CALL TO ORDER PLANNING COMMISSION: Chair Ross Jackson, Vice Chair John Arnaz; Commissioners: Marci Embree, Jennifer Lane, Brian Martell, Thomas Scott, and Justin Raithel

Any documents produced by the City and distributed to the Planning Commission regarding any item on this agenda will be made available at the Community Development Counter at City Hall located at 50 Natoma Street, Folsom, California and at the table to the left as you enter the Council Chambers. The meeting is available to view via webcast on the City’s website the day after the meeting.

PLEDGE OF ALLEGIANCE

CITIZEN COMMUNICATION: The Planning Commission welcomes and encourages participation in City Planning Commission meetings, and will allow up to five minutes for expression on a non-agenda item. Matters under the jurisdiction of the Commission, and not on the posted agenda, may be addressed by the general public; however, California law prohibits the Commission from taking action on any matter which is not on the posted agenda unless it is determined to be an emergency by the Commission.

MINUTES

The minutes of October 19, 2016 will be presented for approval.

NEW BUSINESS

1. **PN 16-339, Natural Result Surgery Center - Planned Development Permit and Determination that the Project is Exempt from CEQA**

   A Public Hearing to consider a request from Williams and Paddon Architects for approval of a Planned Development Permit for development of an 11,000-square-foot medical surgery center (Natural Result Surgery Center) on a 1.91-acre parcel located at the southeast corner of East Bidwell Street and Creekside Drive. The project is zoned BP PD (Business and Professional Planned Development District) and the General Plan land-use designation for the site is CA (Specialty Commercial). The project is categorically exempt from the California Environmental Quality Act (CEQA) under In-Fill Development Projects (15332). *(Project Planner: Principal Planner, Steve Banks / Applicant: Williams and Paddon Architects)*
2. PN 16-334, Lake Forest Business Park, 181 Blue Ravine Road - Tentative Parcel Map and Determination that the Project is Exempt from CEQA

A Public Hearing to consider a request from R.E.Y. Engineers for approval of a Tentative Parcel Map to subdivide a 4.8-acre parcel (includes two existing building) located at 181 Blue Ravine Road within the Lake Forrest Technical Center into two parcels. The project is zoned M-L (Limited Manufacturing District) and the General Plan land-use designation for the site is IND (Industrial/Office Park). The project is categorically exempt from the California Environmental Quality Act (CEQA) under Minor Land Divisions (15315). (Project Planner: Principal Planner, Steve Banks / Applicant: R.E.Y. Engineers)

3. PN 16-108, Quick Quack Car Wash - Planned Development Permit and Consideration of Adoption of a Mitigated Negative Declaration

A Public Hearing to consider a request from Efrain Corona for approval of a Planned Development Permit for development and operation of a 3,579-square-foot car wash facility at the southeast corner of Iron Point Road and Cavitt Drive. The project is zoned SP 95-1 (Broadstone Unit No. 3 Specific Plan) and the General Plan land-use designation for the site is CC (Community Commercial). An Initial Study and Mitigated Negative Declaration have been prepared in accordance with the requirements of the California Environmental Quality Act. (Project Planner: Principal Planner, Steve Banks / Applicant: Efrain Corona)

PLANNING COMMISSION / PLANNING MANAGER REPORT

The next Planning Commission meeting is scheduled for December 21, 2016. Additional non-public hearing items may be added to the agenda; any such additions will be posted on the bulletin board in the foyer at City Hall at least 72 hours prior to the meeting. Persons having questions on any of these items can visit the Community Development Department during normal business hours (8:00 a.m. to 5:00 p.m.) at City Hall, 2nd Floor, 50 Natoma Street, Folsom, California, prior to the meeting. The phone number is 355-7222 and FAX number is 355-7274.

NOTICE REGARDING CHALLENGES TO DECISIONS
The appeal period for Planning Commission Action: Any appeal of a Planning Commission action must be filed, in writing with the City Clerk’s Office no later than ten (10) days from the date of the action pursuant to Resolution No. 8081. Pursuant to all applicable laws and regulations, including without limitation, California Government Code Section 65009 and or California Public Resources Code Section 21177, if you wish to challenge in court any of the above decisions (regarding planning, zoning and/or environmental decisions), you may be limited to raising only those issues you or someone else raised at the public hearing(s) described in this notice/agenda, or in written correspondence delivered to the City at, or prior to, the public hearing.
CALL TO ORDER PLANNING COMMISSION: Chair Ross Jackson; Vice Chair John Arnaz; Commissioners: Marci Embree, Jennifer Lane, Brian Martell, Thomas Scott, Justin Raithel

ABSENT: Lane, Arnaz, Scott

CITIZEN COMMUNICATION: None

MINUTES: The minutes of October 5, 2016 were approved as submitted.

CONTINUED ITEMS

1. **PN 16-025, Enclave at Folsom Ranch, Easton Valley Parkway – Tentative Parcel Map, Vesting Tentative Subdivision Map, Planned Development Permit, and Determination that the Project is Exempt from CEQA – Continued from the September 21, 2016 Planning Commission Meeting**

   A Public Hearing to consider a request from Enclave at Folsom, LLC for approval of a Tentative Parcel Map, Vesting Tentative Subdivision Map, and Planned Development Permit for development of a 111-unit single-family residential subdivision on a 14.7-acre site located on Easton Valley Parkway (APN 072-3190-036). The Specific Plan designation is SP-GC and SP MLD and the General Plan is GC-MLD. An Exemption has been prepared for the project pursuant to California Environmental Quality Act Guidelines Sections 15063 and 15084. (Project Planner: Principal Planner, Steve Banks / Applicant: Enclave at Folsom, LLC)

   COMMISSIONER MARTELL MOVED TO RECOMMEND TO THE CITY COUNCIL APPROVAL OF THE LARGE-LOT TENTATIVE PARCEL MAP CREATING FOUR LARGE LOTS AS ILLUSTRATED ON ATTACHMENT 2 FOR THE ENCLAVE AT FOLSOM RANCH SUBDIVISION PROJECT;

   AND

   MOVE TO RECOMMEND TO THE CITY COUNCIL APPROVAL OF THE SMALL-LOT VESTING TENTATIVE SUBDIVISION MAP CREATING ONE HUNDRED AND ELEVEN (111) SINGLE-FAMILY RESIDENTIAL LOTS AS ILLUSTRATED ON ATTACHMENT 3 FOR THE ENCLAVE AT FOLSOM RANCH SUBDIVISION PROJECT;
MOVE TO RECOMMEND TO THE CITY COUNCIL APPROVAL THE PLANNED DEVELOPMENT PERMIT FOR DEVELOPMENT OF ONE HUNDRED AND ELEVEN (111) SINGLE-FAMILY RESIDENTIAL UNITS AS ILLUSTRATED ON ATTACHMENTS 3 THROUGH 7 FOR THE ENCLAVE AT FOLSOM RANCH SUBDIVISION PROJECT WITH THE FOLLOWING FINDINGS AND CONDITIONS: GENERAL FINDINGS A & B; CEQA FINDINGS C & D; TENTATIVE SUBDIVISION MAP FINDINGS E – L; PLANNED DEVELOPMENT PERMIT FINDINGS M – T; CONDITIONS OF APPROVAL 1 – 210.

COMMISSIONER EMBREE SECONDED THE MOTION WHICH CARRIED THE FOLLOWING VOTE:

AYES: MARTELL, RAITHEL, EMBREE, JACKSON
NOES: NONE
ABSTAIN: NONE
ABSENT: LANE, ARNAZ, SCOTT

REPORTS:
Planning Commission/Planning Manager Report:
None

RESPECTFULLY SUBMITTED,

___________________________________________
Amanda Palmer, SECRETARY

APPROVED:

___________________________________________
Ross Jackson, CHAIRMAN
Transmittal Sheet

Date: 12/2/16
To: Planning Commission
From: Scott A. Johnson, AICP
Subject: PN 16-339, Natural Result Surgery Center

The item, Natural Result Surgery Center, will be presented to the Planning Commission with the recommendation from City staff for continuation to the January 18, 2017 Planning Commission meeting.

Respectfully submitted,

Scott A. Johnson, AICP
Planning Manager
Transmittal Sheet

Date: 12/2/16
To: Planning Commission
From: Scott A. Johnson, AICP
Subject: PN 16-334, Lake Forest Business Park

The item, Lake Forest Business Park, will be presented to the Planning Commission with the recommendation from City staff for continuation to the January 18, 2017 Planning Commission meeting.

Respectfully submitted,

Scott A. Johnson, AICP
Planning Manager

PN 16-334, Lake Forest Business Park
PLANNING COMMISSION STAFF REPORT

PROJECT TITLE
Quick Quack Car Wash

PROPOSAL
Request for approval of a Planned Development Permit for development and operation of a 3,599-square-foot car wash facility

RECOMMENDED ACTION
Approve, based upon findings and subject to conditions

OWNER/APPLICANT
Elliott Homes/Efrain Corona

LOCATION
Southeast corner of the intersection of Iron Point Road and Cavitt Drive

SITE CHARACTERISTICS
The 2.7-acre project site, which has previously been rough-graded and filled, is relatively flat, and contains a variety of non-native grasses. Existing improvements includes curb, gutter, and sidewalk along the frontage of Cavitt Drive

GENERAL PLAN DESIGNATION
Community Commercial (CC)

ZONING
SP 95-1 (Broadstone Unit No. 3 Specific Plan) with an underlying land use designation of C-2 (Community Commercial)

ADJACENT LAND USES/ZONING
North: Iron Point Road with Single-Family Residential Development (SP 95-1) Beyond
South: Open Space (SP 95-1) with Commercial Development and U.S. Highway 50 Beyond
East: Open Space (SP 95-1) with Commercial Development (SP 95-1) and Serpa Way Beyond
West: Cavitt Drive with Commercial Development (SP 95-1) Beyond
PREVIOUS ACTION

Approval of a General Plan Amendment (PN 04-261) to change the General Plan land use designation for three parcels totaling 59.83-acres from Industrial/Office Park (IND) to Community Commercial (CC) and a Specific Plan Amendment to change the Broadstone Unit No. 3 Specific Plan land use designation for three parcels totaling 59.83-acres from Industrial/Office Park (IND/OP) to Community Commercial (C-2)

FUTURE ACTION

Issuance of Building and Grading permits

APPLICABLE CODES

FMC 17.37, Specific Plans
FMC 17.38, Planned Development District
FMC 17.57, Parking Requirements
FMC 17.59, Signs

ENVIRONMENTAL REVIEW

An Initial Study and Mitigated Negative Declaration, and Mitigation Monitoring Program have been prepared as part of this application

ATTACHED REFERENCE MATERIAL

1. Vicinity Map
2. Preliminary Site Plan, dated September 13, 2016
4. Preliminary Grading and Utility Plan, dated August 9, 2016
5. Preliminary Landscape Plan, dated August 30, 2016
7. Color Building Elevations, dated September 13, 2016
8. Signage Details, dated October 19, 2016
10. Initial Study, Mitigated Negative Declaration, and Mitigation Monitoring Program
11. Site Photographs

PROJECT PLANNER

Steve Banks, Principal Planner

BACKGROUND

In October of 2005, the City Council approved a General Plan Amendment to change the General Plan land use designation for three parcels (including the subject parcel) totaling 59.83-acres from Industrial/Office Park (IND) to Community Commercial (CC) and for a separate 14-acre parcel from Industrial/Office Park (IND) to Multi-Family Medium Density (MMD). The City Council also approved a Specific Plan Amendment to change the Broadstone Unit No. 3 Specific Plan land use designation for three parcels totaling 59.83-acres from Industrial/Office Park (IND/OP) to Community Commercial (C-2) and a separate 14-acre parcel from Industrial/Office Park (IND/OP) to Multi-Family Medium Density (R-M). The subject 2.7-acre parcel was among those parcels for
which the General Plan land use designation and Specific Plan designation were modified to a commercial designation.

APPLICANT'S PROPOSAL
The applicant, Efrain Corona on behalf of Quick Quack Car Wash, is requesting approval of a Planned Development Permit for development and operation of a 3,599-square-foot car wash facility on a 2.7-acre site located at the southeast corner of the intersection of Iron Point Road and Cavitt Drive within the Broadstone Unit No. 3 Specific Plan Area. In addition to the primary car wash building, the proposed project includes a car wash tunnel, 10 car vacuum stalls, 41 traditional parking spaces, and a trash/recycling enclosure. Vehicle access to the project site is provided by two new driveways located on the east side of Cavitt Drive. Internal circulation is facilitated by drive aisles within the project site. Additional site improvements include underground utilities, pedestrian walkways, site lighting, and site landscaping. It is important to note that a portion of the site will remain unimproved in anticipation of future development of the south side of the parcel. Lastly, the design of the proposed commercial car wash building reflects a fairly contemporary architectural style with many high-quality elements.

GENERAL PLAN AND ZONING CONSISTENCY
The General Plan land use designation for the project site is CC (Community Commercial) and the zoning classification for the site is SP 95-1 (Broadstone Unit No. 3 Specific Plan) with an underlying land use designation of C-2 (Community Commercial), which is similar to the City’s C-2 (Central Business District) zoning designation. The Specific Plan designation corresponds with the General Plan land use designation. The proposed project is consistent with both the General Plan land use and Specific Plan designations, as retail and commercial uses (including a car wash) are identified as a permitted land use in the specific plan for this site. In addition, the proposed project will not conflict with any known applicable plans or policies by agencies with jurisdiction over the project.

LAND USE COMPATIBILITY
The proposed 3,599-square-foot car wash facility, which is located within the Broadstone Unit No. 3 Specific Plan Area, is situated at the southeast corner of the intersection of Iron Point Road and Cavitt Drive. The project site is bounded by Iron Point Road to the north with single-family residential development beyond, an open space corridor to the south with commercial development and U.S. Highway 50 beyond, an open space corridor to the east with Serpa Way and commercially-designated land beyond, and Cavitt Drive to the west with commercial development beyond. It is important to recognize that the project site has been designated for either industrial or commercial development since approval of the Broadstone Unit No. 3 Specific Plan in 1995.

In reviewing the proposed project, staff took into consideration the compatibility of the proposed land use in relation to the existing land uses in the immediate project vicinity and potential noise impacts associated with the proposed project. As described previously, the project site is located on an undeveloped parcel located at the southeast corner of Iron Point Road and Cavitt Drive. Land uses in the immediate project area are predominantly commercial in nature and include Costco, Staybridge Inn & Suites, Fairfield Inn & Suites, Green Acres Nursery, and Life Time Fitness. Additional commercial land uses are located slightly west of the project site within the Broadstone Pointe Highway Commercial Shopping Center. The nearest residential land uses are located approximately 350 feet to the north across Iron Point Road. Based on the predominance of
commercial development in the immediate project vicinity, staff has determined that the proposed car wash facility is compatible with existing land uses in the project area.

**PLANNED DEVELOPMENT PERMIT**
The purpose of the Planned Development Permit process is to allow greater flexibility in the design of integrated developments than otherwise possible through strict application of land use regulations. The Planned Development Permit process is also designed to encourage creative and efficient uses of land. In reviewing the applicant’s request for approval of a Planned Development Permit, staff considered a variety of factors including existing/proposed development standards, traffic/access/circulation, parking requirements, noise impacts, walls, site lighting, project signage, site landscaping, trash/recycling, grading/drainage, and architecture/design.

**Development Standards**
The applicant’s intent with the subject application is to comply with the development standards established by the Broadstone Unit No. 3 Specific Plan for the Community Commercial district (C-2) including maximum building coverage, setbacks, and building height. The following table outlines the existing and proposed development standards for the proposed project:

<table>
<thead>
<tr>
<th></th>
<th>Building Coverage</th>
<th>Front Yard Setback</th>
<th>Rear Yard Setback</th>
<th>Side Yard Setbacks</th>
<th>Building Height Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadstone Unit No. 3 Standard</td>
<td>50 Percent</td>
<td>30 feet</td>
<td>20 feet</td>
<td>20 feet</td>
<td>40 feet</td>
</tr>
<tr>
<td>Proposed Project</td>
<td>4 Percent</td>
<td>65 feet</td>
<td>330 feet</td>
<td>58 and 90 feet</td>
<td>31 feet</td>
</tr>
</tbody>
</table>

As shown on the development standards table above, the proposed project meets or exceeds all of the applicable development standards. As a result, staff has determined that the proposed project meets the intent, purposes, and standards set forth in the Planned Development District (FMC Section 17.38) and the Broadstone Unit No. 3 Specific Plan.

**Traffic, Access, and Circulation**
**Existing Roadway Network:**
The subject 2.7-acre project site, which is located within the Broadstone Unit No. 3 Specific Plan Area, is situated at the southeast corner of the intersection of Iron Point Road and Cavitt Drive. Significant roadways in the project vicinity include Iron Point Road, Cavitt Drive, and Serpa Way. Adjacent to the project site, Iron Point Road is a six-lane median divided roadway with a posted speed limit of 45 MPH. In the vicinity of the project site, Cavitt Drive is a two-lane median divided roadway with a posted speed limit of 35 MPH. In the project area, Serpa Way is a two-lane undivided roadway that has a posted speed limit of 25 MPH.

**Traffic Impacts:**
The traffic, access, and circulation impacts associated with the proposed project are based on the results of a Traffic Impact Analysis that was prepared on September 30, 2016 by MRO Engineers. The traffic study analyzed traffic operations in the vicinity of the project site under two scenarios: Cumulative No Project Conditions, and Cumulative Plus Project Conditions. Potential impacts of the project were evaluated at three locations: Iron Point Road/Cavitt Drive, Cavitt Drive/North...
Project Driveway, and Cavitt Drive/South Project Driveway. The proposed car wash project is expected to generate a total of 66 weekday PM Peak Hour trips (34 inbound and 32 outbound) assuming average conditions. Under peak-demand conditions, the proposed project is estimated to generate 184 PM Peak Hour trips including 93 inbound trips and 91 outbound trips (includes projected trips from construction of a 3,800-square-foot quick lube or similar facility on undeveloped portion of project site). Under Cumulative No Project Conditions, the intersection of Iron Point Road and Cavitt Drive will operate at LOS C, which conforms to the City’s General Plan Policy of LOS C or better. Under Cumulative Plus Project Conditions, no change in level of service is projected, and all of the study locations will operate at an acceptable level of service (LOS C or better).

Project Access and On-Site Circulation:
As described earlier in this report, the proposed project includes development of a 3,599-square-foot car wash facility on a 2.7-acre site located at the intersection of Iron Point Road and Cavitt Drive. Access to the project site is provided by two new driveways located on the east side of Cavitt Drive. Internal vehicle circulation is facilitated by a series of internal drive aisles. Pedestrian access and circulation is facilitated by existing sidewalks along Cavitt Drive and Iron Point Road as well as proposed interior pedestrian walkways and connections.

The traffic study prepared for the proposed project analyzed the operation and configuration of the project access system in terms of: driveway spacing, turn restrictions, sight distance, vehicle queuing, and on-site circulation. Based on the configuration of the proposed project driveways and the physical characteristics of Cavitt Drive, the study determined that adequate spacing (approximately 175 feet between two proposed driveways) is provided. With regard to turn restrictions and turning movements from the project driveways, the study recommended that the North Driveway be limited to right turns-in and right turns-out due to the location of an existing raised median located on Cavitt Drive and to avoid conflicts with left-turning vehicles queued on the northbound Iron Point Road/Cavitt Drive approach.

To ensure that vehicles are able to enter and exit the project site safely at the two project driveways on Cavitt Drive, a stopping sight distance analysis was prepared as part of the traffic study. The analysis was conducted relative to both inbound and outbound turns at the project driveways, to ensure that project-related drivers could see and react to approaching vehicles on Cavitt Drive. The traffic study concluded that at both project driveways, entering and exiting vehicles have clear visibility that exceeds 305 feet, thus, it was determined that adequate site distance is available. With regard to vehicle queuing at the two project driveways, the study determined that adequate throat depth is provided at both project driveways to accommodate stacking of vehicles within the project site without obstructing any internal drive aisles or parking spaces. In terms of on-site vehicle circulation, the study concluded that the on-site circulation system was generally acceptable. However, to further ensure safe travel in and around the project site, staff recommends that the following measures be implemented (Condition No. 32):

- North Project Driveway
  - North Project Driveway shall be restricted to right-turns only, both inbound and outbound.
o STOP-sign control and corresponding pavement markings (i.e., stop bars and legends), shall be installed at the driveway exit to Cavitt Drive.

o A “RIGHT TURN ONLY” sign shall be posted below the “STOP” sign and a “RIGHT TURN ONLY” pavement arrow shall be painted on the driveway approach to its intersection with Cavitt Drive.

o A “ONE WAY” sign shall be installed in the Cavitt Drive median, directly across from the outbound lane at the driveway.

- South Project Driveway

  o South Project Driveway shall accommodate full turning movements, both inbound and outbound.

  o STOP-sign control and corresponding pavement markings (i.e., stop bars and legends), shall be installed at the driveway exit to Cavitt Drive.

- On-Site Circulation

  o STOP-sign controls and appropriate pavement markings shall be installed at the exits from the car wash tunnel area and the car vacuum area.

  o A “DO NOT ENTER” sign shall be installed at the exit from the one-way car vacuum area near the northeast corner of the project site.

  o A “KEEP CLEAR” pavement legend shall be painted in the on-site intersection immediately east of the car wash tunnel exit. The legend shall be oriented toward drivers entering the car wash area.

  o STOP-sign controls and appropriate pavement markings shall be installed to the south of the on-site intersection of the car wash tunnel exit and the car wash entrance. The legend shall be oriented toward drivers entering the on-site intersection prior to the car wash entrance.

  o The circulation aisle located along the southwesterly edge of the Future Development area shall be widened to accommodate two-way traffic along its entire length.

  o Directional arrows shall be painted on the pavement throughout the project site to reinforce the appropriate travel paths.

  o Landscape materials and signage located along the frontage of Cavitt Drive frontage shall not impede the ability of drivers to see oncoming vehicles on Cavitt Drive.

**Traffic Safety Committee**

The proposed project was reviewed by the Traffic Safety Committee at its October 27, 2016 meeting. At the aforementioned meeting, the Committee was generally supportive of the access and circulation system as shown on the submitted site plan. However, to ensure that adequate emergency vehicle circulation is provided within the project site, the committee recommends that the following measure be implemented (Condition No. 32):
• All primary drive aisles on the project site shall be a minimum of 27 feet in width. In addition, drive aisles around the undeveloped portion of the project site shall be designed to accommodate Fire Department apparatus (inside turning radii of 25 feet and outside turning radii of 50 feet).

Parking
The proposed car wash facility includes a total of 71 parking spaces including 41 traditional parking spaces, 20 car wash drive-thru parking spaces, and 10 car vacuum parking spaces. The Broadstone Unit No. 3 Specific Plan requires that retail commercial uses provide one parking space per two hundred and fifty square feet of gross floor area. Based on the aforementioned standard, staff has determined that the proposed project meets the parking requirements of the Broadstone Unit No. 3 Specific Plan by providing 71 parking spaces whereas 14 parking spaces are required. It is important to note that some of the parking spaces being provided are likely to be utilized when the remaining portion of the project site is developed.

The Folsom Municipal Code requires retail/commercial uses to provide 5 bicycle parking spaces for up to 25 required vehicle parking spaces. An additional bicycle parking space is required for every ten additional vehicle parking spaces required. The maximum number of bicycle parking spaces required is twenty. Based on the number of required onsite parking spaces (14), staff recommends five bicycle parking spaces be provided. Condition No. 31 is included to reflect this requirement.

Noise
In evaluating the request for the Planned Development Permit, staff took into consideration potential noise impacts caused by existing noise sources in the project area and potential noise impacts the proposed project may have on nearby residential and commercial land uses. The predominant existing noise sources in the vicinity of the project site are generated from vehicles traveling on Iron Point Road, East Bidwell Street, and U.S. Highway 50. Secondary noise sources in the project area are associated with nearby commercial development (Costco, Staybridge Inn & Suite, Fairfield Inn & Suites, and Green Acres). Persons and activities potentially sensitive to noise in the project vicinity include residents of the Broadstone Unit No. 3 Subdivision (approximately 300 feet to the north) and guests at the two nearby hotels. It is important to note that the aforementioned subdivision is separated from the project site by Iron Point Road and buffered by a six-foot-tall masonry noise barrier and associated landscape materials.

Potential noise impacts associated with Quick Quack Car Wash project can be categorized as those resulting from construction-related activities and those caused by operational activities. Construction-related noise would have a short-term effect, while operational noise would continue throughout the lifetime of the project. Development of the 3,599-square-foot car wash facility would temporarily increase noise levels in the project vicinity during the construction period, which would take approximately six months. Construction activities, including site clearing, excavation, grading, building construction, and paving, would be considered an intermittent noise impact throughout the construction period of the project. The City’s Noise Ordinance excludes construction activities from meeting the General Plan Noise Element standards, provided that all phases of construction are limited to the hours between 7:00 a.m. and 6:00 p.m. on weekdays, 8:00 a.m. and 5:00 p.m. on Saturdays. To ensure compliance with the City’s Noise Control Ordinance and General Plan Noise Element, staff recommends that hours of construction operation be limited
from 7:00 a.m. to 6:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturdays with no construction permitted on Sundays or holidays. Condition No. 46 is included to reflect these requirements.

To evaluate operational noise impacts associated with the proposed car wash facility, an Environmental Noise Analysis was prepared by Bollard Acoustical Consultants on September 30, 2016. The primary operational noise sources identified by the Analysis included noise generated by the dry blower at the end of the car wash tunnel and the noise created by the central vacuum system at the individual vacuum stations. The Analysis determined that the predicted car wash noise levels would comply with the City’s exterior daytime noise level standard of 50 dBA with respect to the nearby residential land uses and the City’s daytime and nighttime interior noise level standard of 45 dBA and 35 dBA. However, the Analysis determined that the exterior nighttime (10:00 p.m. to 7:00 a.m.) noise level standard would be exceeded at the closest single family residence to the north. To reduce the exterior nighttime noise level impact to be consistent with the City standard, staff recommends that the hour of operation for the car wash facility be limited to the daytime hours of 7:00 a.m. to 10:00 p.m. Condition No. 47 is included to reflect this requirement.

Site Lighting
The applicant is proposing to use a combination of wall-mounted light, landscape lighting, and free-standing parking lot lights. The proposed free-standing parking lot lights are 18 feet in height and have a dark bronze finish. Wall-mounted lights are proposed to provide illumination for architectural building features and to provide necessary lighting for the pedestrian walkways around the building. Staff recommends that decorative (gooseneck, lantern style, etc.) lighting fixtures consistent with the architectural theme of the building be utilized on all building elevations. Condition No. 29-4 is included to reflect this requirement. In addition, staff recommends that all exterior building-attached lighting be shielded and directed downward to minimize glare towards the surrounding properties. Condition No. 23 is included to reflect this requirement.

Signage
Project identification for the proposed car wash includes a combination of wall-mounted signs and a single freestanding monument sign. The proposed wall-mounted signs, which are located on the north, south, and west building elevations respectively, range from 30 square feet in size up to 57 square feet in size with green and white-colored copy that reads “Quick Quack CAR WASH”. In addition to the copy, each of the aforementioned wall signs includes a yellow duck logo. The proposed monument sign, which is located in the northwest corner of the project site, is approximately 21-square-feet in size and also features copy that reads “Quick Quack CAR WASH” and red neon sign copy that reads “OPEN”. Staff has determined that the size and design of the proposed wall signs are consistent with the Broadstone Unit No. 3 Design Guidelines and the requirements of the Folsom Municipal Code (FMC, Section 17.59, Signs). The proposed monument, which is located near the intersection of Iron Point Road and Cavitt Drive, is approximately 24 square feet in size and includes copy that reads “Quick Quack CAR WASH”. It is important to note that there is space allocated on the monument sign for the future tenant of the undeveloped portion of the project site. Staff has determined that the design, materials, and size of the proposed monument sign are consistent with the Broadstone Unit No. 3 Design Guidelines and the requirements of the Folsom Municipal Code (FMC, Section 17.59, Signs).
Grading and Drainage
The preliminary grading plan shows finish pad grade of 474 feet, with the site having been rough-graded previously. Development of the project site is anticipated to require minimal movement of soils and the compaction of said materials as the project site has previously been graded and filled. The applicant will be required to provide a complete geotechnical report before the design of interior road, parking lot, and building foundations are finalized. In addition, the applicant is required to provide evidence that naturally-occurring asbestos is not present at the project site before site improvements are approved or building permits are issued. If naturally-occurring asbestos is found, the applicant will be required to mitigate in a manner consistent with state law. Condition No. 55 is included to reflect this requirement.

The project site includes two existing open stormwater drainage channels located along the western and southern property boundaries. The existing drainage network drains to a shallow detention basin, which in turn discharges to an intermittent natural drainage feature along the southerly edge of the property. At Cavitt Drive this east/west flowing channel becomes piped into the City’s developed storm drainage network. Because no storm drainage facilities are provided within the project site other than two existing drainage channels and a shallow detention basin, stormwater quality treatment controls are required to be incorporated into the site design, and connected to the existing City storm drainage facilities. Staff recommends the storm drain improvement plans provide for “Best Management Practices” that meet the requirements of the water quality standards of the City’s National Pollutant Discharge Elimination System Permit issued by the State Regional Water Quality Control Board. Condition No. 26 is included to reflect this requirement.

Existing and Proposed Landscaping
The undeveloped project site has previously been rough-graded and contains a variety of non-native grasses. Proposed landscape improvements include a variety of trees, shrubs, groundcover, and turf. Among the proposed trees are Carpet Rosemary, Coast Live Oak, Common Hackberry, Crape Myrtle, Red Maple, Valley Oak, and Western Redbud. Proposed shrubs and groundcover include Blue Oak Grass, California Lilac, Dwarf Bottlebrush, Indian Hawthorne, Lavender, Morning Glory, New Zealand Flax, and Yellow Trailing Lantana. The proposed landscape plan meets the City shade requirement by providing 41% shade coverage (40% required) in the parking lot within fifteen (15) years. Staff recommends the final landscape plan be subject to review and approval by the Community Development Department. Condition No. 34 is included to reflect this requirement.

Architecture/Design
The Broadstone Unit No. 3 Design Guidelines relative to commercial developments provide the basis for reviewing the architecture and design of the proposed car wash facility project. The design guidelines provide both general and specific direction for reviewing the proposed project. The applicable guidelines have been provided below.

General Guidelines (Broadstone Unit No. 3 Specific Plan Section 3.1)

A. The architectural theme and building forms should be reflective of an urban character blending with the site and approved by the design review committee.

B. The building heights, signage, setbacks and other standards will be in conformance with the development standards as outlined in Section 4 of the Specific Plan for each land use
C. The architectural design of buildings should consider the site, relationship to other structures, streetscapes, and climatic orientations.

D. Structures with long uninterrupted exterior walls should be avoided where possible. Walls should have varied forms to create shadows and provide relief that softens the architecture.

E. Natural materials such as stone, wood, granite, marble, and masonry will be encouraged. Materials such as textured or patterned concrete are compatible building accents.

F. The character of commercial buildings should be compatible with the adjoining structures. Buildings and structures should accentuate and promote an urban plaza character through consistent use of materials, color, and detailing.

G. Openings in buildings should be accentuated architecturally through indentation and roof variations.

In reviewing the submitted building elevations, color renderings, and color and materials board for the proposed Quick Quack Car Wash facility, City staff determined that the applicant incorporated many of the essential design elements required by the aforementioned design guidelines including varied building shapes and forms, varied roof elements, a prominent entry feature, canopies, and reveals. As recommended by the design guidelines, the primary colors are generally earth tone in nature and feature beige and tan. The supporting trim and accent colors offer more vibrant colors such as white, yellow, and dark brown. In addition, the proposed car wash facility building utilizes a variety of natural building materials as suggested by the design guidelines including the use of stucco and stone veneer.

In evaluating the design of the proposed car wash facility, staff also took into consideration the project’s design compatibility with existing development located within the project area. Commercial development in the immediate project area includes a four-story hotel (Staybridge Inn & Suites), a three-story hotel (Fairfield Inn & Suites), a Costco Wholesale store, and a Green Acres Nursery & Supply store. The aforementioned developments feature buildings that are substantially large in terms of their height, size, and scale. In addition, these developments utilize design elements, building materials, and colors that are fairly complimentary in nature to each other. Based on the similarities in architecture, building materials, and colors between the proposed project and existing development in the project vicinity, staff has determined that the proposed project is compatible and complimentary. Staff forwards the following design recommendations to the Commission for consideration:

1. This approval is for development of a single-story, 3,599-square-foot Quick Quack Car Wash Facility. The owner/applicant shall submit building plans that comply with this approval and the attached building elevations and color renderings dated September 13, 2016.

2. The design, materials, and colors of the proposed Quick Quack Car Wash Facility shall be consistent with the submitted building elevations, materials samples, and color scheme to the satisfaction of the Community Development Department.
3. Roof-mounted mechanical equipment, including satellite dish antennas, shall not extend above the height of the parapet walls. Ground-mounted mechanical equipment shall be shielded by landscaping or trellis-type features.

4. Decorative (gooseneck, lantern style, etc.) lighting fixtures consistent with the architectural theme of the building shall be utilized on all building elevations.

5. All exterior building-attached light fixtures shall be shielded and directed downward and away from adjacent properties.

6. All signs for the project shall comply with the Folsom Municipal Code and Broadstone Unit No. 3 Design Guidelines and any modification to or deviation from the sign criteria shall be subject to review and approval by the Planning Commission.

7. The final location, orientation, design, materials, and colors of the trash/recycling enclosure shall be subject to review and approval by the Community Development Department.

These recommendations are included in the conditions of approval presented for consideration by the Planning Commission (Condition No. 29).

ENERGY AND WATER CONSERVATION
To reduce impacts in terms of energy and water consumption, the proposed project is required to meet the 2014 Title 24 Building Envelope Energy Efficiency Standards. The project will be allowed to achieve this performance standard through a combination of measures to reduce energy use for heating, cooling, water heating and ventilation. Because energy use for each different system type (i.e., heating, cooling, water heating, and ventilation) is defined, this method will also easily allow for application of individual measures aimed at reducing the energy use of these devices in a prescriptive manner.

In an effort to address water conservation, the proposed project includes a number of measures aimed at reducing on-site water usage including using reclaimed water for the car wash, automatically controlled irrigation systems that incorporate the use of spray, subsurface in-line emitters, and other high efficiency drip-type systems. Based on information provided by the applicant, the majority of water used by the Quick Quack Car Wash facility is reclaimed water and will be stored onsite in underground storage tanks for subsequent use. Water consumed and discharged to the City’s wastewater transmission system (consumptive water use) would average approximately 12 to 15 gallons per vehicle. Consumptive water usage would range from 3,900 gallons per day to 4,500 gallons per day. To further ensure water conservation is being achieved, the proposed project is required to comply with all State and local rules, regulations, Governor’s Declarations, and restrictions including but not limited to: Executive Order B-29-15 issued by the Governor of California on December 1, 2015 relative to water usage and conservation, requirements relative to water usage and conservation established by the State Water Resources Control Board, and water usage and conservation requirements established within the Folsom Municipal Code, (Section 13.26 Water Conservation), or amended from time to time. Condition No. 56 is included to reflect these requirements.
ENVIRONMENTAL REVIEW
Staff has prepared an Initial Study and Mitigated Negative Declaration (Attachment 10) for the project and determined that with the proposed mitigations, the project will not have a significant effect on the environment. A Mitigated Negative Declaration has been prepared and noticed for public comment on the project, and mitigation measures have been included as Conditions of Approval. To date, no written comments have been received from the public during the Mitigated Negative Declaration public review period.

The City has adopted a mitigation monitoring and reporting program pursuant to City Council Resolution No. 2634 and Public Resources Code Section 21081.6. The owner/applicant shall be required to participate in the mitigation monitoring and reporting program. Condition No. 5 is included to reflect this requirement.

RECOMMENDATION/PLANNING COMMISSION ACTION

MOVE TO ADOPT THE MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM PREPARED FOR THE QUICK QUACK CAR WASH PROJECT (PN 16-108) PER ATTACHMENT 10;

AND

MOVE TO APPROVE A PLANNED DEVELOPMENT PERMIT FOR DEVELOPMENT AND OPERATION OF A 3,599-SQUARE-FOOT CAR WASH FACILITY AT THE SOUTHEAST CORNER OF THE INTERSECTION OF IRON POINT ROAD AND CAVITT DRIVE AS ILLUSTRATED ON ATTACHMENTS 2 THROUGH 7 FOR THE QUICK QUACK CAR WASH PROJECT WITH THE FOLLOWING FINDINGS AND CONDITIONS (NO. 1-56).

GENERAL FINDINGS

A. NOTICE OF HEARING HAS BEEN GIVEN AT THE TIME AND IN THE MANNER REQUIRED BY STATE LAW AND CITY CODE.

B. THE PROJECT IS CONSISTENT WITH THE GENERAL PLAN AND ZONING CODE OF THE CITY AS WELL AS THE BROADSTONE UNIT NO. 3 SPECIFIC PLAN.

CEQA FINDINGS

C. A MITIGATED NEGATIVE DECLARATION HAS BEEN PREPARED FOR THE PROJECT IN ACCORDANCE WITH CEQA.

D. THE PLANNING COMMISSION HAS CONSIDERED THE PROPOSED MITIGATED NEGATIVE DECLARATION BEFORE MAKING A DECISION REGARDING THE PROJECT.

E. THE MITIGATED NEGATIVE DECLARATION REFLECTS THE INDEPENDENT JUDGMENT AND ANALYSIS OF THE CITY OF FOLSOM.
THE MITIGATED NEGATIVE DECLARATION HAS DETERMINED THAT THE PROPOSED PROJECT WOULD NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT WITH THE REQUIRED MITIGATION MEASURES.

ON THE BASIS OF THE WHOLE RECORD, THERE IS NO SUBSTANTIAL EVIDENCE THAT THE PROJECT WILL HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT WITH THE REQUIRED MITIGATION MEASURES.

PLANNED DEVELOPMENT PERMIT FINDINGS


THE PROPOSED PROJECT IS CONSISTENT WITH THE OBJECTIVES, POLICIES AND REQUIREMENTS OF THE DEVELOPMENT STANDARDS OF THE CITY.

THE PHYSICAL, FUNCTIONAL AND VISUAL COMPATIBILITY BETWEEN THE PROPOSED PROJECT AND EXISTING AND FUTURE ADJACENT USES AND AREA CHARACTERISTICS IS ACCEPTABLE.

THERE ARE AVAILABLE NECESSARY PUBLIC FACILITIES, INCLUDING BUT NOT LIMITED TO, WATER, SEWER AND DRAINAGE AND THE PROJECT ADEQUATELY PROVIDES FOR THE FURNISHING OF SUCH FACILITIES.

THE PROPOSED PROJECT WILL NOT CAUSE UNACCEPTABLE VEHICULAR TRAFFIC LEVELS ON SURROUNDING ROADWAYS, AND THE PROPOSED PROJECT WILL PROVIDE ADEQUATE INTERNAL CIRCULATION, INCLUDING INGRESS AND EGRESS.

THE PROPOSED PROJECT WILL NOT BE DETRIMENTAL TO THE HEALTH, SAFETY AND GENERAL WELFARE OF THE PERSONS OR PROPERTY WITHIN THE VICINITY OF THE PROJECT SITE, AND THE CITY AS A WHOLE.

ADEQUATE PROVISION IS MADE FOR THE FURNISHING OF SANITATION SERVICES AND EMERGENCY PUBLIC SAFETY SERVICES TO THE DEVELOPMENT.

THE PROPOSED PROJECT WILL NOT CAUSE ADVERSE ENVIRONMENTAL IMPACTS WHICH HAVE NOT BEEN MITIGATED TO AN ACCEPTABLE LEVEL.

Submitted,

DAVID E. MILLER, AICP
Public Works and Community Development Director
CONDITIONS
See attached tables of conditions for which the following legend applies.

