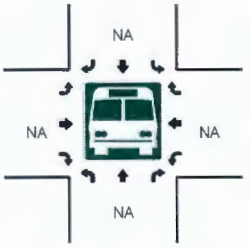












5-Min Count Period Beginning At	9. 105th (Northbound)				9. 105th (Southbound)				International Blvd (Eastbound)				International Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	19	0	14	0	0	0	1	0	2	31	14	1	9	53	0	0	144	
4:05 PM	18	0	18	0	1	0	0	0	3	45	8	0	10	43	0	0	146	
4:10 PM	25	0	14	0	1	0	0	0	2	41	15	0	9	48	1	0	156	
4:15 PM	20	0	13	0	0	0	0	0	0	33	17	0	8	45	1	0	137	
4:20 PM	21	0	17	0	0	0	2	0	1	35	17	0	12	45	0	0	150	
4:25 PM	24	1	13	0	0	0	0	0	2	44	19	1	6	51	1	0	162	
4:30 PM	21	3	17	0	1	2	1	0	3	37	14	0	10	37	0	0	146	
4:35 PM	21	1	11	0	0	0	0	0	2	39	17	0	4	34	0	0	129	
4:40 PM	24	0	12	0	0	0	0	0	0	43	21	0	5	42	0	0	147	
4:45 PM	20	1	12	0	0	1	1	0	0	37	22	0	13	60	0	0	167	
4:50 PM	21	1	12	1	0	0	1	0	0	49	14	1	8	38	0	0	146	
4:55 PM	19	1	15	0	0	0	1	0	2	35	15	1	13	43	2	0	147	1777
5:00 PM	13	0	10	0	0	0	1	0	3	39	13	0	5	41	1	0	126	1759
5:05 PM	22	0	16	0	2	1	1	0	1	35	16	0	8	43	1	0	146	1759
5:10 PM	23	2	16	0	0	0	1	0	2	47	19	0	8	48	0	0	166	1769
5:15 PM	21	1	15	0	1	1	3	0	2	40	21	0	12	49	0	0	166	1795
5:20 PM	23	1	7	0	2	0	3	0	3	28	15	0	4	38	2	0	126	1774
5:25 PM	24	2	15	0	0	0	3	0	0	40	12	0	10	51	1	0	158	1770
5:30 PM	15	0	21	0	1	0	0	0	2	43	20	0	11	46	1	0	160	1784
5:35 PM	19	1	21	0	0	0	1	0	1	45	16	1	13	39	3	0	160	1815
5:40 PM	20	0	13	0	1	0	2	0	0	49	11	0	8	50	0	2	156	1824
5:45 PM	20	1	18	0	1	1	5	0	1	41	14	0	12	39	0	0	153	1810
5:50 PM	26	0	13	0	0	0	0	0	1	50	18	0	10	43	1	0	162	1826
5:55 PM	24	0	9	0	1	0	1	0	3	47	17	0	7	45	0	1	155	1834

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	264	12	188	0	12	8	20	0	20	488	224	0	112	560	4	0	1912
Heavy Trucks	4	0	0		0	0	0		0	16	4		0	8	0		32
Pedestrians		12				16				4				8			40
Bicycles	1	0	0		0	0	0		0	0	0		1	1	0		3
Railroad Stopped Buses																	

Comments:

Report generated on 6/2/2017 2:35 PM

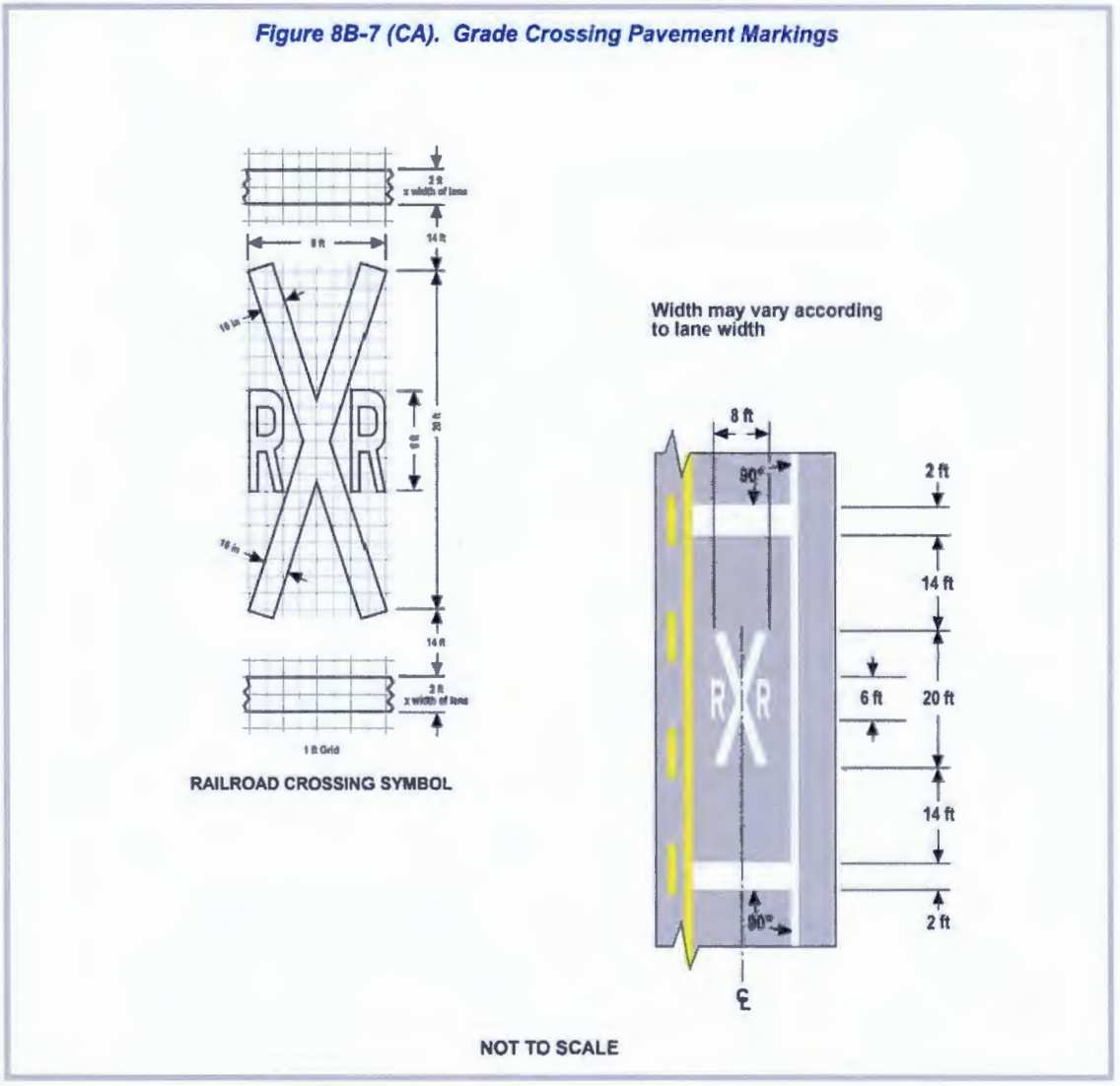
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix C CA-MUTCD Examples of Railroad Crossing Treatments

intersection. The two crossings were reviewed for compliance with the Manual on Uniform Traffic Control Devices California supplement (CA-MUTCD).

CA-MUTCD Pavement Markings. Pavement markings required per the CA-MUTCD for at-grade railroad crossings with automatic gates are shown in Figure 5. Such markings are not present for the 105th Avenue crossing nor the Edes Avenue crossing.

Figure 5: Railroad Crossing Pavement Markings



Source: California MUTCD, 2014

CA-MUTCD Automatic Gates. Figure 6 presents two example locations of automatic gates where sidewalks are present. At both railroad crossings near the Project site, the path of travel for people walking across the tracks is around the automatic gate, and no physical barriers are present to prevent people from walking across the tracks when a train is present.