<table>
<thead>
<tr>
<th>RESPONSIBLE DEPARTMENT</th>
<th>WHEN REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD Community Development Department</td>
<td>I Prior to approval of Improvement Plans</td>
</tr>
<tr>
<td>NS Neighborhood Services Department</td>
<td>M Prior to approval of Final Map</td>
</tr>
<tr>
<td>(P) Planning Division</td>
<td>B Prior to issuance of first Building Permit</td>
</tr>
<tr>
<td>(E) Engineering Division</td>
<td>O Prior to approval of Occupancy Permit</td>
</tr>
<tr>
<td>(B) Building Division</td>
<td>G Prior to issuance of Grading Permit</td>
</tr>
<tr>
<td>(F) Fire Division</td>
<td></td>
</tr>
<tr>
<td>PW Public Works Department</td>
<td>DC During construction</td>
</tr>
<tr>
<td>PR Park and Recreation Department</td>
<td>OG On-going requirement</td>
</tr>
<tr>
<td>PD Police Department</td>
<td></td>
</tr>
</tbody>
</table>
### CONDITIONS OF APPROVAL FOR QUICK QUACK CAR WASH

**PLANNED DEVELOPMENT PERMIT (PN 16-108)**

**SOUTHEAST CORNER OF THE INTERSECTION OF IRON POINT ROAD AND CAIVITT DRIVE**

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>When Required</th>
<th>Responsible Department</th>
</tr>
</thead>
</table>
| 1. The applicant shall submit final site development plans to the Community Development Department that shall substantially conform to the exhibits referenced below:  
- Preliminary Site Plan, dated September 13, 2016  
- Access and Circulation Plan, dated September 13, 2016  
- Preliminary Grading and Utility Plan, dated August 9, 2016  
- Preliminary Landscape Plan, dated August 30, 2016  
- Building Elevations, dated September 13, 2016  
- Color Building Elevations, dated September 13, 2016  
- Signage Details, dated October 19, 2016  
- Traffic Impact Analysis, dated September 30, 2016 | B | CD (P)(E) |
<p>| 2. Building plans, and all civil engineering and landscape plans, shall be submitted to the Community Development Department for review and approval to ensure conformance with this approval and with relevant codes, policies, standards and other requirements of the City of Folsom. | I, B | CD (P)(E)(B) |
| 3. The project approval granted under this staff report shall remain in effect for two years from final date of approval (December 7, 2018). Failure to obtain the relevant building (or other) permits within this time period, without the subsequent extension of this approval, shall result in the termination of this approval. | B | CD (P) |</p>
<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Details</th>
<th>When Required</th>
<th>Responsible Department</th>
</tr>
</thead>
</table>
| 4.                 | The owner/applicant shall defend, indemnify, and hold harmless the City and its agents, officers and employees from any claim, action or proceeding against the City or its agents, officers or employees to attack, set aside, void, or annul any approval by the City or any of its agencies, departments, commissions, agents, officers, employees, or legislative body concerning the project. The City will promptly notify the owner/applicant of any such claim, action or proceeding, and will cooperate fully in the defense. The City may, within its unlimited discretion, participate in the defense of any such claim, action or proceeding if both of the following occur:  
  • The City bears its own attorney’s fees and costs; and  
  • The City defends the claim, action or proceeding in good faith  
The owner/applicant shall not be required to pay or perform any settlement of such claim, action or proceeding unless the settlement is approved by the owner/applicant. | OG            | CD (P)(E)(B)            |
<p>|                    |                                                                                                                                                                                                                                                                                                                                                                                                                               |               | PW, PR, FD, PD          |
| 5.                 | The owner/applicant shall be required to participate in a mitigation monitoring and reporting program pursuant to City Council Resolution No. 2634 and Public Resources Code 21081.6. The mitigation monitoring and reporting measures identified in the Mitigated Negative Declaration prepared for this project have been incorporated into these conditions of approval in order to mitigate or avoid significant effects on the environment. These mitigation monitoring and reporting measures are identified with a check mark (✓) in the mitigation measure column. | G, I          | CD (P)                  |
| ✓                  |                                                                                                                                                                                                                                                                                                                                                                                                                               |               |                        |
| 6.                 | The owner/applicant shall pay all applicable taxes, fees and charges at the rate and amount in effect at the time such taxes, fees and charges become due and payable.                                                                                                                                                                                                                                                                     | I, B          | CD (P)(E)               |</p>
<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>When Required</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. The City, at its sole discretion, may utilize the services of outside legal counsel to assist in the implementation of this project, including, but not limited to, drafting, reviewing and/or revising agreements and/or other documentation for the project. If the City utilizes the services of such outside legal counsel, the applicant shall reimburse the City for all outside legal fees and costs incurred by the City for such services. The applicant may be required, at the sole discretion of the City Attorney, to submit a deposit to the City for these services prior to initiation of the services. The applicant shall be responsible for reimbursement to the City for the services regardless of whether a deposit is required.</td>
<td>I</td>
<td>CD (P) (E)</td>
</tr>
<tr>
<td>8. If the City utilizes the services of consultants to prepare special studies or provide specialized design review or inspection services for the project, the applicant shall reimburse the City for actual costs it incurs in utilizing these services, including administrative costs for City personnel. A deposit for these services shall be provided prior to initiating review of the Final Map, improvement plans, or beginning inspection, whichever is applicable.</td>
<td>I</td>
<td>CD (P)(E)</td>
</tr>
<tr>
<td>9. This project shall be subject to all applicable City-wide development impact fees, unless exempt by previous agreement. This project shall be subject to all applicable City-wide development impact fees in effect at such time that a building permit is issued. These fees may include, but are not limited to, fees for fire protection, park facilities, park equipment, Humbug-Willow Creek Parkway, Light Rail, TSM, capital facilities and traffic impacts. The 90-day protest period for all fees, dedications, reservations or other exactions imposed on this project will begin on the date of final approval (December 7, 2016). The fees shall be calculated at the fee rate in effect at the time of building permit issuance.</td>
<td>B</td>
<td>CD (P)(E), PW, PK</td>
</tr>
<tr>
<td>10. If applicable, the owner/applicant shall pay off any existing assessments against the property, or file necessary segregation request and pay applicable fees.</td>
<td>B</td>
<td>CD (E)</td>
</tr>
<tr>
<td>11. The project is subject to the Housing Trust Fund Ordinance, unless exempt by a previous agreement.</td>
<td>B</td>
<td>CD (P)</td>
</tr>
</tbody>
</table>
### CONDITIONS OF APPROVAL FOR QUICK QUACK CAR WASH
**PLANNED DEVELOPMENT PERMIT (PN 16-108)**
**SOUTHEAST CORNER OF THE INTERSECTION OF IRON POINT ROAD AND CAVITT DRIVE**

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>When Required</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>B</td>
<td>CD (P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SITE DEVELOPMENT REQUIREMENTS**

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>When Required</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>G, B</td>
<td>CD (E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I</td>
<td>CD (E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>B</td>
<td>CD(E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The owner/applicant agrees to pay to the Folsom-Cordova Unified School District the maximum fee authorized by law for the construction and/or reconstruction of school facilities. The applicable fee shall be the fee established by the School District that is in effect at the time of the issuance of a building permit. Specifically, the owner/applicant agrees to pay any and all fees and charges and comply with any and all dedications or other requirements authorized under Section 17620 of the Education Code; Chapter 4.7 (commencing with Section 65970) of the Government Code; and Sections 65995, 65995.5 and 65995.7 of the Government Code.

Prior to the issuance of any grading and/or building permit, the owner/applicant shall have a geotechnical report prepared by an appropriately licensed engineer that includes an analysis of site suitability, proposed foundation design for all proposed structures, and roadway and pavement design.

Public and private improvements, including roadways, curbs, gutters, sidewalks, bicycle lanes and trails, streetlights, underground infrastructure and all other improvements shall be provided in accordance with the current edition of the City of Folsom *Standard Construction Specifications* and the *Design and Procedures Manual and Improvement Standards*.

The applicant/owner shall submit water, sewer and drainage studies to the satisfaction of the Community Development Department and provide sanitary sewer, water and storm drainage improvements with corresponding easements, as necessary, in accordance with these studies and the current edition of the City of Folsom *Standard Construction Specifications* and the *Design and Procedures Manual and Improvement Standards*.

The improvement plans for the required public and private improvements shall be reviewed and approved by the Community Development Department prior to issuance of a building permit for the project.
## CONDITIONS OF APPROVAL FOR QUICK QUACK CAR WASH
### PLANNED DEVELOPMENT PERMIT (PN 16-108)
#### SOUTHEAST CORNER OF THE INTERSECTION OF IRON POINT ROAD AND CAVITT DRIVE

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Description</th>
<th>When Required</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td>The required public and private improvements including landscape and irrigation improvements for the project shall be completed and accepted by the Community Development Department prior to issuance of a Certificate of Occupancy for the project.</td>
<td>O</td>
<td>CD(E)</td>
</tr>
<tr>
<td>18.</td>
<td>The fire protection system shall be separate from the domestic water system. The fire system shall be constructed to meet the National Fire Protection Association Standard 24. The domestic water and irrigation system shall be metered per City of Folsom Standard Construction Specifications.</td>
<td>I</td>
<td>CD(E)</td>
</tr>
<tr>
<td>19.</td>
<td>Final lot and building configurations may be modified to allow for overland release of storm events greater than the capacity of the underground system.</td>
<td>B</td>
<td>CD(E)</td>
</tr>
<tr>
<td>20.</td>
<td>The owner/applicant shall coordinate the planning, development and completion of this project with the various utility agencies (i.e., SMUD, PG&amp;E, etc.).</td>
<td>I</td>
<td>CD(P)(E)</td>
</tr>
<tr>
<td>21.</td>
<td>The owner/applicant shall be responsible for replacing any and all damaged or hazardous public sidewalk, curb and gutter, and/or bicycle trail facilities along the site frontage and/or boundaries, including pre-existing conditions and construction damage, to the satisfaction of the Community Development Department.</td>
<td>O</td>
<td>CD(E)</td>
</tr>
<tr>
<td>22.</td>
<td>For any improvements constructed on private property that are not under ownership or control of the owner/applicant, a right-of-entry, and if necessary, a permanent easement shall be obtained and provided to the City prior to issuance of a grading permit and/or approval of improvement plans.</td>
<td>G, I</td>
<td>CD(E)</td>
</tr>
<tr>
<td>23.</td>
<td>(AES-1) Final exterior building and site lighting plans shall be submitted for review and approval by Community Development Department for location, height, aesthetics, level of illumination, glare and trespass prior to the issuance of any building permits. Lighting shall be shielded and designed to be directed downward onto the project site and away from adjacent properties and public rights-of-way. Lighting shall be equipped with a timer or photo condenser.</td>
<td>I, B</td>
<td>CD(P)</td>
</tr>
<tr>
<td>24.</td>
<td>All future signs for the project shall comply with the Broadstone Unit No. 3 Design Guidelines and the Folsom Municipal Code, (Section 17.59).</td>
<td>B</td>
<td>CD(P)</td>
</tr>
<tr>
<td></td>
<td>STORM WATER POLLUTION/CLEAN WATER ACT REQUIREMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>During Construction, the owner/applicant shall be responsible for litter control and sweeping of all paved surfaces in accordance with City standards. All on-site storm drains shall be cleaned immediately before the commencement of the rainy season (October 15).</td>
<td>G, I, B</td>
<td>CD (E)</td>
</tr>
<tr>
<td>26.</td>
<td>The storm drain improvement plans shall provide for “Best Management Practices” that meet the requirements of the water quality standards of the City’s National Pollutant Discharge Elimination System Permit issued by the State Regional Water Quality Control Board. These facilities shall be constructed concurrent with construction of grading and the initial public improvements and shall be completed prior to final occupancy of the building.</td>
<td>G, I, B, O</td>
<td>CD (E)</td>
</tr>
<tr>
<td>27.</td>
<td>Erosion and sedimentation control measures shall be incorporated into construction plans. These measures shall conform to the City of Folsom requirements and the County of Sacramento Erosion and Sedimentation Control Standards and Specifications—current edition and as directed by the Community Development Department.</td>
<td>G, I</td>
<td>CD (E)</td>
</tr>
<tr>
<td>28.</td>
<td>Prior to issuance of grading permits, the project applicant shall obtain coverage under the State Water SWRCB General Permit for Discharges of Storm Water Associated with Construction Activity (Order 2009-0009-DWQ), including preparation and submittal of a project-specific SWPPP at the time the Notice of Intent (NOI) is filed. The project applicant shall also prepare and submit any other necessary erosion and sediment control and engineering plans and specifications for pollution prevention and control to the City of Folsom. The SWPPP shall contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list BMPs the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for &quot;non-visible&quot; pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.</td>
<td>G, I, B</td>
<td>CD (E)</td>
</tr>
</tbody>
</table>
**ARCHITECTURE/DESIGN REQUIREMENTS**

<table>
<thead>
<tr>
<th>29.</th>
<th>The project shall comply with the following architecture and design requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. This approval is for development of a single-story, 3,599-square-foot Quick Quack Car Wash Facility. The owner/applicant shall submit building plans that comply with this approval and the attached building elevations and color renderings dated September 13, 2016.</td>
</tr>
<tr>
<td></td>
<td>2. The design, materials, and colors of the proposed Quick Quack Car Wash Facility shall be consistent with the submitted building elevations, materials samples, and color scheme to the satisfaction of the Community Development Department.</td>
</tr>
<tr>
<td></td>
<td>3. Roof-mounted mechanical equipment, including satellite dish antennas, shall not extend above the height of the parapet walls. Ground-mounted mechanical equipment shall be shielded by landscaping or trellis-type features.</td>
</tr>
<tr>
<td></td>
<td>4. Decorative (gooseneck, lantern style, etc.) lighting fixtures consistent with the architectural theme of the building shall be utilized on all building elevations.</td>
</tr>
<tr>
<td></td>
<td>5. All exterior building-attached light fixtures shall be shielded and directed downward and away from adjacent properties.</td>
</tr>
<tr>
<td></td>
<td>6. All signs for the project shall comply with the <a href="#">Folsom Municipal Code</a> and the Broadstone Unit No. 3 Design Guidelines and any modification to or deviation from the sign criteria shall be subject to review and approval by the Planning Commission.</td>
</tr>
<tr>
<td></td>
<td>7. The final location, orientation, design, materials, and colors of the trash/recycling enclosure shall be subject to review and approval by the Community Development Department.</td>
</tr>
</tbody>
</table>

**TRAFFIC, ACCESS, CIRCULATION, AND PARKING REQUIREMENTS**

<table>
<thead>
<tr>
<th>30.</th>
<th>The owner/applicant shall provide a minimum of 14 on-site parking spaces.</th>
</tr>
</thead>
</table>

B  CD (P)
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>The owner/applicant shall provide five (5) bicycle parking spaces at a location in close proximity to the primary building entrance to the satisfaction of the Community Development Department.</td>
<td>I</td>
<td>CD (E)(P)</td>
</tr>
<tr>
<td>32.</td>
<td>In accordance with the Traffic Impact Analysis dated September 30, 2016, prepared by MRO Engineers, the owner/applicant shall implement the following traffic measures to the satisfaction of the Community Development Department:</td>
<td>I</td>
<td>CD (E)(P)</td>
</tr>
<tr>
<td></td>
<td><strong>North Project Driveway</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o North Project Driveway shall be restricted to right-turns only, both inbound and outbound.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o STOP-sign control and corresponding pavement markings (i.e., stop bars and legends), shall be installed at the driveway exit to Cavitt Drive.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o A “RIGHT TURN ONLY” sign shall be posted below the “STOP” sign and a “RIGHT TURN ONLY” pavement arrow shall be painted on the driveway approach to its intersection with Cavitt Drive.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o A “ONE WAY” sign shall be installed in the Cavitt Drive median, directly across from the outbound lane at the driveway.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>South Project Driveway</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o South Project Driveway shall accommodate full turning movements, both inbound and outbound.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o STOP-sign control and corresponding pavement markings (i.e., stop bars and legends), shall be installed at the driveway exit to Cavitt Drive.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>On-Site Circulation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o STOP-sign controls and appropriate pavement markings shall be installed at the exits from the car wash tunnel area and the car vacuum area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o A “DO NOT ENTER” sign shall be installed at the exit from the one-way car vacuum area near the northeast corner of the project site.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
32. **On-Site Circulation**
   - A “KEEP CLEAR” pavement legend shall be painted in the on-site intersection immediately east of the car wash tunnel exit. The legend shall be oriented toward drivers entering the car wash area.
   - STOP-sign controls and appropriate pavement markings shall be installed to the south of the on-site intersection of the car wash tunnel exit and the car wash entrance. The legend shall be oriented toward drivers entering the on-site intersection prior to the car wash entrance.
   - The circulation aisle located along the southwesterly edge of the Future Development area shall be widened to accommodate two-way traffic along its entire length.
   - Directional arrows shall be painted on the pavement throughout the project site to reinforce the appropriate travel paths.
   - Landscape materials and signage located along the frontage of Cavitt Drive frontage shall not impede the ability of drivers to see oncoming vehicles on Cavitt Drive.
   - All primary drive aisles on the project site shall be a minimum of 27 feet in width. In addition, drive aisles around the undeveloped portion of the project site shall be designed to accommodate Fire Department apparatus (inside turning radii of 25 feet and outside turning radii of 50 feet).

**LANDSCAPE/TREE PRESERVATION REQUIREMENTS**

<p>| 33. | The owner/applicant shall be responsible for on-site landscape maintenance throughout the life of the project to the satisfaction of the Community Development Department. Vegetation or planting shall not be less than that depicted on the final landscape plan, unless tree removal is approved by the Community Development Department because the spacing between trees will be too close on center as they mature. | B | CD (P)(E) |</p>
<table>
<thead>
<tr>
<th></th>
<th>Final landscape plans and specifications for the project shall be prepared by a registered landscape architect and approved by the City Arborist and City staff prior to the approval of a Building Permit. Said plans shall include all landscape specifications and details. Landscaping of the parking areas for guest parking shall meet shade requirements as outlined in the Folsom Municipal Code Chapter 17.57. The landscape plans shall comply and implement water efficient requirements as adopted by the State of California (Assembly Bill 1881) until such time the City of Folsom adopts its own Water Efficient Landscape Ordinance. The landscape and irrigation plans shall also comply with the City's Model Water Efficiency Landscape Ordinance. Shade and ornamental trees shall be maintained according to the most current American National Standards for Tree Care Operations (ANSI A-300) by qualified tree care professionals. Tree topping for height reduction, sign visibility, light clearance or any other purpose shall not be allowed. Specialty-style pruning, such as pollarding, shall be specified within the approved landscape plans and shall be implemented during a 5-year establishment and training period.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The final landscape plan shall meet the City shade requirement by providing 40% shade coverage in the parking lot area within fifteen (15) years.</td>
</tr>
<tr>
<td></td>
<td><strong>CULTURAL RESOURCE REQUIREMENTS</strong></td>
</tr>
<tr>
<td>36.</td>
<td>(CUL-1) If any archaeological, cultural, or historical resources or artifacts, or other features are discovered during the course of construction anywhere on the project site, work shall be suspended in that location until a qualified professional archaeologist assesses the significance of the discovery and provides consultation with the Folsom Historical Society, City staff, and the Heritage Preservation League. Appropriate mitigation as recommended by the archaeologist and the Historical Society representative shall be implemented. If agreement cannot be met, the Planning Commission shall determine the appropriate implementation method.</td>
</tr>
<tr>
<td>37.</td>
<td>(CUL-2) In the event human remains are discovered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to Public Resources Code 5097.98. If the coroner determines that no investigation of the cause of death is required and if the remains are of Native American Origin, the coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendent. The descendent will then recommend to the landowner or landowner’s representative appropriate disposition of the remains and any grave goods.</td>
</tr>
<tr>
<td></td>
<td>BIOLOGICAL RESOURCE REQUIREMENT</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>38.</td>
<td><strong>(BIO-1a)</strong> Prior to the initiation of construction, the project applicant or any successor in interest shall prepare a memo for submittal to USACE describing the project history under the original Broadstone Unit 3 permits. The memo shall describe the previous permitting process, and current site conditions, including the presence of potential Waters of the U.S. The memo will highlight that all the features presently found on site are either constructed or incidental due to previous construction activities. In addition, the memo shall outline the mitigation that has already occurred for the original project impacts, and provide information to USACE to allow them to determine whether a new Clean Water Act Section 404 permit is required for the proposed project. If the USACE determines that protected Waters of the U.S. are present on the project site whose fill or degradation has not previously been permitted, the applicant shall implement Mitigation Measure BIO-1b. If the USACE determines that no Waters of the U.S. presently exist on the project site, or that Waters do exist but that the loss of these Waters has been fully mitigated by past permit requirements, the applicant shall implement Mitigation Measure BIO-1c.</td>
</tr>
<tr>
<td></td>
<td>G, I CD (P)(E)</td>
</tr>
<tr>
<td>39.</td>
<td><strong>(BIO-1b)</strong> If the USACE determines that a permit is required, the applicant shall obtain the proper permit type as determined through consultation with USACE. The applicant shall conduct a formal wetland delineation of all Waters of the U.S. on the project, and shall submit the delineation to the USACE for verification. The applicant or any successor in interest shall abide by all requirements contained in the Section 404 permit to ensure that there will not be a net loss of wetland function or values. In addition, the applicant shall submit an application for Water Quality Certification to the CVRWQCB pursuant to Section 401 of the Clean Water Act. The applicant or any successor in interest shall abide by all requirements contained in the Section 401 Certification issued by the CVRWQCB.</td>
</tr>
<tr>
<td></td>
<td>G, I CD (P)(E)</td>
</tr>
<tr>
<td>40.</td>
<td><strong>(BIO 1c)</strong> If the USACE determines that a Section 404 permit is not required, the project applicant or any successor in interest shall prepare a memo similar to the one prepared under Mitigation Measure BIO-2a. This memo shall be submitted to the Central Valley Regional Water Quality Control Board for review and concurrence.</td>
</tr>
<tr>
<td></td>
<td>G, I CD (P)(E)</td>
</tr>
<tr>
<td></td>
<td>AIR QUALITY REQUIREMENTS</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>41.</td>
<td>In compliance with Rule 201 of the Sacramento Metropolitan Air Quality Management District (SMAQMD), the applicant/developer of the project shall verify with SMAQMD if a permit is required before equipment capable of releasing emissions to the atmosphere are used at the project site. The applicant/developer shall comply with the approved permit or provide evidence that a permit is not required.</td>
</tr>
<tr>
<td>42.</td>
<td>In compliance with Rule 442 of the Sacramento Metropolitan Air Quality Management District (SMAQMD), the applicant/developer of the project shall use architectural coatings that that comply with the volatile organic compound content limits specified in the general rule.</td>
</tr>
<tr>
<td>43.</td>
<td>Dust generated on the project site shall be controlled by selective watering of exposed areas, especially during clearing and grading operations. All unpaved areas of the project site that are being graded, excavated or used as construction haul roadways shall be sprayed with water as often as is necessary to assure that fugitive dust does not impact nearby properties. Stockpiles of soil or other fine materials being left for periods in excess of one day during site construction shall be sprayed and track walked after stockpiling is complete.</td>
</tr>
<tr>
<td>44.</td>
<td>Street sweeping shall be conducted to control dust and dirt tracked from the project site onto any of the surrounding roadways. Construction equipment access shall be restricted to defined entry and exit points to control the amount of soil deposition.</td>
</tr>
</tbody>
</table>
(AIR-1) Control of fugitive dust is required by District Rule 403 and enforced by SMAQMD staff. The owner/applicant shall implement the following measures as identified by the SMAQMD:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.

- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).

- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

- Maintain all construction equipment in proper working condition according to manufacturer’s specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.
## NOISE REQUIREMENTS

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>46.</td>
<td>(NOI-1) The owner/applicant shall include the following terms in all construction contracts prepared for project-related construction, and shall provide evidence of the inclusion of these terms to the Community Development Department:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Construction Hours/Scheduling: The following are required to limit construction activities to the portion of the day when occupancy of the adjacent sensitive receptors are at the lowest:</td>
<td>G, I, B</td>
</tr>
<tr>
<td></td>
<td>a) Construction activities for all phases of construction, including servicing of construction equipment shall only be permitted during the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and between 9:00 a.m. to 5:00 p.m. on Saturdays. Construction is prohibited on Sundays and on all holidays.</td>
<td>CD (P)(E)</td>
</tr>
<tr>
<td></td>
<td>b) Delivery of materials or equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Construction Equipment Mufflers and Maintenance: All construction equipment powered by internal combustion engines shall be properly muffled and maintained.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Idling Prohibitions: All equipment and vehicles shall be turned off when not in use. Unnecessary idling of internal combustion engines is prohibited.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Equipment Location and Shielding: All stationary noise-generating construction equipment, such as air compressors, shall be located as far as practical from the adjacent homes. Acoustically shield such equipment when it must be located near adjacent residences.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Quiet Equipment Selection: Select quiet equipment, particularly air compressors, whenever possible. Motorized equipment shall be outfitted with proper mufflers in good working order.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Staging and Equipment Storage: The equipment storage location shall be sited as far as possible from nearby sensitive receptors.</td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>(NOI-2) The owner/applicant shall limit car wash operation to the daytime hours, 7 a.m. to 10 p.m. as defined by Chapter 8.42 of the Folsom Municipal Code.</td>
<td>OG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CD (P)</td>
</tr>
</tbody>
</table>
48. (NOI-3) Prior to the initiation of commercial operations, the car wash shall be test-operated in the presence of an acoustical analyst to determine if operational blower and vacuum are as predicted. If so, no further action is required. If noise levels are higher than analyzed, the measured noise levels will be compared to the levels permitted by Chapter 8.42 of the Folsom Municipal Code at the sensitive receptors used by Bollard Acoustical in their analysis. If the higher noise levels meet Chapter 8.42 requirements, no further action would be necessary. If the higher noise levels result in exceedences of Chapter 8.42 standards beyond those determined by Bollard Acoustical, additional mitigation will be required by the City to ensure that car wash operations meet Folsom Municipal Code noise standards.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>48.</td>
<td>✓</td>
<td>(NOI-3) Prior to the initiation of commercial operations, the car wash shall be test-operated in the presence of an acoustical analyst to determine if operational blower and vacuum are as predicted. If so, no further action is required. If noise levels are higher than analyzed, the measured noise levels will be compared to the levels permitted by Chapter 8.42 of the Folsom Municipal Code at the sensitive receptors used by Bollard Acoustical in their analysis. If the higher noise levels meet Chapter 8.42 requirements, no further action would be necessary. If the higher noise levels result in exceedences of Chapter 8.42 standards beyond those determined by Bollard Acoustical, additional mitigation will be required by the City to ensure that car wash operations meet Folsom Municipal Code noise standards.</td>
<td>OG</td>
</tr>
</tbody>
</table>

49. The owner/applicant shall locate and remediate all antiquated mine shafts, drifts, open cuts, tunnels and water conveyance or impoundment structures existing on the project site, with specific recommendations for the sealing, filling or removal of each that meet all applicable health, safety, and engineering standards. Recommendations shall be prepared by an appropriately licensed engineer or geologist. All remedial plans shall be reviewed and approved by the City.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>49.</td>
<td></td>
<td>The owner/applicant shall locate and remediate all antiquated mine shafts, drifts, open cuts, tunnels and water conveyance or impoundment structures existing on the project site, with specific recommendations for the sealing, filling or removal of each that meet all applicable health, safety, and engineering standards. Recommendations shall be prepared by an appropriately licensed engineer or geologist. All remedial plans shall be reviewed and approved by the City.</td>
<td>G, I</td>
</tr>
</tbody>
</table>

50. Prior to the approval of the final facilities design and the initiation of construction activities, the applicant shall submit an erosion control plan to the City for review and approval. The plan shall identify protective measures to be taken during excavation, temporary stockpiling, any reuse or disposal, and revegetation. Specific techniques may be based upon geotechnical reports, the Erosion and Sediment Control Handbook of the State of California Department of Conservation, and shall comply with all updated City standards.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>50.</td>
<td></td>
<td>Prior to the approval of the final facilities design and the initiation of construction activities, the applicant shall submit an erosion control plan to the City for review and approval. The plan shall identify protective measures to be taken during excavation, temporary stockpiling, any reuse or disposal, and revegetation. Specific techniques may be based upon geotechnical reports, the Erosion and Sediment Control Handbook of the State of California Department of Conservation, and shall comply with all updated City standards.</td>
<td>G, I</td>
</tr>
</tbody>
</table>

51. The owner/applicant shall obtain all required State and Federal permits and provide evidence that said permits have been obtained, or that the permit is not required, subject to staff review and approval of any grading or improvement plan.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>51.</td>
<td></td>
<td>The owner/applicant shall obtain all required State and Federal permits and provide evidence that said permits have been obtained, or that the permit is not required, subject to staff review and approval of any grading or improvement plan.</td>
<td>G, I</td>
</tr>
</tbody>
</table>

52. The building shall have illuminated addresses visible from the street or drive fronting the property. Size and location of address identification shall be reviewed and improved by the Fire Marshal.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>52.</td>
<td></td>
<td>The building shall have illuminated addresses visible from the street or drive fronting the property. Size and location of address identification shall be reviewed and improved by the Fire Marshal.</td>
<td>I</td>
</tr>
<tr>
<td>53.</td>
<td>Prior to the issuance of any improvement plans or building permits, the Community Development and Fire Departments shall review and approve all detailed design plans for accessibility of emergency fire equipment, fire hydrant flow location, and other construction features.</td>
<td>I, B</td>
<td>FD</td>
</tr>
</tbody>
</table>

**POLICE/SECURITY REQUIREMENT**

| 54. | The owner/applicant shall consult with the Police Department in order to incorporate all reasonable crime prevention measures. The following security/safety measures shall be required:  
- A security guard shall be on-duty at all times at the site or a six-foot security fence shall be constructed around the perimeter of construction areas. (This requirement shall be included on the approved construction drawings).  
- Security measures for the safety of all construction equipment and unit appliances shall be employed.  
- Landscaping shall not cover exterior doors or windows, block line-of-sight at intersections or screen overhead lighting. | G, I, B | PD |

**MISCELLANEOUS REQUIREMENTS**

| 55. | (HAZ-1) A site investigation shall be performed to determine whether and where NOA is present in the soil and rock on the project site. The site investigation shall include the collection of soil and rock samples by a qualified geologist. If the site investigation determines that NOA is present on the project site, the project applicant shall prepare an Asbestos Dust Control Plan for approval by SMAQMD as required in Section 93105 of the California Health and Safety Code, “Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations.” The Asbestos Dust Control Plan shall specify measures, including but not limited to those set forth in Appendix B of this Initial Study, such as periodic watering to reduce airborne dust, and ceasing construction during high winds that shall be taken to ensure that no visible dust crosses the property line. Measures in the Asbestos Dust Control Plan also may include but shall not be limited to dust control measures required by Mitigation Measure AIR-1. The project applicant shall submit the plan to the Folsom Community Development Department for review, and SMAQMD for review and approval before any grading or construction may occur. SMAQMD approval of the plan must be received before any asbestos-containing rock or soils can be disturbed. Upon approval of the Asbestos Dust Control Plan by SMAQMD, the applicant shall ensure that construction contractors implement the terms of the plan throughout the construction period. | G, I | CD (E) |
The proposed project shall comply with all State and local rules, regulations, Governor's Declarations, and restrictions including but not limited to: Executive Order B-29-15 issued by the Governor of California on December 1, 2015 relative to water usage and conservation, requirements relative to water usage and conservation established by the State Water Resources Control Board, and water usage and conservation requirements established within the Folsom Municipal Code, (Section 13.26 Water Conservation), or amended from time to time.
Attachment 1

Vicinity Map
Attachment 2

Preliminary Site Plan, dated September 13, 2016
Attachment 3

Access and Circulation Plan, dated September 13, 2016
Attachment 4

Preliminary Grading and Utility Plan, dated August 9, 2016
Attachment 5

Preliminary Landscape Plan, dated August 30, 2016
Attachment 6

Building Elevations, dated September 13, 2016
Attachment 7

Color Building Elevations, dated September 13, 2016
NEW FACILITY FOR
Quick Quack Car Wash
CAVITT DR & IRON PONT RD,
FOLSOM, CA
Attachment 8

Signage Details, dated October 19, 2016
Freestanding Sign | Monument Sign

Material Schedule

1. Boxed with stainless steel structure skinned with panel board exterior aluminum skin to match building structure to be ventilated.
2. Frontal paneling fabricated aluminum construction with faces and returns trenched and finished to match building CMS wall surface.
3. Backgrounds: Painted all in masonry concrete with bees and returns trenched and painted to match CMS 932 boral light.
4. Tenant Cabinet: Fabricated aluminum construction with faces and returns trenched and painted to match CMS 932 boral light.

Vinyl Film Color Schedule

<table>
<thead>
<tr>
<th>Color Code</th>
<th>Color Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Black</td>
</tr>
<tr>
<td>B</td>
<td>Green</td>
</tr>
<tr>
<td>C</td>
<td>Yellow</td>
</tr>
<tr>
<td>D</td>
<td>Rustic Orange</td>
</tr>
</tbody>
</table>

Quick Quick Logo Graphics

Graphics to be routed out of return nickel face and bonded with white acrylic and vinyl tile overlay (see color chart).

Divider Bar and Corrugated Fabricated aluminum construction with bees and returns trenched and painted to match CMS 6055 rusty brown.

Address Numerals

Routed to be 3/4" H x 1/8" W aluminum with 1/8" threaded studs projecting from backside and returned to aluminum face and vinyl tile overlay and returns to be painted white, wax finish.

End View (Street Side)

| Scale 3/8" = 1'-0" |

End View (Parking Lot Side)

| Scale 3/8" = 1'-0" |
Attachment 9

September 30, 2016

Mr. Bob Klousner  
Environmental Planning Partners, Inc.  
3110 Gold Canal Drive, Suite D  
Rancho Cordova, California 95670-6164

Subject:  Quick Quack Car Wash Traffic Access & Circulation Analysis

Dear Mr. Klousner:

MRO Engineers, Inc., has completed a traffic access and circulation analysis for the proposed Quick Quack Car Wash project. As shown on Figure 1, the project site is located in the southeast quadrant of the intersection of Iron Point Road/Cavitt Drive. The proposed project will consist of a 3,599-square-foot (SF) car wash on a 3.7-acre site. Vehicular access will be via two driveways on Cavitt Drive, both of which are proposed to be full-access locations. The driveways will also serve an undefined “Future Development” area on the project site.

The recommendations resulting from the analysis are summarized below, followed by a detailed discussion of the analysis procedures and results.

ANALYSIS SUMMARY

This analysis addressed the long-term (year 2035) access needs of the proposed Quick Quack Car Wash project. The project site plan is presented on Figure 2, and Figure 3 illustrates the features of the existing transportation system in the immediate vicinity of the project site.

Primary vehicular access for the proposed project will be via two new driveways at the west edge of the project site on Cavitt Drive. Both STOP-sign controlled driveways are proposed to serve all turning movements, both inbound and outbound.

In addition to the project driveways, the analysis addressed conditions at the off-site intersection of Iron Point Road/Cavitt Drive. The analysis focused on the PM peak hour, as it is expected that only minimal activity would occur in the AM peak hour. Two levels of project-related activity were addressed: “average” and “peak.”

Because a portion of the site has been reserved for future development, the analysis also included the traffic associated with that potential project. According to the project applicant, the future development is expected to be a 3,800 SF quick lubrication shop (e.g., Jiffy Lube) or something similar.

The key findings and recommendations resulting from the analysis are summarized below.
KEY FINDINGS AND RECOMMENDATIONS

The results of the access analysis are summarized below. These results reflect conditions in the year 2035 upon completion of both the Quick Quack Car Wash project and the assumed future development. Excerpts from the California Manual on Uniform Traffic Control Devices (CA MUTCD) illustrating the various signs and pavement markings are presented in Attachment A. Also, Figure 4, which is presented later, provides appropriate CA MUTCD references for the signs and markings.

Cavitt Drive/North Driveway

- To avoid creating conflicts with the northbound dual left-turn lanes at the Iron Point Road/Cavitt Drive intersection (which are protected by a raised median along Cavitt Drive), this driveway should be restricted to right-turns only, both inbound and outbound.

- Traffic exiting the project driveway should be controlled by a STOP sign and corresponding pavement markings (i.e., stop bars and legends), as the driveway intersection will not meet the “Peak Hour” warrant for consideration of installation of a traffic signal.

- A RIGHT TURN ONLY sign should be posted below the STOP sign and a RIGHT TURN ONLY pavement arrow should be painted on the driveway approach to its intersection with Cavitt Drive.

- A ONE WAY sign should be installed in the Cavitt Drive median, directly across from the outbound lane at the driveway.

- With completion of both the proposed project and the future development, the Cavitt Drive/North Driveway intersection is projected to operate at Level of Service (LOS) B in the PM peak hour on an average day and LOS C on a peak day.

- The North Driveway has adequate sight distance along Cavitt Drive, so drivers will be able to exit safely.

- No right turn lane or taper is recommended on northbound Cavitt Drive at the North Driveway.

- The site plan provides adequate space at the North Driveway to accommodate the queues of vehicles exiting to Cavitt Drive in the PM peak hour.

Cavitt Drive/South Driveway

- No turn restrictions are recommended in conjunction with the project; full access is acceptable.

- Traffic exiting the project driveway should be controlled by a STOP sign and corresponding pavement markings (i.e., stop bars and legends), as the driveway intersection will not meet the “Peak Hour” warrant for consideration of installation of a traffic signal.

- With completion of both the proposed project and the future development, the Cavitt Drive/South Driveway intersection is projected to operate at Level of Service (LOS) C in the PM peak hours on both an average day and a peak day.
• The South Driveway has adequate sight distance along Cavitt Drive, so drivers will be able to enter and exit safely.

• No right turn lane or taper is recommended on northbound Cavitt Drive at the South Driveway.

• The site plan provides adequate space at the South Driveway to accommodate the queues of vehicles exiting to Cavitt Drive in the PM peak hour.

**Off-Site Improvement Recommendations**

• No off-site improvements are recommended beyond the median-mounted ONE WAY sign described above at the North Driveway.

**On-Site Traffic Circulation Recommendations**

The access and circulation recommendations to be implemented on the project site are summarized below. They are illustrated on Figure 4, which is presented later in this report.

• STOP signs and appropriate pavement markings should be installed at the project driveway intersections with Cavitt Drive, as well as near the exits from the car wash tunnel area and the vacuum area.

• A DO NOT ENTER sign should be installed at the exit from the one-way vacuum area near the northeast corner of the site to prevent drivers from traveling the wrong way through this area.

• A KEEP CLEAR pavement legend should be painted in the on-site intersection immediately east of the car wash tunnel exit. It should be oriented toward drivers entering the car wash area. This is intended to ensure that entering vehicles do not block the ability of drivers to exit the tunnel.

• The circulation aisle along the southwesterly edge of the Future Development area narrows from a two-way road at its northwest end to a single-lane, one-way road at its southeasterly end. It should be widened to allow two-way traffic along its entire length.

• As shown on the project site plan, directional arrows should be painted on the pavement throughout the site to reinforce the appropriate travel paths.

• The project’s signage and any landscape materials located along the Cavitt Drive frontage should not impede the ability of drivers to see oncoming vehicles on Cavitt Drive.
PROPOSED ACCESS SYSTEM

Vehicular access for the proposed project will be via a pair of proposed STOP-sign-controlled driveways on Cavitt Drive. The North Driveway is proposed to be located about 280 feet south of the southerly edge of Iron Point Road. The driveway is proposed to be a full-access location, allowing all turning movements both inbound and outbound.

The South Driveway would be located about 175 feet south of the North Driveway. It is also proposed to be a full-access, STOP-sign-controlled location.

Both driveways will also serve the access needs of the future development area.

ACCESS ANALYSIS

The proposed project consists of a 3,599 SF car wash facility plus a future development area, which is assumed to be a 3,800 SF quick lubrication shop. It is to be located in the southeast quadrant of the intersection of Iron Point Road/Cavitt Drive.

This analysis addressed the cumulative conditions time frame (i.e., the year 2035), to ensure that the resulting recommendations will be applicable to all foreseeable conditions.

In addition to the project driveways and on-site traffic circulation system, the off-site intersection of Iron Point Road/Cavitt Drive was analyzed, as no significant impacts are anticipated at other locations, given the results of previous analyses in the vicinity of the proposed project as well as the magnitude of the project. In recognition of the typical travel characteristics in the area and the anticipated demand patterns at the proposed project, the analysis focused on conditions in the PM peak hour (i.e., the highest hour between 4:00 and 6:00 PM). Two levels of activity at the proposed project were considered: “average” conditions (reflecting typical circumstances on a day-to-day basis) and “peak” conditions (reflecting the busiest days, potentially including Saturdays).

The analysis included the following basic components:

- PM peak-period turning movement forecasts for the intersection of Iron Point Road/Cavitt Drive were derived from information presented in the recently-completed traffic impact analysis for the Broadstone Apartments project. Those forecasts reflect cumulative conditions (year 2035) conditions, based on traffic volume projections developed in conjunction with the environmental analyses for the recently-approved Russell Ranch project. The peak-hour traffic volumes for Cumulative (2035) No Project conditions are included in Attachment B.

- Using information presented in the Institute of Transportation Engineers Trip Generation Manual (ITE, Ninth Edition, 2012), estimates of the volume of traffic to be generated by the proposed Quick Quack Car Wash project on an average day were developed. These estimates were prepared for the PM peak-hour period. Similar estimates were developed for the assumed quick lubrication shop. Attachment B illustrates the average peak-hour traffic volumes resulting from addition of the traffic associated with both projects at the project driveways and the Iron Point Road/Cavitt Drive intersection.

- The PM peak hour project-generated traffic on a “peak” day was estimated using the results of traffic counts at selected car wash facilities, which were conducted in conjunction with an analysis of a proposed Quick Quack Car Wash in Elk Grove, California. (Reference: KD Anderson & Associates, Inc., “Traffic Access Assessment: Quick Quack Car Wash on
Bruceville Road, Elk Grove,” October 30, 2015.) The peak-hour traffic volumes for Cumulative (2035) + Project conditions are presented in Attachment B.

- Using procedures documented in the *Highway Capacity Manual* (Transportation Research Board, 2010), intersection delay and level of service analyses were conducted for Iron Point Road/Cavitt Drive and the project access intersections under cumulative conditions (i.e., the year 2035). Attachment C contains a detailed description of the intersection analysis procedures. Attachment D contains the level of service worksheets.

- Queue length estimates were developed for the project driveways using the results of the *Highway Capacity Manual* calculations and the probability-based analysis procedure set forth in that document. The results of these analyses represent the expected “95th-percentile” queue length (i.e., there is a 95-percent probability that the actual queue at the driveway will be equal to or shorter than the projected queue and only a 5-percent probability that the queue will be longer than the estimated value).

- Signal warrant analyses were performed to determine whether the project driveway intersections would meet the minimum requirements for installation of a traffic signal. This analysis was based on the “Peak Hour” warrant presented in the *California Manual on Uniform Traffic Control Devices* (Caltrans, November 7, 2014).

- Field reconnaissance was conducted on Cavitt Drive to evaluate sight distance at the project driveways.

- The project site plan was evaluated to determine whether traffic would flow safely and efficiently at the project.

- Access and circulation recommendations were developed for presentation in this letter report. Those recommendations addressed driveway traffic control (i.e., signal or STOP-sign control), driveway turn restrictions, minimum recommended throat depth at the project driveways, and driveway queue length, as well as other on-site traffic circulation issues.

**Projected Traffic Volumes**

To ensure consistency with other ongoing or recently-conducted traffic analyses in Folsom, the future year traffic forecasts employed in this analysis are based on information developed in connection with the traffic analysis for the recently-approved Broadstone Apartments and Russell Ranch projects. The traffic forecasts reflect the level of development anticipated throughout the City of Folsom, including the Folsom Sphere of Influence (SOI) annexation area (i.e., the Folsom Plan Area Specific Plan) and the entire Sacramento region, through the year 2035. In addition, the traffic projections reflect completion of all roadway system improvements within the Folsom Plan Area Specific Plan, as well as the regional transportation system improvements identified in the SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

The year 2035 “no project” traffic forecasts are presented in Attachment B.

**Project Trip Generation**

Project-related trip generation estimates for “average” conditions were based on information published in the *Trip Generation Manual* (Institute of Transportation Engineers, Ninth Edition,
2012). Table 1 summarizes the trip generation rates (in terms of trips per 1,000 SF) and the resulting peak-hour trip generation estimates.

As described above, the “peak” conditions trip generation estimates were based on data collected as part of a recent traffic access analysis for a proposed Quick Quack Car Wash in Elk Grove. Specifically, traffic counts were performed at Kelly’s Car Wash in Elk Grove and Prime Shine Car Wash in Manteca, California. Conversion of those counts to trip generation rates (in terms of trips/1,000 SF) revealed that the Elk Grove location had a higher rate – 46.77 trips/1,000 SF (compared to 39.38 trips/1,000 SF at the Manteca facility), so that rate was employed in this analysis, as summarized in Table 1.

Also shown in Table 1 is the peak-hour trip generation estimate for the assumed 3,800 SF quick lubrication facility, based on application of trip rates from the ITE Trip Generation Manual.

Under average conditions, the proposed Quick Quack Car Wash project is expected to generate a total of 66 vehicle-trips in the weekday PM peak hour (34 inbound and 32 outbound), including the assumed quick lubrication facility. Under peak conditions, the total project is estimated to generate 184 peak hour trips (93 inbound and 91 outbound).

In order to ensure a conservative analysis, no internal trips or pass-by trips were assumed in conjunction with either of the two development projects and, therefore, no trip adjustments were applied.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Average Conditions</th>
<th>Peak Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Quick Quack Car Wash (3,599 SF)</td>
<td>7.06</td>
<td>7.06</td>
</tr>
<tr>
<td>Trip Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trips</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Quick Lubrication Shop (3,800 SF)</td>
<td>2.85</td>
<td>2.34</td>
</tr>
<tr>
<td>Trip Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trips</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Total Trips</td>
<td>34</td>
<td>32</td>
</tr>
</tbody>
</table>

Notes:
2 Square feet.
3 Trips per 1,000 SF.
5 Assumed to have 3 service bays.
6 Trips/Servicing Position.
Project Trip Distribution

The geographic distribution of project-generated trips was estimated based on projected traffic patterns at Iron Point Road/Cavitt Drive and is summarized below:

- To/from the west on Iron Point Road: 60 percent
- To/from the east on Iron Point Road: 30 percent
- To/from the north on Cavitt Drive: 5 percent
- To/from the south on Cavitt Drive: 5 percent

Project Traffic Assignment

The project-generated traffic was assigned to the project driveways and Cavitt Drive in accordance with the geographic trip distribution described above to develop “Cumulative + Project” peak-hour traffic volumes for both average and peak conditions. These volumes are illustrated in Attachment B.