Figure 6: Example of Separate Pedestrian Gate

Figure 8C-5. Example of a Shared Pedestrian/Roadway Gate

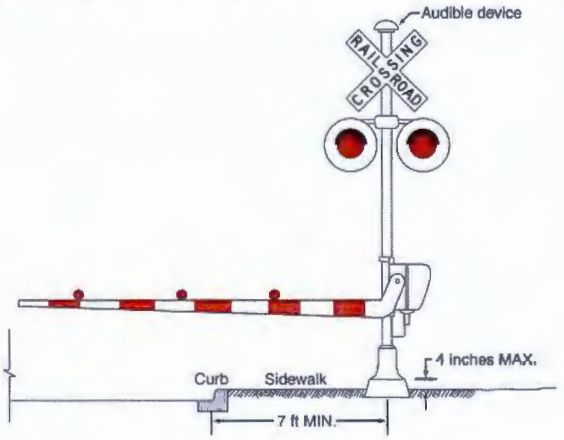
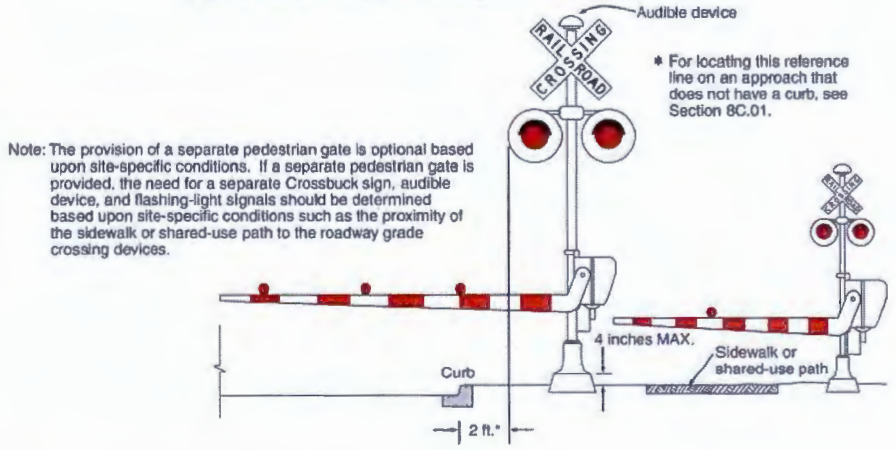


Figure 8C-6. Example of a Separate Pedestrian Gate



Source: California MUTCD, 2014

105th Avenue Crossing. The 105th Avenue crossing has automatic gates; however, it lacks railroad crossing pavement markings and Americans with Disabilities Act (ADA) compliant sidewalks. Figure 7 and Figure 8 illustrate the conditions for walking across the tracks at the 105th Avenue crossing. On the east side of the street, the automatic gate directly obstructs the path for people walking across the tracks.

Appendix D SWITRS Crash Data

GGB Intersection	Type of Collision									Number Vehicles Involved	Motor Vehicle Involved With	PDO	Injuries	Killed	Collision Date
	Head-on	Sideswipe	Rear End	Broadside	Hit Object	Overturn	Auto / Pedestrian	Other	Total						
98th avenue/I-880 SB Ramps									0						
98th avenue/I-880 NB Ramps									0						
98th avenue/Edes Avenue		1							1	2	Other MV	1			02/18/16
		1							1	2	Other MV	1			03/23/16
				1					1	2	Other MV		2		05/04/16
	1								1	2	Other MV		1		04/22/16
				1					1	2	Other MV		5		08/09/16
	1								1	1	Other MV	1			10/02/16
		1							1	2	PED		1		10/27/16
	1								1	2	Other MV		1		06/05/16
				1					1	2		1			10/30/16
		1							1	2	Other MV		3		12/21/16
98th avenue/International Blvd			1						1	2		1			01/06/16
		1							1	2	Other MV	1			04/04/16
	1								1	3	Other MV		1		04/16/16
				1					1	2	Other MV	1			05/18/16
			1						1	2	Other MV	1			06/18/16
				1					1	2	Other MV	1			08/13/16
				1					1	2	Other MV	1			09/22/16
								1	1	1	Other OBJ	1			10/23/16
			1						1	2	Other MV	1			06/26/16
				1					1	2	Other MV	1			09/04/16
			1						1	2	Other MV	1			10/23/16
		1							1	2	Other MV		2		10/28/16
				1					1	2	Other MV	1			12/06/16
			1						1	2	Other MV	1			11/18/16
			1						1	2	Other MV	1			06/04/16
			1						1	2	PKD MV	1			06/01/16
98th avenue/Pearmain St		1							1	2	Other MV	1			05/03/16
				1					1	2	Other MV	1			05/23/16
98th avenue/Pippin St				1					1	2	Other MV		2		05/10/16
				1					1	2	Other MV	1			06/09/16
98th avenue/San Leandro St			1						1	3	Other MV		2		07/27/16
		1							1	2	Other MV		1		08/25/16
			1						1	2	Other MV	1			09/20/16
					1				1	1	Fixed OBJ	1			12/15/16
				1					1	2	Other MV	1			01/16/16
	1								1	2	Fixed OBJ	1			03/01/16
			1						1	2	Other MV	1			05/23/16
	1								1	2	Other MV	1			11/12/16
105th avenue/Edes Avenue							1		1	1	PED		1		02/11/16
							1		1	1	PED		1		04/04/16
		1							1	2	Other MV	1			07/31/16
							1		1	1	PED		1		02/11/16
							1		1	1	PED		1		04/04/16
		1							1	1	Other MV	1			07/31/16
				1					1	2	Other MV		1		09/24/16
		1							1	4	Other MV		1		12/09/16
		1							1	2	Other MV	1			12/12/16
					1				1	1	Fixed OBJ	1			11/03/16
							1		1	1	PED		1		10/17/16
105th avenue/International Blvd							1		1	1	PED		1		07/11/16
				1					1	1	Bicycle	1			12/13/16
				1					1	2	Other MV		2		07/10/16
	1								1	2	Other MV		1		08/11/16
	1								1	2	Other MV		2		10/26/16
			1						1	3	Other MV	1			11/22/16
			1						1	2	PKD MV		1		12/31/16
105th avenue/Pearmain St			1						1	4	Other MV		1		03/15/16
					1				1	1	Fixed OBJ	1			03/05/16
105th avenue/San Leandro			1						1	2	Other MV	1			02/11/16
				1					1	2	Other MV		1		05/16/16
	1								1	2	Fixed OBJ	1			11/08/16
				1					1	1	Other MV		1		01/13/16
					1				1	2	Fixed OBJ	1			04/05/16
105th avenue/Pippin St				1					1	2	Other MV		1		01/06/16