Traffic Operations Analysis

The results of the level of service analyses for Iron Point Road/Cavitt Drive and the STOP-sign-controlled project driveways are summarized in Table 2. Shown there are LOS results for cumulative conditions, both with and without the proposed project (for average and peak conditions). Attachment D presents the level of service worksheets.

Under Cumulative No Project conditions, Iron Point Road/Cavitt Drive will operate at LOS C. This conforms to the City of Folsom’s General Plan policy regarding intersection LOS. Under this scenario, the project driveways do not exist, so no LOS results are presented here.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Level of Service Summary¹</th>
<th>PM Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersection</td>
<td>Cumulative No Project</td>
<td>Cumulative + Project</td>
</tr>
<tr>
<td></td>
<td>Delay²</td>
<td>Delay²</td>
</tr>
<tr>
<td>Iron Point Rd./Cavitt Dr.</td>
<td>29.9</td>
<td>31.7</td>
</tr>
<tr>
<td>Cavitt Dr./North Driveway</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Cavitt Dr./South Driveway</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Notes:

2. Average control delay (seconds per vehicle).
3. Level of service.
4. Project driveway does not exist under “no project” conditions.
5. Driveway delays represent the “worst-case” movement.
Under average conditions, with addition of the traffic associated with the proposed project (including both the car wash and the quick lubrication shop), a slight delay increase is projected at Iron Point Road/Cavitt Drive, but it will continue to operate at an acceptable LOS C. At the project’s North Driveway, the worst-case movement will operate at LOS B. At the South Driveway, LOS C is projected. These results conform to the City of Folsom General Plan policy calling for operation at LOS C or better.

Even under “peak” conditions, all of the study locations will operate at acceptable levels of service. Iron Point Road/Cavitt Drive will continue to operate at LOS C. Both driveways will also operate at LOS C.

**Signal Warrant Analysis**

The need for installation of a traffic signal at a given location is judged relative to a defined set of traffic signal “warrants.” The warrants applied in the State of California are established by Caltrans, based on essentially similar requirements documented in the *Manual on Uniform Traffic Control Devices* (MUTCD) published by the Federal Highway Administration (FHWA). The current signal warrants are documented in “Part 4 – Highway Traffic Signals” of the *California Manual on Uniform Traffic Control Devices* (Caltrans, November 7, 2014). Nine such warrants have been defined, although not all warrants are relevant to each case. This analysis of the project driveway intersections was conducted using the “Peak Hour” warrant.

The analysis revealed that neither project driveway intersection is expected to meet the peak-hour signal warrant, either with or without the proposed project, and even under peak conditions.

**Sight Distance Analysis**

In general, sight distance is defined as, “... the continuous length of highway ahead visible to the driver.” (Reference: State of California, Department of Transportation, *Highway Design Manual*, Fifth Edition, November 1, 2001.) Of particular interest in this analysis is “stopping sight distance.” The Caltrans *Highway Design Manual* defines this factor as, “... the distance required by the driver of a vehicle, traveling at a given speed, to bring his vehicle to a stop after an object on the road becomes visible.”

To ensure that drivers will be able to enter and exit the site safely at the project driveways, a stopping sight distance analysis was conducted at the proposed driveway locations using information provided in *A Policy on Geometric Design of Highways and Streets* (American Association of State Highway and Transportation Officials, 2004).

Cavitt Drive south of Iron Point Road has no posted speed limit. The segment north of Iron Point Road is posted 35 MPH, though, which also seems appropriate for the segment along the project frontage. That speed calls for 250 feet of clear stopping sight distance. Accounting for the fact that some drivers will exceed the posted speed limit, a design value of 305 feet (representing the stopping sight distance at 40 MPH) was used for this analysis. The analysis was conducted relative to both inbound and outbound turns at the project driveways, to ensure that project-related drivers could see and react to approaching vehicles on Cavitt Drive.

At both project driveways, entering and exiting vehicles have clear visibility that exceeds 305 feet. Thus, adequate sight distance is available.
Driveway Turn Restrictions

Both project driveways are proposed as full access locations, at which all turning movements would be allowed in both the inbound and outbound directions. Under certain circumstances, it is advisable to prohibit particular turn movements (especially left turns). For example, the City of Folsom has a policy prohibiting outbound left turns from private property onto six-lane streets.

The North Driveway is located at the southerly end of the northbound left-turn lanes serving the Iron Point Road/Cavitt Drive intersection, approximately 280 feet from the near edge of the crosswalk on the south leg of that intersection. Those left-turn lanes are separated from southbound traffic by a narrow raised median. Immediately south of the raised median is a short section (approximately 100 feet) of painted barrier median (i.e., “double-double” yellow lines), which vehicles are prohibited from crossing. That painted barrier then transitions into a two-way center left-turn lane.

In recognition of the existing raised median and painted barrier median, and to avoid conflicts with left-turning vehicles queued on the northbound Iron Point Road/Cavitt Drive approach, it is recommended that left turns be prohibited at the North Driveway; that driveway should be restricted to right-turns only, both inbound and outbound.

The South Driveway is roughly 175 feet south of the North Driveway. This driveway would be served by the two-way center left-turn lane described above. This analysis has revealed no factors that would suggest a need for turn restrictions of any sort at this project driveway. The level of service analysis presented above indicates that a full access driveway would operate satisfactorily, with drivers experiencing low delay values. Further, field investigations revealed that adequate sight distance exists for drivers entering and exiting the site, and no safety problems are foreseen.

Consequently, no turn restrictions are recommended at the South Driveway; all turning movements should be allowed.

Project Driveway Queue Length Analysis

The minimum recommended throat depth (MRTD) for outbound traffic under “Cumulative Plus Project” conditions (both “average” and “peak”) was estimated at the project driveways. Adequate throat depth is necessary on the project driveways to provide enough stacking distance for exiting vehicles so that the first on-site parking space is not blocked.

An analysis was conducted to determine the expected “95th-percentile” queue length (i.e., there is a 95 percent probability that the actual queue at the driveway will be equal to or shorter than the projected queue). Using the standard approach accepted by the City of Folsom, the MRTD was derived from the intersection level of service calculations.

Table 3 summarizes the results of the queue length analysis for both project driveway intersections. This analysis focused on the exiting movements from both project driveways to Cavitt Drive as well as the southbound left-turn movement from Cavitt Drive into the South Driveway.

In all cases, the projected queues can be accommodated within the space available.
### Table 3

<table>
<thead>
<tr>
<th>Turn Movement</th>
<th>Available Storage</th>
<th>Queue Length</th>
<th>Average Conditions</th>
<th>Peak Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vehicles</td>
<td>Feet</td>
</tr>
<tr>
<td>North Driveway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outbound Right</td>
<td>45 ft.</td>
<td>1</td>
<td>25 ft.</td>
<td>1</td>
</tr>
<tr>
<td>South Driveway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inbound Left</td>
<td>75 ft.</td>
<td>1</td>
<td>25 ft.</td>
<td>1</td>
</tr>
<tr>
<td>Outbound Left/Right</td>
<td>40 ft.</td>
<td>1</td>
<td>25 ft.</td>
<td>1</td>
</tr>
</tbody>
</table>

### ON-SITE TRAFFIC CIRCULATION

The project site plan was reviewed to ensure that drivers will be able to circulate through the project site safely. Although the review indicated that the on-site circulation system is generally adequate, the following suggestions are offered for consideration by City staff. The numbered items below correspond to the numbering on Figure 4, which illustrates the recommendations.

1. At the northeast corner of the project site:
   a. A STOP sign should be posted to control traffic exiting the vacuum area.
   b. On the reverse side of the STOP sign described above, a DO NOT ENTER sign should be installed to prevent drivers from entering the one-way vacuum area and traveling in the wrong direction.

2. A STOP sign and appropriate pavement markings should be installed at the South Driveway approach to Cavitt Drive.

3. A ONE WAY sign should be placed in the raised median on Cavitt Drive across from the North Driveway.

4. A STOP sign and appropriate pavement markings should be installed at the North Driveway approach to Cavitt Drive. Also, a RIGHT TURN ONLY arrow should be painted on the driveway approach to the intersection.

5. A STOP sign and appropriate pavement markings should be installed to control vehicles exiting the car wash tunnel who do not proceed to the vacuum area.

6. A KEEP CLEAR legend should be painted in the intersection just east of the car wash tunnel exit. This legend should be oriented toward vehicles entering the car wash area, and is intended to ensure that queues of entering vehicles do not block the exit from the tunnel. If the tunnel exit were to be blocked, a potentially hazardous situation could be created for vehicles being conveyed through the tunnel.
1. CA MUTCD R1-1 ("STOP") sign facing exiting traffic and R5-1 sign ("DO NOT ENTER") facing entering traffic
2. CA MUTCD R1-1 ("STOP")
3. CA MUTCD R6-1 ("ONE WAY" Arrow) mounted on median
4. CA MUTCD R1-1 ("STOP") above with CA MUTCD R3-5 (Right) ("RIGHT TURN ONLY") below (both on the same post) plus Right Turn Arrow pavement marking (CA MUTCD Figure 3B-24 (CA) – Type IV (R))
5. CA MUTCD R1-1 ("STOP")
6. "KEEP CLEAR" pavement legend (CA MUTCD Figure 3B-18 (CA), Option D)
7. Allow two-way traffic flow.

Ref.: Caltrans, California Manual on Uniform Traffic Control Devices (CA MUTCD), 2014.
7. The circulation aisle along the southwesterly edge of the Future Development area narrows from a two-way road at its northwest end to a single-lane, one-way road at its southeasterly end. It should be widened to allow two-way traffic along its entire length.

8. As shown on the project site plan, directional arrows should be painted on the pavement throughout the site to assist drivers as they circulate internally.

9. The project's signage and any landscape materials located along the Cavitt Drive frontage should not impede the ability of drivers to see oncoming vehicles on Cavitt Drive.

OFF-SITE IMPROVEMENTS

No off-site improvements are recommended, other than the median-mounted ONE WAY sign described in Item 3 above.

CONCLUSION

This analysis addressed a variety of traffic access and circulation issues associated with the proposed Quick Quack Car Wash project in the City of Folsom, California. Recommendations were provided with respect to the appropriate form of traffic control at the project driveways, sight distance at those locations, and the potential need to restrict turn movements. Queue length estimates were developed for entering and exiting movements at the project driveways. Several recommendations were also provided concerning on-site traffic circulation.

We hope this information is useful. Please feel free to contact me call if you have questions or need further information.

Sincerely,

MRO ENGINEERS, INC.

Neal K. Liddicoat, P.E.
Traffic Engineering Manager

Attachments

c: Mr. Steve Banks, City of Folsom
Attachment 10

Initial Study, Mitigated Negative Declaration, and Mitigation Monitoring Program
INITIAL STUDY
AND MITIGATED NEGATIVE DECLARATION
FOR THE
QUICK QUACK CAR WASH PROJECT
PLANNED DEVELOPMENT PERMIT
FILE NO. 16108

CITY OF FOLSOM
COMMUNITY DEVELOPMENT DEPARTMENT
50 Natoma Street
Folsom, CA 95630

Prepared with the Technical Assistance of:

PLANNING PARTNERS, INC.
3110 Gold Canal Drive, Suite D
Rancho Cordova, CA 95670

November 2016
This page intentionally left blank.
NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION
FOR THE QUICK QUACK CAR WASH PROJECT

To: Interested Persons

From: City of Folsom
Community and Development Department
50 Natoma Street
Folsom, CA 95630
Phone: (916) 355-7385
sbanks@folsom.ca.us

Contact: Steven Banks, Principal Planner

Subject: Notice of Intent to Adopt a Mitigated Negative Declaration

The City of Folsom is the Lead Agency pursuant to the California Environmental Quality Act (CEQA) for the proposed Quick Quack Car Wash project. The City intends to adopt a Mitigated Negative Declaration for the proposed project.

The project site is located on the southeast corner of the intersection of Iron Point Road and Cavitt Drive in the City of Folsom. The project site consists of a roughly triangular plot of land measuring 2.69 acres as described in the attached Initial Study/Mitigated Negative Declaration (IS/MND). The City of Folsom is considering Planned Development Permit Application No. PN 16-108. Approval of the application would permit the construction and operation of a 3,599 square foot automated car wash. The project would be completed in a single phase. An approximate 13,500 square foot area of the project site would be left vacant in anticipation of a future auto-related use. Development of this area for a future use would require an application for a second Planned Development permit for the site, and additional environmental review.

The proposed IS/MND is available for public review from 8:00 a.m. to 1:00 p.m., Monday through Friday, at the offices of the City of Folsom Community Development Department (address listed above) and online at the City of Folsom website at:

https://www.folsom.ca.us/city_hall/depts/community/planning/projects/default.asp

The public comment period on the IS/MND closes on December 5, 2016. Comments may be submitted to Steven Banks, Principal Planner at the above address. Emailed comments should be submitted to “sbanks@folsom.ca.us” and should include the phrase “Quick Quack Car Wash Project IS/MND” in the subject line.
This page intentionally left blank.
ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been adequately analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, or (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

The City of Folsom has determined that the subject project, further defined and discussed in the attached Environmental Checklist/Initial Study will not have significant effects on the environment. As a result thereof, the preparation of an Environmental Impact Report pursuant to the California Environmental Quality Act (Division 14 of the Public Resource Code of the State of California) is not required.

The City of Folsom prepared the attached Environmental Checklist/Initial Study on November 7, 2016.

Further information, including the project file, supporting reports, and related studies, may be reviewed at the public offices of the Community Development Department, 50 Natoma Street, Folsom, California 95630.

MITIGATION MEASURES: Mitigation measures have been identified for the project.

Signature: David E. Miller
Date: November 16, 2016
Printed Name: David E. Miller
For: City of Folsom
This page intentionally left blank.
# TABLE OF CONTENTS

1. Environmental Factors Potentially Affected ......................................................... 1
2. Description of Proposed Project .............................................................................. 2
3. Required Approvals ................................................................................................. 12
4. Previous Relevant Environmental Analysis .......................................................... 13
5. Environmental Setting and Evaluation of Potential Impacts ................................. 19
   I. Aesthetics ............................................................................................................. 20
   II. Agriculture and Forest Resources ...................................................................... 29
   III. Air Quality ....................................................................................................... 31
   IV. Biological Resources ......................................................................................... 40
   V. Cultural Resources ............................................................................................. 47
   VI. Geology and Soils ............................................................................................. 50
   VII. Greenhouse Gas Emissions .............................................................................. 55
   VIII. Hazards and Hazardous Materials ................................................................. 60
   IX. Hydrology and Water Quality ........................................................................... 65
   X. Land Use and Planning ..................................................................................... 70
   XI. Mineral Resources ........................................................................................... 71
   XII. Noise ............................................................................................................... 72
   XIII. Population and Housing .................................................................................. 80
   XIV. Public Services ............................................................................................... 81
   XV. Recreation ........................................................................................................ 84
   XVI. Transportation/Traffic ................................................................................... 85
   XVII. Tribal Cultural Resources ............................................................................... 97
   XVIII. Utilities and Service Systems ....................................................................... 98
   XIX. Mandatory Findings of Significance ............................................................... 103

6. Preparers of the Initial Study .................................................................................. 108
7. References ............................................................................................................. 109
8. Applicant Agreement .............................................................................................. 116

Appendix A Biological Resources of the Quick Quack Carwash Project Site
Appendix B SMAQMD Asbestos Dust Mitigation Plan Application and Requirements
Appendix C Environmental Noise Assessment, Quick Quack Car Wash at Iron Point Road
Appendix D Quick Quack Car Wash Traffic Access and Circulation Analysis

# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Regional Location</td>
<td>3</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Project Location</td>
<td>4</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Proposed Site Plan</td>
<td>6</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Proposed Building Elevations</td>
<td>7</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Locations of Potential Views of Project Site</td>
<td>22</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Existing View from Southwest Corner of Project Site</td>
<td>23</td>
</tr>
</tbody>
</table>
Figure 7  Existing View from Northwest Corner of Project Site ........................................24
Figure 8  Existing View from Northeast Corner of Project Site .........................................25
Figure 9  Project Area, Sensitive Receptors, and Long-Term Noise Monitoring Locations ......74
Figure 10 Existing Transportation System .........................................................................86

LIST OF TABLES

Table 1  Surrounding Land Uses at the Proposed Project Site ............................................5
Table 2  Quick Quack Car Wash Development Standards Table .........................................9
Table 3  City of Folsom Municipal Code Sections Regulating Urban Development
          within the City ........................................................................................................11
Table 4  Sacramento Valley Air Basin/Sacramento County/Sacramento Metropolitan Area
          Attainment Status ..................................................................................................32
Table 5  Summary of Annual Air Quality Data for Folsom Area Air Quality Monitoring Stations .34
Table 6  SMAQMD Thresholds of Significance ...................................................................34
Table 7  Soil Types within the Project Site .......................................................................51
Table 8  City of Folsom Municipal Code Sections Regulating the Effects on Hydrology and
          Water Quality from Urban Development within the City .......................................67
Table 9  Summary of Long-Term Ambient Noise Monitoring Results Near the Project Site ....73
Table 10 Exterior Hourly Noise Level Performance Standards for New Project and
        Developments in the City of Folsom .......................................................................75
Table 11 Predicted Car Wash Noise Levels at Nearby Sensitive Receptors ..........................77
Table 12 Predicted Vacuum Noise Levels .........................................................................79
Table 13 Trip Generation Estimate: PM Peak Hour .........................................................91
Table 14 Level of Service Summary: PM Peak Hour .......................................................92
Table 15 Project Driveway Queue Length Analysis Summary: PM Peak Hour ..................94
INITIAL STUDY AND ENVIRONMENTAL EVALUATION

Project Title: Quick Quack Car Wash

Entitlement Requested: Planned Development Permit

Lead Agency Name and Address: City of Folsom
Community Development Department
50 Natoma Street, Folsom, CA 95630

Contact Person and Phone Number: Steven Banks, Principal Planner
City of Folsom Community Development Department
Phone: (916) 355-7385
sbanks@folsom.ca.us

General Plan Designation: Community Commercial Center (CC)
Zoning: Commercial - Central Business Planned Development (C-2 PD)

Specific Plan Designation: Broadstone Unit 3 Specific Plan (SP 95-1)

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This Initial Study focuses on whether the proposed project may cause significant effects on the environment that were not examined in the Folsom General Plan Environmental Impact Report (EIR) as amended by the EIR for the East Area Facilities Plan and the EIR prepared for the Broadstone 3 Specific Plan. In particular, consistent with California Public Resources Code Section 21083.3 (the California Environmental Quality Act or CEQA), this Initial Study is intended to assess any effects on the environment that are peculiar to the proposed project, or to the parcel on which the project would be located. This includes environmental effects not addressed or analyzed as significant effects in the General Plan EIR as amended by the EIR for the East Area Facilities Plan or the Broadstone 3 Specific Plan EIR. The Initial Study also assesses any effects for which substantial new information shows that identified effects would be more significant than those described in the previous EIRs. (For additional information regarding the relationship between the General Plan EIR, the East Area Facilities Plan EIR, the Broadstone 3 Specific Plan EIR, and the proposed project, see Section 4 of this Initial Study.) The Initial Study is also intended to assess whether any environmental effects of the project are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or by other means [Section 15152(b)(2) of the State Guidelines for CEQA1]. If such revisions, conditions, or other means are identified, they will be identified as mitigation measures.

---
1 Title 14 California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act.
This Initial Study relies on State CEQA Guidelines Sections 15064 through 15065 in its determination of the significance of environmental effects. According to Section 15064, the finding as to whether a project may have one or more significant effects shall be based on substantial evidence in the record, and that controversy alone, without substantial evidence of a significant effect, does not trigger the need for an EIR.

2. DESCRIPTION OF PROPOSED PROJECT

PROJECT LOCATION

The project site is located on the southeast corner of the intersection of Iron Point Road and Cavitt Drive in the City of Folsom (see Figures 1 and 2). The project site consists of a roughly triangular plot of land measuring 2.69 acres, identified as Sacramento County Assessor Parcel Number (APN) 072-2270-014 (Sacramento County 2016). The project site is located in a portion of Section 9, Township 9 North, Range 8 East, Mount Diablo Base and Meridian, at 38° 38.350' N, 120° 6.652' W. The site is currently undeveloped.

EXISTING SITE CONDITIONS

PHYSICAL SETTING

The project site is an undeveloped lot, triangular in shape. It has been rough-graded in the past to form a relatively level building pad by grading associated with the Broadstone Unit 3 Specific Plan. The site slopes from north and northeast to the southeast corner of the parcel. Elevations within the project area range from 489 feet at the northeast corner adjacent to Iron Point Road to 469 feet at the southwesterly corner near Cavitt Drive. Both the frontages of Iron Point Road and Cavitt Drive are developed with curb, gutter, and sidewalk.

Within the site, open stormwater drainage channels have been constructed along the eastern and southern property lines. This drainage network drains to a shallow detention basin, that in turn discharges to an unnamed intermittent natural drainage along the southerly edge of the property. At Cavitt Drive this east/west flowing channel becomes piped into the City’s developed storm drainage network.

Other than several shrubs near the southwest corner, there are no shrubs or trees on the project site. Both street and native trees are located within the planting strip between the site’s northern boundary and Iron Point Road. An area of trees and shrubs associated with the natural drainage channel is located south of the site.

GENERAL PLAN LAND USE DESIGNATION AND ZONING

The project site is designated as Community Commercial (CC) in the City of Folsom General Plan and Commercial - Central Business Planned Development (C-2 PD) within the Broadstone Unit 3 Specific Plan (SP 95-1) in the Zoning Code. The requested Planned Development Permit allows the City of Folsom to review the site plan and associated project site details to ensure that the project meets standards and requirements beneficial to the City and its residents, as defined in Section 17.38.100 of the Zoning Code.
SURROUNDING LAND USES

The project site is adjoined by Iron Point Road, residential uses, permanent open space, and undeveloped land designated for commercial uses to the north; Cavitt Drive and two extended-stay hotels to the west; and a natural drainage channel, Costco, and a retail plant nursery to the south and east. Table 1 lists the surrounding land uses and corresponding General Plan and zoning designations.

Table 1  Surrounding Land Uses at the Proposed Project Site

<table>
<thead>
<tr>
<th>Location</th>
<th>Land Use</th>
<th>General Plan</th>
<th>Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Site</td>
<td>Vacant Land</td>
<td>Regional Commercial Center (RCC)</td>
<td>Commercial - Central Business (C-2)*</td>
</tr>
<tr>
<td>North</td>
<td>Single-family residences; open space, undeveloped land</td>
<td>Single Family Residential (SF); Open Space (OS); Community Commercial (CC)</td>
<td>Single Family, Small Lot (R-1-M); Open Space (OSC); Commercial - Central Business (C-2)*</td>
</tr>
<tr>
<td>West</td>
<td>Hotel</td>
<td>Regional Commercial Center (RCC)</td>
<td>Commercial - Central Business (C-2)*</td>
</tr>
<tr>
<td>South and East</td>
<td>Open space; Costco, retail plant nursery</td>
<td>Open Space (OS); Regional Commercial Center (RCC)</td>
<td>Open Space and Conservation (OSC); Commercial - Central Business (C-2)*</td>
</tr>
</tbody>
</table>

*Note: All zoning designations are pursuant to the Broadstone Unit 3 Specific Plan (SP 95-1)

Source: City of Folsom 2016 and 2007; Planning Partners 2016.

PROPOSED PROJECT

The following discussion is based on the application package submitted to the City of Folsom by the applicant in April 2016, as revised through October 2016.

The project applicant proposes to develop a 3,599 square foot automated car wash on the southeast corner of the intersection of Cavitt Drive and Iron Point Road in the City of Folsom (see Figure 3). The facility would consist of a single building that would house the carwash tunnel, office, employee lounge and restrooms, equipment housing, and materials storage (see Figure 4). Additional facilities would include ten vacuum stalls, centralized vacuum equipment, 41 parking spaces, and a trash/recycling enclosure. The centralized vacuum equipment would also be housed within an enclosure. According to the applicant, the facility would be expected to serve 8,000 cars in a typical month. (Quick Quack 2016)

Access to the site would be provided by two driveways on Cavitt Drive; no vehicle access to Iron Point Road would be provided. Internal drives would provide access within the site. Additional site improvements would include underground utilities, reclaimed water storage tanks (underground), pedestrian walkways, site lighting, and landscaping. (Quick Quack 2016)

According to the applicant, the majority of water used in car washing is reclaimed, and it is stored in on-site storage tanks and recycled for subsequent washes. Water consumed and discharged to the City’s wastewater transmission system (consumptive water use) would average 12 to 15 gallons per vehicle. Consumptive water use would range from 3,900 gallons per day to 4,500 gallons per day on Fridays and Saturdays when the facility would be busier. (Quick Quack 2016)
An approximate 13,500 square foot area of the project site would be left vacant in anticipation of a future use. The applicant is attempting to site an oil change/lubrication station for this area, but at the time of preparation of this Initial Study, no tenant had been secured. Development of this area for a future use would require an application for a second Planned Development Permit for the site and additional environmental review.

Implementation of the proposed project would require that the existing flat area of the site be regraded to provide building pads and internal parking and drive aisles. No grading would occur on the rising slope from the site to Iron Point Road, or on the downslope immediately offsite to the natural drainage way south of the project boundaries. The existing stormwater drainage facilities onsite, including the two swales along the south and east boundaries and the existing detention basin, would be filled during grading. (Quick Quack 2016)

Stormwater generated from paved and developed areas of the site would flow within internal drives from north and east to the southwest corner of the site where stormwater would be collected by two drop inlets. Collected stormwater would be discharged to an existing drain inlet and then transmitted to the unnamed drainage south of the site using an existing outfall. As noted above, water within the drainage channel flows west to an existing inlet to the City’s stormwater drainage network at Cavitt Drive. (Quick Quack 2016)

**PROJECT PHASING**

Construction of the proposed car wash project is scheduled to begin upon project approval. The proposed project would be constructed in a single phase.

**CITY REGULATION OF URBAN DEVELOPMENT**

**GENERAL PLAN**

The City of Folsom updated and adopted its current comprehensive General Plan in October 1988. The General Plan is a long-term planning document that guides growth and land development in the City of Folsom. It provides the foundation for establishing community goals and supporting policies, and directs appropriate land uses for all land parcels within the city. The General Plan land use designation for the proposed project is Regional Commercial Center. The proposed Quick Quack car wash use would be consistent with that designation.

**BROADSTONE UNIT 3 SPECIFIC PLAN AND ZONING ORDINANCE**

The proposed project falls within the plan area for the Broadstone Unit No. 3 Specific Plan (SP 95-1). The Broadstone Unit No. 3 Specific Plan area encompasses approximately 570 acres between East Bidwell Street and the Empire Ranch Specific Plan area, and is bound by Folsom Lake College to the north, and U.S. Highway 50 to the south.

The City of Folsom adopted the Broadstone Unit 3 Specific Plan in 1995. In more detail than the General Plan, the Specific Plan provides policies and land uses within a discrete area. It establishes community goals and supporting policies at the local level in response to community and environmental concerns, and directs appropriate land uses for all parcels within the Specific Plan area. The Specific Plan land use designation for the proposed project is Commercial - Central Business Planned Development (C-2 PD). The proposed Quick Quack car wash use would be consistent with this designation.
Developed land uses in the City of Folsom are regulated by the City’s Zoning Code, in addition to the other adopted regulations and programs that apply to all proposed development within the City. In more detail than the General Plan, the Zoning Code regulates land uses on a parcel-by-parcel basis throughout the City. In order to achieve this regulation, the City assigns each parcel within the City to a zoning district: for example, a district for single-family homes. Regulations for each district apply equally to all properties within the district.

The Commercial – Central Business (C-2) zone permits auto wash facilities by right (Zoning Code Section 17.22.030E, use 24). The purpose of the C-2 zone is to designate areas appropriate for a wide range of commercial activities that serve the entire community of Folsom. (Folsom 2016)

The City Zoning Code additionally defines the Planned Development designation. The PD designation does not establish any land use (such as for commercial uses), but rather is a combining zone to permit the City to “allow a greater flexibility in the design of integrated developments than otherwise possible through strict application of land use regulations, … (Zoning Code Section 17.38.010).

The zoning classification for the site is SP 95-1 (Broadstone Unit No. 3 Specific Plan) with an underlying land use designation of C-2 (Community Commercial), which is similar to the City’s C-2 (Central Business District) zoning designation. The zoning district corresponds with the General Plan land use designation. The proposed project is consistent with both the General Plan land use and zoning designations, as retail and commercial uses (including a car wash) are identified as a permitted land use in the zoning district for this site. In addition, the proposed project will not conflict with any known applicable plans or policies by agencies with jurisdiction over the project.

Development Standards

The applicant’s intent with the subject application is to comply with the development standards established by the Broadstone Unit No. 3 Specific Plan for the Community Commercial zoning district (C-2) including maximum building coverage, setbacks, and building height. The following table outlines the existing and proposed development standards for the proposed project:

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Quick Quack Car Wash Development Standards Table</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Building Coverage</td>
</tr>
<tr>
<td>Broadstone Unit. No. 3 Specific Plan Standard</td>
<td>50 Percent</td>
</tr>
<tr>
<td>Proposed Project</td>
<td>4 Percent</td>
</tr>
</tbody>
</table>

Source: City of Folsom 2016

As shown in Table 2, the proposed project meets or exceeds all of the applicable development standards.

Other City Regulation of Urban Development

The City of Folsom further regulates urban development through standard construction conditions and through mitigation, building, and construction requirements set forth in the Folsom Municipal Code. Required of all projects constructed throughout the City, compliance with the requirements
of the City’s standard conditions and the provisions of the Municipal Code avoids or reduces many potential environmental effects. City procedures to minimize negative environmental effects and disruptions include analysis of existing features, responsible agency and public input to the design process, engineering and design standards, and construction controls. The activities that mitigate typical environmental impacts to be implemented by the City during the project review, design, and construction phases are described in greater detail below.

COMMUNITY DEVELOPMENT DEPARTMENT STANDARD CONSTRUCTION CONDITIONS

The requirements are set forth in the City of Folsom, Community Development Standard Construction Specifications published in December 2014. A summary of these requirements is set forth below, and hereby incorporated by reference into the Project Description as though fully set forth herein. Copies of these documents may be reviewed at the City of Folsom; Community Development Department; 50 Natoma Street; Folsom, California 95630. (City of Folsom 2014a)

Any contractor constructing a public or private project within the City must comply with standard construction specifications. Standards that regulate aspects of the environment are summarized below.

Use of Pesticides – Requires contractors to store, use, and apply a wide range of chemicals in a manner that is consistent with local, state, and federal rules and regulations.

Air Pollution Control - Requires compliance with all Sacramento Metropolitan Air Quality Management District (SMAQMD) and City air pollution regulations.

Water Pollution - Requires compliance with City water pollution regulations, including National Pollution Discharge Elimination System (NPDES) provisions. Also requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) to control erosion and siltation of receiving waters.

Noise Control – Requires that all construction work comply with the Folsom Noise Ordinance (discussed further below), and that all construction vehicles be equipped with a muffler to control sound levels.

Naturally Occurring Asbestos (NOA) - Requires compliance with all SMAQMD and City air pollution regulations, including preparation and implementation of an Asbestos Dust Mitigation Plan consistent with the requirements of Section 93105 of the California Government Code.

Weekend, Holiday, and Night Work – Prohibits construction work during evening hours, or on Sunday or holidays, to reduce noise and other construction nuisance effects.

Public Convenience - Regulates automobile, bicyclist, and pedestrian traffic and access through the work area, the operation of existing traffic signals, roadway cuts for pipelines and cable installation, and the notification of adjacent property owners and businesses.

Public Safety and Traffic Control - Regulates signage and other traffic safety devices through work zones.

Existing Utilities - Regulates the location, relocation, and protection of utilities, both underground and overhead.
Preservation of Property - Requires the preservation of trees and shrubbery, and prohibits adverse effects to adjacent property and fixtures.

Cultural Resources - Requires contractors to stop work upon the discovery of unknown cultural or historic resources until such time that a qualified archaeologist can evaluate the significance of the resource and make recommendations to the State Historic Preservation Officer for further direction.

Protection of Existing Trees - Specifies measures necessary to protect both ornamental trees and native oak trees.

Clearing and Grubbing - Specifies construction specifications for for signs, mailboxes, underground structures, survey monuments, drainage facilities, sprinklers and lights, trees and shrubbery, fencing, and concrete. Also requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) to control erosion and siltation of receiving waters.

Reseeding - Specifies seed mixes and methods for the reseeding of graded areas.

**City of Folsom Municipal Code**

The City regulates many aspects of construction and development through requirements and ordinances established in the Folsom Municipal Code. These requirements are set forth below, and hereby incorporated by reference into the Project Description as though fully set forth herein. Copies of these documents may be reviewed at the City of Folsom; City Clerk; 50 Natoma Street; Folsom, California 95630.

<table>
<thead>
<tr>
<th>Code Section</th>
<th>Code Name</th>
<th>Effect of Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.42</td>
<td>Noise Control</td>
<td>Establishes interior and exterior noise standards that may not be exceeded within structures, including residences; establishes time periods for construction operations.</td>
</tr>
<tr>
<td>8.70</td>
<td>Stormwater Management and Discharge Control</td>
<td>Establishes conditions and requirements for the discharge of urban pollutants and sediments to the storm-drainage system; requires preparation and implementation of SWPPPs.</td>
</tr>
<tr>
<td>9.34</td>
<td>Hazardous Materials Disclosure</td>
<td>Defines hazardous materials; requires filing of a Hazardous Material Disclosure Form by businesses that manufacture, use, or store such materials.</td>
</tr>
<tr>
<td>9.35</td>
<td>Underground Storage of Hazardous Substances</td>
<td>Establishes standards for the construction and monitoring of facilities used for the underground storage of hazardous substances, and establishes a procedure for issuance of permits for the use of these facilities.</td>
</tr>
<tr>
<td>12.16</td>
<td>Tree Preservation</td>
<td>Regulates the cutting or modification of trees, including oaks and specified other trees; requires a Tree Permit prior to cutting or modification; establishes mitigation requirements for cut or damaged trees.</td>
</tr>
<tr>
<td>13.26</td>
<td>Water Conservation</td>
<td>Prohibits the wasteful use of water; establishes sustainable landscape requirements; defines water use restrictions.</td>
</tr>
</tbody>
</table>
Table 3  City of Folsom Municipal Code Sections Regulating Urban Development within the City

<table>
<thead>
<tr>
<th>Code Section</th>
<th>Code Name</th>
<th>Effect of Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.20</td>
<td>Green Building Standards Code</td>
<td>Adopts the California Green Building Standards Code (CALGreen Code), 2013 Edition, excluding Appendix Chapters A4 and A5, published as Part 11, Title 24, C.C.R. to promote and require the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices.</td>
</tr>
<tr>
<td>14.29</td>
<td>Grading Code</td>
<td>Requires a grading permit prior to the initiation of any grading, excavation, fill or dredging; establishes standards, conditions, and requirements for grading, erosion control, stormwater drainage, and revegetation.</td>
</tr>
<tr>
<td>14.32</td>
<td>Flood Damage Prevention</td>
<td>Restricts or prohibits uses that cause water or erosion hazards, or that result in damaging increases in erosion or in flood heights; requires that uses vulnerable to floods be protected against flood damage; controls the modification of floodways; regulates activities that may increase flood damage or that could divert floodwaters.</td>
</tr>
<tr>
<td>14.33</td>
<td>Hillside Development</td>
<td>Regulates urban development on hillsides and ridges to protect property against losses from erosion, ground movement and flooding; to protect significant natural features; and to provide for functional and visually pleasing development of the city's hillsides by establishing procedures and standards for the siting and design of physical improvements and site grading.</td>
</tr>
</tbody>
</table>


3. **Required Approvals**

A listing and brief description of the regulatory permits and approvals required is provided below. This environmental document is intended to address the environmental impacts associated with all of the following decision actions and approvals:

- **Planned Development Permit**: Because the proposed project would be sited within a PD overlay zoning designation, the project requires a Planned Development Permit. This designation requires review by the Planning Commission for design review purposes.

The City of Folsom has the following discretionary powers related to the proposed Quick Quack car wash project:

- **Certification of the Environmental Document**: The Planning Commission will act as the lead agency as defined by CEQA, and will have authority to determine if the environmental document is adequate under CEQA.

- **Consider Project**: The Planning Commission will consider approval of the project and the entitlement described above.
4. **PREVIOUS RELEVANT ENVIRONMENTAL ANALYSIS**

**CITY OF FOLSOM GENERAL PLAN**

The EIR for the City of Folsom General Plan (1988) as amended by approval of the East Area Facilities Plan (1992) still provides relevant policy guidance for this environmental analysis. The site is located within the boundaries of the East Area, and the East Area Facilities Plan EIR was designed to update the EIR for the General Plan and the whole city. Therefore, the East Area Facilities Plan EIR updated and revised the environmental conclusions of the General Plan EIR so that the East Area Facilities Plan EIR provides the foundation environmental document for evaluating development throughout the City.

**BROADSTONE UNIT 3 SPECIFIC PLAN**

The project site is also located within the area regulated by the Broadstone Unit 3 Specific Plan (SP 95-1). An EIR for the Specific Plan was certified by the City Council in September 1994. The Specific Plans establishes guidance and regulations for development within the plan area. The analyses contained in the EIR prepared for the Specific Plan are incorporated into this Initial Study, as applicable.

**TIERING**

“Tiering” refers to the relationship between a program-level EIR (where long-range programmatic cumulative impacts are the focus of the environmental analysis) and subsequent environmental analyses such as the subject document, which focus primarily on issues unique to a smaller project within the larger program or plan. Through tiering, a subsequent environmental analysis can incorporate, by reference, discussion that summarizes general environmental data found in the program EIR that establishes cumulative impacts and mitigation measures, the planning context, and the regulatory background. These broad based issues need not be reevaluated subsequently, having been previously identified and evaluated at the program stage.

Tiering focuses the environmental review on the project-specific significant effects that were not examined in the prior environmental review, or that are susceptible to substantial reduction or avoidance by specific revisions in the project, by the imposition of conditions, or by other means. Section 21093(b) of the Public Resources Code requires the tiering of environmental review whenever feasible, as determined by the Lead Agency. In the case of the proposed Quick Quack Car Wash project, this Initial Study is tiered from the EIR for the City of Folsom General Plan as amended by approval of the East Area Facilities Plan, and the EIR for the Broadstone 3 Specific Plan.

The City of Folsom adopted its current General Plan in 1988. The 1988 General Plan underwent environmental review in the form of an EIR and Master Environmental Assessment. The Folsom City Council adopted the Urban Development Policy of the Folsom General Plan on June 6, 1988, by Resolution No. 1616 to implement the General Plan, to direct the orderly growth of the City, and to provide for an adequate level of services to the community. Pursuant to the urban development policy, Area Facilities Plans were formulated and adopted as part of the Public Facilities Element of the General Plan to assure an adequate funding level for municipal services and facilities in developing areas of the City.
To meet the requirements of the Urban Development Policy, the City and landowners within a then-undeveloped portion of the City, known as the Folsom East Area, initiated preparation of the Folsom East Area Facilities Plan. Concurrently, east area landowners requested that the City of Folsom consider a series of General Plan amendments for land uses in the area. The City of Folsom prepared and certified an EIR evaluating the direct, indirect, and citywide impacts of implementing the East Area Facilities Plan and requested General Plan amendments. Because of the large size of the east area relative to the remainder of the City of Folsom, the East Area Facilities Plan EIR, in effect, updated the EIR for the General Plan to reflect the configuration of the City as it would exist upon buildout of the City and the east area as modified.

The 1992 East Area Facilities Plan EIR contained a comprehensive evaluation of the effects of implementing the Folsom General Plan as amended by development within the East Area. The Folsom General Plan/East Area Facilities Plan EIRs as amended are comprehensive in their analysis of the environmental impacts associated with development of the City, including the area that makes up the proposed site of the Quick Quack Car Wash project. This includes discussion of a full range of alternatives and growth inducing impacts associated with urban development in the City, and the proposed Quick Quack Car Wash project site.

Subsequent to the certification of the East Area Facilities Plan EIR, the City of Folsom prepared and certified an EIR for the Broadstone 3 Specific Plan. This EIR was tiered from the East Area Facilities Plan EIR and evaluated in more detail the impacts of urban development within a discrete portion of the Folsom East Area. The Broadstone 3 Specific Plan EIR, which incorporated the mitigation measures set forth in the EIR for the East Area Facilities Plan, was certified by the City of Folsom in fall 1994.

The relationships between the previous environmental documents and the current Quick Quack Car Wash Initial Study are displayed in the following graphic.
In conclusion, the Folsom General Plan, as amended by the East Area Facilities Plan, and the Broadstone 3 Specific Plan are projects that are related to the proposed Quick Quack Car Wash project and, pursuant to Section 15152(a) of the State CEQA Guidelines, tiering of environmental documents is appropriate. State CEQA Guidelines Section 15152(e) specifically provides that,

"[w]hen tiering is used, the later EIRs or Negative Declarations shall refer to the prior EIR and state where a copy of the prior EIR may be examined. The later [environmental document] should state that the Lead Agency is using the tiering concept and that the [environmental document] is being tiered with the earlier EIR.

The Folsom General Plan and the Broadstone 3 Specific Plan, and the EIRs for the General Plan, the East Area Facilities Plan, and the Broadstone 3 Specific Plan can be reviewed at the following location:

City of Folsom
Community Development Department
50 Natoma Street, Folsom, California 95630
Contact: Steve Banks, Principal Planner
(916) 355-7385
INCORPORATION OF THE FOLSOM GENERAL PLAN AND EAST AREA FACILITIES PLAN EIRs BY REFERENCE

The EIRs for the Folsom General Plan, the East Area Facilities Plan and the Broadstone 3 Specific Plan are comprehensive documents. Due to various references to the Folsom General Plan, East Area Facilities Plan, and Broadstone 3 Specific Plan EIRs in this proposed Quick Quack Car Wash project Initial Study, and to their importance relative to understanding the environmental analysis that has occurred to date with respect to development in the Folsom area, each of the three documents are hereby incorporated by reference as though fully set forth herein pursuant to State CEQA Guidelines Section 15150.

SUMMARY OF FOLSOM GENERAL PLAN EIR AS AMENDED BY THE EAST AREA FACILITIES PLAN EIR

The Folsom General Plan EIR as amended by the EIR for the East Area Facilities Plan analyzed the environmental impacts associated with adoption of the City of Folsom General Plan allowing for development, open space preservation, and provision of services for approximately 13,100± acres of land in and adjacent to the City of Folsom.

Buildout of the area subject to the Folsom General Plan envisions construction of up to 29,290 dwelling units and 2,466 acres of commercial and industrial uses. The Folsom General Plan contemplates the full range of land uses that would constitute a balanced community, including residential uses at a variety of densities, as well as commercial, office, employment, and open space uses. Additionally, public or quasi-public uses are contemplated by the Folsom General Plan, including schools, parks, fire stations, government offices, and other uses.

The East Area Facilities Plan EIR evaluated the environmental impacts associated with the above-described development of the Folsom General Plan planning area on a comprehensive basis, including discussion of the full range of impacts that would occur due to future development.

The East Area Facilities Plan EIR identified citywide impacts arising from urban development pursuant to the General Plan for the following issue areas:

- **Land Use** - Conversion of agricultural and grazing lands to urban uses;
- **Transportation/Circulation** - Levels of Service below City of Folsom, El Dorado County, and Caltrans standards for area streets and highways;
- **Air Quality** - Air pollutant emissions and concentrations in excess of local, state, and federal thresholds;
- **Noise** - Increase in roadway noise for existing and future residential areas, and other sensitive uses;
- **Visual Resources** - Extension of the edge of the metropolitan Sacramento region into an apparently rural area;
- **Housing** - Lack of low- and moderate-income housing units;
- **Biological Resources** - Conversion of wildlife habitat and loss of special status species of plants and animals;
- **Geology, Soils, and Seismicity** - Exposure to seismic hazards, loss of mineral resources, construction on steep slopes, exposure to constrained soils, increase in erosion;
• **Hydrology, Flooding, Drainage, and Water Quality** - Exposure to localized drainage and flood hazards, and water quality degradation;
• **Domestic Water** - Demand would exceed supply;
• **Sewer** - Flow would exceed the capacity of the Folsom interceptor;
• **Police Protection Services** - Additional, unfunded, police officers would be needed;
• **Fire Protection Services** - Additional, unfunded, fire personnel and equipment would be needed;
• **Schools** - School capacities would be exceeded;
• **Parks and Recreation** - Park facilities would be over capacity;
• **Light and Glare** - Increase in urban light and glare in Folsom and adjacent El Dorado County;
• **Cultural Resources** - Loss or degradation of cultural and historic resources; and
• **Library Services** - Library facilities would be over capacity.

**SUMMARY OF BROADSTONE 3 SPECIFIC PLAN EIR**

The Broadstone 3 Specific Plan EIR analyzed the environmental impacts associated with approval of the Specific Plan allowing for urban development, open space preservation, and provision of infrastructure and services for approximately 570± acres of land in the eastern area of the City of Folsom.

The EIR evaluated the environmental effects associated with the above-described development within the Broadstone 3 Specific Plan area on a comprehensive basis, including discussion of the full range of impacts that would occur due to future development.

The Broadstone 3 Specific Plan EIR identified Plan-wide impacts arising from urban development pursuant to the Specific Plan for the following issue areas:

• **Land Use** – Conflicts between industrial and residential land uses, and conflicts between commercial and residential land uses;
• **Visual Resources** – Alteration of the (then) existing visual character of the Specific Plan area, alteration of the (then) existing visual character as seen from East Bidwell Street and U.S. Highway 50, conflicts in visual form between proposed development and existing developed areas, loss of visual quality from the construction of power lines, increases in glare, increases in night lighting, cumulative loss of rural views in the region;
• **Population, Employment and Housing** – Contribution to an imbalance between housing and employment in the City;
• **Public Services and Utilities** – Result in a cumulative and project-specific shortfall in water supply, treatment capacity, and distribution facilities, Result in a cumulative and project-specific shortfall of wastewater collection and treatment facilities, Result in a cumulative and project-specific shortfall in facilities to collect, process, and dispose of solid waste, Result in a cumulative and project-specific shortfalls in facilities for electricity, natural gas, communications, and cable television services, Result in a cumulative and project-specific shortfalls for fire protection services and water used in fighting, Result in a cumulative and project-specific shortfall in police protection services, Result in a cumulative and project-specific shortfall in the capacity of public schools to serve the Broadstone 3 area;
• **Transportation/Circulation** - Levels of Service below City of Folsom, El Dorado County, and Caltrans standards for area streets and highways;
• **Air Quality** - Air pollutant emissions and concentrations in excess of local, state, and federal thresholds during construction and operation of developed uses;

• **Noise** – Increased noise levels during construction, Increased roadway and light rail noise for existing and future residential areas, and other sensitive uses;

• **Public Health and Safety** – Exposure to hazardous materials during construction, exposure to transported hazardous materials, exposure to magnetic fields from power lines;

• **Geology, Soils, and Seismicity** - Exposure to seismic hazards, loss of mineral resources, construction on steep slopes, exposure to constrained soils, increases in erosion;

• **Hydrology, Flooding, Drainage, and Water Quality** - Exposure to localized drainage and flood hazards, increases in stormwater generation, cause ground- and surface water quality degradation, result in construction hazards from shallow groundwater;

• **Biological Resources** - Conversion of riparian, wetland and upland wildlife habitat and loss of special status species of plants and animals; and

• **Cultural Resources** - Loss or degradation of known and unknown cultural and historic resources.
5. **Environmental Setting and Evaluation of Potential Impacts**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is potentially significant, but would be “less than significant with mitigation incorporated” as indicated by the checklist on the following pages.

- [x] Aesthetics
- [x] Biological Resources
- [x] Greenhouse Gases
- [x] Land Use and Planning
- [x] Population and Housing
- [x] Transportation / Traffic
- [ ] Mandatory Findings of Significance
- [x] Agricultural Resources
- [x] Cultural Resources
- [x] Hazards & Hazardous Materials
- [x] Mineral Resources
- [x] Public Services
- [x] Tribal Cultural Resources
- [x] Air Quality
- [x] Geology and Soils
- [x] Hydrology/Water Quality
- [x] Noise
- [x] Recreation
- [x] Utilities / Service Systems

Responses to the following questions and related discussion indicate if the proposed project will have or potentially have a significant adverse impact on the environment, either directly or indirectly, individually or cumulatively with other projects. All phases of project planning, implementation, and operation are considered. Mandatory Findings of Significance are located in Section XIX below.

The California Supreme Court has clarified CEQA practice to limit the evaluation of environmental effects only to the direct, indirect, or cumulative impacts of a proposed project on the environment, and not the effects of the environment on a project. Thus, adverse effects from existing environmental hazards on a proposed new use would not be assessed for CEQA purposes. No mitigation could be required. The exception to this general rule would be if the construction or operation of the proposed project modified a hazardous condition on the project site or affected the project site in a way that caused new or increased direct, indirect, or cumulative environmental effects on site or off site, or if implementation of the project exacerbated an existing condition for on-site or off-site uses.

This revision of CEQA practice affects the following issue areas in this Initial Study:

**VI. Geology and Soils**
- Question a.i - Earthquake Faults
- Question a.ii - Seismic Ground Shaking
- Question a.iii - Ground Failure/Liquefaction
- Question a.iv - Landslides
- Question d - Expansive Soils

**VIII. Hazards and Hazardous Materials**
- Question e - Public Airport Hazards
- Question f - Private Airport Hazard
- Question h - Wildland Fire Hazard

---

IX. Hydrology and Water Quality
   Question g - Housing in Floodplain
   Question i - Exposure to Flood Risk
   Question j - Inundation by Seiche or Tsunami

XII. Noise
   Question c - Public Airport Noise
   Question f - Private Airport Noise

However, for many environmental hazards, local agencies such as the City of Folsom impose requirements to avoid or reduce hazards. Similarly, local agencies have the ability to impose conditions of project approval to avoid or reduce hazardous conditions.

The following analysis is based upon Appendix G of the State CEQA Guidelines as used by the City of Folsom. Because Appendix G has not been modified in response to the ruling of the California Supreme Court cited above, the evaluation below follows the order of the questions posed by Appendix G. For traditionally evaluated impacts that may not now be subject to CEQA, the environmental conclusion is classified as “No Impact.” A discussion of the potentially hazardous condition follows, including recommended conditions of approval where appropriate.

<table>
<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>c)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>d)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Environmental Setting

Viewpoints and Vistas

The City of Folsom is located along the western edge of the Sierra Nevada foothills. The surrounding area to the east of the City includes residences, commercial uses, and grassy rolling hills at varying elevations. To the west is the substantially urbanized Sacramento metropolitan area. The area in the vicinity of the project site is also considerably developed with urban land uses. Developed uses in the project vicinity include Iron Point Road, residential uses, permanent open space, and undeveloped land designated for commercial uses to the north; Cavitt Drive and two extended-stay hotels to the west; and a natural drainage channel, Costco, and a retail plant nursery to the south and east. Additional single-family residential uses are located more distantly north and east of the project.
site. The existing urban visual character of the project vicinity is defined by the nearby commercial uses.

Scenic vistas within the City and in the project vicinity vary from short-range to long-range views, depending upon the topography, intervening buildings, and the presence of mature vegetation. Elevations in the project area decrease from east to west from approximately 823 feet at the ridgeline 0.6 mile east of the project site, to 470 feet at the project site, to approximately 400 feet at the commercial centers west of East Bidwell Street, 0.3 miles west of the project site. Except as truncated by intervening residential structures and vegetation, this substantial change in elevation provides panoramic views from the residences to the north and east of the site. These views extend from internal views upslope and downslope within the residential neighborhoods, to the East Bidwell Street commercial corridor, and on to the distant skyline of downtown Sacramento at a distance of 21 miles on exceptionally clear days. (Google Earth Pro 2016)

Visibility is the maximum distance at which a given reference object or light can be clearly discerned. In the United States, visibilities that are greater than or equal to 10 miles are typically reported as 10 miles. The nearest continuously monitored weather station to the project site is located at Mather Airport in Rancho Cordova. In the 12 months ending in September 2016 at this location, the month with the lowest average visibility was December 2015, with an average visibility of 8.9 miles. With an average visibility of 10.0 miles, the month of July 2015 had the highest average visibility. Daily visibilities in the project area averaged approximately 10.0 miles or more from July through September 2016. (Weatherspark.com 2016)

Views into the Quick Quack Car Wash project site tend to be short or medium range, and activities on the site are potentially visible by guests of the two hotels immediately west of the site, shoppers at an adjacent Costco and retail nursery, residents of surrounding homes (especially those located on Pentland Court), users of nearby shopping centers, or motorists on Iron Point Road or Cavitt Drive. Views from the site are limited to views of nearby residential and commercial uses, motorists on surrounding roadways, and, more distantly, a wide range of urban uses in the City of Folsom and beyond (see Figure 2).

The site is potentially visible from adjacent residences in the short- to medium-range. Figure 5 provides an illustration of where the project site is potentially visible to residential viewers within 0.25 and 0.5 miles of the project site. Figures 6 - 8 show photographs taken from the southwest, northwest, and northeast corners of the site, and illustrate adjacent residences and any existing visual screening between the residences and the project site.

As shown on Figure 5, the project site is potentially visible in the short-range (less than 0.25 miles) from residences located at the ends of Abbeyfeale Court, Pentland Court, and Bathgate Court. Additionally, short-range views of the site are potentially visible from residences on Fetter Court and Tobrrurry Way. Medium-range views of the site are potentially visible from Tobrrurry Way and Iris Circle. In most cases intervening vegetation, solid fences, and existing homes act to limit views of the project site. However, two homes on Pentland Court and one home on Abbeyfeale Court would be exposed to short-range views of the site from second story windows or from side or rear yards.
Figure 5

Locations of Potential Views of Project Site
Figure 6

Existing View from Southwest Corner of Project Site
Existing View from Northwest Corner of Project Site
Figure 8
Existing View from Northeast Corner of Project Site
The project site slopes from its northeast corner to the southwest corner, with elevations ranging from 489 feet above mean sea level to 467 feet at Cavitt Drive. With implementation of the project, the existing flat area of the site would be re-graded to provide building pads at elevations ranging from 471 feet to 472 feet. (Quick Quack 2016a)

By comparison, in the project vicinity, existing elevations on Iron Point Road range from 473 feet at the Iron Point Road/Cavitt Drive intersection to 492 feet at a point near the northeast corner of the project site. Relative to the elevations of adjacent streets, the building pad elevations on the project site would be similar to those of Cavitt Drive, and lower than Iron Point Road (maximum of 12.5 feet) (Quick Quack 2016a). Building pad elevations of the homes nearest the project site range between 515 feet and 525 feet. (Google Earth Pro 2016)

**Project Site**

The appearance of the existing site is one of an unmaintained vacant lot within a primarily urban setting. An open seasonal drainage channel is located along the southern project boundary. This drainage channel is vegetated with riparian shrubs and trees. The project site has been rough graded in the past, and, except for weeds and annual grasses, little vegetation is present. Other than riparian vegetation along the drainage course and landscape trees along Iron Point Road, there are no trees on or adjacent to the project site.

**Regulation of Scenic Resources**

Neither the project site, nor the views to or from the site, have been designated as an important scenic resource by the City of Folsom or any other public agency (City of Folsom 1988). Folsom Municipal Code (FMC) Chapter 15.59.040 (Signage or Sign Ordinance) lists an adjacent roadway, East Bidwell Street, as a scenic corridor, but only within the context of the City’s regulation of signage (City of Folsom 2015a). The only other protected scenic resource in the project vicinity is the prominent ridgeline north of Iron Point Road and east of Tobrurry Way (City of Folsom 2015b). No state designated scenic highway has been identified in the vicinity of the project site (Caltrans 2016). Sacramento County identifies State Route 50 in the project vicinity as a locally-designated scenic highway and has designated a scenic corridor extending 660 feet on both sides of the freeway to regulate the design of developed uses as viewed from the highway (Sacramento County 2014). The proposed Quick Quack Car Wash would be located 1,230 feet from State Route 50 at its nearest point.

The project site has been designated by the City of Folsom for commercial development since 1995 with the adoption of the Broadstone 3 Specific Plan. Construction of commercial and residential uses adjacent to the project site began as early as 2002. By July 2003, the adjacent Costco store was under construction and the rough grading of the Quick Quack Car Wash project site had been completed. (Google Earth Pro 2016)

**Proposed Project**

The project applicant proposes to develop a 3,599 square foot automated car wash on the southeast corner of the intersection Cavitt Drive and Iron Point Road in the City of Folsom. The facility would consist of a single 115 foot by 33 foot building housing the carwash tunnel, office, employee lounge and restrooms, equipment housing, and materials storage. Additional facilities would include ten vacuum stalls, centralized vacuum equipment, 36 parking spaces, and a trash/recycling enclosure. The centralized vacuum equipment also would be housed within an enclosure. See Figures 3 and 4.
The building would be similar to other contemporary commercial buildings in the vicinity and within the City of Folsom. As required by the City, the building would feature a variety of texture and earth tone color treatments. At its highest point, the building would be 30 feet, 6 inches in height.

An approximate 13,500 square foot area of the project site would be left vacant in anticipation of a future use (see Figure 3). The applicant is attempting to site an oil change/lubrication station for this area, but at the time of preparation of this Initial Study, no tenant had been secured. Development of this area for a future use would require an application for a second Planned Development Permit for the site, and additional environmental review. (Quick Quack 2016)

**Environmental Evaluation**

**Question a: No Impact.** No designated scenic vistas are identified by the City of Folsom, Sacramento County, or Caltrans within the viewedshed of the project site. Protected scenic resources in the vicinity include the ridgeline east of Tobrurry Way (protected by Chapter 14.33, Hillside Development Standards, of the FMC), and the commercial corridor of East Bidwell Street (protected by Chapter 15.59.040, Sign Ordinance, of the FMC). The proposed project is located approximately 0.6 miles southwest of, and 350 feet below this protected ridgeline. Construction of the proposed structures that would have a roofline not exceeding 30 feet above grade would not interfere with views of this ridge from adjacent residences (which are north and east of the site) or from motorists travelling on adjacent roadways north and west of the site. Similarly, the proposed project would not place signage within the East Bidwell Street corridor, and hence, would not be subject to the special sign rules pertaining to the corridor. There would be no impact to these protected scenic resources, and no mitigation would be necessary.

**Question b: No Impact.** No state or City of Folsom designated scenic highways are located within the project's viewedshed or in the vicinity of the proposed project (Caltrans 2016). Although Sacramento County identifies Highway 50 as a scenic corridor, County policy limits the width of the scenic corridor to 660 feet on either side of the freeway (Sacramento County 2014). The proposed Quick Quack Car Wash would be located 1,230 feet from State Route 50 at its nearest point. Therefore, implementation of the proposed Quick Quack project would not adversely affect scenic resources within a designated scenic highway. No impact would occur, and no mitigation would be necessary.

**Question c: Less-than-Significant Impact.** The short- to medium-range visual character of the project site is defined by urban and suburban elements, including large, multi-lane streets and commercial and lodging uses to the south and west, and single-family residences to the north and rising in tiers to a ridge northeast of the site. A large swath of graded but vacant land, planned for urban development, is located north/northwest of the project site.

Though no scenic vistas in the project area that could be affected by the project have been designated by the City of Folsom or any other governmental agency, because of the rising terrain of the project vicinity, residents of neighborhoods north and northeast of the project site currently enjoy a variety of views extending from short-range to long-range. Because portions of these views can be enjoyed from backyards and from inside residences, residents could be sensitive to modifications of these views. Motorists on adjacent roadways, guests of the extended stay motels, and shoppers at surrounding commercial uses would not be considered to be sensitive viewers.
Implementation of the proposed project would change the visual character of the project site from an undeveloped lot to a car wash with associated parking areas and landscape improvements. A portion of the project site would be left vacant in anticipation of a complementary automobile service use. Construction of the car wash building with a roofline at a maximum of 30 feet, 6 inches above grade, would result in a new element in the short-range view of the nearest residences.

Based on the proposed building pad elevation of 471 feet, the top of the proposed car wash building would rise to 501 feet, 6 inches above mean sea level (msl). Building pad elevations at the nearest residences on Abbeyfeale Court and Pentland Court range from 515 to 525 feet. Because the proposed building would be substantially lower than the nearest residences, construction of the project would not interfere with the medium- and long-range views of residents to the north and northeast. As shown on Figures 6 – 8, heavy landscaping adjacent to Iron Point Road, and within individual rear yards, tends to block views from most backyards. The layout of individual lots also tends to limit views from within homes as intervening houses block the views of their upslope neighbors. Even with the change in view, most viewers would consider the car wash to be similar to other aspects of the short- to medium-range view, and over time to be common and appropriate within the context of existing development in the area and the City of Folsom generally.

The CEQA standard expressed in Question 1c is whether implementation of the project would substantially degrade the existing visual character or quality of the site and its surroundings. Based on the foregoing analysis, the implementation of the Quick Quack Car Wash would not substantially degrade existing visual character. Because of the limited change in the viewscape for most residential viewers, there would not be a substantial degradation of the existing visual character. There would be a less-than-significant impact on views with implementation of the Car Wash project, and no mitigation measures would be necessary.

**Question d: Less-than-Significant Impact with Mitigation.** As an undeveloped lot, the project site features no existing day or nighttime lighting. Implementation of the proposed project would result in new exterior lighting, such as security, signage, walkway, and landscape lighting. Because there is currently no development on the project site, the proposed lighting would result in a new or increased source of light and glare that would be visible to motorists on perimeter streets, and to viewers from nearby residences, lodging, and commercial uses. As a condition of approval, the City requires that the proposed project comply with lighting standards that ensure that lighting on the site would be focused within the project boundary, and shielded away from adjacent roadways and properties. City standards also require that the lights be placed on a timer or photo electronic cell capable of turning the lights on and off one-half hour prior to dawn and one-half-hour past dusk.

Although a lighting plan has been submitted for the project being assessed in this Initial Study, it does not assess light trespass at the project boundaries, or indicate whether light fixtures would be shielded to prevent direct shine off site. Therefore, the potential for adverse light and glare effects would be a significant impact. Implementation of the following measure would require that the project applicant prepare, submit, and implement a lighting plan to ensure that on-site lighting meets City standards for light trespass and timing.
Mitigation Measure AES-1:

Prior to the issuance of a building permit, the applicant shall submit a lighting plan to the City of Folsom for review and approval. The plan shall demonstrate compliance with the City's lighting requirements, including the limitation of light trespass outside of the project boundaries, the shielding of all light fixtures to ensure that there would be no direct shine onto adjacent roadways or surrounding properties, and the provision of timing devices to turn-off lighting during daytime hours. Upon approval by the City, the applicant shall implement the lighting plan.

By requiring compliance with the City's lighting standards, implementation of the mitigation measure would reduce this potential effect below a level of significance, and no additional mitigation would be necessary.

II. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agriculture resources are significant environmental effects, lead agencies may refer to the California Agriculture Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?  

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?  

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?  

d) Result in the loss of forest land or conversion of forest land to non-forest use?  

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
II. AGRICULTURE AND FOREST RESOURCES

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agriculture use or conversion of forest land to non-forest use?

<table>
<thead>
<tr>
<th></th>
<th>Less than Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SETTING

The project site consists of an undeveloped lot surrounded by major streets and commercial uses to the south and west, a residential community to the north, and undeveloped open space to the immediate south and east. No agricultural activities or timber management occur on the project site or in adjacent areas, nor is the site designated or zoned for agricultural or timberland uses. The site is not subject to a Williamson Act Contract.

The Important Farmlands Map prepared for Sacramento County by the California Resources Agency classifies the project site and open space areas immediately to the south and east as Grazing Land. The small area of Grazing Land on the site is isolated from the extensive areas used for seasonal grazing to the south of the project site. Areas to the south, west, and north are classified Urban and Built-Up Land. According to the Farmland Mapping and Monitoring Program, Grazing Land is land whose vegetation is suited to the grazing of livestock. Grazing Land is not considered to be an important farmland type as defined by the DOC. Urban and Built-Up lands are defined to be land occupied by structures or infrastructure to accommodate a building density of at least one unit to one and one-half acres, or approximately six structures to 10 acres. Appropriate uses within the Urban and Built-Up Land category include commercial uses (DOC 2015).

The Natural Resources Conservation Service (NRCS) Soil Survey of Sacramento County, California indicates that soils on the site consist of the Argonaut-Auburn complex. This soil complex is not classified as a prime agricultural soil. (NRCS 2016)

ENVIRONMENTAL EVALUATION

Questions a, b, c: No Impact. The project site is located on land classified as Grazing Land that is currently designated for commercial development by the City of Folsom General Plan. No prime or important farmlands are located on the site or in the adjacent area, nor are any agricultural crops currently grown. Also, the proposed project site is not held in Williamson Act contracts. Because no important agricultural resources or activities exist within the City or on the project site, no impact would occur, and no mitigation would be necessary.

Questions c, d, e: No Impact. There are no harvestable trees on the project site. Additionally, no timber management activities occur on the project site or elsewhere within the City of Folsom. No areas within the City or the project site are designated as forest land, timberland, or zoned for Timberland Production. Because no important timberland resources or activities exist within the City or on the project site, no significant impact would occur, and no mitigation would be necessary.
III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan? ___  ___  X  ___

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? ___  X  ___

c) Result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ___  ___  X  ___

d) Expose sensitive receptors to substantial pollutant concentrations? ___  ___  ___  X

e) Create objectionable odors affecting a substantial number of people? ___  ___  ___  X

ENVIRONMENTAL SETTING

Climate in the Folsom area is characterized by hot, dry summers and cold, rainy winters. During summer’s longer daylight hours, plentiful sunshine provides the energy needed to fuel photochemical reactions between oxides of nitrogen (NOx) and reactive organic gases (ROG), which result in ozone (O3) formation. High concentrations of O3 are reached in the Folsom area due to intense heat, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer. At this time, the greatest air pollution problem in the Folsom area is from NOx.

The City of Folsom lies within the eastern edge of the Sacramento Valley Air Basin (SVAB). The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for implementing emissions standards and other requirements of federal and state laws in the project area. As required by the California Clean Air Act (CCAA), SMAQMD has published various air quality planning documents to address requirements to bring the SVAB into compliance with the federal and state ambient air quality standards. The Air Quality Attainment Plans are incorporated into the State Implementation Plan, which is subsequently submitted to the U.S. Environmental Protection Agency (EPA), the federal agency that administers the Federal Clean Air Act (CAA) of 1970, as amended.

The City of Folsom regulates urban development through standard construction conditions and through mitigation, building, and construction requirements set forth in the Folsom Municipal Code. Required of all projects constructed throughout the city, compliance with the requirements of the City’s standard conditions and the provisions of the Municipal Code avoids or reduces many potential environmental effects. The proposed project would be subject to the City’s standard
construction requirement that all construction be in compliance with applicable SMAQMD and City air pollution requirements. 2

Ambient air quality is described in terms of compliance with state and national standards, and the levels of air pollutant concentrations considered safe to protect the public health and welfare. These standards are designed to protect people most sensitive to respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. The EPA has established national ambient air quality standards (NAAQS) for seven air pollution constituents (listed in Table 4). As permitted by the CAA, California has adopted more stringent state ambient air quality standards (SAAQS) and expanded the number of air constituents regulated.

The California Air Resources Board (ARB) is required to designate areas of the state as attainment, nonattainment, or unclassified for any state standard. An “attainment” designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A “nonattainment” designation indicates that a pollutant concentration violated the standard at least once.

The EPA designates areas for ozone (O₃), carbon monoxide (CO), and nitrogen dioxide (NO₂) as either “Does not meet the primary standards,” “Cannot be classified,” or “Better than national standards.” For sulfur dioxide (SO₂), areas are designated as “Does not meet the primary standards,” “Does not meet the secondary standards,” “Cannot be classified,” or “Better than national standards.” The area air quality attainment status of the SVAB and the City of Folsom is listed in Table 4.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>State of California Attainment Status</th>
<th>Federal Attainment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>Nonattainment</td>
<td>Nonattainment (8-hr Severe)</td>
</tr>
<tr>
<td>Respirable Particulate Matter (PM₁₀)</td>
<td>Nonattainment</td>
<td>Attainment (24-hour)</td>
</tr>
<tr>
<td>Fine Particulate Matter (PM₂.₅)</td>
<td>Attainment</td>
<td>Nonattainment (24-hour)</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>Attainment</td>
<td>Unattainment/Unclassified (Annual)</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>Attainment</td>
<td>Unattainment/Unclassified</td>
</tr>
<tr>
<td>Lead</td>
<td>Attainment</td>
<td>Unattainment/Unclassified</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Attainment</td>
<td>Unattainment/Pending</td>
</tr>
<tr>
<td>Sulfates</td>
<td>Attendance</td>
<td>No Federal Standard</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>Unclassified</td>
<td>No Federal Standard</td>
</tr>
<tr>
<td>Visibility Reducing Particles</td>
<td>Unclassified</td>
<td>No Federal Standard</td>
</tr>
</tbody>
</table>


The SMAQMD also regulates construction and other activities in areas with naturally occurring asbestos. As documented in Section VIII, Hazards and Hazardous Materials, of this Initial Study, the Quick Quack Car Wash project is located in an area likely to contain naturally occurring asbestos.
The Sacramento County/Sacramento Metropolitan Area portion of the SVAB is currently in nonattainment for federal and state ozone, state PM$_{10}$, and federal PM$_{2.5}$ standards. Concentrations of all other pollutants meet state and federal standards (see Table 3 above).

Ozone is not emitted directly into the environment, but is generated from complex chemical reactions between ROG, or non-methane hydrocarbons, and NO$_x$ that occur in the presence of sunlight. ROG and NO$_x$ generators in Sacramento County include motor vehicles, recreational boats, other transportation sources, and industrial processes.

PM$_{10}$, or inhalable particulate matter, is atmospheric particulate matter having a particle size less than 10 microns ($\mu$m) in diameter. PM$_{10}$ is a complex mixture of primary or directly emitted particles, and secondary particles or aerosol droplets formed in the atmosphere by precursor chemicals. According to the 2014 National Emissions Inventory, approximately 57 percent of PM$_{10}$ emissions are due to dust (EPA 2016b). The main sources of fugitive dusts are unpaved roads, construction, and paved roads. Additional sources of PM$_{10}$ include agriculture, fires, fuel combustion, industrial processes, mobile sources, solvents, and miscellaneous sources.

PM$_{2.5}$ is atmospheric particulate matter having a particle size less than 2.5 microns ($\mu$m) in diameter. These particles are so small they can be detected only with an electron microscope. Sources of fine particles include all types of combustion, including motor vehicles, power plants, residential wood burning, forest fires, agricultural burning, and some industrial processes.

**Air Quality Monitoring**

The air quality monitoring network within the SVAB provides information on ambient concentrations of air pollutants in the SVAB. SMAQMD operates a monitoring station in Folsom, where the air quality data for ozone and PM$_{2.5}$ were obtained. PM$_{10}$ data is reported from an additional location in Sacramento County. Table 5 compares a five-year summary of the highest annual criteria air pollutant emissions collected at these monitoring stations with applicable SAAQS, which are more stringent than the corresponding NAAQS. Due to the regional nature of these pollutants, O$_3$, PM$_{2.5}$, and PM$_{10}$ are expected to be fairly representative of the project site.

As indicated in Table 5, the maximum concentration of O$_3$ has exceeded standards in Folsom over the past five years of available data. The maximum concentration of PM$_{10}$ has exceeded standards in Folsom for three of the past five years of available data. Although no data is available for PM$_{2.5}$ at the Folsom monitoring station for three of the five years, there have been exceedances for this pollutant for two years, though the annual average concentration did not exceed standards.
Table 5  Summary of Annual Air Quality Data for Folsom Area Air Quality Monitoring Stations

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone (O&lt;sub&gt;3&lt;/sub&gt;) 1-hour: Monitoring location: Folsom – Natoma Street</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Concentration (ppm)</td>
<td>0.119</td>
<td>0.122</td>
<td>0.114</td>
<td>0.100</td>
<td>0.114</td>
</tr>
<tr>
<td>Days Exceeding State Standard (1-hr avg, 0.09 ppm)</td>
<td>16</td>
<td>19</td>
<td>5</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Ozone (O&lt;sub&gt;3&lt;/sub&gt;) 8-hour: Monitoring location: Folsom – Natoma Street</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Concentration (ppm)</td>
<td>0.098</td>
<td>0.106</td>
<td>0.087</td>
<td>0.085</td>
<td>0.093</td>
</tr>
<tr>
<td>Days Exceeding State Standard (8-hr avg, 0.070 ppm)</td>
<td>46</td>
<td>57</td>
<td>17</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>Days Exceeding National Standard (8-hr avg, 0.075 ppm)</td>
<td>33</td>
<td>38</td>
<td>6</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt; Monitoring location: Sacramento – Branch Center Road 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days Exceeding State Standard (Daily Standard 50 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>12.2</td>
<td>17.8</td>
<td>6.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Maximum State 24-Hour Concentration (µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>73.0</td>
<td>60.0</td>
<td>63.0</td>
<td>46.0</td>
<td>45.0</td>
</tr>
<tr>
<td>Days exceeding Federal Standard (Daily Standard 150 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maximum Federal 24-Hour Average Concentration (µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>69.0</td>
<td>60.0</td>
<td>59.0</td>
<td>45.0</td>
<td>44.0</td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt; Monitoring location: Folsom – Natoma Street</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days Exceeding National 2006 Standard (Daily Standard 35 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Annual Average National 24-Hour Concentration (µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>7.2</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Notes: Underlined Values in excess of applicable standard / ppm = parts per million / µg/m<sup>3</sup> = micrograms per cubic meter
As the time of Initial Study production, 2014 data was not available.
*Insufficient data to determine the value

Source: California Air Resources Board (ARB) 2016, ARB 2016a.

SIGNIFICANCE THRESHOLDS

The SMAQMD has published thresholds of significance for new projects (SMAQMD 2016), which are used to determine whether the potential air quality impacts of a proposed project are significant. The SMAQMD procedure is to quantify pollutant emissions from a project and compare the results to the significance threshold. The emission levels shown in Table 6 have been established as the significance thresholds for those air quality impacts quantitatively assessed:

Table 6  SMAQMD Thresholds of Significance

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Construction Phase</th>
<th>Operational Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROG (VOC):</td>
<td>None</td>
<td>65 pounds per day (lbs/day)</td>
</tr>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;:</td>
<td>85 lbs/day</td>
<td>65 lbs/day</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;:</td>
<td>Zero. If all feasible BACT/BMPs are applied, then 80 lbs/day and 14.6 tons/year</td>
<td></td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;:</td>
<td>Zero. If all feasible BACT/BMPs are applied, then 82 lbs/day and 15 tons/year</td>
<td></td>
</tr>
</tbody>
</table>


For pollutants other than ozone precursors and particulate matter as listed in Table 6, the SMAQMD requires that emissions concentrations from all phases of project activities not exceed the applicable CAAQS. A project is considered to contribute substantially to an existing or projected violation of a CAAQS if it emits pollutants at a level equal to or greater than five percent of the applicable CAAQS.
ENVIRONMENTAL EVALUATION

Potential air quality impacts are assessed for both construction and operational phases of the Quick Quack Car Wash project:

- Construction includes site grading and building of the 3,599 square foot car wash facility, parking areas, and driveways. The existing stormwater drainage swales and detention basin would be filled during grading. Construction activities resulting in air emissions include employee commute trips, exhaust from construction equipment, fugitive dust from earthmoving activities and vehicle movement on the project site, evaporative emissions from paving of roadway surfaces, and the application of architectural coatings to the buildings. Construction is scheduled to begin upon project approval in a single phase.

- Operation activities resulting in air emissions include vehicular trips generated by the car wash; area sources (architectural coating, consumer products, and landscaping); and energy use. It is anticipated the project would become operational in 2017.

Questions a, c: Less-than-Significant Impact. Construction - NOx Emissions. The SMAQMD has developed a screening process to assist in determining if NOx emissions from constructing a project in Sacramento County would exceed the District’s construction significance threshold for NOx. Construction of a project that does not exceed the screening level and meets all the screening parameters will be considered to have a less-than-significant impact on air quality. However, all construction projects regardless of the screening level are required to implement the District’s Basic Construction Emission Control Practices (also known as Best Management Practices (BMPs)). (SMAQMD 2016)

Projects that are 35 acres or less in size generally will not exceed the District’s construction NOx threshold of significance. This screening level was developed using default construction inputs in the California Emissions Estimator Model (CalEEMod). This screening level cannot be used to determine a project’s construction emissions will have a less-than-significant impact on air quality unless all of the following parameters are met. The project does not:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include significant trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than two phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills);
- Require import or export of soil materials that will require a considerable amount of haul truck activity. (SMAQMD 2016)

The project site includes 2.69 acres. The project includes development of a single-story, 3,599-square-foot automated car wash. Finish grading and cut and fill activities would be balanced on site. None of the parameters identified above would be associated with the proposed project. Thus, according to SMAQMD screening criteria, the project would be expected to result in less-than-significant construction NOx emissions. This would be a less-than-significant impact, and no mitigation would be necessary.
The proposed project is required to comply with all SMAQMD rules and regulations for construction, including, but not limited to, Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), and Rule 442 (Architectural Coatings). In addition, all construction projects are required to implement the District's Basic Construction Emission Control Practices (SMAQMD 2016). While the proposed project would not exceed SMAQMD significance criteria for NOx emissions, implementation of SMAQMD Basic Construction Emission Control Practices during project construction would further reduce the emissions of NOx. See Mitigation Measure AIR-1, below.

Questions b, d: Less-than-Significant Impact with Mitigation. Construction - PM$_{10}$ and PM$_{2.5}$ Emissions. During typical construction projects the majority of particulate matter emissions (i.e., PM$_{10}$ and PM$_{2.5}$) are generated in the form of fugitive dust during ground disturbance activities, most of which is generated during the grading phase. PM emissions are also generated in the form of equipment exhaust and re-entrained road dust from vehicle travel on paved and unpaved surfaces.

The District considers PM$_{10}$ and PM$_{2.5}$ emissions to be a significant impact if the levels will exceed the District’s mass emissions thresholds of significance, will generate substantial emissions impacting sensitive receptors, or will cause an exceedance of the ambient air quality standards. The District recommends the same screening level as the NOx emission screening level to determine if PM emissions from constructing a project in Sacramento County will exceed the District’s construction significance thresholds for PM$_{10}$ and PM$_{2.5}$. Construction of a project that does not exceed the screening level, meets all the screening parameters, and implements the District’s Basic Construction Emission Control Practices will be considered to have a less-than-significant impact on air quality. (SMAQMD 2016)

In the case of the proposed Quick Quack Car Wash, none of the parameters identified above would be associated with the proposed project. However, to meet the requirements of SMAQMD’s screening criteria, the project applicant must implement all of the District’s Basic Construction Emission Control Practices. Since the applicant has not included these Practices in their project plans, this would be a significant impact. Implementation of Mitigation Measure AIR-1 would ensure that the SMAQMD Practices would be applied during project construction, and after mitigation, this impact would be less than significant.

Mitigation Measure AIR-1:

To reduce short-term construction emissions, the project applicant for the proposed project, as well as all successors in interest, shall implement, or require its contractors to implement, SMAQMD’s list of Basic Construction Emission Control Practices. In addition to SMAQMD-recommended measures, construction operations shall comply with all applicable SMAQMD rules and regulations.

Basic Construction Emission Control Practices

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
• Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

• Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).

• All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

• Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

• Maintain all construction equipment in proper working condition according to manufacturer’s specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

With implementation of Mitigation Measure AIR-1, dust emissions during construction activities would be reduced to less-than-significant levels.

Questions a through d: Less-than-Significant Impact. Ozone Precursor and Particulate Matter Emissions from Operations. The SMAQMD has established screening levels for projects to determine significance from operational emissions. Projects under the screening level require no further analysis in order to make a finding of less-than-significant air quality impacts. The proposed project would include a 3,599-square-foot car wash, a land use that is not included in the SMAQMD operational screening table. However, every land use and size listed in the operational screening table is much larger than the proposed project, and would have more vehicle trips associated with the use than the 66 daily trips anticipated with the project. Even the screening level for a fast food restaurant with a drive thru, which has a large number of associated vehicle trips per day, is 15,000 square feet for ozone precursors and 51,000 square feet for particulate matter (SMAQMD 2016). Based on the small size of the project, the low number of trips associated with the project, and a comparison with other land use screening levels, it is reasonable to conclude that the proposed car wash would be well below SMAQMD operational screening levels. Emissions from the operation of projects below the screening levels will have a less-than-significant impact on air quality. According to the screening level requirements, no quantification of ozone precursor or particulate matter emissions is needed for projects less than or equal to the size thresholds.

The screening levels for particulate matter assume the project includes BMPs, which allows the project to apply the non-zero PM thresholds of significance. As required by existing regulations, the following BMPs provided by the District will be included by the City of Folsom as Conditions of Approval:

1. Compliance with District rules that control operational PM and NOX emissions. Reference rules regarding wood burning devices, boilers, water heaters, generators and other PM control rules that may apply to equipment to be located at the project. Current rules can be found on the District’s website: http://www.airquality.org/Businesses/Rules-Regulations

2. Compliance with mandatory measures in the California Building Energy Efficiency Standards (Title 24, Part 6) that pertain to efficient use of natural gas for space and water heating and other uses at the proposed project. The current standards can be found on the California Energy Commissions website: http://www.energy.ca.gov/title24/
3. Compliance with mandatory measures in the California Green Building Code (Title 24, Part 11). The California Building Standards Commission provides helpful checklists showing the required and voluntary measures for residential and non-residential projects on its website:

Current mandatory measures related to operational PM include requirements for bicycle parking, parking for fuel-efficient vehicles, electric vehicle charging, and fireplaces for non-residential projects.

4. Compliance with anti-idling regulations for diesel powered commercial motor vehicles (greater than 10,000 gross vehicular weight rating). The current requirements include limiting idling time to 5 minutes and installing technologies on the vehicles that support anti-idling. Information can be found on the California Air Resources Board’s website:

Since the proposed project may not have control over the anti-idling technologies installed on commercial vehicles coming to the project, the BMP is to provide notice of the anti-idling regulations at the delivery/loading dock and to neighbors. The notice to the neighbors should also include who at the proposed project can be contacted to file a complaint regarding idling and the California Air Resources Vehicle Complaint Hotline 1-800-363-7664.

As provided by the District, the screening levels shall not be used to evaluate operational emissions from projects that have one or more of the following characteristics:

- The project will include wood stoves or wood-burning appliances;
- The project does not include BMPs for PM emissions;
- Project trip generation rates are expected to be greater than the default trip rates in CalEEMod. The default trip rates in CalEEMod, which can be viewed in the Operational-Mobile Vehicle Trips tab, are based on standard rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual;
- The vehicle fleet mix for the project is expected to be substantially different from the average vehicle fleet mix for Sacramento County. For example, the fleet mix associated with an industrial land use project will likely consist of a high portion of heavy-duty trucks;
- The project will include mixed-use development; or
- The project will include any industrial land use types.

None of the parameters identified above would be associated with the proposed project. Thus, according to SMAQMD screening criteria, the project would be expected to result in less-than-significant operational ozone precursor and particulate matter emissions. This would be a less-than-significant impact, and no mitigation would be necessary.

Questions b, d: Less-than-Significant Impact. CO Emissions from Operations. The SMAQMD has developed a screening process to assist in determining if CO emissions from operations of a project in Sacramento County would exceed the District’s operational significance threshold for CO. Operation of a project that does not exceed the screening level and meets all the screening parameters will be considered to have a less-than-significant impact on air quality. (SMAQMD 2016)

The first tier of screening criteria provides that the proposed project will result in a less-than-significant impact to air quality for local CO if:
• Traffic generated by the proposed project will not result in deterioration of intersection level of service (LOS) to LOS E or F; and
• The project will not contribute additional traffic to an intersection that already operates at LOS of E or F. (SMAQMD 2016)

In the case of the proposed Quick Quack Car Wash project, the intersection potentially affected by the proposed project is Iron Point Road/Cavitt Drive as identified in Section XVI, Transportation/Traffic of this Initial Study. According to the traffic study prepared for the proposed project (MRO Engineers, Inc. 2016), the study intersection is projected to operate acceptably under p.m. peak hour cumulative plus project conditions. Under average conditions, with addition of the traffic associated with the proposed project (including both the car wash and the quick lubrication shop), a slight delay increase is projected at Iron Point Road/Cavitt Drive, but it will continue to operate at an acceptable LOS C. These results conform to the City of Folsom General Plan policy calling for operation at LOS C or better.

Therefore, according to SMAQMD screening criteria, the project would be expected to result in less-than-significant CO emissions. This would be a less-than-significant impact, and no mitigation would be necessary.

**Question e: Less-than-Significant Impact. Odors from Operations.** The proposed project would consist of the operation of a car wash. No odors would be generated by this use. Potential effects from odors would be less than significant, and no mitigation would be necessary.

**Naturally Occurring Asbestos**

The proposed project is located in an area that is moderately likely to contain naturally occurring asbestos. For more information and analysis, see Section VIII, *Hazards and Hazardous Materials.*
IV. BIOLOGICAL RESOURCES

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The following evaluation of biological resources and the potential environmental effects of implementing the Quick Quack Car Wash project is a summary of the following document appended to this Initial Study in its entirety (see Appendix A):

- Biological Resources of the Quick Quack Car Wash Project Site, prepared by Miriam Green Associates, November 2, 2106.

REGULATORY SETTING

The following discussion summarizes the various federal, state, and local environmental laws and regulations that apply to this project under the California Environmental Quality Act (CEQA).

Federal

Section 404 of the Clean Water Act - The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the United States. Waters of the United States include wet environments such as wetlands, rivers, creeks, tidal and ocean waters, lakes, and ponds.
The USACE does not regulate all water bodies and wetlands, such as isolated waters and waters that do not have a significant nexus to navigable waters.

Any discharge requiring a Section 404 permit also requires Section 401 Water Quality Certification from the California Regional Water Quality Control Board (CRWQCB). Discharges into state waters not requiring a USACE permit require obtaining Waste Discharge Requirements from the CRWQCB.