Appendix E Detailed Trip Generation Calculations

Trip Generation

Land Use	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Rate	In %	Out %	In trips	Out trips	Total	Rate	In %	Out %	In trips	Out trips	Total
Vehicle-Trips, per *ITE Trip Generation Manual, 9th Edition*																
Project Generated Trips																
Elementary (ITE Land Use 520)	333	Student	1.29	430	0.45	55%	45%	83	67	150	0.15	49%	51%	25	25	50
Middle (ITE Land Use 522)	167	Student	1.62	271	0.54	55%	45%	51	40	91	0.16	49%	51%	13	14	27
High School (ITE Land Use 530)	350	Student	1.71	599	0.43	68%	32%	103	48	151	0.13	47%	53%	21	25	46
Total ITE Project Trips	*850*		----	*1,299*	----	----	----	*237*	*155*	*392*	----	----	----	*59*	*64*	*123*
Trips by Mode, per *City of Oakland TIS Guidelines*																
Vehicle Trips	----	----	76.9%	999	76.9%	----	----	182	119	301	76.9%	----	----	45	49	94
Transit Trips	----	----	17.9%	232	17.9%	----	----	42	28	70	17.9%	----	----	11	11	22
Bicycle Trips	----	----	1.9%	25	1.9%	----	----	5	3	8	1.9%	----	----	1	1	2
Walk / Other Trips	----	----	2.0%	26	2.0%	----	----	5	3	8	2.0%	----	----	1	1	2
Total Trips	----	----	*98.7%*	*1,282*	*98.7%*	----	----	*234*	*153*	*387*	*98.7%*	----	----	*58*	*62*	*120*
Vehicle Trip Credit																
Credit for Existing Vehicle Trips	----	----	----	-29	----	----	----	-24	0	-24	----	----	----	-2	-3	-5
New Project Vehicle Trips	----	----	----	*970*	----	----	----	*158*	*119*	*277*	----	----	----	*43*	*46*	*89*
Trip Changes by Mode per TDM Plan																
Vehicle Trips	----	----	----	-86	----	----	----	-33	-32	-65	----	----	----	-10	-11	-21
Transit Trips	----	----	----	22	----	----	----	17	0	17	----	----	----	0	5	5
Bicycle Trips	----	----	----	3	----	----	----	2	0	2	----	----	----	0	1	1
Walk / Other Trips	----	----	----	8	----	----	----	6	0	6	----	----	----	0	2	2
Net New Trips by Mode																
Vehicle Trips	----	----	----	884	----	----	----	125	87	212	----	----	----	33	35	68
Transit Trips	----	----	----	254	----	----	----	59	28	87	----	----	----	11	16	27
Bicycle Trips	----	----	----	28	----	----	----	7	3	10	----	----	----	1	2	3
Walk / Other Trips	----	----	----	34	----	----	----	11	3	14	----	----	----	1	3	4
Net New Project Trips	----	----	----	**1,200**	----	----	----	**202**	**121**	**323**	----	----	----	**46**	**56**	**102**