**Federal Endangered Species Act** - The Endangered Species Act (ESA) provides a process to protect federally listed threatened and endangered species. The ESA is administered by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of FESA prohibits the “take” of species listed under FESA, except when authorized by a permit; take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” In addition, special management considerations or protections may apply to specific portions of the geographical area occupied by a species at the time of its listing (designated as Critical Habitat). All project sponsors, except federal agencies, are required to consult with USFWS and NOAA Fisheries on actions that may have direct or indirect impacts on species listed under FESA, and to obtain a permit under Section 10 of FESA for any “take” of such a species that might result from implementing the proposed project. Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct. Violations involving take can result in criminal or civil penalties.

**Migratory Bird Treaty Act** - The Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except as specified in Department of Interior regulations. Under a similar provision in the California Department of Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey or owls, or to take, possess, or destroy the nest or eggs of these birds except as provided in the Code or associated regulations.

**State of California**

**California Endangered Species Act** - The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which is similar to the federal ESA. CESA requires state agencies to consult with CDFW when preparing CEQA documents to assure that the proposed action does not jeopardize any listed species. CDFW has also developed a list of Species of Special Concern, which includes species in California whose numbers, reproductive success, or habitat may be threatened.

**Section 1600 of the Fish and Game Code** – CDFW administers Section 1600 of the Fish and Game Code. The CDFW must be notified if someone proposes to impact the bed, channel, or bank of any river, stream, or lake designated by CDFW.

**California Native Plant Society** - The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. Potential impacts to CNPS-listed plants are considered under CEQA review.
City of Folsom

The City of Folsom regulates urban development through standard construction conditions and through mitigation, building, and construction requirements set forth in the Folsom Municipal Code. Required of all projects constructed throughout the City, compliance with the requirements of the City's standard conditions and the provisions of the Municipal Code avoids or reduces many potential environmental effects. Requirements related to biological resources include:

- **Protection of Existing Trees** - specifics measures necessary to protect both ornamental and native oak trees.

Chapter 12.16 of the Folsom Municipal Code, the Tree Preservation Ordinance, regulates the cutting or modification of specified trees (City of Folsom 2016c). The City of Folsom ordinance requires issuance of a permit for any regulated activity to be undertaken to a protected tree or within the protected zone of a protected tree. Protected trees include the following:

- Native oak trees (valley oak, blue oak, interior live oak, and hybrids) with a trunk diameter at breast height (4.5 feet above grade) greater than six inches, or 20 inches of aggregate diameter from multi-trunk specimens;
- Heritage tree, which are native oak trees over 19 inches in diameter at breast height or 38 inches of aggregate diameter of multi-trunk specimens;
- Street tree is any tree growing within the tree maintenance strip and contained on the master tree list maintained by the City; and,
- Landmark tree is a tree or group of trees determined by the City Council to be a significant community benefit.

**Environmental Setting**

The 2.7-acre project site is part of a larger undeveloped area that is bordered by Cavitt Drive on the west, Iron Point Road on the north, and Serpa Way on the east. To the south the project site is bordered by a riparian drainage, and the land beyond this drainage is developed with a Costco complex, including fuel pumps, landscaped areas, and a Green Acres Nursery. The project site can be found on the United States Geological Survey (USGS) Clarksville 7.5-minute topographic quadrangle at 38° 38.350' North, 120° 6.652' West.

A record search of the California Natural Diversity Data Base (CNDDB) was conducted on October 28, 2016 (CDFW 2016) to identify all documented occurrences of special-status plant and wildlife species within the Clarksville 7.5-minute topographic quadrangle. Miriam Green, M.S., and/or Heather Johnson, M.S., conducted four field surveys (on August 11, September 17, October 18, and October 30, 2016) to record vegetation and wildlife on-site.

**Biological Communities**

The project site consists of a plateau created by grading during the construction of Serpa Way and Cavitt Road in 2002-2003; both of these roads terminate at the Costco complex. The created project plateau isolates a natural riparian drainage that bisects the open space parcel to the east, and borders the project site on the south. Additional plateaus were created on the opposite side of the ravine that is now dominated by the Costco complex and Green Acres Nursery developments. The riparian drainage beyond the southern border of the project site supports walnut (*Juglans* sp.), willow (*Salix* sp.), and cottonwood (*Populus fremontii*) trees with sections of freshwater emergent vegetation such as cattail (*Typha* sp.). Riparian habitat is a valuable resource that provides nesting, roosting, and
foraging habitat for a variety of wildlife species though this relatively small feature does not constitute sufficient wetland habitat to support some of the special-status wildlife known from the region.

The project site does not support any trees; one shrub is present (coyote bush [Baccharis pilularis]). Vegetation on the project site consists of non-native annual grasses and other weedy forbs. Dominant weedy species include Mediterranean barley (Hordeum maritimum ssp. pustuleanum), medusahead grass (Elymus caput-medusae), Italian ryegrass (Lolium multiflorum), wild oat (Avena fatua), ripgut brome (Bromus diandrus), and soft chess (Bromus bordeaeus). Other species include vetch (Vicia villosa), cut-leaf geranium (Geranium dissectum), filaree (Erodium botrys), rose clover (Trifolium hirtum), yellow star-thistle (Centaurea solitaria), dock (Rumex sp.), and prickly wild lettuce (Lactuca serriola). Just beyond the northern border of the project site ornamental shrubs, such as rose (Rosa sp.) and a few native trees, such as interior live oak (Quercus wislizenii) are scattered within the landscaped areas along the sidewalk beside Iron Point Road.

A 3 to 4 foot deep ditch runs along the eastern and southern borders of the project site. This ditch conveys overland surface runoff flows to a detention basin and concrete drain at the southwest corner of the project site. Several inches of water were present in the ditch during the rainy season surveys; however, vegetation indicates the ditch is dry during most of the year. Vegetation in the interior of the ditch consists almost entirely of upland weeds, with one deeper 50-foot long section supporting narrow-leaf cattail (Typha angustifolia).

Wildlife use of the site is limited to species that are adapted to urban environments. Common species observed on the project site during the surveys included red-tailed hawk (Buteo jamaicensis), American crow (Corvus brachyrhynchos), northern mockingbird (Mimus polyglottos), western scrub-jay (Aphelocoma californica), white-crowned sparrow (Zonotrichia leucophrys), black phoebe (Sayornis nigricans), northern flicker (Colaptes auratus), Anna's hummingbird (Calypte anna), black-tailed jackrabbit (Lepus californicus), and California vole (Microtus californicus).

**Special-Status Plant and Wildlife Species**

This section summarizes an evaluation of the potential presence of special-status species within the project site. The special-status species evaluation considers those species identified as having relative scarcity and/or declining populations by the USFWS or CDFW. Special-status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of special concern by CDFW. Also included are those plant species considered to be rare, threatened, or endangered in California by the CNPS, and those plant and animal taxa meeting the criteria for listing under Section 15380 of the State CEQA Guidelines.

Tables 1 and 2, respectively, of Appendix A provide information on special-status plant and wildlife species that may occur in the project area. Based on the project site's disturbed nature and existing habitat, there is little potential for any of these special-status species to inhabit the project site, except on a transient basis. The project site does not support any special-status plant species and does not contain any suitable breeding habitat for sensitive wildlife species listed by state and/or federal regulatory agencies known to occur in the vicinity.

Several special-status animal species may forage on the site but are not expected to be impacted by the project: pallid bat (Antrozous pallidus), white-tailed kite (Elanus leucurus), and tricolored blackbird.
(Agelaius tricolor). The riparian drainage south of the project site offers low-quality habitat for the western pond turtle (Emys marmorata), which is unlikely to occur on the site.

**Tricolored Blackbird**

The tricolored blackbird breeds in dense colonies in California’s Central Valley in wetlands and native grasslands. Much of the tricolored blackbird’s former nesting habitat has been lost as a result of conversion to urban and agricultural uses. Additionally, remnant populations of the species have been adversely affected by direct mortality (e.g., shooting, pesticide use, and mass destruction of nests through mowing and harvesting of crops). For these reasons, the number of tricolored blackbirds has declined from several million in the 1930s and 1940s to less than 200,000 in 2015. This species was listed under the California Endangered Species Act (CESA) on an emergency basis from 2014 to June 2015. Since December 2015 it has been considered a Candidate for listing under CESA. As a Candidate for listing the tricolored blackbird is protected under CESA for one year until a final determination is made.

Scattered nesting colonies of tricolored blackbirds were recorded in the Folsom area as recently as the late 1990s; however, only one colony is still viable today. In 2016 this colony nested approximately 0.36 mile east of the project site, southeast of Serpa Way, in an unnamed drainage (CNDDDB 2016). The colony forages in local open grassland, mostly on the south side of Highway 50. The riparian drainage south of the project site does not support nesting tricolored blackbirds; however, individuals have been observed occasionally foraging in the open grassland and blackberry thickets adjacent to the project site (Green, Johnson personal observations).

**Waters of the U.S. and Wetlands**

The 3 to 4 foot deep ditch that runs along the eastern and southern borders of the project site conveys surface runoff flows to a detention basin and concrete drain at the southwest corner of the project parcel. Several inches of water were present in the ditch during the October 18, 2016 survey following rains the previous week. Although this ditch appears to be dry during most of the year, it may still be a jurisdictional wetland. Vegetation in the interior of the ditch consists almost entirely of upland weeds; however, one deeper 50-foot long section supports narrow-leaf cattail (Typha angustifolia), which is indicative of a wetland.

**Sensitive Habitats**

The open ditch on the project site does not constitute sufficient wetland habitat to support any of the special-status wildlife known from this region.

**Protected Trees**

The Folsom Tree Preservation Ordinance acts to protect both native and landscape trees within the City. No trees subject to the Ordinance are located on the project site.

**Migratory Corridors/Animal Movement**

Except for an area of protected open space east and south of the project site, the area is totally surrounded by existing commercial and residential development. The nearest natural habitat providing for animal movement or a migratory corridor is located along the riparian corridor of the unnamed channel south of the project site.
Habitat Conservation Plans

No Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or state habitat conservation plan has been approved for the City of Folsom.

ENVIRONMENTAL EVALUATION

Question a: Less-than-Significant Impact. The project site consists of extremely disturbed land that has undergone rough grading in the past. The site does not support any special-status plant species and does not contain any suitable habitat for sensitive wildlife species listed by state and/or federal regulatory agencies and known to occur in the vicinity of the proposed project.

The riparian drainage beyond the southern border of the project site supports walnut (Juglans sp.), willow (Salix sp.), and cottonwood (Populus fremontii) trees with sections of freshwater emergent vegetation such as cattail (Typha sp.). This relatively small feature does not constitute sufficient wetland habitat to support any of the wetland-associated special-status wildlife species known from this region. This drainage would be unaffected by construction and operation of the proposed project.

No potential for direct impacts in the form of “incidental take” of an endangered, threatened, sensitive, or otherwise protected animal species or associated habitat would occur as a result of the development of the Quick Quack Car Wash project. As there would be a less-than-significant impact, no mitigation measures would be required.

Questions b and c: Less-than-Significant Impact with Mitigation. A riparian drainage is located beyond the southern border of the project site. Although riparian habitat is a valuable resource that provides nesting, roosting, and foraging habitat for a variety of wildlife species, this drainage would be unaffected by construction and operation of the proposed Quick Quack project.

The 3 to 4 foot deep ditch that runs along the eastern and southern borders of the project site conveys surface runoff flows to a detention basin and concrete drain at the southwest corner of the project parcel. Several inches of water were present in the ditch during the October 18, 2016 survey following rains. Although this ditch appears to be dry during most of the year, it may still be a jurisdictional wetland. Vegetation in the interior of the ditch consists almost entirely of upland weeds; however, one deeper 50-foot long section supports narrow-leaf cattail (Typha angustifolia), which is indicative of a wetland. This ditch would be filled by construction of the proposed project. This would be a potentially significant impact.

Implementation of the following measures would determine whether the ditch is a protected resource, and require mitigation to compensate for the loss of wetland functions and values if it were. With implementation of these measures, the impact would be less than significant, and no additional mitigation would be necessary.

Mitigation Measure BIO-1a:

Prior to the initiation of construction, the project applicant or any successor in interest shall prepare a memo for submittal to USACE describing the project history under the original Broadstone Unit 3 permits. The memo shall describe the previous permitting process, and current site conditions, including the presence of potential Waters of the U.S. The memo will highlight that all the features presently found on site are either constructed or incidental.
due to previous construction activities. In addition, the memo shall outline the mitigation that has already occurred for the original project impacts, and provide information to USACE to allow them to determine whether a new Clean Water Act Section 404 permit is required for the proposed project. If the USACE determines that protected Waters of the U.S. are present on the project site whose fill or degradation has not previously been permitted, the applicant shall implement Mitigation Measure BIO-1b. If the USACE determines that no Waters of the U.S. presently exist on the project site, or that Waters do exist but that the loss of these Waters has been fully mitigated by past permit requirements, the applicant shall implement Mitigation Measure BIO-1c.

Mitigation Measure BIO-1b:

If the USACE determines that a permit is required, the applicant shall obtain the proper permit type as determined through consultation with USACE. The applicant shall conduct a formal wetland delineation of all Waters of the U.S. on the project, and shall submit the delineation to the USACE for verification. The applicant or any successor in interest shall abide by all requirements contained in the Section 404 permit to ensure that there will not be a net loss of wetland function or values.

In addition, the applicant shall submit an application for Water Quality Certification to the CVRWQCB pursuant to Section 401 of the Clean Water Act. The applicant or any successor in interest shall abide by all requirements contained in the Section 401 Certification issued by the CVRWQCB.

Mitigation Measure BIO-1c:

If the USACE determines that a Section 404 permit is not required, the project applicant or any successor in interest shall prepare a memo similar to the one prepared under Mitigation Measure BIO-2a. This memo shall be submitted to the Central Valley Regional Water Quality Control Board for review and concurrence.

Question d: Less-than-Significant Impact. The project would not interfere with the movement of any native resident or migratory fish or wildlife species. The project site is located in a highly urbanized area that offers little in the way of suitable movement corridor for wildlife species other than the riparian channel south of the project site. The open area of this channel, and any migratory corridor offered by the drainage, terminates at Cavitt Drive where the channel becomes piped. The channel would be unaffected by construction of the project. Construction of the proposed project would have no direct or indirect impacts to wildlife corridors. As there would be a less-than-significant project impact, no mitigation measures would be required. For a discussion of night lighting on the project site, please refer to Section I, Aesthetics, Question ‘d’ of this Initial Study.

Question e: No Impact. No trees exist on the project site; therefore, there are no protected trees as defined by of the Folsom Tree Preservation Ordinance. Because there are no protected trees on the project site, there would be no impact, and no mitigation would be required.

Question f: No Impact. No approved Habitat Conservation Plans, Natural Community Conservation Plans, or other local, regional, or state habitat conservation plans that include the project site have been adopted or approved. Therefore, the proposed project would not conflict with any local, regional or state habitat conservation plans and no mitigation measures would be required.
V. CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>d) Disturb any human remains, including those interred outside of dedicated cemeteries?</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Because the project site previously has been rough graded, and thus highly disturbed, a cultural resources study has not been completed. The information contained in this section is based previous cultural resource studies conducted for the Broadstone Unit 3 Specific Plan.

ENVIRONMENTAL SETTING

The proposed Quick Quack Car Wash project lies on a parcel on the southeast corner of the Iron Point Road/Cavitt Drive intersection. The area surrounding the project site has previously been disturbed by the development of commercial uses, their associated parking lots, and residential subdivisions. The project site has not been identified as a cultural resource by the City based on the City of Folsom Cultural Resources Inventory (City of Folsom 2016d).

The City of Folsom has been a key site in significant early California history. The City played an important role in the gold rush, railroading, and the development of hydropower in California. Additionally, the early development of Folsom was accomplished by a diversity of ethnic groups found in few other places in California.

The Native Americans who occupied the area of the City at the time of Euro American contact (ca. 1845) are known as the Southern Maidu or Nisenan. Ethnographers who have studied these Penutian-speaking people generally agree that their territory included the drainages of the Bear, American, Yuba, and southern Feather Rivers. Permanent settlements were on ridges separating parallel streams, or on crests, knolls, or terraces located part way up the slope (Kroeber 1925).

Several gravel bars situated along the American River were rich in gold. Stores of gold were located at Slate Bar, across from Folsom State Prison, in the early 1850s. During the 1880s and 1890s, mining occurred within Folsom’s city limits.

During the late 19th century Folsom experienced a surge of residential and infrastructure development. The State of California chose Folsom as the ideal site for a prison, and by 1880 Folsom State Prison opened its gates to its first inmates. State engineers finished construction on the city’s historic truss bridge in 1893 to transport people and livestock across the American River. In 1895 the Folsom Powerhouse was constructed, facilitating the first long-distance transmission of electricity: 22 miles from Folsom to Sacramento. The powerhouse operated continuously from 1895 to 1952. Today, both the original powerhouse building and the distribution point in Sacramento are
listed as California Historical Landmarks. Additionally, many buildings constructed in Folsom during
the 1860s remain today, including the Wells Fargo building, built in 1860, and historic houses such
as the Cohn House, which is listed as a National Landmark, and the Burnham Mansion and the
Hymen House, both constructed during the late 19th century. By 1917, the Rainbow Bridge opened
to accommodate automobiles. Folsom’s Chamber of Commerce filed incorporation papers with the
Secretary of State in 1946, officially establishing Folsom as a city. During the late 20th century,
Folsom experienced continual residential and community growth. (Folsom 2016d)

REGULATORY SETTING

State and federal legislation requires the protection of historical and cultural resources. In 1971,
President’s Executive Order No. 11593 required that all federal agencies initiate procedures to
preserve and maintain cultural resources by nomination and inclusion on the National Register of
Historic Places. In 1980, the Governor’s Executive Order No. B-64-80 required that state agencies
inventory all “significant historic and cultural sites, structures, and objects under their jurisdiction
which are over 50 years of age and which may qualify for listing on the National Register of Historic
Places.” Section 15064.5(b)(1) of the CEQA Guidelines specifies that projects that cause
“...physical demolition, destruction, relocation, or alteration of the resource or its immediate
surroundings such that the significance of an historic resource would be materially impaired” shall
be found to have a significant impact on the environment.

For the purposes of CEQA, a historical resource is a resource listed in, or determined eligible for
listing in the California Register of Historical Resources. When a project could impact a site, it needs
to be determined whether the site is an historical resource, which is defined as any site which:

(A) Is historically or archeologically significant, or is significant in the architectural, engineering,
scientific, economic, agricultural, educational, social, political or cultural annals of California; and,

(B) Meets any of the following criteria:
   1. Is associated with events that have made a significant contribution to the broad patterns
      of California's history and cultural heritage;
   2. Is associated with the lives of persons important in our past;
   3. Embody the distinctive characteristics of a type, period, region, or method of
      construction, or represents the work of an important creative individual, or possesses
      high artistic values; or
   4. Has yielded, or may be likely to yield, information important in prehistory or history.

Standard Construction Specifications were developed and approved by the City of Folsom in May
2004 and updated in December 2014. They include Article 11 - Cultural Resources, which provides
direction on actions to be taken in the event that materials are discovered that may ultimately be
identified as a historical or archaeological resource, or human remains (City of Folsom 2014a).

ENVIRONMENTAL EVALUATION

Questions a, b, and d: Less-than-Significant Impact with Mitigation. The project area has
been highly disturbed over the years and contains no known prehistoric or historic period resources.
Because of this disturbance, no Native American resources have been identified on the project site.

As with any development project, there is some possibility that a buried site may exist in the area
and be obscured by vegetation, fill, or other historic activities, leaving no surface evidence.
Proposed grading and construction activities on the project site could unearth buried cultural resources, including human remains. This would be a significant impact.

The following mitigation measures, in addition to compliance with standard City requirements set forth in the City’s Standard Construction Specifications, Article 11 - Cultural Resources, would be required. By establishing procedures to properly address this potential effect, implementation of the following mitigation measure would reduce this impact below a level of significance.

**Mitigation Measure CUL-1:**

If any archaeological, cultural, historical resources, artifacts, or other features are discovered during the course of construction anywhere on the project site, work shall be suspended in that location until a qualified professional archaeologist assesses the significance of the discovery and provides consultation with staff, the Folsom Historical Society, and the Heritage Preservation League. Appropriate mitigation, as recommended by the archaeologist, shall be implemented. If agreement cannot be reached, the Planning Commission shall determine the appropriate implementation measure.

**Mitigation Measure CUL-2:**

In the event human remains are discovered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to Public Resources Code 5097.98. If the coroner determines that no investigation of the cause of death is required and if the remains are of Native American Origin, the coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendent. The descendent will then recommend to the landowner or landowner’s representative appropriate disposition of the remains and any grave goods.

Implementation of mitigation identified above and compliance with standard City requirements would assure that no adverse effects to unknown cultural resources would occur until such resources had been evaluated and any necessary mitigation had been performed. No residual potentially significant impact would exist, and no additional mitigation would be necessary.

**Question c: Less-than-Significant Impact.** No unique geological features are present in the proposed project area. For this reason, no unique geological resources would be adversely affected.

The Society of Vertebrate Paleontology has established three categories of sensitivity for paleontological resources: high, low, and undetermined. Areas where fossils have been previously found are considered to have a high sensitivity and a high potential to produce fossils. Areas that are not sedimentary in origin and that have not been known to produce fossils in the past typically are considered to have low sensitivity. Areas that have not had any previous paleontological resource surveys or fossil finds are considered to be of undetermined sensitivity until surveys and mapping are performed to determine their sensitivity. (Society of Vertebrate Paleontology 1995)

The underlying bedrock on the site is the non-sedimentary Copper Hill Volcanics Formation (DMG 1981). Additionally, the majority of the site has previously been disturbed by the rough grading completed by the previous landowner. Therefore, it is not likely that unique paleontological resources would be found in onsite soils. Thus, geologic units at the project site may be considered to have a low paleontological sensitivity, and a less-than-significant impact on previously unknown paleontological resources would result from construction activities associated with the project. No mitigation would be necessary.
VI. GEOLGY AND SOILS

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

   X

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

   X

iv) Landslides?

   X

b) Result in substantial soil erosion or the loss of topsoil?

   X

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

   X

d) Be located expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

   X

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

   X

ENVIRONMENTAL SETTING

Geology

The project area is located at the western margin of the Sierra Nevada foothills. The local area geology is composed of the Copper Hill Volcanics (DMG 1981). Elevations within the project area range from 489 feet at the northeast corner adjacent to Iron Point Road to 469 feet at the southwestern corner near Caviit Drive. The parcel has been rough graded in the past by grading associated with the Broadstone Unit 3 Specific Plan. As a result of this previous grading, the area of the site proposed for development is essentially flat, with a change in grade of less than one foot from east to west.

The only “active” fault in the Sacramento area is the Dunnigan Hills fault, located northwest of Woodland. This fault has shown activity in the last 11,000 years but not in the past 200 years. The West Branch of the Bear Mountain fault is located approximately five miles northeast of the Folsom city limits. The California Division of Mines and Geology (DMG) classifies this fault as Late Quaternary, with movement sometime in the last 700,000 years, but not in the last 11,000 years. The Bear Mountain fault is part of the Foothills fault system, which is 360 miles long and has a slip rate...
of 0.05 millimeters (mm) per year, +/-0.03 mm, with a maximum earthquake magnitude of 6.5. By comparison, the San Andreas Fault has a slip rate ranging from 17 to 34 mm per year, depending on location. The inactive Mormon Island Fault is located on the eastern edge of the City for approximately two miles before crossing into El Dorado County. The fault zone was evaluated for earthquake activity in 1983, and it was concluded that it has not undergone displacement during the last 65,000 to 70,000 years at minimum, and probably has not been the locus of large displacements since the late Mesozoic. (City of Folsom 2014b)

The USGS California Geological Survey (CGS) Probabilistic Seismic Hazards Assessment (PSHA) Model, revised in April 2003, places Folsom in the second lowest category for seismic shaking potential out of nine zones. The model predicts peak ground acceleration (PGA) based on location and underlying geology. For Folsom, the model estimates the PGA for three different site conditions: firm rock (0.103 g), soft rock (0.112 g), and alluvium (0.15 g). These levels of ground shaking, would equate to a maximum VI intensity earthquake on the Mercalli scale, with strong perceived shaking and light potential damage. (City of Folsom 2014b)

Soils

The Web Soil Survey operated by the U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS 2016) was used to identify soil types on the project site. According to the Web Soil Survey, the project site is underlain by soils of the Argonaut-Auburn and Auburn-Argonaut-Rock outcrop Soil Complexes (see Table 7). These soils are classified as “very limited” with regard to use in construction due to their potential for shrink-swell and the shallow depth to hard bedrock. (For potential hazards related to naturally-occurring asbestos, please refer to the impact analysis in Section VIII, Hazards and Hazardous Materials.)

<table>
<thead>
<tr>
<th>Soil Type within the Project Site</th>
<th>Area</th>
<th>Site Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argonaut, Auburn Soil Complex, 3 to 8 percent slopes</td>
<td>2.4 acres</td>
<td>Very limited; shrink-swell potential and depth to hard bedrock</td>
</tr>
<tr>
<td>Auburn-Argonaut-Rock outcrop complex, 8 to 30 percent slopes</td>
<td>0.2 acres</td>
<td>Very limited; shrink-swell potential and depth to hard bedrock</td>
</tr>
</tbody>
</table>


Site soils have been modified by past grading activities. The project site was mass graded during 2003 (Google Earth Pro 2016).

CITY REGULATION OF GEOLOGY AND SOILS

The City of Folsom regulates the effects of soils and geological constraints on urban development primarily through enforcement of the California Building Code (CBC), which requires the implementation of engineering solutions for constraints to urban development posed by slopes, soils, and geology. The City has additionally adopted a Grading Ordinance (Folsom Municipal Code Section 14.29) that regulates grading citywide to require revegetation and to control erosion, stormwater drainage, and ground movement (City of Folsom 2016e).
ENVIRONMENTAL EVALUATION

The following analysis is based upon Appendix G of the State CEQA Guidelines as used by the City of Folsom. Because Appendix G has not been modified in response to the ruling of the California Supreme Court, the evaluation below follows the order of the questions posed by Appendix G. For traditionally evaluated impacts that may not now be subject to CEQA, the environmental conclusion is classified as “No Impact.” A discussion of the potentially hazardous condition follows, including recommended conditions of approval where appropriate. For additional information, see page 18 of this Initial Study.

**Question a (i): No Impact.** There are no active or potentially active faults located within the project site, or in the project vicinity as mapped under the Alquist-Priolo Earthquake Fault Zone Act (CGS 2016). Because no fault traces underlie the project site or area, no hazardous conditions would result from implementation of the project. Additionally, the implementation of the project would not lead to offsite effects related to fault hazards, nor would any existing hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

**Question a (ii): No Impact.** The USGS/CGS PSHA Model places Folsom in the second lowest zone out of nine zones for seismic shaking potential. The model predicts the maximum level of ground shaking at a VI intensity earthquake on the Mercalli scale, with strong perceived shaking and light potential damage (City of Folsom 2014b).

While earthquake-induced ground shaking could occur in the project vicinity, historically, seismic activity in the Folsom area has been limited. Further, construction of the proposed project in accordance with the requirements and recommendations of the CBC, the City’s Grading Ordinance, and a project-specific geotechnical study would provide protection in the event of a seismic event. Compliance with the CBC, grading ordinance, and geotechnical study requirements and recommendations would reduce potential seismic impacts to levels considered acceptable for the project site and the region. Therefore, no hazardous conditions related to ground shaking would occur with the implementation of the project. Additionally, the implementation of the project would not lead to offsite effects related to ground shaking, nor would any existing hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

**Question a (iii): No Impact.** Liquefaction is a process by which water-saturated materials, such as soil and sediment, lose strength and fail during strong ground shaking. Liquefaction occurs when granular material is transformed from a solid state into a liquefied state as a consequence of increased water pressure. Liquefaction is most commonly induced by strong ground shaking associated with earthquakes.

Factors that contribute to liquefaction potential include soil type, the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater. Liquefaction can occur where unconsolidated sediments and a high water table coincide. Loose sands and peat deposits are susceptible to liquefaction, while clayey silts, silty clays, and clays deposited in fresh water environments are generally stable under the influence of seismic ground shaking. According to

---

3 California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369,
NRCS, the predominant soils within the project site consists of loams trending to clays with depth (USDA NRCS 2016). Because the depths to groundwater are more than 80 inches below the ground surface, and the soils found within the project site have a high percentage of clay content, it is unlikely that the proposed project would be exposed to liquefaction hazards.

The proposed project would also be constructed in accordance with building standards imposed by the City and the requirements and recommendations of the CBC, the City’s Grading Ordinance, and a site-specific geotechnical study. Compliance with CBC and Grading Ordinance requirements would further reduce potential impacts related to liquefaction. For these reasons, no hazardous conditions related to seismic-related ground failure or liquefaction hazards would occur with the implementation of the project. Additionally, the implementation of the project would not lead to offsite effects related to seismic-related ground failure or liquefaction hazards, nor would any existing hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

**Question a (iv): No Impact.** In Sacramento County, only a narrow strip of land along the eastern boundary is considered to have landslide potential (Sacramento County 2011). This strip extends from the Placer County line to the Cosumnes River. Although the project site is located within this area, because of the flat topography of the buildable area of the site and the limited grading proposed, the project would not be exposed to potential adverse effects, including the risk of loss, injury, or death involving a landslide. Compliance with CBC, Grading Ordinance, and geotechnical study requirements and recommendations would further reduce potential impacts related to landslides. No hazardous conditions related to landslide hazards would occur with the implementation of the project. Additionally, the implementation of the project would not lead to offsite effects related to landslides, nor would any existing landslide hazard be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

**Question b: Less-than-Significant Impact.** Native soils found on the project site are identified as the Argonaut-Auburn complex series. These soils are well-drained, and have a very low to moderately low infiltration rate, a very high runoff rate, and a slight water erosion potential. Although the hazard of erosion is slight, grading and construction proposed on the project site could result in erosion during the construction period.

Construction of the proposed project in accordance with the requirements of the CBC would reduce or avoid potential effects from water erosion hazards. Compliance with the City’s Grading Ordinance and standard conditions of approval would further minimize impacts related to soil erosion. As a condition of approval, prior to the issuance of a grading or building permit, the City would require the applicant to prepare a soils report, a geotechnical report, and a detailed grading plan by a qualified and licensed engineer. The soils and geotechnical reports would provide information on soil hazards, reducing potential soil erosion impacts. As another condition of approval, prior to the initiation of construction activities, the City would review and approve an erosion control plan based on the State of California Department of Conservation’s “Erosion and Sediment Control Handbook.” The erosion control plan would identify protective measures to be taken during excavation, temporary stockpiling, disposal, and revegetation.

A project involving construction activities that disturb one or more acres would require a General Construction Activity Stormwater Permit and a National Discharge Elimination System (NPDES) permit from the State Water Resources Control Board (SWRCB). Prior to the initiation of grading
and/or fill, the project applicant is required by the SWRCB to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to water quality during construction of the project. As required by regulations implementing the Construction Stormwater Permit, the SWPPP shall include:

- Specific and detailed Best Management Practices (BMP) to mitigate construction related pollutants, including sediments. These controls would include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricant, paints, solvents, and adhesives) with stormwater. The SWPPP would specify properly designed centralized storage areas that keep these materials out of the rain and/or protected from the wind.

- Dust control BMPs for the stabilization of exposed surfaces and to minimize activities that suspend or track dust particles. For heavily traveled and disturbed areas, wet suppression (watering), chemical dust suppression, gravel or asphalt surfacing, temporary gravel construction entrances, equipment wash-out areas, and haul truck covers can be employed as dust control applications. Permanent or temporary vegetation and mulching, and sand fences can be employed to prevent sediment-laden stormwater from reaching receiving waters, or to force stormwater to drop their sediment load on-site.

- The SWPPP is required to specify a monitoring program to be implemented by the construction site supervisor. SWRCB personnel, who may make unannounced site inspections, are empowered to levy appropriate fines if it is determined that the SWPPP has not been properly prepared and implemented.

The implementation of the SWPPP would minimize potentially significant impacts from soil erosion during construction. Compliance with the CBC requirements and City standards would further reduce impacts from geophysical features related to soil erosion to a less-than-significant level. No additional mitigation would be necessary.

**Question c: Less-than-Significant Impact.** Soils present in the project site have limitations related to the construction of buildings, such as shrink-swell potential and depth to hard bedrock (USDA NRCS 2016); however, project design and special planning according to the requirements of existing City regulations and construction requirements, as well as recommendations contained in a site-specific geotechnical report, would minimize these limitations. The project area is not noted for unstable geologic formations susceptible to landslide, lateral spreading, subsidence, liquefaction, or collapse (Sacramento County 2011). Potential effects from weak soils would be subject to the requirements of the CBC, which would reduce potential geophysical hazards associated with unstable soils. Compliance with City standards such as the Grading Ordinance would also minimize impacts related to unstable soils. Therefore, impacts related to unstable soils would be less than significant, and no additional mitigation would be necessary.

**Question d: Less-than-Significant Impact.** Expansive soils shrink and swell in response to changes in moisture. These volume changes can result in damage over time to building foundations, roads, underground utilities, and other structures, if they are not designed and constructed appropriately to resist the changing soil conditions. Soils found on the project site are identified as the Argonaut-Auburn series. The main limitations of the soil type found on-site are shrink-swell potential and depth to hard bedrock (USDA NRCS 2016). When leveled, the soil type is considered to be suitable for urban uses with proper design and construction (USDA NRCS 1993). The proposed project would be designed to meet seismic safety requirements specified in the CBC,
including standards to minimize impacts from expansive soils. Additionally, the implementation of the project would not lead to off-site effects related to expansive soils, nor would any existing expansive soils hazard be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

**Question c: No Impact.** The proposed project would be served by the City’s wastewater conveyance and treatment system, and all connections to this wastewater system would occur within the proposed project site and within the Cavitt Drive right-of-way. Therefore, the proposed project would use the existing sewer service, and no impacts from on-site wastewater disposal due to soils incapable of adequately supporting septic tanks or alternative wastewater disposal would occur. No impact would occur, and no mitigation would be necessary.

### VII. GREENHOUSE GAS EMISSIONS

<table>
<thead>
<tr>
<th>Processed Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Global Warming is a public health and environmental concern around the world. As global concentrations of atmospheric greenhouse gases increase, global temperatures increase, weather extremes increase, and air pollution concentrations increase. Global warming and climate change has been observed to contribute to poor air quality, rising sea levels, melting glaciers, stronger storms, more intense and longer droughts, more frequent heat waves, increases in the number of wildfires and their intensity, and other threats to human health (IPCC 2013). With the exception of 1998, the 10 warmest years in the 136-year record of global temperatures all have occurred since 2000, with 2015 ranking as the warmest year on record (NOAA 2016). Hotter days facilitate the formation of ozone, increases in smog emissions, and increases in public health impacts (e.g., premature deaths, hospital admissions, asthma attacks, and respiratory conditions) (EPA 2016c). Averaged global combined land and ocean surface temperatures have risen by roughly 0.85°C from 1880 to 2012 (IPCC 2013). Because oceans tend to warm and cool more slowly than land areas, continents have warmed the most. If greenhouse gas emissions continue to increase, climate models predict that the average temperature at the Earth’s surface is likely to increase by over 1.5°C by the year 2100 relative to the period from 1850 to 1900 (IPCC 2013).

**The Greenhouse Effect (Natural and Anthropogenic)**

The Earth naturally absorbs and reflects incoming solar radiation and emits longer wavelength terrestrial (thermal) radiation back into space. On average, the absorbed solar radiation is balanced by the outgoing terrestrial radiation emitted to space. A portion of this terrestrial radiation, though, is itself absorbed by gases in the atmosphere. The energy from this absorbed terrestrial radiation warms the Earth’s surface and atmosphere, creating what is known as the “natural greenhouse effect.” Without the natural heat-trapping properties of these atmospheric gases, the average surface climate...
temperature of the Earth would be below the freezing point of water (IPCC 2007). Although the Earth’s atmosphere consists mainly of oxygen and nitrogen, neither plays a significant role in this greenhouse effect because both are essentially transparent to terrestrial radiation. The greenhouse effect is primarily a function of the concentration of water vapor, carbon dioxide, methane, nitrous oxide, ozone, and other trace gases in the atmosphere that absorb the terrestrial radiation leaving the surface of the Earth (IPCC 2007). Changes in the atmospheric concentrations of these greenhouse gases can alter the balance of energy transfers between the atmosphere, space, land, and the oceans. Radiative forcing is a simple measure for both quantifying and ranking the many different influences on climate change; it provides a limited measure of climate change as it does not attempt to represent the overall climate response (IPCC 2007). Holding everything else constant, increases in greenhouse gas concentrations in the atmosphere will likely contribute to an increase in global average temperature and related climate changes (EPA 2016d).

Greenhouse Gases

Naturally occurring greenhouse gases include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). Several classes of halogenated substances that contain chlorine, themselves, or bromine are also greenhouse gases, but they are, for the most part, emitted solely by human activities. There are also several gases that, although they do not have a direct radiative forcing effect, do influence the formation and destruction of ozone, which does have such a terrestrial radiation absorbing effect. These gases, referred to here as ozone precursors, include carbon monoxide (CO), oxides of nitrogen (NOₓ), and non-methane volatile organic compounds (NMVOC). Aerosols (extremely small particles or liquid droplets emitted directly or produced as a result of atmospheric reactions) can also affect the absorptive characteristics of the atmosphere.

Carbon is stored in nature within the atmosphere, soil organic matter, ocean, marine sediments and sedimentary rocks, terrestrial plants, and fossil fuel deposits. Carbon is constantly changing form on the planet through a number of processes referred to as the carbon cycle, which includes but is not limited to degradation and burning, photosynthesis and respiration, decay, and dissolution. When the carbon cycle transfers more carbon to the atmosphere this can lead to global warming. Over the last 300 years atmospheric levels of carbon have increased by more than 30 percent, of which approximately 65 percent is attributable to fossil fuel combustions and 35 percent is attributed to deforestation and the conversion of natural ecosystems to agricultural use (Piddwirny 2006). Carbon stored in plants and rocks is referred to as being sequestered. Within the United States, forest sequestration of carbon offsets approximately 11 percent of the fossil fuel GHG emissions each year (USDA 2010).

California Greenhouse Gas Emissions

California carbon dioxide equivalent emissions were approximately 441.5 million metric tons in 2014. This represents an overall decrease of 9.4 percent since peak levels in 2004. Of GHG emissions from within California, 36 percent is from transportation and 20 percent is from electric power. Other sources of GHG emissions include commercial and residential (11 percent), agriculture (8 percent), industrial (24 percent), and other sources (1 percent)(ARB 2016b).

REGULATORY FRAMEWORK

The U.S. EPA is the federal agency responsible for implementing the CAA. The U.S. Supreme Court ruled on April 2, 2007 that CO₂ is an air pollutant as defined under the CAA, and that EPA
has the authority to regulate emissions of GHGs. However, there are no federal regulations or policies regarding GHG emissions thresholds applicable to the proposed project at the time of this Initial Study.

The ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California, and for implementing the CCAA. Various statewide and local initiatives to reduce the state’s contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long-term. Because every nation emits GHGs, and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG emissions to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

There are numerous laws that have been signed into effect in California in efforts to reduce GHG emissions. AB 1493 (signed in 2002) requires that the ARB develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of GHG emissions emitted by passenger vehicles and light-duty trucks and other vehicles determined by the ARB to be vehicles whose primary use is noncommercial personal transportation in the state.” To meet the requirements of AB 1493, in 2004 the ARB approved amendments to the California Code of Regulations adding GHG emissions standards to California’s existing standards for motor vehicle emissions. In 2009, the ARB adopted amendments to the “Pavley” regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016.

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra’s snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent of the 1990 level by 2050 (20 percent reduction).

In September 2006, then-Governor Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. In 2011, the ARB adopted the cap-and-trade regulation. The cap-and-trade program covers major sources of GHG emissions in the State such as refineries, power plants, industrial facilities, and transportation fuels. The cap-and-trade program includes an enforceable emissions cap that will decline over time. The State will distribute allowances, which are tradable permits, equal to the emissions allowed under the cap.

The initial main strategies and roadmap for meeting the 1990 emission level reductions are outlined in a Scoping Plan approved in December 2008 and updated every five years (the updated Scoping Plan was released in May 2014). The Scoping Plan includes regulations and alternative compliance mechanisms, such as monetary and non-monetary incentives, voluntary actions, and market-based mechanisms, such as a cap-and-trade program. The Climate Change Scoping Plan contains the main strategies California will implement to achieve a reduction of 80 million metric tons (MMT) of carbon dioxide equivalent (CO₂e) emissions, or approximately 16 percent, from the state’s projected
2020 emission level of 507 MMT of CO$_2$e under a business-as-usual scenario. The Climate Change Scoping Plan also includes a breakdown of the amount of GHG reductions the ARB recommends for each emissions sector of the state’s GHG inventory. The updated Scoping Plan includes recommended strategies to reduce GHG emissions in the agricultural sector, mostly involving GHG emission reduction and carbon sequestration programs. (ARB 2014)

Senate Bill (SB) 97, signed August 2007, acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. This bill directs the State Office of Planning and Research to develop guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. These guidelines were adopted in December 2009 and were made effective March 18, 2010. The amendments include an explicit requirement that EIRs analyze GHG emissions resulting from a project when the incremental contribution of those emissions may be cumulatively considerable.

Executive Order B-30-15, signed April 2015, establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by former Governor Schwarzenegger in 2005 with Executive Order S-3-05. The Executive Order requires state agencies consider “full life-cycle cost accounting” when making future planning and investment decisions. To help state agencies incorporate climate change impacts into planning and investment decisions, the Executive Order requires the Governor’s Office of Planning and Research to establish a technical, advisory group on the issue.

As the sequel to AB 32, Senate Bill (SB) 32 was approved by the Governor on September 8, 2016. SB 32 would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40 percent below the 1990 level by 2030. The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by former Governor Schwarzenegger in 2005 with Executive Order S-3-05.

The California Renewables Portfolio Standard was established in 2002 under Senate Bill 1078 and updated in 2006 and 2011 under Senate Bill 107 and Senate Bill 2, respectively. The California RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

The California Green Building Standards Code (CALGreen Code) (California Code of Regulations, Title 24, Part 11) is a part of the California Building Standards Code that comprehensively regulates the planning, design, operation, and construction of newly constructed buildings throughout the state. Both mandatory and voluntary measures are included in the CALGreen Code. Mandatory measures for non-residential structures include standards for light pollution reduction, energy efficiency, and water conservation, among others.

**Significance Thresholds**

The SMAQMD has published greenhouse gas emissions thresholds of significance for new projects (SMAQMD 2016), which are used to determine whether the potential greenhouse gas emissions of a proposed project are significant.
The SMAQMD has adopted a procedure to quantify pollutant emissions from a project and compare the results to the significance threshold. The following emission levels have been established as the significance thresholds for those greenhouse gas emissions impacts quantitatively assessed:

- Construction phase of projects – 1,100 metric tons of CO₂e per year
- Operational phase of land development projects – 1,100 metric tons of CO₂e per year
- Stationary source projects – 10,000 direct metric tons of CO₂e per year

For projects that exceed the District’s threshold of significance, lead agencies shall implement all feasible mitigation to reduce GHG emissions.

**Environmental Evaluation**

**Question a: Less-than-Significant Impact.** Greenhouse gas emissions would be generated from the proposed car wash during construction and operation. Temporary GHG emissions would occur during construction activities, predominantly from heavy-duty construction equipment exhaust and worker commute trips. Operational GHG emissions would occur from vehicles accessing the site and from secondary emissions associated with car wash equipment electrical use. Indirectly, project operations would also result in greenhouse gas emissions from wastewater treatment, water conveyance to the project site, and solid waste disposal.

The SMAQMD has developed a screening process to assist in determining if operational and construction GHG emissions from implementation of the project would exceed the District’s significance threshold for GHG emissions. The GHG Operational Screening Levels table shows the size of development (by land use type) at which the District’s operational GHG emissions thresholds of significance would not be exceeded. The proposed project would include a 3,599-square-foot car wash, a land use that is not included in the SMAQMD operational screening table. However, most every land use and size listed in the operational screening table is much larger than the proposed project. The screening level for a fast food restaurant with a drive thru, which has a large number of associated vehicle trips per day, is 4,000 square feet (SMAQMD 2016). The proposed car wash is smaller than this threshold, and according to Institute of Transportation Engineers common trip generation rates, an automated car wash generates less than half of the trips of a fast food restaurant with a drive thru. Based on the small size of the project, the low number of trips associated with the project, and a comparison with other land use screening levels, it is reasonable to conclude that the proposed car wash would be below SMAQMD operational screening levels for GHG emissions.

In addition, the District has determined that projects below the GHG Operational Screening Levels would not exceed the District’s construction GHG threshold of significance if the project meets the parameters for the construction NOₓ screening level. As discussed in Section III, Air Quality, projects that are 35 acres or less in size generally will not exceed the District’s construction NOₓ threshold of significance. Therefore, since the project would be considered below SMAQMD operational screening levels for GHG emissions, and would also meet the parameters for the construction NOₓ screening level, greenhouse gas emissions from the proposed car wash would not be expected to be significant, and the project would not be expected to make a substantial contribution to the cumulatively significant impact of global warming. No significant impact would result, and no mitigation would be necessary.
Energy Efficiency: As required by the City of Folsom Municipal Code, the buildings would be compliant with the Energy Code and Green Building Standards Code. With implementation of these regulatory measures, the proposed Quick Quack Car Wash operations would be considered energy efficient.

Question b: Less-than-Significant Impact with Mitigation. The City of Folsom has not adopted a Climate Action Plan, nor any greenhouse gas reductions measures, other than enforcing the provisions of the Green Building Standards Code and the Energy Code adopted by the City.

Because transportation is the largest sector of greenhouse gas emissions, many reduction strategies focus on reducing travel and making transportation more efficient. Therefore, many of the transportation and land use strategies contained in regional air quality and transportation plans act to reduce greenhouse gas emissions as well. The proposed Quick Quack Car Wash project would be consistent with all applicable provisions of the Ozone Attainment Plan, the 2035 Metropolitan Transportation Plan, and the Sacramento Region Preferred Blueprint Scenario adopted by the SMAQMD and the Sacramento Area Council of Governments. This would be a less-than-significant impact, and no mitigation would be necessary.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
   
   X

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

   X

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

   X

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

   X

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

   X

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

   X

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

   X

Quick Quack Car Wash
Initial Study
City of Folsom
November 2016
VIII. HAZARDS AND HAZARDOUS MATERIALS

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SETTING

Except for chemicals used in car washing (cleaners, waxes, wheel treatments), no use or storage of hazardous materials would be expected from the proposed project beyond minor amounts of cleaning and landscaping chemicals. The proposed project is located in an area that is moderately likely to contain naturally occurring asbestos (CGS 2006).

Database Review

A database search of various environmental agency lists was conducted for the project site and the surrounding area to identify potential hazardous contamination sites. Based on the database search, the project site is not listed as a hazardous waste site according to the EPA’s Envirosfacts website database (EPA 2016c). Also, the project site is not listed on the California Department of Toxic Substance Control’s (DTSC) Hazardous Waste and Substances Sites List (known as the Cortese List) (DTSC 2016), or the U.S. EPA’s Superfund National Priorities List (NPL) (EPA 2016f).

Naturally Occurring Asbestos (NOA)

Naturally occurring asbestos (NOA), was identified as a Toxic Air Contaminant in 1986 by the California Air Resources Board (ARB). Asbestos is a natural mineral that is a known carcinogen. Inhalation of asbestos may result in lung cancer or a serious lung disease. (City of Folsom 2014b; City of Folsom 2010)

For individuals living in areas of NOA, there are many potential pathways for airborne exposure. Exposures to soil dust containing asbestos can occur under a variety of scenarios, including children playing in the dirt; dust raised from unpaved roads and driveways covered with crushed serpentine; grading and earth disturbance associated with construction activity; rock blasting; quarrying; gardening; and other human activities. For homes built on asbestos outcroppings, asbestos can be tracked into the home and can also enter as fibers suspended in outdoor air. Once such fibers are indoors, they can be entrained into the air by normal household activities, such as vacuuming (as many respirable fibers will simply pass through vacuum cleaner bags). (City of Folsom 2010)

People exposed to low levels of asbestos may be at elevated risk (e.g., above background rates) of lung cancer and mesothelioma. The risk is proportional to the cumulative inhaled dose (quantity of fibers), and also increases with the time since first exposure. Although there are a number of factors that influence the disease-causing potency of any given asbestos (such as fiber length and width, fiber type, and fiber chemistry), all forms are carcinogens. (City of Folsom 2010)

Eastern Sacramento County is an area known to be a source of naturally occurring asbestos (NOA) in the soil. In 2006, the California Geological Survey published the report “Relative Likelihood for the Presence of Naturally Occurring Asbestos in Eastern Sacramento County, California.” The report notes that parts of Folsom, including the site of the Quick Quack Car Wash, are moderately
likely to contain NOA. These are areas underlain with gabbroic rocks, metamorphosed mafic volcanic rocks, and metamorphosed intrusive rocks. The map within the California Geological Survey report that “the information used to create the map is not sufficient to determine if NOA will be found at a specific location within the county. A site-specific geologic investigation is required to verify the presence and concentration of NOA.” (City of Folsom 2014b; CGS 2006)

**REGULATORY FRAMEWORK**

Both federal and state laws include provisions for the safe handling of hazardous substances. The federal Occupational Safety and Health Administration (OSHA) administers requirements to ensure worker safety. Construction activity must also be in compliance with the California OSHA regulations (Occupational Safety and Health Act of 1970).

California also has a statewide regulation that addresses NOA. The Asbestos Airborne Toxics Control Measure (ATCM) for Asbestos-Containing Serpentine, adopted in 1990, prohibited the use of serpentine aggregate for surfacing if the asbestos content was five percent or more asbestos. The limit on asbestos content was lowered to 0.25 percent in 2000 and modified to include ultramafic rock. (City of Folsom 2010)

In July 2001, ARB adopted an ATCM for construction, grading, quarrying, and surface mining operations that regulates grading and excavation activities in areas of serpentine or ultramafic rocks. In addition, the Governor’s Office of Planning and Research issued a memorandum providing guidance to lead agencies in analyzing the impacts of NOA through the CEQA review process. (City of Folsom 2010)

The Sacramento Metropolitan Air Quality Management District (SMAQMD) enforces ARB’s Asbestos ATCM to control dust emissions and human exposure to the asbestos fibers found in serpentine and ultramafic rock (and soil derived from those substrates). The ATCM can be summarized as follows:

- Large construction projects are required to prepare a dust mitigation plan and receive approval from the district prior to start of the project. The plan must specify measures that will be taken to ensure that no visible dust crosses the property line and must address specific topics. The dust mitigation plan must address control of emissions from: track-out, disturbed surface areas, storage piles, on-site vehicle traffic, off-site transport of material, and earthmoving activities. The plan must also address post construction stabilization and air monitoring (if required by the local air district [SMAQMD]). Appendix B of this Initial Study shows required control options for the topics to be addressed in the asbestos dust mitigation plan for large construction projects. Many of these requirements would already be carried out by such projects to minimize nuisance dust complaints and protect water quality. (City of Folsom 2010)

Development of the Quick Quack Car Wash also would be subject to the following construction requirements of the City:

- *Air Pollution Control* - requires compliance with all SMAQMD and City air pollution regulations, including obtaining all necessary SMAQMD permits for demolition and/or construction in areas of naturally occurring asbestos.
- *Naturally Occurring Asbestos* - requires compliance with all SMAQMD and City air pollution regulations including preparation and implementation of an Asbestos Dust
Mitigation Plan consistent with the requirements of Section 93105 of the California Government Code.

ENVIRONMENTAL EVALUATION

Question a: Less-than-Significant Impact. Construction activities associated with the proposed project would involve the use, storage, transport, and disposal of oil, gasoline, diesel fuel, paints, solvents, and other hazardous materials. During operations, other than chemicals associated with car washing (cleaners, waxes, wheel treatments), no use or storage of hazardous materials would be expected from the proposed project beyond the use and storage of common household cleaning and landscaping chemicals. These cleaning products and landscaping chemicals would be stored in small quantities with containment, and properly disposed. If spilled, these substances could pose a risk to the environment and to human health. According to federal health and safety standards, applicable federal OSHA requirements would be in place to ensure worker safety. Construction activity must also be in compliance with the California OSHA regulations. Compliance with these requirements would reduce the risk of hazards to the public, and accidents involving the release of hazardous materials into the environment, to a less-than-significant level. No mitigation would be required.

Question b: Less-than-Significant Impact with Mitigation. Grading and other forms of ground disturbance during construction would result in fugitive dust emissions. The project site may contain serpentine or ultramafic rock as is common to the Sierra Nevada foothills. These types of rock contain thin veins of asbestos that can become airborne when disturbed by grading. Additionally, soils derived from these rocks may contain trace amounts of asbestos.

The project site would be graded to provide the final grades for two building pads, and to configure drive aisles, parking, and landscaped areas. During grading activities, serpentine soils may be disturbed, potentially exposing residents of the nearby residential neighborhoods to asbestos during project construction. As a result, this impact would be considered significant.

Implementation of the following measure would control the potential release of NOA, and ensure that project construction dust emissions would conform to health-based standards adopted by ARB and the SMAQMD.

Mitigation Measure HAZ-1:

A site investigation shall be performed to determine whether and where NOA is present in the soil and rock on the project site. The site investigation shall include the collection of soil and rock samples by a qualified geologist. If the site investigation determines that NOA is present on the project site, the project applicant shall prepare an Asbestos Dust Control Plan for approval by SMAQMD as required in Section 93105 of the California Health and Safety Code, “Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations.” The Asbestos Dust Control Plan shall specify measures, including but not limited to those set forth in Appendix B of this Initial Study, such as periodic watering to reduce airborne dust, and ceasing construction during high winds that shall be taken to ensure that no visible dust crosses the property line. Measures in the Asbestos Dust Control Plan also may include but shall not be limited to dust control measures required by Mitigation Measure AIR-1. The project applicant shall submit the plan to the Folsom Community Development Department for review, and SMAQMD for review and approval before any grading or construction may occur. SMAQMD approval of the plan.
must be received before any asbestos-containing rock or soils can be disturbed. Upon approval of the Asbestos Dust Control Plan by SMAQMD, the applicant shall ensure that construction contractors implement the terms of the plan throughout the construction period.

Because implementation of this measure would assure compliance with City of Folsom, SMAQMD, and State ARB health-based standards for the control of NOA during construction, there would be no residual impact, and no additional mitigation would be needed. This impact would be less than significant after mitigation.

Question c: Less-than-Significant Impact. The are no existing schools within ¼ mile of the project site. The nearest schools - Vista del Lago High School, Folsom Lake Community College, Russell Ranch Elementary, and Gold Ridge Elementary - are located between 0.55 and 1.2 miles from the project site. (City of Folsom 2016f; Google Earth Pro 2016) Although the proposed Quick Quack Car Wash project would result in the storage and use of chemicals used in car washing (cleaners, waxes, wheel treatments) and small amounts of common hazardous materials, there are no schools within ¼ mile of the site. Additionally, all materials would be stored and used pursuant to federal and state laws that include provisions for the safe handling of hazardous substances. Thus, implementation of the proposed Quick Quack Car Wash would not result in a hazard to students or staff under normal operating conditions. This would be a less than significant impact, and no mitigation would be necessary.

Question d: No Impact. The project site is not identified as a location included on a list of hazardous materials sites compiled by the EPA (Envirosfacts database (EPA 2016c), the DTSC’s Hazardous Waste and Substances Sites List (known as the Cortese List) pursuant to Government Code Section 65962.5 (DTSC 2016), or the U.S. EPA’s Superfund National Priorities List (NPL) (EPA 2016f). Therefore, no significant hazard to the public related to a hazardous materials site would occur, and no mitigation would be necessary.

Questions e, f: No Impact. Because the project site is not located in an area for which an Airport Land Use Plan has been prepared, and no public or private airfields are within two miles of the project area, no at-risk population working or patronizing the proposed project would be exposed to hazards due to aircraft overflight. The implementation of the project would not lead to off-site effects related to aircraft safety hazards, nor would any existing aircraft safety hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

Question g: Less-than-Significant Impact. As set forth in the City’s Multi-Hazard Emergency Management Plan, the City of Folsom maintains pre-designated emergency evacuation routes along major streets and thoroughfares (Sacramento County 2004). Both Iron Point Road and Cavitt Drive are fully improved in the vicinity of the proposed project. No aspect of the proposed project would modify these streets or preclude their continued use as an emergency evacuation route. The proposed project would not result in an increased concentration of large numbers of persons in any at-risk location, and the proposed project would not have a significant impact on any emergency plans. Therefore, no significant impact would occur, and no mitigation would be necessary.

Question h: No Impact. The proposed project site is located within the urban area of the City, completely surrounded by urban uses. According to the California Department of Forestry and Fire
Resource Assessment Program (FRAP), the project area is not within a fire hazard severity zone (CAL FIRE 2008). Because the area surrounding the proposed project is urbanized, is provided with urban levels of fire protection by the City, and is not within a fire hazard severity zone, risks from wildland fire would be low. The introduction of landscape plants and the associated irrigation system would further reduce the wildland fire hazard potential in the project area. The implementation of the project would not lead to offsite effects related to wildland fire hazards, nor would any existing wildland fire hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

IX. HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Implemented</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

Would the project:

a) Violate any water quality standards or waste discharge requirements?  
X

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

X

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

X

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

X

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

X

f) Otherwise substantially degrade water quality?

X

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance rate map or other hazard delineation map?

X

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

X

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

X

j) Inundation by sciche, tsunami, or mudflow?

X

ENVIRONMENTAL SETTING

The project site consists of a roughly triangular plot of land measuring 2.69 acres. The project parcel has been rough-graded in the past to form a relatively level building pad with grading associated with the Broadstone Unit 3 Specific Plan. The site slopes from north and northeast to the southeast.
corner of the parcel. Elevations within the project area range from 489 feet at the northeast corner adjacent to Iron Point Road to 469 feet at the southwesterly corner near Caviot Drive. Both the frontages of Iron Point Road and Caviot Drive are developed with curb, gutter, and sidewalk.

Within the site, open stormwater drainage channels have been constructed along the eastern and southern property lines. This drainage network drains to a shallow detention basin, that in turn discharges to an unnamed intermittent natural drainage along the southerly edge of the property. At Caviot Drive this cast/west flowing channel becomes piped into the City's developed storm drainage network.

Because no storm drainage facilities are provided within the project site other than two existing drainage channels and a shallow detention basin, stormwater quality treatment controls must be incorporated into the site design. The City currently requires that on-site treatment control measures be designed consistent with the Stormwater Quality Design Manual for the Sacramento and South Placer Regions (Sacramento County 2007). If the project is approved, it may be required to comply with the updated Stormwater Quality Design Manual, which would require the implementation of certain Low Impact Development (LID) techniques. Once the stormwater treatment controls are installed, all stormwater collected in the public storm drainage system will eventually be discharged to the American River or its tributaries.

The project site and adjacent area are not within a 100-year flood plain as identified by the Federal Emergency Management Agency (FEMA 2012). According to FEMA, the project site is within Zone X, which is defined as an area outside of the 0.2 percent annual floodplain. According to the DWR Best Available Maps, the project site is not located within the 100-year or 500-year floodplains of the American River or other local streams (DWR 2010). There are no delineated 200-year floodplains in the City of Folsom (DWR 2012).

Within Folsom, major rivers, creeks, streams, flood corridors, riparian habitat, and other land that may accommodate floodwater are identified as locations of groundwater recharge. Although an unlined seasonal stream is located along the southerly boundary of the project site, this feature is not identified by the City of Folsom as an area important for groundwater recharge. (City of Folsom 2014c)

The City of Folsom provides domestic water services to the area within the City limits located south of the American River, including the proposed project site. Because domestic water in this area of the City of Folsom is provided solely from surface water sources, implementation of the proposed project would not involve either withdrawals of groundwater for domestic purposes, or discharges to groundwater.

**REGULATORY FRAMEWORK**

The City is a signatory to the Sacramento County-wide National Pollutant Discharge Elimination Systems (NPDES) permit for the control of pollutants in urban stormwater. Since 1990, the City has been a partner in the Sacramento Stormwater Quality Partnership, along with the County of Sacramento and the Cities of Sacramento, Citrus Heights, Elk Grove, Galt, and Rancho Cordova. These agencies are implementing a comprehensive program involving public outreach, construction and industrial controls (BMP), water quality monitoring, and other activities designed to protect area creeks and rivers (Sacramento Stormwater Quality Partnership 2016). The project would be required to implement all appropriate program requirements.
In addition to these activities, the City maintains the following requirements and programs to reduce the potential impacts of urban development on stormwater quality and quantity, erosion and sediment control, flood protection, and water use.

Standard construction conditions required by the City include:

- **Water Pollution** - requires compliance with City water pollution regulations, including NPDES provisions.
- **Clearing and Grubbing** - specifies protection standards for existing signs, mailboxes, underground structures, drainage facilities, sprinklers and lights, trees and shrubbery, and fencing. Also requires the preparation of a SWPPP to control erosion and siltation of receiving waters.
- **Reseeding** - specifies seed mixes and methods for reseeding of graded areas.

Additionally, the City enforces the requirements of the Folsom Municipal Code summarized in Table 8.

<table>
<thead>
<tr>
<th>Code Section</th>
<th>Code Name</th>
<th>Effect of Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.70</td>
<td>Stormwater Management and Discharge Control</td>
<td>Establishes conditions and requirements for the discharge of urban pollutants and sediments to the storm-drainage system; requires preparation and implementation of SWPPPs.</td>
</tr>
<tr>
<td>13.26</td>
<td>Water Conservation</td>
<td>Prohibits the wasteful use of water; establishes sustainable landscape requirements; defines water use restrictions.</td>
</tr>
<tr>
<td>14.20</td>
<td>Green Building Standards Code</td>
<td>Adopts the California Green Building Standards Code (CALGreen Code), 2013 Edition, excluding Appendix Chapters A4 and A5, published as Part 11, Title 24, C.C.R. to promote and require the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices.</td>
</tr>
<tr>
<td>14.29</td>
<td>Grading Code</td>
<td>Requires a grading permit prior to the initiation of any grading, excavation, fill or dredging; establishes standards, conditions, and requirements for grading, erosion control, stormwater drainage, and revegetation.</td>
</tr>
<tr>
<td>14.32</td>
<td>Flood Damage Prevention</td>
<td>Restricts or prohibits uses that cause water or erosion hazards, or that result in damaging increases in erosion or in flood heights; requires that uses vulnerable to floods be protected against flood damage; controls the modification of floodways; regulates activities that may increase flood damage or that could divert floodwaters.</td>
</tr>
<tr>
<td>14.33</td>
<td>Hillside Development Standards</td>
<td>Regulates urban development on hillsides and ridges to protect property against losses from erosion, ground movement and flooding; to protect significant natural features; and to provide for functional and visually pleasing development of the city’s hillsides by establishing procedures and standards for the siting and design of physical improvements and site grading.</td>
</tr>
</tbody>
</table>


**ENVIRONMENTAL EVALUATION**

**Questions a, f: Less-than-Significant Impact.** Construction activities associated with project implementation would include grading and site leveling. The existing drainage ditches and detention basin would be filled. Stormwater generated from paved and developed areas of the site would flow within internal driveways from north and east to the southwest corner of the site where stormwater
would be collected by two drop inlets. Collected stormwater would be discharged to an existing drain inlet and then transmitted to the unnamed drainage south of the site using an existing outfall. As noted above, water within the drainage channel flows west to an existing inlet to the City’s stormwater drainage network at Cavitt Drive.

The proposed project would be required to comply with various state and local water quality standards, which would ensure the proposed project would not violate water quality standards or waste discharge permits, or otherwise substantially degrade water quality. The project site would be subject to NPDES permit conditions, which include the preparation of a SWPPP. As described above, the proposed project would also be subject to all of the City’s standard Code and construction requirements (listed in Table 8), including conditions for the discharge of urban pollutants and sediments to the storm-drainage system and restrictions on uses that cause water or erosion hazards.

Further, prior to the issuance of grading and building permits, the applicant would be required to submit a drainage plan that shows how project Best Management Practices (BMP) capture and treat stormwater runoff during project operations for the developed area of the project. No stormwater treatment features have been identified by the applicant at the time of preparation of this Initial Study. Compliance with all existing stormwater quality requirements would ensure that water quality standards and waste discharge requirements are not violated, and water quality is protected. Therefore, impacts would be less than significant, and no mitigation is necessary.

**Question b: No Impact.** Implementation of the proposed project would not result in the use of groundwater, and no groundwater wells would be drilled as part of the proposed project. Domestic water in this area of Folsom is provided solely from surface water sources from the Folsom Reservoir. The City of Folsom currently has water rights for up to 34,000 acre-feet of water per year (City of Folsom 2016g). While the proposed project would result in the addition of new impervious surfaces to the project site that could affect groundwater recharge, the proposed project area is not identified as important to groundwater recharge. Because the proposed project would not rely on groundwater for domestic water and irrigation purposes, and the site is not an important area of groundwater recharge, the proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge to an extent that would result in a net deficit in aquifer volume or a lowering of the local groundwater table. Therefore, there would be no impact.

**Questions c through e: Less-than-Significant Impact.** Implementation of the proposed project would have the potential to generate stormwater and contaminated runoff from developed areas of the project site. The 2.69-acre project site to be developed consists of a highly disturbed vacant lot, with two drainage swales, a shallow detention basin, and an armored outfall for the discharge of stormwater to a seasonal stream south of the project site.

Because the site is currently undeveloped, the construction of the proposed project would result in the addition of new impervious surfaces to the project site. Stormwater generated from paved and developed areas of the site would flow within internal driveways from the north and east areas of the site to the southwest corner where stormwater would be collected by two drop inlets. Collected stormwater would be discharged to an existing drain inlet and then transmitted to the unnamed drainage south of the site using an existing outfall. (Quick Quack 2016) Water within the drainage channel flows west to an existing inlet to the City’s stormwater drainage network at Cavitt Drive.
Although particulates, dissolved metals, hydrocarbons, nutrients, metals, and other common pollutants are found in urban stormwater runoff, as proposed, the Car Wash project does not describe any stormwater treatment methods or facilities (Quick Quack 2016).

The project site is within the existing urban area of the City served by urban stormwater facilities, and construction on the site would be subject to NPDES permit conditions, which would include the preparation of a SWPPP. As described above, the proposed project would also be subject to all of the City’s standard Code and construction requirements (listed in Table 7), including conditions requiring the limitation of stormwater flows to those naturally occurring prior to the construction of the project, the treatment of urban pollutants and sediments prior to discharge to the storm-drainage system, and restrictions on uses that cause water or erosion hazards.

The implementation of these requirements would ensure that no adverse effects due to stormwater generation or contamination would take place. The proposed project drainage pattern would be designed to avoid impacts to adjoining properties, and all drainage would be conveyed into existing or proposed storm drain facilities and on-site drainage improvements to ensure that no increase in downstream flood hazards would occur. For these reasons, impacts to water quality, drainage patterns, and stormwater runoff would result in a less-than-significant impact. No additional mitigation measures would be required beyond compliance with City, State, and federal requirements.

**Questions g, h, i: No Impact.** The project area is located outside of the 100-year and 500-year floodplain of the American River and local streams, so no impacts related to flooding or the exposure of residences to flooding would result from project implementation, and no mitigation would be necessary. The implementation of the project would not lead to off-site effects related to flood hazards, nor would any existing flood hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

**Question j: No Impact.** The City of Folsom is located approximately 95 miles from the Pacific Ocean, at elevations ranging from approximately 140 feet to 828 feet above msl. Elevations at the proposed project site ranging from 469 feet above mean sea level to 489 feet. Because of this, there would be no possibility of inundation by tsunami.

The City is located adjacent to Folsom Lake, a reservoir on the American River impounded by a main dam on the river channel and wing dikes. Areas of the City adjacent to the wing dikes could be adversely affected by a seiche as a result of an earthquake, either through sloshing within a full reservoir or by a massive landslide or earth movement into the lake. Although historic seismic activity has been minor, the potential for strong ground shaking exists. However, the possibility of a strong earthquake occurring when lake levels are high and creating a large enough wave to overtop or breach the wing dikes is considered to be remote.

Mudslides and other forms of mass wasting occur on steep slopes in areas having susceptible soils or geology, typically as a result of an earthquake or high rainfall event. Although the site is moderately sloped, grading standards, including requirements to evaluate slope stability and implement slope stabilizing measures as necessary, would act to mitigate this potential effect.

Therefore, there would be no potential effect from inundation by seiche, tsunami, or mudflow to the proposed project. The implementation of the project would not lead to off-site effects related to such hazards, nor would any existing seiche, tsunami, or mudflow hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.
X. LAND USE AND PLANNING

Would the project:

a) Physically divide an established community? ____________ X ____________ ____________ ____________

b) Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? X

__________________________ ____________ ____________ ____________

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? ____________ ____________ ____________ X

ENVIRONMENTAL SETTING

The project site is located within the incorporated City limits of Folsom, in Sacramento County. Land use in the project area is regulated by the City of Folsom General Plan and the City of Folsom Municipal Code, including the Zoning Code.

The project site is designated as Community Commercial (CC) in the City of Folsom General Plan (City of Folsom 1988) and Commercial - Central Business Planned Development (C-2 PD) within the Broadstone Unit 3 Specific Plan (SP 95-1) and the Zoning Code (City of Folsom 2016a). The requested Planned Development Permit allows the City of Folsom to review the site plan and associated project site details to ensure that the project meets standards and requirements beneficial to the City and its residents, as defined in Section 17.38.100 of the Zoning Code. The proposed Quick Quack Car Wash project would be consistent with these land use and zoning designations, and the project would be a land use allowed by the General Plan and Zoning Code at this location.

A Planned Development Permit is required to allow the City of Folsom to review the site plan and associated project details to ensure that they meet requirements beneficial to the City. Because the Car Wash project is consistent with the basic requirements of the General Plan and Zoning Code, any evaluation of benefits to the City in the context of the Special Permit would not be an evaluation of potential environmental effects, but rather a determination made by the Planning Commission with the advice of staff. Thus, the evaluation of compliance with City land use regulations is not the proper subject for this Initial Study. Rather, staff’s advice to the Planning Commission regarding this issue will be set forth in the Planning Commission Staff Report submitted to the Commission, and available to the public, prior to the initial public hearing for the project.

The proposed Quick Quack Car Wash project site is bounded on three sides by urban development: Iron Point Road, residential uses, permanent open space, and undeveloped land designated for commercial uses to the north; Cavitt Drive and two extended-stay hotels to the west; and a natural drainage channel, Costco, and a retail plant nursery to the south and east. Table 1 in Section 2 of this Initial Study details the surrounding land uses and corresponding General Plan and zoning designations.
ENVIRONMENTAL EVALUATION

**Question a: Less-than-Significant Impact.** The proposed project would involve the construction of a car wash on a vacant lot within the City of Folsom. The project vicinity consists of both residential and commercial uses. The nearest residences are located across Iron Point Road to the north and northeast. Because the proposed project is located in an area of similar commercial uses and separated from any residential community by a six-lane roadway as well as a 45- to 55-foot change in elevation, construction of the proposed project would not physically divide an established community. There would be a less-than-significant impact, and no mitigation would be required.

**Question b: Less-than-Significant Impact.** As the project is located in an area surrounded by developed uses, and the project proposes a land use consistent with applicable General Plan, Specific Plan, and Zoning Code land use requirements, the proposed project would not conflict with the City of Folsom General Plan, Broadstone Unit 3 Specific Plan, or Municipal Code, including the Zoning Code. This would be a less-than-significant impact, and no mitigation would be required.

**Question c: No Impact.** No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan has been approved for the project area. For this reason, implementation of the proposed Quick Quack Car Wash project would not conflict with any conservation plan. No significant impact would result, and no mitigation would be necessary.

<table>
<thead>
<tr>
<th>XI. MINERAL RESOURCES</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SETTING

The presence of mineral resources within the City of Folsom has led to a long history of gold extraction, primarily placer gold. The State of California, under the Surface Mining and Reclamation Act (SMARA), can designate certain areas as having mineral deposits of regional significance. According to the Sacramento County General Plan Background Report, the project site is not located in an area classified as containing Significant Mineral Deposits by the California State Geologist (Sacramento County 2011a). According to the City's General Plan, no areas of the City are currently designated for mineral resource extraction (City of Folsom 1988).

ENVIRONMENTAL EVALUATION

**Questions a, b: No Impact.** The project site is not located in an area designated for known or suspected mineral or aggregate resources. The area surrounding the project has been fully developed or is zoned for residential or commercial uses. No area of the City of Folsom is designated in the General Plan or zoned for mineral resource extraction, and no mining operations are present on or
near the site. Although the proposed project would preclude mineral resource extraction, the City of Folsom has planned the area of the project for urban land uses, and mineral extraction has been deemed to be inappropriate. Therefore, implementation of the project would not alter the availability of on-site mineral resources, or interfere with the planned extraction of any known mineral resource. There would be no impacts, and no mitigation would be necessary.

XII. NOISE

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

   - Possibly Significant Impact
   - Less than Significant with Mitigation
   - Less than Significant Impact
   - No Impact
   
   X

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

   - Possibly Significant Impact
   - Less than Significant with Mitigation
   - Less than Significant Impact
   - No Impact
   
   X

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

   - Possibly Significant Impact
   - Less than Significant with Mitigation
   - Less than Significant Impact
   - No Impact
   
   X

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

   - Possibly Significant Impact
   - Less than Significant with Mitigation
   - Less than Significant Impact
   - No Impact
   
   X

e) For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project areas to excessive noise levels?

   - Possibly Significant Impact
   - Less than Significant with Mitigation
   - Less than Significant Impact
   - No Impact
   
   X

f) For a project in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

   - Possibly Significant Impact
   - Less than Significant with Mitigation
   - Less than Significant Impact
   - No Impact
   
   X

An acoustical analysis of the proposed project was performed by Bollard Acoustical Consultants, Inc. (Bollard) due to the potential for increased noise levels during car wash operations (see Appendix C). This section summarizes the results of the Bollard report.

Existing land uses in the project vicinity include single-family homes to the northeast, a hotel to the immediate west, and commercial uses to the south and northwest. Due to the proximity of the project site to these existing noise-sensitive residential uses, the City of Folsom retained Bollard to prepare an acoustical analysis for the Quick Quack Car Wash project. Specifically, the purpose of this analysis was to quantify noise levels associated with the proposed project and to assess the state of compliance of those noise levels with the applicable City of Folsom noise standards.

ENVIRONMENTAL SETTING

The noise environment in the vicinity of the nearest noise-sensitive residential receivers is defined primarily by traffic noise from Iron Point Road. There are no industrial noise sources located in the vicinity of the proposed project, and there are no airports located within two miles of project site. To generally quantify background noise levels at the nearest residences, Bollard conducted a long-
term ambient noise level survey in the backyard of 1739 Abbeyfeale Court on August 5-8, 2016. The noise monitoring location is depicted on Figure 9 and a summary of the measurement results is provided in Table 9.

<table>
<thead>
<tr>
<th>Date</th>
<th>Ldn, dB</th>
<th>Average Measured Hourly Noise Levels (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daytime (7 a.m. to 7 p.m.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L25</td>
</tr>
<tr>
<td>Friday 8/5/16</td>
<td>57</td>
<td>54</td>
</tr>
<tr>
<td>Saturday 8/6/16</td>
<td>57</td>
<td>53</td>
</tr>
<tr>
<td>Sunday 8/7/16</td>
<td>56</td>
<td>52</td>
</tr>
<tr>
<td>Monday 8/8/16</td>
<td>58</td>
<td>54</td>
</tr>
</tbody>
</table>

Note: Long-term ambient noise monitoring conducted within backyard of 1739 Abbeyfeale Court, identified on Figure 9.


As noted in Table 9, environmental noise levels at the nearest residences range from 56 to 58 dB Ldn, thus meeting the City’s standard of 65 dB Ldn discussed in the following paragraph.

**City Regulation of the Noise Environment**

The City of Folsom General Plan Noise Element establishes land use compatibility criteria for both transportation noise sources, such as roadways, and for non-transportation (stationary) noise sources. For stationary noise sources, the City of Folsom has adopted a Noise Ordinance as Section 8.42 of the Folsom Municipal Code (City of Folsom 2016h). The Noise Ordinance establishes hourly noise level performance standards, which are most commonly quantified in terms of an hourly average (L_{eq}) and instantaneous maximum (L_{max}). Table 10 shows the City of Folsom noise level performance standards for stationary noise sources for both day and nighttime periods. The City’s General Plan Noise Element allows exterior noise levels up to 65 dB Ldn/CNEL, which means that the average 24-hour noise level must not exceed this standard, so long as interior noise levels are maintained to meet General Plan requirements (45 dB Ldn).

Section 8.42.060 C of the Noise Ordinance exempts construction noise from the provisions of the Code, provided such activities do not take place before 7:00 a.m. or after 6:00 p.m. on any day except Monday through Friday, or before 8:00 a.m. or after 5:00 p.m. on Saturday.
Table 10  Exterior Hourly Noise Level Performance Standards for New Projects and Developments in the City of Folsom

<table>
<thead>
<tr>
<th>Minutes/Hour of Noise Generation (Ln)</th>
<th>Maximum Acceptable Noise Level, dBA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daytime (7 am - 10 pm)</td>
</tr>
<tr>
<td>30 (L_{50})</td>
<td>50</td>
</tr>
<tr>
<td>15 (L_{25})</td>
<td>55</td>
</tr>
<tr>
<td>5 (L_{3})</td>
<td>60</td>
</tr>
<tr>
<td>1 (L_{1})</td>
<td>65</td>
</tr>
<tr>
<td>0 (L_{max})</td>
<td>70</td>
</tr>
</tbody>
</table>

Note: L_{n} means the percentage of time the noise level is exceeded during an hour. For example, L_{50} means the level exceeded 50 percent of the hour, L_{25} is the level exceeded 25 percent of the hour, etc.

Source: City of Folsom Municipal Code, Section 8.42.040.

As discussed in the Project Description above, the City has established Standard Construction Specifications as published in December 2014 (City of Folsom 2014a). The standard construction specifications are required to be adhered to by any contractor constructing a public or private project within the City. Standards regarding the noise environment are summarized below.

- **Noise Control** – requires that all construction work comply with the Folsom Noise Ordinance, and that all construction vehicles be equipped with a muffler to control sound levels.
- **Weekend, Holiday, and Night Work** – Prohibits construction work during evening hours, or on Sunday or holidays to reduce noise and other construction nuisance effects.

**ENVIRONMENTAL EVALUATION**

Potential noise impacts of the Quick Quack Car Wash project can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project.

**Questions a, c, and d: Less-than-Significant Impact with Mitigation.**

**Construction Noise**

Noise generated during construction would vary, depending on the construction phase and the type and amount of equipment used at the construction site. Noise would be generated by trucks delivering and recovering materials at the site, grading and paving equipment, saws, hammers, the radios and voices of workers, and other typical provisions necessary to construct a car wash project. Construction activities that would generate noise include site grading, excavation, placement of fill, hauling and deliveries, foundation work, and to a lesser extent framing, and exterior and interior finishing. The highest noise levels would be generated during grading of the site, with lower noise levels occurring during building construction and finishing. No pile driving, jack hammering, or extensive earth work is anticipated.

When demolition, ground clearing, excavation, paving and foundation work are occurring near adjacent neighbors, daytime noise levels can be expected to exceed existing noise levels at the nearest residences located approximately 300 feet from the site boundaries (across Iron Point Road). Construction activities associated with the proposed development have the potential to result in
temporary noise levels that would impact adjacent homes periodically over the course of the construction period.

Construction related noise impacts are typically only occasionally intrusive, and cease once construction is complete. Nevertheless, this impact would be significant.

**Mitigation Measure NOI-1:**

Due to the proximity of sensitive receptors to the project site, the project applicant or any successor in interest shall include the following terms in all construction contracts prepared for project-related construction, and shall provide evidence of the inclusion of these terms to the City of Folsom:

1. **Construction Hours/Scheduling:** The following are required to limit construction activities to the portion of the day when occupancy of the adjacent sensitive receptors are at the lowest:
   a. Construction activities for all phases of construction, including servicing of construction equipment shall only be permitted during the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and between 9:00 a.m. to 5:00 p.m. on Saturdays. Construction is prohibited on Sundays and on all holidays.
   b. Delivery of materials or equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above.

2. **Construction Equipment Mufflers and Maintenance:** All construction equipment powered by internal combustion engines shall be properly muffled and maintained.

3. **Idling Prohibitions:** All equipment and vehicles shall be turned off when not in use. Unnecessary idling of internal combustion engines is prohibited.

4. **Equipment Location and Shielding:** All stationary noise-generating construction equipment, such as air compressors, shall be located as far as practical from the adjacent homes. Acoustically shield such equipment when it must be located near adjacent residences.

5. **Quiet Equipment Selection:** Select quiet equipment, particularly air compressors, whenever possible. Motorized equipment shall be outfitted with proper mufflers in good working order.

6. **Staging and Equipment Storage:** The equipment storage location shall be sited as far as possible from nearby sensitive receptors.

**Operational Noise**

**Carwash**

Noise generated by project-related activities were quantified through a combination of reference noise level measurements and application of accepted noise modeling techniques. Noise sources associated with the proposed project include the car wash blower and the vacuum equipment. Predicted noise levels resulting from these sources are evaluated in the following paragraphs.

Based on Bollard's previous experience, noise levels generated by car washes are primarily due to the drying portion of the operation. As a means of determining the potential noise impacts associated with the proposed car wash, Bollard used noise level data provided by Sonny's Enterprises/The Car Wash Factory for the blower assembly. The reference noise level at the entrance, where the blowers
would be located, is 86 dB Lmax at 20 feet. Appendix C provides the noise specification sheet for the proposed project blowers.

Bollard staff conducted reference noise level measurements at an existing Quick Quack Car Wash located at 3050 Sunrise Boulevard in March 2008. Measurements were conducted at the exit of the car wash to quantify the noise level generation of the blower assembly. Directly facing the exit of the car wash, 0 degrees off-axis, the blower assembly was measured to generate a noise level of 86 dB Lmax at 25 feet. The measured equipment noise level at the Sunrise location is comparable to the proposed equipment at the project site (86 dB Lmax at 20 feet).

Noise level measurements were also conducted at off-axis positions in order to quantify the noise level reductions provided by the building structure. Specifically, measurements were conducted at positions 45 and 90 degrees relative to the façade of the car wash exit, both at a reference distance of 25 feet. At 45 degrees off-axis, the blowers generated a noise level of 78 dB Lmax. At 90 degrees off-axis, the blowers generated a noise level of 70 dB Lmax. This represents noise level reductions of 8 and 16 dB due to the intervening building structure at positions 45 and 90 degrees off-axis, respectively.

The nearest noise-sensitive receivers are three single-family residences located immediately north of the project, identified as Sites 1-3 on Figure 9. Because Sites 1 and 2 are located at a position that is 90 degrees off-axis of the tunnel entrance, reference blower noise levels in the direction of those residences was assumed to be 70 dB at 25 feet. Because Site 3 is located at a position that is 45 degrees off-axis of the tunnel exit, reference blower noise levels in the direction of that residence was assumed to be 78 dB at 25 feet. Because Site 4 is directly facing the tunnel entrance, a blower assembly reference noise level of 86 dB at 25 feet was assumed.

Assuming standard spherical spreading loss (-6 dB per doubling of distance), car wash blower noise exposure at the nearest residential property lines was calculated and the results of those calculations are presented in Table 11. The predicted noise levels in Table 11 take into consideration the shielding provided by an existing property line noise barrier north of Iron Point Road illustrated on Figure 9. A conservative 6 dB offset was applied to the predicted car wash blower noise levels to account for the attenuation provided by the property line noise barrier.

Table 11  Predicted Car Wash Noise Levels at Nearby Sensitive Receptors

<table>
<thead>
<tr>
<th>Receiver¹</th>
<th>Reference Noise Level²</th>
<th>Distance (feet)</th>
<th>Attenuation due to Distance (dB)</th>
<th>Predicted Noise Levels, L50 (dB)³</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70 dB at 25 feet</td>
<td>320</td>
<td>-22</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>70 dB at 25 feet</td>
<td>300</td>
<td>-22</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>78 dB at 25 feet</td>
<td>350</td>
<td>-23</td>
<td>49</td>
</tr>
<tr>
<td>4</td>
<td>86 dB at 25 feet</td>
<td>360</td>
<td>-23</td>
<td>33⁴</td>
</tr>
</tbody>
</table>

Notes:
1. Receiver locations are indicated on Figure 9.
2. Reference noise levels vary depending on the receiver location relative to the car wash tunnel. Detailed manufacturer reference noise level data for the proposed blower assembly is contained within Appendix C.
3. A conservative 6 dB offset has been applied to the predicted noise levels at receivers 1-3 to account for the screening provided by the existing property line noise barrier illustrated on Figure 9.
4. The reported noise level of 33 dB represents the predicted interior noise level within the nearest hotel rooms to the project site, and includes a 30 dB reduction provided by typical hotel façade construction.


---

Quick Quack Car Wash
Initial Study

City of Volo
November 2016
According to Table 11, the predicted car wash noise level of 33 dB within the nearest hotel rooms would satisfy the City of Folsom daytime and nighttime interior noise level standards of 45 and 35 dB, respectively. As a result, no adverse noise impacts from the project are identified within the nearby hotel to the west from this component of the project.

The Table 11 data also indicate that predicted median car wash noise levels at receivers 1 and 2 of 42 dB L50 would satisfy the City’s daytime and nighttime noise level criteria. At receiver 3, the predicted noise level of 49 dB L50 would satisfy the daytime criteria, but would exceed the nighttime criteria of 45 dB L50 by 4 dB. However, the predicted noise level conservatively assumes a full hour of car wash blower operation. Bollard understands that the demand for car washes decreases significantly during nighttime hours, 10 p.m. to 7 a.m. Due to the decreased demand during nighttime hours, car wash blower noise levels would likely be below 45 dB L₅₀. Nonetheless, to ensure satisfaction of the City’s noise level standards and to reduce the potential for annoyance at the nearest residences, nighttime noise mitigation measures for the car wash blower operation would be warranted for the project.

Mitigation Measure NOI-2

Limit car wash operation to daytime hours, 7 a.m. to 10 p.m. as defined by Chapter 8.42 of the Folsom Municipal Code.