Sources: Kittelson & Associates, Inc. 2017; Institute of Transportation Engineers' *Trip Generation Manual* , 9th Edition, 2012; City of Oakland's *Traffic Impact Analysis Guidelines* , 2013; Metropolitan Transportation Commission, *2000 Bay Area Travel Survey* , 2000., City of Oakland *Transportation Impact Review Guidelines*

Notes:

[1]Total trip generation does not add up to 100 percent and is not constant, as the mode split of "Other" mode varies slightly by land use category.

[2]ITE Trip Generation Rates

Elementary (ITE Land Use 520)

Daily: **1.29** A.M. Peak Hour: **0.45** (55% in; 45% out) P.M. Peak Hour: **0.15** (49% in; 51% out)

Middle (ITE Land Use 522)

Daily: **1.62** A.M. Peak Hour: **0.54** (55% in; 45% out) P.M. Peak Hour: **0.16** (49% in; 51% out)

High School (ITE Land Use 530)

Daily: **1.71** A.M. Peak Hour: **0.43** (68% in; 32% out) P.M. Peak Hour: **0.13** (47% in; 53% out)

Appendix F Doorway and Driveway Counts at SUM

20161 - Oakland Lighthouse School TIA Observer: Date:

estrian Access	Notes
Sidewalk conditions	Generally okay. Sidewalk gaps at rail tracks
Any obstructions along the sidewalk (decreasing the effective width)?	Yes, narrow eff.
Any ADA non-compliant locations? What type of non-compliance?	Width of sidewalk- utility poles, sign posts, debrie/large trash
Where are crosswalks?	105/Edes nsxn
Countdown ped signal heads?	Yes
Is the signal phasing pretimed? How are ped phases called?	Pretimed ped phase assumed
Are the ped signals built into the traffic signal phase? Or are pushbuttons present/needed?	no push buttons, but ped. phase programmed with traffic phase
Railroad Tracks	
Conditions walking across railroad tracks	Poor. Not ADA cpmpliant on either side. Significant blockage of path on south side
Conditions of the pavement markings for drivers and bicyclists	Stop bar for vehicles
Observations about signs	Not to standard, sign chained to barrier arm
Take photos of railroad crossing	signage likely not to standard
Bicycle Access	
Any bike facilities along the roadway?	No
Bike parking on site or nearby?	Yes- On site
Any bikes parked at an ad-hoc location?	No
Vehicle Access	
How do drivers circulate in the parking lot?	As expected, not using out only driveway
Is drop off/pick up activity occurring along the street?	No
People per vehicle	1
ve through the 98th Ave/Edes Ave intersection	Push buttons parallel striped on all legs

	Vehicles			Bikes		Pedestrians	
Time Interval	Out	Parked on the Street	Drop off or Pick up on Street	In	Out	In	Out
7:00-7:15 AM							
7:15-7:30 AM							
7:30-7:45 AM	15			1		1	
7:45-8:00 AM	4					1	
8:00-8:15 AM	5					1	
8:15-8:30 AM	3						
8:30-8:45 AM							
8:45-9:00 AM							

21061 - Oakland Lighthouse School TIA
Observer:
Date:

* Edes- Moderate SB flow, minimal NB flow
* 105th- Heavy WB flow, moderate EB flow
* Disgruntled drivers

Short cycle = 55 s. (25 N/S, 30 E/W)
E/W could use more cycle length

	Vehicles				Bikes		Pedestrians	
Time Interval	In	Out	Parked on the Street	Drop off or Pick up on Street	In	Out	In	Out
3:00-3:15 PM	33							
3:15-3:30 PM		1						
3:30-3:45 PM		1						
3:45-4:00 PM								
4:00-4:15 PM	1							
4:15-4:30 PM	1	1						
4:30-4:45 PM		1						
4:45-5:00 PM		1						

21061 - Oakland Lighthouse School TIA
Observer:
Date:

* Street traffic relatively light in all direction