Limiting the operation of the car wash to daytime hours would result in satisfaction of the City of Folsom noise level criteria at the nearest residences.

Vacuum Noise

A central vacuum system is proposed for the project, however the exact model has yet to be determined. It has been Bollard’s experience that the typical dome-style car wash vacuums are significantly louder than central vacuum systems, whose noise-generating motors are located within a masonry enclosure. Reference noise level data for the JE Adams Super Vac Model #92091D, a dome-style vacuum, was conservatively used for this assessment. Reference noise level data for the vacuum system is provided in Appendix C. According to the noise level data in Appendix C, the vacuum would generate a noise level of approximately 62 dB Lₘₐₓ at a distance of 50 feet.

Assuming standard spherical spreading loss (-6 dB per doubling of distance), vacuum noise exposure at the nearest residential property lines was calculated and the results of those calculations are presented in Table 12. A conservative 6 dB offset was applied to the predicted vacuum noise levels to account for the attenuation provided by an existing property line noise barrier north of Iron Point Road.
Table 12  
Predicted Vacuum Noise Levels

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Reference Noise Level</th>
<th>Distance (feet)</th>
<th>Attenuation due to Distance (dB)</th>
<th>Predicted Noise Levels, L₅₀ (dB)³</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>62 dB at 50 feet</td>
<td>380</td>
<td>-18</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>300</td>
<td>-16</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>300</td>
<td>-16</td>
<td>40</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>430</td>
<td>-19</td>
<td>&lt;20³</td>
</tr>
</tbody>
</table>

Notes:
1. Receiver locations are indicated on Figure 9.
2. Detailed manufacturer reference noise level data for a dome-style vacuum is contained within Appendix C.
3. A conservative 6 dB offset has been applied to the predicted noise levels to account for the screening provided by the existing property line noise barrier illustrated on Figure 9.
4. The reported noise level of 20 dB or less represents the predicted interior noise level within the nearest hotel rooms to the project site, and includes a 30 dB reduction provided by typical hotel façade construction.


As indicated above in Table 12, predicted vacuum noise levels of 38-40 dB L₅₀ at the nearest residences would satisfy the City’s daytime and nighttime noise level standards of 50 and 45 dB L₅₀, respectively. In addition, vacuum noise levels within the hotel rooms of less than 20 dB are predicted to satisfy the City’s interior noise level criteria. As a result, no additional noise mitigation measures would be warranted for this aspect of the project.

The conclusions regarding noise generation found by Bollard are based on the site plan shown on Figure 3 and on the manufacturer’s noise level data cited herein. Deviations from these plans or data could cause noise levels to differ from those predicted in this assessment. To ensure that the car wash operates as evaluated, the following mitigation shall be implemented.

Mitigation Measure NOI-3

Prior to the initiation of commercial operations, the car wash shall be test-operated and noise levels measured by an acoustical analyst to determine if operational blower and vacuum are as predicted. If so, no further action would be necessary. If noise levels are higher than analyzed, the measured noise levels will be compared to the levels permitted by Chapter 8.42 of the Folsom Municipal Code at the sensitive receptors used by Bollard in their analysis. If the higher noise levels meet Chapter 8.42 requirements, no further action would be necessary. If the higher noise levels result in exceedences of Chapter 8.42 standards beyond those determined by Bollard, additional mitigation will be required by the City to ensure that car wash operations meet Folsom Municipal Code noise standards.

Summary

With implementation of Mitigation Measure NOI-1, construction-related noise levels would be minimized, and excessive noise during sensitive periods of the day would be prohibited. With implementation of Mitigation Measure NOI-2, noise impacts from blower noise would be reduced to a less-than-significant level by prohibiting night-time operations. Implementation of NOI-3 would ensure that the actual noise emitted by car wash operations would meet the requirements of the Folsom Municipal Code. Thus, with mitigation, these impacts would be reduced to less-than-significant levels.
Question b: Less-than-Significant Impact. No pile driving, jack hammering, or extensive work that would generate substantial groundborne vibration is anticipated during construction of the proposed project. Field inspections of both the project site and neighboring uses revealed no discernable sources of vibration that would adversely affect existing sensitive land uses located within the project area. The project does not propose any appreciable sources of vibration, and any localized vibration generated by project equipment would dissipate to imperceptible levels between the project site and nearest existing sensitive land uses. As a result, vibration generated during project construction and ongoing operations is predicted to be imperceptible at the nearest residences. Therefore, this impact is considered to be less than significant, and no mitigation would be necessary.

Questions e, f: No Impact. Since the project site is not located in an area for which an Airport Land Use Plan has been prepared, and no public or private airfields are within two miles of the project area, workers and customers of the proposed car wash would not be exposed to adverse levels of noise due to aircraft overflights. For these reasons, no hazardous conditions related to airport or airstrip noise would occur with the implementation of the project. Additionally, the implementation of the project would not lead to offsite effects related to airport or airstrip noise, nor would any existing hazards be exacerbated on- or off-site. No direct, indirect, or cumulative impacts would result. There would be no impact.

XIII. POPULATION AND HOUSING

Would the project:

a) Induce substantial growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (for example through extension of roads or other infrastructure)?

<table>
<thead>
<tr>
<th>Personally Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

<table>
<thead>
<tr>
<th>Personally Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<table>
<thead>
<tr>
<th>Personally Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SETTING

The project site is designated as Community Commercial (CC) in the City of Folsom General Plan (City of Folsom 1988) and Commercial - Central Business Planned Development (C-2 PD) within the Broadstone Unit 3 Specific Plan (SP 95-1) and the Zoning Code (City of Folsom 2016a). According to Chapter 17.22 of the Code, The purpose of the C-2 zone is to designate areas appropriate for a wide range of commercial activities serving the entire community. The C-2 zone will include all sizes of shopping centers. Only manufacturing, warehousing, and the heaviest commercial uses are excluded. The C-2 zone should be located on major arterials and thoroughfares (City of Folsom 2016a).

The project site consists of an undeveloped lot; there are no residences located on the site.
ENVIRONMENTAL EVALUATION

Question a: Less-than-Significant Impact. Implementation of the proposed project would result in the construction and operation of a car wash and a future automobile maintenance or repair facility. The project would not result in any modification of the Folsom General Plan or Zoning Ordinance that could result in an increase in the intensity or type of use that could be constructed on the project site or in the area. While there would be some increase in employment both during the construction phase and during project operation, the number of employees would be small in relation to the overall workforce in the city. The local labor pool could accommodate the need for additional employees. Therefore, the proposed project would not induce substantial growth in the City of Folsom area. The impact would be less than significant, and no mitigation would be required.

Questions b, c: No Impact. The proposed Quick Quack Car Wash project would affect a site within the City of Folsom that has been designated for commercial land uses; there are no existing housing units on the project site. Therefore, neither housing units nor people would be displaced, and no replacement housing would be required. There would be no impact, and no mitigation would be necessary.

XIV. PUBLIC SERVICES

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives of any of the public services:

- Fire protection?  
- Police protection?  
- Schools?  
- Parks?  
- Other public facilities?

X

ENVIRONMENTAL SETTING

Public services provided by the City of Folsom in the project area include fire, police, school, library, and park services.

The City of Folsom Fire Department provides fire protection services. There are four stations within the City of Folsom. Station 37 is the closest station to the project site, located at 70 Clarksville Road, approximately 1.1 miles to the northwest of the project site. The Fire Department provides fire protection and emergency medical services to the Folsom community, responding to over 6,000 requests for service annually (City of Folsom 2015i).
The City of Folsom Police Department is located at 46 Natoma Street, approximately 3.6 miles northeast of the project site. The City police department has a staff of 99, including officers and support staff (Blackburn pers. comm. 2015). The City also maintains a police substation within the Palladio Center (Regan pers. comm. 2015).

The project site is located within the Folsom Cordova Unified School District (FCUSD undated). The nearest schools to the project site are Folsom Lake College, located northwest of the site; Russell Ranch Elementary, located to the east of the site, and Vista Del Lago High School, located to the northeast. The project site is within the attendance boundaries of Russell Ranch Elementary School, Folsom Middle School, and Vista Del Lago High School (FCUSD undated).

Compliant with State regulations, the FCUSD imposes development fees on new construction to assist in the construction of new or expanded school facilities. For commercial development such as that proposed by the Quick Quack Car Wash, the fee is $0.56 per square foot of construction. (FCUSD 2016)

The State of California has preempted the determination of the environmental impacts of new development on school facilities. Under the law, if a developer agrees to pay the fees established by the California Government and Education Codes, the impacts on school facilities may not be analyzed under the California Environmental Quality Act (CEQA), no mitigation for impacts on school facilities may be required, and the project may not be denied due to impacts on schools or due to the inadequacy of school facilities. Hence, state law substantially limits the City of Folsom’s discretion to consider the school overcrowding in its review of land use projects, including the proposed Quick Quack Car Wash.

There are several parks in the vicinity of the project site, including the Handy Family Park; John Kemp Community Park and Folsom Sports Complex; and Nisenan Community Park (City of Folsom 2016f). For an evaluation of the proposed project's environmental effects on recreation resources, please refer to Section XV, Recreation, of this Initial Study.

The City of Folsom has a program of maintaining and upgrading existing public services within the City, including the collection of fees on new development. Fees collected by the City include those to fund maintenance and improvements to police and fire services, roadways, water, wastewater, storm drainage, and solid waste facilities and infrastructure, parks, and light rail (Folsom 2015). Similarly, all private utilities and service providers maintain and upgrade their systems, as necessary for public convenience and necessity, and as technology changes.

**ENVIRONMENTAL EVALUATION**

**Question a: Less-than-Significant Impact.** Implementation of the proposed project would result in an incremental increase in demand for all listed municipal services. The project site is located within a fully developed urban area currently provided with all urban services. As discussed below, there is no indication that these services are currently inadequate.

**Fire:** The Fire Department has reviewed the proposed site plan to determine whether the project is consistent with the Fire Code and all Fire Department requirements, and that the project would not present any unusual safety hazards. As a result of this review, the Fire Department requested that

---

the drive aisles within the project site be widened to permit access by emergency vehicles; no other fire protection concerns were noted (Folsom 2016k). As revised, the project meets this Fire Department request (Quick Quack 2016). Implementation of the proposed project would not require new or altered fire protection facilities. No significant impact would occur, and no mitigation would be necessary.

**Police:** Certain aspects of a project's design can influence crime within the project itself. Common design features that could encourage crime include low levels of outdoor lighting, lack of visibility of areas of the project site from surrounding streets, and any other features that would create obscured visibility. Based on a review of the proposed site and lighting plans, all areas of the project site would be adequately lit and would be visible from surrounding streets. The Folsom Police Department's review of the project indicated no concerns regarding the project (Folsom 2016k). (For additional information on lighting, see Section I, *Aesthetics*, of this Initial Study.)

Thus, there is no indication that implementation of the proposed project would increase calls for service beyond that considered normal and appropriate within the City. No aspect of the project would require new or altered public safety facilities. No significant impact would occur, and no mitigation would be necessary.

**Schools:** The FCUSD has planned for new school facilities within the City of Folsom, and has instituted development fees to assist in paying for the costs of new facilities. Additionally, the voters of the City of Folsom passed Measure G in November 2014. Measure G is a $195 million general obligation bond program that will renovate, replace, construct, update and improve classrooms, portables and schools in Folsom north of Highway 50. Thus, the FCUSD has anticipated the need for additional school facilities within Folsom, and has developed funding sources address these needs. As directed by the state, impacts to school facilities are defined to be less than significant, and no mitigation in addition to impact fees adopted by the FCUSD can be required by the City. This would be a less-than-significant impact.

**Parks:** For an evaluation of the proposed project's environmental effects on recreation resources, please refer to Section XV, *Recreation*, of this Initial Study.

**Public Services:** Because residential development in this area was anticipated in the City's General Plan, impact fees have been established based on the development of the site. There are no unique aspects of the project that would increase service demands beyond those anticipated in the General Plan, or that would render the current service levels to be inadequate. No new public facilities to accommodate the project's service demands would be necessary. As a condition of approval, the City would require the applicant to participate in the funding of its fair-share of public services to maintain service delivery standards Citywide. The applicant would also be required to verify that the fire-flow requirements are met and rights-of-way for all fire and police vehicles are sufficient and comply with the state and City standards. Compliance with state and City standards, and standard conditions of approval would ensure that any potential public service impacts would be reduced to less-than-significant levels. All potential impacts would be less than significant, and no mitigation in addition to existing City requirements and fees would be necessary.
XV. RECREATION

Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SETTING

The Folsom Parks and Recreation Department provides and maintains a full range of recreational activities and park facilities for the community. There are several parks in the vicinity of the project site, including Handy Family Park; John Kemp Community Park and Folsom Sports Complex; and Nisenan Community Park (City of Folsom 2015f).

The proposed project would develop a commercial car wash. Employees of the facility and their families could also use the City’s recreation facilities. It can be expected that these employees would live in or near the Folsom area.

ENVIRONMENTAL EVALUATION

Question a: Less-than-Significant Impact. Because the addition of project employees would not be substantial in relation to the overall City of Folsom population of 73,098 (citydata.com 2015), the proposed Quick Quack Car Wash project would not result in a substantial increase in the use or demand for neighborhood or regional parks, or other recreational facilities beyond the uses and demands contemplated by the Folsom General Plan and the Park and Recreation Master Plan (Folsom 2002). The City charges impact fees to all new development to mitigate a project’s impacts on park and recreation facilities. These impact fees are used to address the identified future needs for the City’s park system. The impact fees and the associated-funded improvements would reduce any impacts from this project to a less-than-significant level, and mitigation would not be necessary.

Question b: No Impact. Development of the proposed project would not include public recreation facilities, nor require the construction or expansion of recreational facilities that might have an adverse impact on the environment. There would be no impact, and mitigation would not be necessary.
XVI. TRANSPORTATION/TRAFFIC

Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>Mitigation Incorporation</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The following information summarizes the information and analysis contained in the Quick Quack Car Wash Traffic Access and Circulation Analysis, Folsom, California prepared in September 2016 by MRO Engineers, Inc., attached as Appendix D.

Introduction

The MRO analysis addressed the long-term (year 2035) access needs of the proposed Quick Quack Car Wash project. The project site plan is presented in Figure 3, and Figure 10 illustrates the features of the existing transportation system in the immediate vicinity of the project site.

Primary vehicular access for the proposed project would be via two new driveways at the west edge of the project site on Cavitt Drive. Both STOP-sign controlled driveways are proposed to serve all turning movements, both inbound and outbound.

In addition to the project driveways, the analysis addressed conditions at the off-site intersection of Iron Point Road/Cavitt Drive. The analysis focused on the PM peak hour, as it is expected that only minimal activity would occur in the AM peak hour. Two levels of project-related activity were addressed: “average” and “peak.”
Figure 10
Existing Transportation System

Legend:
- Blue: Sidewalk/Crosswalk
- Orange: Bike Lane
- Pink: Raised Median
- Green Light: Traffic Signal
Because a portion of the site has been reserved for future development, the analysis also includes the traffic associated with that potential project. According to the project applicant, the future development is expected to be a 3,800 SF quick lubrication shop (e.g., Jiffy Lube) or a similar use.

Environmental Setting

Roads

Existing Roadway Network

The existing transportation system in the vicinity of the project site is illustrated on Figure 10. The proposed project would be located in the southeast quadrant of the intersection of Iron Point Road and Cavitt Drive. The site is currently undeveloped, and no access to the site is currently provided from either roadway. Brief descriptions of these two roadways in the broader network serving the project site are provided below.

- **Iron Point Road** is an east-west arterial roadway that generally runs parallel to and just north of U.S. Highway 50. It extends from Folsom Boulevard to the west to the Folsom City limit east of Empire Ranch Road. In the immediate vicinity of the project site, it is a six-lane, median-divided road.
- **Cavitt Drive** is a collector road that extends from Scholar Way (where it provides access to Folsom Lake College) to south of Iron Point Road (to provide access to Costco). Along the project frontage, it provides one travel lane in each direction with a raised center median.

Parking

No parking is currently provided on the vacant project site, or on the streets adjacent to the site.

Alternative Modes of Transportation

**Transit.** The Folsom Stage Line fixed bus route 10 serves the area with departures ranging from 0.5 hourly to 1.5 hourly from 6:00 a.m. to 8:00 p.m. (City of Folsom 2016). The nearest bus stop is Palladio/Kaiser located on Clarksville Road, north of its intersection with Iron Point Road.

**Bicycle / Pedestrian Facilities.** On-street ("Class II") bike lanes exist along the project frontage on both Iron Point Road and Cavitt Drive. In the vicinity of the proposed project, sidewalks are currently provided on both sides of Iron Point Road and Cavitt Drive.

**Airports.** No private or public airports are located within the City of Folsom. The nearest public airfield is Mather Airport, located approximately 10 miles from the center of the city. No private airports are located within 10 miles of the city.

**Emergency Access.** As set forth in the City’s Multi-Hazard Emergency Management Plan, the City of Folsom maintains pre-designated emergency evacuation routes along major streets and thoroughfares (Sacramento County 2004). No aspect of the proposed project would modify any streets or preclude their continued use as emergency evacuation routes.
Regulatory Setting

Thresholds of Significance Used In the Analysis

Policy 17.17 of the City of Folsom General Plan identifies the minimum acceptable level of service for traffic operations at signalized intersections in the City. Specifically, this policy states:

The City should strive to achieve at least a traffic Level of Service “C” throughout the City.

The City has defined appropriate standards of significance to reflect this policy, including criteria that address situations where the intersection level of service is worse than LOS C under “no project” conditions. A project impact is considered significant:

- If the “no project” level of service at a signalized intersection is LOS C or better and the project-generated traffic causes the intersection level of service to degrade to worse than LOS C (i.e., LOS D, E, or F); the proposed project must implement mitigation measures to return the intersection to LOS C or better.
- If the “no project” level of service at a signalized intersection is worse than LOS C (i.e., LOS D, E, or F) and the project-generated traffic causes the overall average delay value at the intersection to increase by five seconds or more; the proposed project must implement mitigation measures to improve the intersection to the “no project” condition or better. It is not necessary to improve the intersection to LOS C.
- If project-generated traffic at a stop sign-controlled study intersection, causes the intersection to operate at worse than LOS C, and the intersection meets the minimum traffic volume requirements associated with the “Peak Hour” signal warrant.

Proposed Project

Proposed Access System

Vehicular access for the proposed project will be via a pair of stop-sign-controlled driveways on Cavitt Drive. The North Driveway is proposed to be located about 280 feet south of the southerly edge of Iron Point Road. The driveway is proposed to be a full-access location, allowing all turning movements both inbound and outbound.

The South Driveway would be located about 175 feet south of the North Driveway. It is also proposed to be a full-access, stop-sign-controlled location.

Both driveways will also serve the access needs of the future development area.

Access Analysis

The proposed project consists of a 3,599 SF car wash facility plus a future development area, which is assumed to be a 3,800 SF quick lubrication shop. The project site is located in the southeast quadrant of the intersection of Iron Point Road/Cavitt Drive.

This analysis addressed the cumulative conditions time frame (i.e., the year 2035), to ensure that the resulting recommendations will be applicable to all foreseeable conditions.

In addition to the project driveways and on-site traffic circulation system, the off-site intersection of Iron Point Road/Cavitt Drive was analyzed, as no significant impacts are anticipated at other locations, given the results of previous analyses in the vicinity of the proposed project as well as the
magnitude of the project. In recognition of the typical travel characteristics in the area and the anticipated demand patterns at the proposed project, the analysis focused on conditions in the PM peak hour (i.e., the highest hour between 4:00 and 6:00 PM). Two levels of activity at the proposed project were considered: “average” conditions (reflecting typical circumstances on a day-to-day basis) and “peak” conditions (reflecting the busiest days, potentially including Saturdays).

The analysis included the following basic components:

- PM peak-period turning movement forecasts for the intersection of Iron Point Road/Cavitt Drive were derived from information presented in the recently-completed traffic impact analysis for the Broadstone Apartments project (City of Folsom 2014d). Those forecasts reflect cumulative conditions (year 2035) conditions, based on traffic volume projections developed in conjunction with the environmental analyses for the recently-approved Russell Ranch project (City of Folsom 2014e). The peak-hour traffic volumes for Cumulative (2035) No Project conditions are included in Attachment B of Appendix D.

- Using information presented in the Institute of Transportation Engineers' Trip Generation Manual (ITE, Ninth Edition, 2012), estimates of the volume of traffic to be generated by the proposed Quick Quack Car Wash project on an average day were developed. These estimates were prepared for the PM peak-hour period. Similar estimates were developed for the assumed quick lubrication shop. Attachment B of Appendix D illustrates the average peak-hour traffic volumes resulting from addition of the traffic associated with both projects at the project driveways and the Iron Point Road/Cavitt Drive intersection.

- The PM peak hour project-generated traffic on a “peak” day was estimated using the results of traffic counts at selected car wash facilities, which were conducted in conjunction with an analysis of a proposed Quick Quack Car Wash in Elk Grove, California (KD Anderson 2015). The peak-hour traffic volumes for Cumulative (2035) + Project conditions are presented in Attachment B.

- Using procedures documented in the Highway Capacity Manual (Transportation Research Board, 2010), intersection delay and level of service analyses were conducted for Iron Point Road/Cavitt Drive and the project access intersections under cumulative conditions (i.e., the year 2035). Appendix D, Attachment C contains a detailed description of the intersection analysis procedures. Attachment D contains the level of service worksheets.

- Queue length estimates were developed for the project driveways using the results of the Highway Capacity Manual calculations and the probability-based analysis procedure set forth in that document. The results of these analyses represent the expected “95th percentile” queue length (i.e., there is a 95-percent probability that the actual queue at the driveway will be equal to or shorter than the projected queue and only a 5-percent probability that the queue will be longer than the estimated value).

- Signal warrant analyses were performed to determine whether the project driveway intersections would meet the minimum requirements for installation of a traffic signal. This analysis was based on the “Peak Hour” warrant presented in the California Manual on Uniform Traffic Control Devices (Caltrans, November 7, 2014).

- Field reconnaissance was conducted on Cavitt Drive to evaluate sight distance at the project driveways.
The project site plan was evaluated to determine whether traffic would flow safely and efficiently at the project.

Projected Traffic Volumes

To ensure consistency with other ongoing or recently-conducted traffic analyses in Folsom, the future year traffic forecasts employed in the analysis are based on information developed in connection with the traffic analysis for the recently-approved Broadstone Apartments and Russell Ranch projects (City of Folsom 2014d; 2014e). The traffic forecasts reflect the level of development anticipated throughout the City of Folsom, including the Folsom Sphere of Influence (SOI) annexation area (i.e., the Folsom Plan Area Specific Plan) and the entire Sacramento region, through the year 2035. In addition, the traffic projections reflect completion of all roadway system improvements within the Folsom Plan Area Specific Plan, as well as the regional transportation system improvements identified in the SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

The year 2035 “no project” traffic forecasts are presented in Appendix D, Attachment B.

Project Trip Generation

Project-related trip generation estimates for “average” conditions were based on information published in the Trip Generation Manual (Institute of Transportation Engineers 2012). Table 13 summarizes the trip generation rates (in terms of trips per 1,000 SF) and the resulting peak-hour trip generation estimates.

As described above, the “peak” conditions trip generation estimates were based on data collected as part of a recent traffic access analysis for a proposed Quick Quack Car Wash in Elk Grove. Specifically, traffic counts were performed at Kelly’s Car Wash in Elk Grove and Prime Shine Car Wash in Manteca, California. Conversion of those counts to trip generation rates (in terms of trips/1,000 SF) revealed that the Elk Grove location had a higher rate – 46.77 trips/1,000 SF (compared to 39.38 trips/1,000 SF at the Manteca facility), so that rate was employed in this analysis, as summarized in Table 13.

Also shown in Table 13 is the peak-hour trip generation estimate for the assumed 3,800 SF quick lubrication facility, based on application of trip rates from the ITE Trip Generation Manual.

Under average conditions, the proposed Quick Quack Car Wash project is expected to generate a total of 66 vehicle-trips in the weekday PM peak hour (34 inbound and 32 outbound), including the assumed quick lubrication facility. Under peak conditions, the total project is estimated to generate 184 peak hour trips (93 inbound and 91 outbound).

In order to ensure a conservative analysis, no internal trips or pass-by trips were assumed in conjunction with either of the two development projects and, therefore, no trip adjustments were applied.
### Table 13  Trip Generation Estimate: PM Peak Hour

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Average Conditions</th>
<th>Peak Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Quick Quack Car Wash</td>
<td>Trip Rate</td>
<td>7.06</td>
</tr>
<tr>
<td>(3,599 SF)</td>
<td>Trips</td>
<td>25</td>
</tr>
<tr>
<td>Quick Lubrication Shop</td>
<td>Trip Rate</td>
<td>2.85</td>
</tr>
<tr>
<td>(3,800 SF)</td>
<td>Trips</td>
<td>9</td>
</tr>
<tr>
<td>Total Trips</td>
<td></td>
<td>34</td>
</tr>
</tbody>
</table>

Notes:
2. Square feet.
3. Trips per 1,000 SF.
5. Assumed to have 3 service bays.

### Project Trip Distribution

The geographic distribution of project-generated trips was estimated based on projected traffic patterns at Iron Point Road/Cavitt Drive and is summarized below:

- To/from the west on Iron Point Road: 60 percent
- To/from the east on Iron Point Road: 30 percent
- To/from the north on Cavitt Drive: 5 percent
- To/from the south on Cavitt Drive: 5 percent

### Project Traffic Assignment

The project-generated traffic was assigned to the project driveways and Cavitt Drive in accordance with the geographic trip distribution described above to develop “Cumulative + Project” peak-hour traffic volumes for both average and peak conditions. These volumes are illustrated in Appendix D, Attachment B.

### Traffic Operations Analysis

The results of the level of service analyses for Iron Point Road/Cavitt Drive and the stop-sign-controlled project driveways are summarized in Table 14. Shown there are LOS results for cumulative conditions, both with and without the proposed project (for average and peak conditions). Appendix D, Attachment D presents the level of service worksheets.

Under Cumulative No Project conditions, Iron Point Road/Cavitt Drive will operate at LOS C. This conforms to the City of Folsom’s General Plan policy regarding intersection LOS. Under this scenario, the project driveways do not exist, so no LOS results are presented here.
<table>
<thead>
<tr>
<th>Intersection</th>
<th>Cumulative No Project</th>
<th>Cumulative + Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delay (^2)</td>
<td>LOS (^3)</td>
</tr>
<tr>
<td>Iron Point Rd./Cavitt Dr.</td>
<td>29.9</td>
<td>C</td>
</tr>
<tr>
<td>Cavitt Dr./North Driveway</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Cavitt Dr./South Driveway</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Notes:
2. Average control delay (seconds per vehicle).
3. Level of service.
4. Project driveway does not exist under “no project” conditions.
5. Driveway delays represent the “worst-case” movement.

Under average conditions, with addition of the traffic associated with the proposed project (including both the car wash and the quick lubrication shop), a slight delay increase is projected at Iron Point Road/Cavitt Drive, but it will continue to operate at an acceptable LOS C. At the project’s North Driveway, the worst-case movement will operate at LOS B. At the South Driveway, LOS C is projected. These results conform to the City of Folsom General Plan policy calling for operation at LOS C or better.

Even under “peak” conditions, all of the study locations will operate at acceptable levels of service. Iron Point Road/Cavitt Drive will continue to operate at LOS C. Both driveways will also operate at LOS C.

**Signal Warrant Analysis**

The need for installation of a traffic signal at a given location is judged relative to a defined set of traffic signal “warrants.” The warrants applied in the State of California are established by Caltrans, based on essentially similar requirements documented in the *Manual on Uniform Traffic Control Devices* (MUTCD) published by the Federal Highway Administration (FHWA). The current signal warrants are documented in “Part 4 – Highway Traffic Signals” of the *California Manual on Uniform Traffic Control Devices* (Caltrans 2014). Nine such warrants have been defined, although not all warrants are relevant to each case. This analysis of the project driveway intersections was conducted using the “Peak Hour” warrant.

The analysis revealed that neither project driveway intersection is expected to meet the peak-hour signal warrant, either with or without the proposed project, and even under peak conditions.

**Sight Distance Analysis**

In general, sight distance is defined as, “... the continuous length of highway ahead visible to the driver.” (Caltrans 2001) Of particular interest in this analysis is “stopping sight distance.” The Caltrans *Highway Design Manual* defines this factor as, “... the distance required by the driver of a vehicle, traveling at a given speed, to bring his vehicle to a stop after an object on the road becomes visible.”
To ensure that drivers will be able to enter and exit the site safely at the project driveways, a stopping sight distance analysis was conducted at the proposed driveway locations using information provided in *A Policy on Geometric Design of Highways and Streets* (AASHTO 2004).

Cavitt Drive south of Iron Point Road has no posted speed limit. The segment north of Iron Point Road is posted 35 MPH, though, which also seems appropriate for the segment along the project frontage. That speed calls for 250 feet of clear stopping sight distance. Accounting for the fact that some drivers will exceed the posted speed limit, a design value of 305 feet (representing the stopping sight distance at 40 MPH) was used for this analysis. The analysis was conducted relative to both inbound and outbound turns at the project driveways, to ensure that project-related drivers could see and react to approaching vehicles on Cavitt Drive.

At both project driveways, entering and exiting vehicles have clear visibility that exceeds 305 feet. Thus, adequate sight distance is available.

**Driveway Turn Restrictions**

Both project driveways are proposed as full access locations, at which all turning movements would be allowed in both the inbound and outbound directions. Under certain circumstances, it is advisable to prohibit particular turn movements (especially left turns). For example, the City of Folsom has a policy prohibiting outbound left turns from private property onto six-lane streets.

The North Driveway is located at the southerly end of the northbound left-turn lanes serving the Iron Point Road/Cavitt Drive intersection, approximately 280 feet from the near edge of the crosswalk on the south leg of that intersection. Those left-turn lanes are separated from southbound traffic by a narrow raised median. Immediately south of the raised median is a short section (approximately 100 feet) of painted barrier median (i.e., “double-double” yellow lines), which vehicles are prohibited from crossing. That painted barrier then transitions into a two-way center left-turn lane.

The South Driveway is roughly 175 feet south of the North Driveway. This driveway would be served by the two-way center left-turn lane described above. This analysis has revealed no factors that would suggest a need for turn restrictions of any sort at this project driveway. The level of service analysis presented above indicates that a full access driveway would operate satisfactorily, with drivers experiencing low delay values. Further, field investigations revealed that adequate sight distance exists for drivers entering and exiting the site, and no safety problems are foreseen.

**Project Driveway Queue Length Analysis**

The minimum recommended throat depth (MRTD) for outbound traffic under “Cumulative Plus Project” conditions (both “average” and “peak”) was estimated at the project driveways. Adequate throat depth is necessary on the project driveways to provide enough stacking distance for exiting vehicles so that the first on-site parking space is not blocked.

An analysis was conducted to determine the expected “95th-percentile” queue length (i.e., there is a 95 percent probability that the actual queue at the driveway will be equal to or shorter than the projected queue). Using the standard approach accepted by the City of Folsom, the MRTD was derived from the intersection level of service calculations.
Table 15 summarizes the results of the queue length analysis for both project driveway intersections. This analysis focused on the exiting movements from both project driveways to Cavitt Drive as well as the southbound left-turn movement from Cavitt Drive into the South Driveway.

In all cases, the projected queues can be accommodated within the space available.

<table>
<thead>
<tr>
<th>Turn Movement</th>
<th>Available Storage</th>
<th>Average Conditions</th>
<th>Peak Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Vehicles</td>
<td>Feet</td>
</tr>
<tr>
<td>North Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outbound Right</td>
<td>45 ft.</td>
<td>1</td>
<td>25 ft.</td>
</tr>
<tr>
<td>South Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inbound Left</td>
<td>75 ft.</td>
<td>1</td>
<td>25 ft.</td>
</tr>
<tr>
<td>Outbound Left/Right</td>
<td>40 ft.</td>
<td>1</td>
<td>25 ft.</td>
</tr>
</tbody>
</table>

Off-Site Improvements
- No off-site improvements are recommended, other than a ONE WAY sign installed in the Cavitt Drive median, directly across from the outbound lane at the North driveway.

ENVIRONMENTAL EVALUATION

Questions a, b, d: Less-than-Significant Impact with Mitigation. Implementation of the proposed Quick Quack Car Wash project would result in a minor increase in traffic, compared to Cumulative Year No Project Conditions, due to both employee vehicle trips and client trips. Under Cumulative No Project conditions, Iron Point Road/Cavitt Drive will operate at LOS C. This conforms to the City of Folsom’s General Plan policy regarding intersection LOS.

Under average conditions, with addition of the traffic associated with the proposed project (including both the car wash and the quick lubrication shop), a slight delay increase is projected at Iron Point Road/Cavitt Drive, but it will continue to operate at an acceptable LOS C. At the project’s North Driveway, the worst-case movement will operate at LOS B. At the South Driveway, LOS C is projected. These results conform to the City of Folsom General Plan policy calling for operation at LOS C or better.

Even under “peak” conditions, all of the study locations will operate at acceptable levels of service. Iron Point Road/Cavitt Drive will continue to operate at LOS C. Both driveways will also operate at LOS C.

The South Driveway is roughly 175 feet south of the North Driveway. This driveway would be served by the two-way center left-turn lane described above. The analysis has revealed no factors that would suggest a need for turn restrictions of any sort at this project driveway. The level of service analysis presented above indicates that a full access driveway would operate satisfactorily, with drivers experiencing low delay values. Further, field investigations revealed that adequate sight distance exists for drivers entering and exiting the site, and no safety problems are foreseen.
Consequently, no turn restrictions are recommended at the South Driveway; all turning movements should be allowed.

The North Driveway is located at the southerly end of the northbound left-turn lanes serving the Iron Point Road/Cavitt Drive intersection, approximately 280 feet from the near edge of the crosswalk on the south leg of that intersection. Those left-turn lanes are separated from southbound traffic by a narrow raised median. Immediately south of the raised median is a short section (approximately 100 feet) of painted barrier median (i.e., "double-double" yellow lines), which vehicles are prohibited from crossing. That painted barrier then transitions into a two-way center left-turn lane.

In recognition of the existing raised median and painted barrier median, and to avoid conflicts with left-turning vehicles queued on the northbound Iron Point Road/Cavitt Drive approach, it is recommended that left turns be prohibited at the North Driveway; that driveway should be restricted to right-turns only, both inbound and outbound. Implementation of mitigation measure TRF-1 would ensure that this restriction would be implemented. With completion of this mitigation measure, all potential traffic impacts would be reduced below a level of significance, and no additional mitigation would be necessary.

**Mitigation Measure TRF-1**

Prohibit left turns into and out of the proposed North Driveway. Prior to the initiation of operations, the applicant shall install the following signage at the North Driveway:

- Traffic exiting the project driveway should be controlled by a STOP sign and corresponding pavement markings (i.e., stop bars and legends), as the driveway intersection will not meet the “Peak Hour” warrant for consideration of installation of a traffic signal.
- A RIGHT TURN ONLY sign should be posted below the STOP sign and a RIGHT TURN ONLY pavement arrow should be painted on the driveway approach to its intersection with Cavitt Drive.
- A ONE WAY sign should be installed in the Cavitt Drive median, directly across from the outbound lane at the driveway.

**Question c: No Impact.** No private or public airports are located within the City of Folsom. The nearest public airfield is Mather Airport, located approximately 10 miles from the center of the city. No private airports are located within 10 miles of the city. Therefore, the proposed project would not result in the modification of any air travel route. There would be no impact, and no mitigation would be required.

**Question e: Less-than-Significant Impact.**

As set forth in the City’s Multi-Hazard Emergency Management Plan, the City of Folsom maintains pre-designated emergency evacuation routes along major streets and thoroughfares (Sacramento County 2004). Both Iron Point Road and Cavitt Drive are fully improved in the vicinity of the proposed project. No aspect of the proposed project would modify these streets or preclude their continued use as an emergency evacuation route. The proposed project would not result in an increased concentration of large numbers of persons in any at-risk location, and the proposed project would not have a significant impact on any emergency plans. Therefore, no significant
impact would occur, and no mitigation would be necessary.

Each of the access points to the proposed project will be designed to accommodate emergency vehicles, including fire vehicles, pending a review by the Folsom Fire Department.

**Question f: Less-than-Significant Impact.**

**Pedestrians**

Sidewalks exist on both sides of Iron Point Road and Cavitt Drive in the project vicinity. Potential pedestrian safety issues that might arise in connection with the proposed residential project were also considered. Existing sidewalks, intersection amenities (such as ADA-compliant wheelchair ramps, walk/don’t walk signal heads, push buttons, and appropriate signage) are sufficient to provide safe access for any project residents walking near the project site.

**Bicycles**

Class II bicycle lanes in each direction are currently provided on both Iron Point Road and Cavitt Drive. The proposed project would not modify these existing bicycle lanes.

**Transit**

No transit facilities are located in the project vicinity. The nearest transit stop is on Clarksville Road, north of its intersection with Iron Point Road. This transit stop would be unaffected by construction and operation of the car wash project.

**Conclusion**

Because the project would not result in the adverse modification of any existing pedestrian, bicycle, or transit facility, and would not result in any interference with such facilities, this would be a less-than-significant impact, and no mitigation is required.
XVII. TRIBAL CULTURAL RESOURCES

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Pursuant to the procedures set forth in Appendix G of the State CEQA Guidelines, the City of Folsom has notified Native American tribes with traditional and cultural affiliation to the City of the Quick Quack Car Wash project. The City has additionally offered to conduct consultation with any requesting tribe. To provide additional information to interested Native Americans, the City has provided the United Auburn Indian Community with the Cultural Resource Studies that were completed for the Broadstone Unit 3 Specific Plan EIR and for the East Area Facilities Plan EIR. In addition, City staff has informed the Community that the project site has previously been graded and filled and provided photographs to that effect. The City subsequently made an offer to consult to the United Auburn Indian Community on November 2, 2016. The City has received no response from the Community as of the date of preparation of this Initial Study.

**Questions ai and aii: Less-than-Significant Impact.** Previous Cultural Resource studies of the project area have been completed for the Broadstone Unit 3 Specific Plan EIR and for the East Area Facilities Plan EIR. Additionally, the City prepared a cultural resource study for a project adjacent to the Quick Quack Car Wash project site (Folsom 2016m). This recent study found that no pre-contact resources had been recorded within a 0.50-mile radius of the (adjacent) project nor was the project area in a location that would have typically been occupied by Native Americans. The analysis concluded that the project area did not appear to be sensitive for Native American resources. In addition, no pre-contact resources were discovered during the course of the field survey within the project area. (Folsom 2016m).

Based on this information, the City has identified no tribal cultural resources in the Quick Quack Car Wash project area, or in adjacent areas that would be affected by the project. This would be a less-than-significant impact, and no mitigation would be necessary.

---

5 This Initial Study is tiered from both of the cited EIRs. Please refer to Section 4, Previous Environmental Analysis, of this Initial Study for more information regarding tiering.
XVIII. UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
   
<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
   
<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
   
<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

d) Have sufficient water supplies available to serve the project from existing water entitlements and resources, or are new or expanded entitlements needed?
   
<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?
   
<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?
   
<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

g) Comply with federal, state, and local statutes and regulations related to solid waste?
   
<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SETTING

The project site is fully served by urban levels of all utilities and services. Public utilities provided within the City include domestic water, wastewater treatment, storm water drainage, and solid waste disposal. Private utilities provide electric, gas, telephone, and cable television services. According to the City of Folsom and major utility providers, all utility and service systems are currently adequate to serve the project. (Folsom 2016g, Folsom 2014g, SMUD 2016, SRCSD 2016)

The City of Folsom provides municipal water services to the area within the City limits located south of the American River, where the proposed project is located. Wastewater transmission and treatment facilities are provided by the City of Folsom and the Sacramento Regional County Sanitation District (Folsom 2016g, Folsom 2014g, SRCSD 2016).

The City of Folsom employs a design process that includes coordination with potentially affected utilities as part of project development. Identifying and accommodating existing utilities is part of the design process, and utilities are considered when finalizing public project plans. The City of Folsom coordinates with the appropriate utility companies to plan and implement any needed accommodation of existing utilities, including water, sewer, telephone, gas, electricity, and cable television lines.
PROPOSED PROJECT

The project applicant would be required to complete utility infrastructure and storm drainage system improvements as part of the proposed project. Stormwater drainage improvements would be installed and connected to the City of Folsom stormwater drainage system. Stormwater from developed areas of the site would be collected and transmitted to the unnamed drainage channel south of the project site using an existing outfall. No stormwater treatment facilities are currently proposed. The City of Folsom would require that stormwater quality control measures be designed and constructed in accordance with the latest edition of the Stormwater Quality Design Manual for the Sacramento and South Placer Regions. (Folsom 2016g)

Sanitary sewer lines would connect to an existing 8-inch sewer line operated by the City of Folsom in Caviitt Drive to the west of the site. Water mains for both domestic and fire fighting would connect with a 16-inch City main on Caviitt Drive. According to the applicant, the majority of water used in car washing is reclaimed; it is stored in on-site storage tanks, and recycled for subsequent washes. Water consumed and discharged to the City’s wastewater transmission system (consumptive water use) would average 12 to 15 gallons per vehicle. Consumptive water use would range from 3,900 gallons per day to 4,500 gallons per day on Fridays and Saturdays when the facility would be busier. (Quick Quack 2016)

All utility connections would occur within the project site or adjacent to the project site at existing utilities in Caviitt Drive. (Quick Quack 2016)

Solid waste generated by the proposed project would be stored onsite in a trash bin located in at the eastern edge of the project’s parking lot. (Quick Quack 2016)

ENVIRONMENTAL EVALUATION

Questions a, b, c: Less-than-Significant Impact. The City of Folsom is responsible for managing and maintaining its wastewater collection system, including 267 miles of pipeline and nine lift stations. This system ultimately discharges into the SRCSD interceptor sewer system. Wastewater is then treated at the Sacramento Regional Wastewater Treatment Plant, located in south Sacramento (Folsom 2014f, SRCSD 2016).

In compliance with the 2006 State Water Resources Control Board, General Waste Discharge Requirements for Sanitary Sewer Systems, the City of Folsom adopted a Sewer System Management Plan on July 28, 2009. The plan outlines how the municipality operates and maintains the collection system, and the reporting of all Sanitary Sewer Overflows (SSO) to the SWRCB’s online SSO database. (Folsom 2014g)

According to the applicant, the majority of water used in car washing is reclaimed; it is stored in on-site storage tanks, and recycled for subsequent washes. Water consumed and discharged to the City’s wastewater transmission system (consumptive water use) would average 12 to 15 gallons per vehicle. Consumptive water use would range from 3,900 gallons per day to 4,500 gallons per day on Fridays and Saturdays when the facility would be busier. (Quick Quack 2016). The Folsom Environmental and Water Resources Department has reviewed the potential wastewater flows from the project, and has determined that transmission and treatment facilities are adequate to serve the Quick Quack Car Wash (Folsom 2014g).
The proposed project would not require or result in the construction of new wastewater treatment facilities, or the expansion of existing treatment facilities. The City of Folsom has sufficient capacity to accommodate the additional demands for wastewater collection that could result from implementation of the Quick Quack Car Wash project, and the City is in compliance with statutes and regulations related to wastewater collection and treatment. This would be a less-than-significant impact, and no mitigation would be necessary.

**Question c: Less-than-Significant Impact.** As discussed in Section IX, *Hydrology and Water Quality*, of this Initial Study, the project would be served by the City’s existing stormwater collection facilities. Much of the project site would be converted to impervious surfaces due to the construction of the proposed car wash, driveways and parking areas. As of the date of preparation of this Initial Study, the applicant has not identified any stormwater treatment facilities (Quick Quack 2016).

Folsom’s Public Works Department handles all storm water management issues for the City, including design and construction of the storm drain system, operation and maintenance, and urban runoff pollution prevention. Because the proposed project doesn’t currently include stormwater treatment, the Public Works Department has required that the project applicant prepare and submit a Drainage Study that meets the requirements of the City’s Storm Drain Design Standards and the Folsom Municipal Code Chapter 14.32 Flood Damage Protection.

Other than onsite facilities, no expansion of existing facilities or construction of new facilities would be required. With design and implementation of the required Drainage Study, stormwater would be treated and managed to meet City, State, and Federal Standards. The project would result in a less-than-significant impact, and no mitigation would be necessary.

**Questions b, d: Less-than-Significant Impact.** The Quick Quack Car Wash project would use potable water for car washing, domestic purposes, and irrigation. Water consumed and discharged to the City’s wastewater transmission system (consumptive water use) would average 12 to 15 gallons per vehicle. Consumptive water use would range from 3,900 gallons per day to 4,500 gallons per day on Fridays and Saturdays when the facility would be busier. The project’s landscaping plan proposes to implement a low to medium water use landscape. As set forth in the applicant’s Landscape Plan, trees, shrub, and groundcovers would all be low to medium water use, and suitable for local climate conditions. No natural turf would be planted. The drip irrigation system would use a smart controller to account for local weather conditions (e.g., recent rains, high temperatures, etc.). According to the applicant, the irrigation system would comply with the City’s Model Water Efficient Landscape Ordinance (Quick Quack 2016).

**Urban Water Management Plan**

California Water Code Section 10620(a) requires an urban water supplier to prepare and adopt a UWMP consistent with section CWC Section 10640. All urban water suppliers, either publicly or privately owned, serving municipal water to 3,000 customers or supplying more than 3,000 acre-feet annually are required to prepare an UWMP. Under these standards, the City of Folsom is required to prepare a UWMP. The UWMP is required of an urban water supplier by the California Department of Water Resources (DWR) to be eligible for DWR state grants and loans, as well as drought assistance. (Folsom 2016g)

The City prepared a 2015 UWMP, and, after review by the State, adopted the document on June 14, 2016. Consistent with the requirements of CWC Section 10610, the City’s UWMP contains an
assessment of 2015 and projected supplies through 2040, an evaluation of the reliability of these supplies given a range of hydrologic conditions, an assessment of demands by customer type, and an explanation of water management strategies designed to integrate supply and demand conditions. The purpose of the 2015 UWMP is to document the City’s water supply planning strategies for their existing water service jurisdiction. (Folsom 2016g)

As documented in the 2015 UWMP, the City of Folsom has sufficient water supplies to accommodate existing and planned uses within the City through the year 2040, including amounts necessary in normal years, a single dry year, and multiple dry years. (Folsom 2016g) In reaching this conclusion, the City based water demand forecasts on existing water use within the City plus anticipated water demand from new development consistent with the City’s General Plan. As noted in Section X, Land Use, the proposed Quick Quack project is consistent with the City’s General Plan. Because the Car Wash is a consistent use, the water demand from the Car Wash has been accounted in the 2015 UWMP. Since the UWMP concludes that the City would have sufficient water supplies to meet all demands, implementation of the Car Wash project would not require new or modified sources of water.

**Water Conservation**

Pursuant to California Water Code Section 10608.26, retail water suppliers are required to develop an implementation plan for compliance with the Water Conservation Bill of 2009. As identified in the 2015 UWMP, these efforts included a combination of State requirements and local initiatives, which include:

- California Model Water Efficient Landscape Ordinance (The City must require that private project applicants submit landscape plans that meet the requirements of the Model Water Efficient Landscape Ordinance for City review and approval)
- Metering and Volumetric Pricing (requires that the City install water meters Citywide and charge for water based on the amount used)
- California Urban Water Conservation Council (The City is signatory to this body and implements several of the water conserving best management practices identified by the CUWCC)
- California Green Building Standards Code (The City has adopted this Code, which requires residential water efficiency and conservation measures in new buildings to reduce potable water use in the building over a baseline usage)

**Environmental Conclusion**

Based on the information contained within the 2015 UWMP, the City of Folsom has sufficient water supplies to serve land uses within the Folsom Water Service Area developed consistent with the City of Folsom General Plan through the year 2040. This would be a less than significant impact, and no mitigation would be necessary. As noted above, the project would recycle much of the water used in the wash process, and the project has been designed to feature low water use landscaping. Because the City has sufficient water supplies available to serve existing and future demands, including those of the project, and the Car Wash would use water in an efficient manner, this would be a less-than-significant impact. No mitigation would be necessary.
Questions f, g: Less-than-Significant Impact. The City of Folsom Solid Waste Division provides solid waste, recycling, and hazardous materials collection services to its residential and business communities. In order to meet the State-mandated 50 percent landfill diversion requirements stipulated under AB 939, the City has instituted several community-based programs. The City offers a door-to-door collection program for household hazardous and electronic waste, curbside recycling, and a neighborhood clean-up program to meet the diversion targets.

After solid waste is sorted and processed for recycling, the remaining solid waste is taken to the Kiefer Landfill, the primary municipal solid waste disposal facility in Sacramento County. The landfill facility is situated on 1,084 acres and currently has 250 acres available for disposal needs, including sufficient capacity to accommodate the solid waste disposal needs of the City of Folsom through the year 2064 (Sacramento County 2015).

Both project construction and operation of the proposed project would generate solid waste. Construction of the car wash would involve site preparation activities that would generate solid waste (i.e., building material debris, cardboard, insulation, asphalt, concrete). Once constructed, operation of the car wash would also generate solid waste. Because the City of Folsom complies with applicable federal, state, and local requirements regarding solid waste removal and diversion targets, and the landfill serving the project area has sufficient capacity to accommodate solid waste needs, no modification or expansion of solid waste facilities or operations would be necessary. Impacts to solid waste disposal would be less than significant, and no mitigation would be necessary.
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Potentially Significant Volume Mitigated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

   

   X


b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

   

   X


c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

   

   X


**Question a: Less-than-Significant Impact with Mitigation.** As discussed above, the project has the potential to adversely affect visual quality, air quality, biological resources, cultural resources, hazards and hazardous materials, noise, and traffic and circulation. See Sections I - Aesthetics, III - Air Quality, IV - Biological Resources, V - Cultural Resources, VIII, Hazards and Hazardous Materials, XII - Noise, XVI, and Traffic and Transportation, for further discussion of the proposed project’s potential impacts on these environmental issue areas. With the implementation of the mitigation measures identified within those issue areas, and compliance with City, State, and Federal programs and requirements identified in this report, impacts would be reduced to a less-than-significant level. No significant or potentially significant impacts would remain.

**Question b: Less-than-Significant Impact.** The proposed project would accommodate long-term City of Folsom environmental goals to provide community-serving commercial uses within the City, and to infill the proposed project’s area of the City consistent with goals of the City’s General Plan. While the project would indirectly contribute to cumulative impacts associated with increased urban development in the city and region, these impacts have previously been evaluated by the City and considered in development of the City’s General Plan as set forth in this Initial Study. See Section 4 of this Initial Study for a discussion of the cumulative impacts of urban development within the City.

**Question c: Less-than-Significant Impact with Mitigation.** As discussed above, the project has the potential for impacts related to visual quality, air quality, biological resources, cultural resources, hazards and hazardous materials, noise, and traffic and transportation. With the implementation of the City, State, and Federal programs and regulations, and implementation of the mitigation measures identified in this report, potential impacts would be reduced to less-than-significant levels. No significant or potentially significant impacts would remain. Mitigation measures are as follows:
Mitigation Measure AES-1:

Prior to the issuance of a building permit, the applicant shall submit a lighting plan to the City of Folsom for review and approval. The plan shall demonstrate compliance with the City’s lighting requirements, including the limitation of light trespass outside of the project boundaries, the shielding of all light fixtures to ensure that there would be no direct shine onto adjacent roadways or surrounding properties, and the provision of timing devices to turn-off lighting during daytime hours. Upon approval by the City, the applicant shall implement the lighting plan.

Mitigation Measure AIR-1:

To reduce short-term construction emissions, the project applicant for the proposed project, as well as all successors in interest, shall implement, or require its contractors to implement, SMAQMD’s list of Basic Construction Emission Control Practices. In addition to SMAQMD-recommended measures, construction operations shall comply with all applicable SMAQMD rules and regulations.

Basic Construction Emission Control Practices

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer’s specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Mitigation Measure BIO-1a:

Prior to the initiation of construction, the project applicant or any successor in interest shall prepare a memo for submittal to USACE describing the project history under the original Broadstone Unit 3 permits. The memo shall describe the previous permitting process, and current site conditions, including the presence of potential Waters of the U.S. The memo will highlight that all the features presently found on site are either constructed or incidental due to previous construction activities. In addition, the memo shall outline the mitigation that has already occurred for the original project impacts, and provide information to
USACE to allow them to determine whether a new Clean Water Act Section 404 permit is required for the proposed project. If the USACE determines that protected Waters of the U.S. are present on the project site whose fill or degradation has not previously been permitted, the applicant shall implement Mitigation Measure BIO-1b. If the USACE determines that no Waters of the U.S. presently exist on the project site, or that Waters do exist but that the loss of these Waters has been fully mitigated by past permit requirements, the applicant shall implement Mitigation Measure BIO-1c.

**Mitigation Measure BIO-1b:**

If the USACE determines that a permit is required, the applicant shall obtain the proper permit type as determined through consultation with USACE. The applicant shall conduct a formal wetland delineation of all Waters of the U.S. on the project, and shall submit the delineation to the USACE for verification. The applicant or any successor in interest shall abide by all requirements contained in the Section 404 permit to ensure that there will not be a net loss of wetland function or values.

In addition, the applicant shall submit an application for Water Quality Certification to the CVRWQCB pursuant to Section 401 of the Clean Water Act. The applicant or any successor in interest shall abide by all requirements contained in the Section 401 Certification issued by the CVRWQCB.

**Mitigation Measure BIO-1c:**

If the USACE determines that a Section 404 permit is not required, the project applicant or any successor in interest shall prepare a memo similar to the one prepared under Mitigation Measure BIO-2a. This memo shall be submitted to the Central Valley Regional Water Quality Control Board for review and concurrence.

**Mitigation Measure CUL-1:**

If any archaeological, cultural, historical resources, artifacts, or other features are discovered during the course of construction anywhere on the project site, work shall be suspended in that location until a qualified professional archaeologist assesses the significance of the discovery and provides consultation with staff, the Folsom Historical Society, and the Heritage Preservation League. Appropriate mitigation, as recommended by the archaeologist, shall be implemented. If agreement cannot be reached, the Planning Commission shall determine the appropriate implementation measure.

**Mitigation Measure CUL-2:**

In the event human remains are discovered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to Public Resources Code 5097.98. If the coroner determines that no investigation of the cause of death is required and if the remains are of Native American Origin, the coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendent. The descendent will then recommend to the landowner or landowner’s representative appropriate disposition of the remains and any grave goods.
Mitigation Measure HAZ-1:

A site investigation shall be performed to determine whether and where NOA is present in the soil and rock on the project site. The site investigation shall include the collection of soil and rock samples by a qualified geologist. If the site investigation determines that NOA is present on the project site, the project applicant shall prepare an Asbestos Dust Control Plan for approval by SMAQMD as required in Section 93105 of the California Health and Safety Code, “Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations.” The Asbestos Dust Control Plan shall specify measures, including but not limited to those set forth in Appendix B of this Initial Study, such as periodic watering to reduce airborne dust, and ceasing construction during high winds that shall be taken to ensure that no visible dust crosses the property line. Measures in the Asbestos Dust Control Plan also may include but shall not be limited to dust control measures required by Mitigation Measure AIR-1. The project applicant shall submit the plan to the Folsom Community Development Department for review, and SMAQMD for review and approval before any grading or construction may occur. SMAQMD approval of the plan must be received before any asbestos-containing rock or soils can be disturbed. Upon approval of the Asbestos Dust Control Plan by SMAQMD, the applicant shall ensure that construction contractors implement the terms of the plan throughout the construction period.

Mitigation Measure NOI-1:

Due to the proximity of sensitive receptors to the project site, the project applicant or any successor in interest shall include the following terms in all construction contracts prepared for project-related construction, and shall provide evidence of the inclusion of these terms to the City of Folsom:

1. Construction Hours/Scheduling: The following are required to limit construction activities to the portion of the day when occupancy of the adjacent sensitive receptors are at the lowest:
   a. Construction activities for all phases of construction, including servicing of construction equipment shall only be permitted during the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and between 9:00 a.m. to 5:00 p.m. on Saturdays. Construction is prohibited on Sundays and on all holidays.
   b. Delivery of materials or equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above.

2. Construction Equipment Mufflers and Maintenance: All construction equipment powered by internal combustion engines shall be properly muffled and maintained.

3. Idling Prohibitions: All equipment and vehicles shall be turned off when not in use. Unnecessary idling of internal combustion engines is prohibited.

4. Equipment Location and Shielding: All stationary noise-generating construction equipment, such as air compressors, shall be located as far as practical from the adjacent homes. Acoustically shield such equipment when it must be located near adjacent residences.

5. Quiet Equipment Selection: Select quiet equipment, particularly air compressors, whenever possible. Motorized equipment shall be outfitted with proper mufflers in good working order.
6. Staging and Equipment Storage: The equipment storage location shall be sited as far as possible from nearby sensitive receptors.

**Mitigation Measure NOI-2:**

Limit car wash operation to daytime hours, 7 a.m. to 10 p.m. as defined by Chapter 8.42 of the Folsom Municipal Code.

**Mitigation Measure NOI-3:**

Prior to the initiation of commercial operations, the car wash shall be test-operated and noise levels measured by an acoustical analyst to determine if operational blower and vacuum are as predicted. If so, no further action would be necessary. If noise levels are higher than analyzed, the measured noise levels will be compared to the levels permitted by Chapter 8.42 of the Folsom Municipal Code at the sensitive receptors used by Bollard in their analysis. If the higher noise levels meet Chapter 8.42 requirements, no further action would be necessary. If the higher noise levels result in exceedances of Chapter 8.42 standards beyond those determined by Bollard, additional mitigation will be required by the City to ensure that car wash operations meet Folsom Municipal Code noise standards.

**Mitigation Measure TRF-1:**

Prohibit left turns into and out of the proposed North Driveway. Prior to the initiation of operations, the applicant shall install the following signage at the North Driveway:

- Traffic exiting the project driveway should be controlled by a STOP sign and corresponding pavement markings (i.e., stop bars and legends), as the driveway intersection will not meet the “Peak Hour” warrant for consideration of installation of a traffic signal.
- A RIGHT TURN ONLY sign should be posted below the STOP sign and a RIGHT TURN ONLY pavement arrow should be painted on the driveway approach to its intersection with Cavitt Drive.
- A ONE WAY sign should be installed in the Cavitt Drive median, directly across from the outbound lane at the driveway.

Because of site conditions, existing City regulation, regulation of potential environmental impacts by other agencies, and the above-listed mitigation measures, the proposed Quick Quack Car Wash project would not have the potential to cause substantial adverse effects on human beings as demonstrated in the detailed evaluation contained in this Initial Study.
6. **Preparers of the Initial Study/Mitigated Negative Declaration**

**Lead Agency**

City of Folsom  
Community Development Department  
50 Natoma Street  
Folsom, CA 95630

Steven Banks, Senior Planner  
(916) 355-7385

**Environmental Consultant**

Environmental Planning Partners, Inc.  
P. O. Box 627  
7281 Lone Pine Drive, Suite D-203  
Sloughhouse, California 95683  
(916) 354-1620

Robert D. Klousner – President, Principal in Charge  
Craig Stevens – Principal Planner  
Raadha Jacobstein – Project Planner  
Mary Wilson – Planner  
Dale Nutley – Graphic Artist

Paul Bollard – Bollard Acoustical Consultants  
Neal Liddicoat – MRO Engineers  
Miriam Green – Miriam Green Associates
7. REFERENCES


ARB. See California Air Resources Board.


California, State of. Department of Conservation; Division of Mines and Geology (DMG); 1981. Regional Geologic Map Series, Sacramento Quadrangle, Map 1A (Geology).


_____, 2016b. FMC Chapter 14.33, Hillside Development Standards.

_____, 2016c. FMC Chapter 12.16, Tree Preservation Ordinance.

_____, 2016d. City of Folsom Planning Services, Historic District, Cultural Resources Inventory, accessed on October 13, 2016 by Robert D. Klousner of Planning Partners at: <https://www.folsom.ca.us/city_hall/depts/community/planning/historic/cultural_invent ory.asp>

_____, 2016e. FMC Chapter 14.29, Grading Ordinance.

_____, 2016f. City of Folsom Parks & Recreation Department. Parks & Schools Location Map.

2016h. FMC Chapter 8.42, Noise Ordinance.


2014c. General Plan Update Background Report Public Review Draft, Chapter 6, Open Space and Natural Resources


2014f. General Plan Update Background Report Public Review Draft, Chapter 8, Public Facilities and Services


---

Quick Quack Car Wash

Initial Study

City of Folsom

November 2016


Google Earth Pro, 2016. Map of land uses at various distances from the project site. Created on October 10, 2016.


NASA. See United States, National Aeronautics and Space Administration.
Planning Partners, 2016. Site visit conducted by Robert Klousner on July 26, 2016.

Quick Quack, 2016. Application materials from Elliott Homes and Efrain Corona submitted to the City of Folsom, April through October 2016.


______, 2015d. Plan Sheets A4.01 (October 28, 2015), Building Sections; A4.02, Typical Building Section (October 28, 2015); C-3, Preliminary Grading Plan (October 22, 2015); and C-5, Preliminary Sections (October 22, 2015); prepared by GMPA Architects and TSD Engineering, Inc.


______, 2011. 2030 Sacramento County General Plan, Open Space Element, Open Space Resources Background Report. November 9, 2011. General Plan Safety Element, Background to the 1993 General Plan as Amended, Seismic and Geologic Hazards, Technical Discussion, Figure II-10, Relative Amounts of Landslides. Prepared by the Sacramento Community Planning and Development Department.


Sacramento Metropolitan Air Quality Management District (SMAQMD), 2015. Asbestos Airborne Toxic Control Measure For Construction, Grading, Quarrying And Surface Mining Operations. Asbestos Dust Mitigation Plan Application.


8. APPLICANT AGREEMENT TO MITIGATION MEASURES

By the signature below, the project applicant agrees to implement and incorporate the Mitigation Measures outlined above as part of the Quick Quack Car Wash project.

Signature

Date

Printed Name

Title

Quick Quack Car Wash
Initial Study

City of Folsom
November 2016
MITIGATION MONITORING
AND REPORTING PROGRAM
FOR THE
QUICK QUACK CAR WASH PROJECT

CITY OF FOLSOM

COMMUNITY DEVELOPMENT DEPARTMENT

Prepared with the Technical Assistance of:
Environmental Planning Partners, Inc.

Environmental Planning Partners, Inc.
3110 Gold Canal Drive, Suite D
Rancho Cordova, CA 95670

NOVEMBER 2016
1 INTRODUCTION

1.1 PURPOSE OF THE MITIGATION MONITORING PROGRAM

Section 21081.6 of the California Public Resources Code requires that:

A public agency shall adopt a reporting or monitoring program for the changes to the
project which it has adopted or made a condition of project approval in order to mitigate or
avoid significant effects on the environment. This mitigation monitoring program applies to
mitigation measures adopted as part of EIRs or negative declarations.

The purpose of the Mitigation Monitoring and Reporting Program is to ensure that the mitigation
measures included in the Initial Study/Mitigated Negative Declaration (IS/MND) for the Quick
Quack Car Wash project are implemented.

1.2 DESCRIPTION OF PROJECT

The project site is located on the southeast corner of the intersection of Iron Point Road and Cavitt
Drive in the City of Folsom. The project site consists of a roughly triangular plot of land measuring
2.69 acres.

The project applicant proposes to construct and operate a 3,599 square foot automated car wash. The
project would be completed in a single phase. An approximate 13,500 square foot area of the project
site would be left vacant in anticipation of a future auto-related use. Development of this area for a
future use would require an application for a second Planned Development permit for the site, and
additional environmental review.

The project site is designated as Community Commercial (CC) in the City of Folsom General Plan
and Commercial - Central Business Planned Development (C-2 PD) within the Broadstone Unit 3
Specific Plan (SP 95-1) in the Zoning Code. The requested Planned Development Permit allows the
City of Folsom to review the site plan and associated project site details to ensure that the project
meets standards and requirements beneficial to the City and its residents, as defined in Section
17.38.100 of the Zoning Code.

1.3 ORGANIZATION AND FORMAT

This program describes the requirements and procedures to be followed to ensure that all mitigation
measures adopted as part of this project will be implemented as described in the IS/MND, and
adopted by the City of Folsom Planning Commission.
This Mitigation Monitoring and Reporting Program contains the following chapters:

- **Chapter 2 - Inventory of Mitigation Measures.** This section contains a list of all mitigation measures included in the IS/MND as adopted by the City of Folsom Planning Commission in numerical order.
- **Chapter 3 - Implementation Schedule and Monitoring Checklist.** This section contains a summary description of the required mitigation measures in checklist format. The timing of implementation of mitigation measures is indicated, in addition to implementation and monitoring responsibility.

### 1.4 IMPLEMENTATION OF THE MITIGATION MONITORING AND REPORTING PROGRAM

The City of Folsom Community Development Department and/or Community Development Director shall assign staff to manage the Quick Quack Car Wash project Mitigation Monitoring and Reporting Program under the Department’s responsibility.

Responsible staff shall have overall responsibility for ensuring implementation of measures under their jurisdiction and verification of such measures. Responsible staff may delegate duties and responsibilities to other Department staff, state regulatory agencies, consultants, the project sponsor, or other authorities as necessary and appropriate.

### 1.5 IMPLEMENTATION SCHEDULE AND MONITORING CHECKLIST

Chapter 3 contains a mitigation measure implementation schedule and monitoring checklist. Responsible Community Development Department staff may use the checklist as a summary of the measures to be implemented and the entities responsible for mitigation implementation and monitoring and to check off mitigation implementation as it is completed.

The monitoring checklist should be maintained for all mitigation measures by the entity responsible for monitoring the mitigation (e.g., Community Development Department, delegated authority, hired consultant). The monitoring checklist should be prepared and reviewed periodically, as directed by responsible staff. Copies of the monitoring checklist should be submitted to the responsible staff and filed in the project file available for public review.

Responsible staff should ensure that the monitoring checklist is filed on a timely basis and, when identified, that mitigation monitoring plan violations are reported to the Community Development Director. The Director and responsible staff should initiate any appropriate action necessary to correct the deficiency, including, but not necessarily limited to, holding a meeting with the applicant or requesting legal, City, or regulatory agency action.
Mitigation Measure AES-1:

Prior to the issuance of a building permit, the applicant shall submit a lighting plan to the City of Folsom for review and approval. The plan shall demonstrate compliance with the City's lighting requirements, including the limitation of light trespass outside of the project boundaries, the shielding of all light fixtures to ensure that there would be no direct shine onto adjacent roadways or surrounding properties, and the provision of timing devices to turn-off lighting during daytime hours. Upon approval by the City, the applicant shall implement the lighting plan.

Mitigation Measure AIR-1:

To reduce short-term construction emissions, the project applicant for the proposed project, as well as all successors in interest, shall implement, or require its contractors to implement, SMAQMD's list of Basic Construction Emission Control Practices. In addition to SMAQMD-recommended measures, construction operations shall comply with all applicable SMAQMD rules and regulations.

*Basic Construction Emission Control Practices*

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Mitigation Measure BIO-1a:

Prior to the initiation of construction, the project applicant or any successor in interest shall prepare a memo for submittal to USACE describing the project history under the original Broadstone Unit 3 permits. The memo shall describe the previous permitting process, and current site conditions, including the presence of potential Waters of the U.S. The memo will highlight that all the features presently found on site are either constructed or incidental due to previous construction activities. In addition, the memo shall outline the mitigation
that has already occurred for the original project impacts, and provide information to USACE to allow them to determine whether a new Clean Water Act Section 404 permit is required for the proposed project. If the USACE determines that protected Waters of the U.S. are present on the project site whose fill or degradation has not previously been permitted, the applicant shall implement Mitigation Measure BIO-1b. If the USACE determines that no Waters of the U.S. presently exist on the project site, or that Waters do exist but that the loss of these Waters has been fully mitigated by past permit requirements, the applicant shall implement Mitigation Measure BIO-1c.

**Mitigation Measure BIO-1b:**

If the USACE determines that a permit is required, the applicant shall obtain the proper permit type as determined through consultation with USACE. The applicant shall conduct a formal wetland delineation of all Waters of the U.S. on the project, and shall submit the delineation to the USACE for verification. The applicant or any successor in interest shall abide by all requirements contained in the Section 404 permit to ensure that there will not be a net loss of wetland function or values.

In addition, the applicant shall submit an application for Water Quality Certification to the CVRWQCB pursuant to Section 401 of the Clean Water Act. The applicant or any successor in interest shall abide by all requirements contained in the Section 401 Certification issued by the CVRWQCB.

**Mitigation Measure BIO-1c:**

If the USACE determines that a Section 404 permit is not required, the project applicant or any successor in interest shall prepare a memo similar to the one prepared under Mitigation Measure BIO-2a. This memo shall be submitted to the Central Valley Regional Water Quality Control Board for review and concurrence.

**Mitigation Measure CUL-1:**

If any archaeological, cultural, historical resources, artifacts, or other features are discovered during the course of construction anywhere on the project site, work shall be suspended in that location until a qualified professional archaeologist assesses the significance of the discovery and provides consultation with staff, the Folsom Historical Society, and the Heritage Preservation League. Appropriate mitigation, as recommended by the archaeologist, shall be implemented. If agreement cannot be reached, the Planning Commission shall determine the appropriate implementation measure.

**Mitigation Measure CUL-2:**

In the event human remains are discovered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to Public Resources Code 5097.98. If the coroner determines that no investigation of the cause of death is required and if the remains are of Native American Origin, the coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendent. The descendent will then recommend to the landowner or landowner’s representative appropriate disposition of the remains and any grave goods.
Mitigation Measure HAZ-1:

A site investigation shall be performed to determine whether and where NOA is present in the soil and rock on the project site. The site investigation shall include the collection of soil and rock samples by a qualified geologist. If the site investigation determines that NOA is present on the project site, the project applicant shall prepare an Asbestos Dust Control Plan for approval by SMAQMD as required in Section 93105 of the California Health and Safety Code, "Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations." The Asbestos Dust Control Plan shall specify measures, including but not limited to those set forth in Appendix B of this Initial Study, such as periodic watering to reduce airborne dust, and ceasing construction during high winds that shall be taken to ensure that no visible dust crosses the property line. Measures in the Asbestos Dust Control Plan also may include but shall not be limited to dust control measures required by Mitigation Measure AIR-1. The project applicant shall submit the plan to the Folsom Community Development Department for review, and SMAQMD for review and approval before any grading or construction may occur. SMAQMD approval of the plan must be received before any asbestos-containing rock or soils can be disturbed. Upon approval of the Asbestos Dust Control Plan by SMAQMD, the applicant shall ensure that construction contractors implement the terms of the plan throughout the construction period.

Mitigation Measure NOI-1:

Due to the proximity of sensitive receptors to the project site, the project applicant or any successor in interest shall include the following terms in all construction contracts prepared for project-related construction, and shall provide evidence of the inclusion of these terms to the City of Folsom:

1. Construction Hours/Scheduling: The following are required to limit construction activities to the portion of the day when occupancy of the adjacent sensitive receptors are at the lowest:
   a. Construction activities for all phases of construction, including servicing of construction equipment shall only be permitted during the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and between 9:00 a.m. to 5:00 p.m. on Saturdays. Construction is prohibited on Sundays and on all holidays.
   b. Delivery of materials or equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above.

2. Construction Equipment Mufflers and Maintenance: All construction equipment powered by internal combustion engines shall be properly muffled and maintained.

3. Idling Prohibitions: All equipment and vehicles shall be turned off when not in use. Unnecessary idling of internal combustion engines is prohibited.

4. Equipment Location and Shielding: All stationary noise-generating construction equipment, such as air compressors, shall be located as far as practical from the adjacent homes. Acoustically shield such equipment when it must be located near adjacent residences.

5. Quiet Equipment Selection: Select quiet equipment, particularly air compressors, whenever possible. Motorized equipment shall be outfitted with proper mufflers in good working order.
6. Staging and Equipment Storage: The equipment storage location shall be sited as far as possible from nearby sensitive receptors.

**Mitigation Measure NOI-2:**

Limit car wash operation to daytime hours, 7 a.m. to 10 p.m. as defined by Chapter 8.42 of the Folsom Municipal Code.

**Mitigation Measure NOI-3:**

Prior to the initiation of commercial operations, the car wash shall be test-operated and noise levels measured by an acoustical analyst to determine if operational blower and vacuum are as predicted. If so, no further action would be necessary. If noise levels are higher than analyzed, the measured noise levels will be compared to the levels permitted by Chapter 8.42 of the Folsom Municipal Code at the sensitive receptors used by Bollard in their analysis. If the higher noise levels meet Chapter 8.42 requirements, no further action would be necessary. If the higher noise levels result in exceedances of Chapter 8.42 standards beyond those determined by Bollard, additional mitigation will be required by the City to ensure that car wash operations meet Folsom Municipal Code noise standards.

**Mitigation Measure TRF-1:**

Prohibit left turns into and out of the proposed North Driveway. Prior to the initiation of operations, the applicant shall install the following signage at the North Driveway:

- Traffic exiting the project driveway should be controlled by a STOP sign and corresponding pavement markings (i.e., stop bars and legends), as the driveway intersection will not meet the “Peak Hour” warrant for consideration of installation of a traffic signal.
- A RIGHT TURN ONLY sign should be posted below the STOP sign and a RIGHT TURN ONLY pavement arrow should be painted on the driveway approach to its intersection with Cavitt Drive.
- A ONE WAY sign should be installed in the Cavitt Drive median, directly across from the outbound lane at the driveway.
3 IMPLEMENTATION SCHEDULE AND CHECKLIST

This section contains an abbreviated description of each mitigation measure presented in tabular, checklist format. A complete description of each measure is contained in the preceding Chapter 2, *Inventory of Mitigation Measures*, contained within this document.

The mitigation measures to be implemented by the project applicant(s) and successors in interest are separated into the following phases:

1. Prior to Issuance of a Grading Permit or Building Permit
2. Prior to Construction
3. During Construction
4. Prior to Initiation of Operations
5. During Project Operations.

The checklist is presented below. Some measures have components that are to be implemented during several project phases. These measures are noted in each category.
<table>
<thead>
<tr>
<th>Timing of Verification (To occur prior to the following actions)</th>
<th>Measure Complete? (check)</th>
<th>Mitigation Measures</th>
<th>Responsibility - Implementation</th>
<th>Responsibility - Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to Issuance of Grading or Building Permit, During Operations</td>
<td>Mitigation Measure AES-1: Submit a Lighting Plan for the City's approval that demonstrates compliance with the City's lighting requirements. Upon approval by the City, implement the lighting plan.</td>
<td>Project Applicant</td>
<td>Folsom CDD</td>
<td></td>
</tr>
<tr>
<td>During Construction</td>
<td>Mitigation Measure AIR-1: Implement measures to reduce short-term construction emissions as identified by the SMAQMD.</td>
<td>Project Applicant</td>
<td>Folsom CDD, SMAQMD</td>
<td></td>
</tr>
<tr>
<td>Prior to Issuance of Grading or Building Permit</td>
<td>Mitigation Measure BIO-1a: Submit a memo to the Corps that describes the project history under the original Broadstone Unit 3 permit; outlines the mitigation that has already occurred for the original project impacts, and provides information to allow the Corps to determine whether a new Clean Water Act Section 404 permit is required.</td>
<td>Project Applicant</td>
<td>Folsom CDD, Corps</td>
<td></td>
</tr>
<tr>
<td>Prior to Issuance of Grading or Building Permit, During Construction</td>
<td>Mitigation Measure BIO-1b: If the Corps determines that a permit is required, obtain the proper permit type, and conduct a formal wetland delineation of all Waters of the U.S. on the project site. Abide by all requirements of the permit to ensure that there will not be a net loss of wetland function or values. Apply for Water Quality Certification to the CVRWQCB, and abide by all requirements contained in the Section 401 Certification.</td>
<td>Project Applicant</td>
<td>Folsom CDD, Corps, CVRWQCB</td>
<td></td>
</tr>
<tr>
<td>Prior to Issuance of Grading or Building Permit, During Construction</td>
<td>Mitigation Measure BIO-1c: If a Section 404 permit is not required, prepare a memo similar to the memo prepared under Mitigation Measure BIO-1b for submittal to the Central Valley Regional Water Quality Control Board for review and concurrence.</td>
<td>Project Applicant</td>
<td>Folsom CDD, CVRWQCB</td>
<td></td>
</tr>
<tr>
<td>During Construction</td>
<td>Mitigation Measure CUL-1: If any archaeological, cultural, historical resources, artifacts, or other features are discovered, work shall be suspended until a qualified archaeologist assesses the discovery and provides consultation with appropriate agencies. Appropriate mitigation shall be implemented as advised.</td>
<td>Project Applicant</td>
<td>Folsom CDD</td>
<td></td>
</tr>
<tr>
<td>During Construction</td>
<td>Mitigation Measure CUL-2: In the event human remains are discovered, no further disturbance shall occur until the county coroner has made the necessary findings as to the origin and disposition of the remains, and notified the appropriate parties.</td>
<td>Project Applicant</td>
<td>Folsom CDD</td>
<td></td>
</tr>
<tr>
<td>Timing of Verification (To occur prior to the following actions)</td>
<td>Measure Complete? (check)</td>
<td>Mitigation Measures</td>
<td>Responsibility - Implementation</td>
<td>Responsibility - Monitoring</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>---------------------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Prior to Issuance of Grading or Building Permit, During Construction</td>
<td>Mitigation Measure HAZ-1: Perform a site investigation to determine the presence or absence of NOA in the soil and rock on the project site and the portion of the adjacent parcel to be filled. If NOA is present, prepare an Asbestos Dust Control Plan for approval by the Folsom CDD and SMAQMD prior to grading or construction. Construction contractors shall implement the terms of the plan throughout the construction period.</td>
<td>Project Applicant</td>
<td>Folsom CDD, SMAQMD</td>
<td></td>
</tr>
<tr>
<td>During Construction</td>
<td>Mitigation Measure NOI-1: Limit hours of construction to comply with the City's Noise standards; traffic and shroud construction equipment to minimize noise levels; idling of internal combustion engines shall be prohibited; select quiet equipment whenever possible; all noise generating equipment shall be stored and used as far as possible from nearby sensitive receptors.</td>
<td>Project Applicant</td>
<td>Folsom CDD</td>
<td></td>
</tr>
<tr>
<td>During Project Operations</td>
<td>Mitigation Measure NOI-2: Limit car wash operation to daytime hours.</td>
<td>Project Applicant</td>
<td>Folsom CDD</td>
<td></td>
</tr>
<tr>
<td>Prior to Initiation of Operations</td>
<td>Mitigation Measure NOI-3: Test-operate the car wash and measure noise levels to ensure that noise levels are as anticipated, and that they meet Folsom Noise Ordinance requirements. If not, additional mitigation will be required by the City.</td>
<td>Project Applicant</td>
<td>Folsom CDD</td>
<td></td>
</tr>
<tr>
<td>Prior to Initiation of Operations</td>
<td>Mitigation Measure TRF-1: Prohibit left turns into and out of the proposed North Driveway. Install signage to control traffic in the vicinity of the project.</td>
<td>Project Applicant</td>
<td>Folsom CDD</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX A

Biological Resources Technical Appendix
This page intentionally left blank.
BIOLOGICAL RESOURCES 
OF THE 
QUICK QUACK CAR WASH PROJECT SITE

November 2, 2016

BACKGROUND

Project Description

The proposed project consists of the construction of a 3,579-square-foot Quick Quack Car Wash on a 2.7-acre site located at the southeast corner of the intersection of Iron Point Road and Cavitt Drive in the City of Folsom, Sacramento County, California. In addition to the main car wash building, the proposed project includes a car wash tunnel, 13 vacuum stalls, 42 parking spaces, and a trash/recycling enclosure. Access to the project site will be provided by two new driveways located on Cavitt Drive. Additional site developments include underground utilities, pedestrian walkways, site lighting, and landscaping. A portion of the south side of the site will remain unimproved in anticipation of future development.

Location

The 2.7-acre project site is part of a larger undeveloped parcel that is bordered by Cavitt Drive on the west, Iron Point Road on the north, and Serpa Way on the east. To the south the project site is bordered by a riparian drainage, and the land beyond this drainage is developed by a Costco complex, including fuel pumps, landscaped areas, and a Green Acres Nursery. The project site can be found on the United States Geological Survey (USGS) Clarksville 7.5-minute topographic quadrangle at 38° 38.350’ North, 120° 6.652’ West.

Methodology

A record search of the California Natural Diversity Data Base (CNDDB) was conducted on October 28, 2016 (CNDDB 2016) to identify all documented occurrences of special-status plant and wildlife species within the Clarksville 7.5-minute topographic quadrangle. Miriam Green, M.S., and/or Heather Johnson, M.S., conducted four field surveys [on August 11, September 17, October 18, and October 30, 2016] to record vegetation and wildlife on-site.

RESULTS

Existing Conditions

The project site consists of an anthropogenic plateau created by grading during construction of Serpa Way and Cavitt Road in 2002-2003; both of these roads dead end into the Costco complex. The project plateau was created to form a ravine isolating a natural riparian drainage that bisects the undeveloped parcel and borders the project site on the south (Photo 1). Additional anthropogenic plateaus were created on the opposite side of the ravine that is now dominated by the Costco complex and Green Acres Nursery developments. The riparian drainage beyond the southern border of the project site supports
walnut (*Juglans* sp.), willow (*Salix* sp.), and cottonwood (*Populus fremontii*) trees with sections of freshwater emergent vegetation such as cattail (*Typha* sp.). Riparian habitat is a valuable resource that provides nesting, roosting, and foraging habitat for a variety of wildlife species though this relatively small feature does not constitute sufficient wetland habitat to support some of the special-status wildlife known from this region.

The project site does not support any trees; one shrub is present (coyote bush [*Baccharis pilularis]*)). Vegetation on the project site consists of non-native annual grasses and other weedy forbs (Photo 2). Dominant weedy species include Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), medusahead grass (*Elymus caput-medusae*), Italian ryegrass (*Lolium multiflorum*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*). Other species include vetch (*Vicia villosa*), cut-leaf geranium (*Geranium dissectum*), filaree (*Erodium botrys*), rose clover (*Trifolium hirtum*), yellow star-thistle (*Centaurea solstitialis*), dock (*Rumex* sp.), and prickly wild lettuce (*Lactuca serriola*). Just beyond the northern border of the project site are ornamental shrubs, such as rose (*Rosa* sp.) and a few native trees, such as interior live oak (*Quercus wislizenii*) scattered within the landscaped areas along the sidewalk beside Iron Point Road.

A 3-4 foot deep ditch runs along the entire border of the project site except for downslope of Iron Point Road. This ditch conveys overland surface runoff flows to a concrete drain at the southwest corner of the project site (Photo 3). Several inches of water were present in the ditch during the rainy season surveys; however, vegetation indicates the ditch is dry during most of the year. Vegetation in the interior of the ditch consists almost entirely of upland weeds with one deeper 50-foot long section supporting narrow-leaf cattail (*Typha angustifolia*)

Wildlife use of the site is limited to species that are adapted to urban environments. Common species observed on the project site during the surveys included red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), western scrub-jay (*Aphelocoma californica*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*), northern flicker (*Colaptes auratus*), Anna’s hummingbird (*Calypte anna*), black-tailed jackrabbit (*Lepus californicus*), and California vole (*Microtus californicus*).

Tables 1 and 2, respectively, provide information on special-status plant and wildlife species that may occur in the project area. Based on the project site’s disturbed nature and existing habitat, there is little potential for any of these special-status species to inhabit the project site, except on a transient basis. The project site does not support any special-status plant species and does not contain any suitable breeding habitat for sensitive wildlife species listed by state and/or federal regulatory agencies known to occur in the vicinity.

**Special-Status Species**

Several special-status animal species may forage on the site but are not expected to be impacted by the project: palid bat (*Antrozous pallidus*), white-tailed kite (*Elanus leucurus*), and tricolored blackbird (*Agelaius tricolor*). The riparian drainage south of the project site offers low-quality habitat for the western pond turtle (*Emys marmorata*) which is unlikely to occur on the site.
Tricolored Blackbird

The tricolored blackbird breeds in dense colonies in California’s Central Valley in wetlands and native grasslands. Much of the tricolored blackbird’s former nesting habitat has been lost as a result of conversion to urban and agricultural uses. Additionally, remnant populations of the species have been adversely affected by direct mortality (e.g., shooting, pesticide use, and mass destruction of nests through mowing and harvesting of crops). For these reasons, the number of tricolored blackbirds has declined from several million in the 1930s and 1940s to less than 200,000 in 2015. This species was listed under the California Endangered Species Act (CESA) on an emergency basis from 2014 to June 2015. Since December 2015 it has been considered a Candidate for listing under CESA. As a Candidate for listing the tricolored blackbird is protected under CESA for 1-year until a final determination is made.

Scattered nesting colonies of tricolored blackbirds were recorded in the Folsom area as recently as the late 1990s; however, only one colony is still viable today. In 2016 this colony nested approximately 0.36 mile east of the project site, southeast of Serpa Way (Photo 4), in an unnamed drainage (CNDDB 2016). The colony forages in local open grassland, mostly on the south side of Highway 50. The riparian drainage south of the project site does not support nesting tricolored blackbirds; however, individuals have been observed occasionally foraging in the open grassland and blackberry thickets adjacent to the project site (Green, Johnson personal observations).

No potential for direct impacts in the form of “incidental take” of an endangered, threatened, sensitive, or otherwise protected animal species or associated habitat would occur as a result of the development of this project. As there would be no project impact, no mitigation measures would be required.

Sensitive Habitats

The open ditch on the project site does not constitute sufficient wetland habitat to support any of the special-status wildlife known from this region.

Waters of the U.S. and Wetlands

The 3 to 4 foot deep ditch that runs along the entire border of the project site (except for downslope of Iron Point Road) conveys surface runoff flows to a concrete drain at the southwest corner of the project site (Photo 3). Several inches of water were present in the ditch on the October 18, 2016 survey following rains the previous week. Although this ditch appears to be dry during most of the year its status as a wetland is questionable. Vegetation in the interior of the ditch consists almost entirely of upland weeds; however, one deeper 50-foot long section supports narrow-leaf cattail (Typha angustifolia), which is indicative of a wetland. If this ditch will be impacted by the proposed project a wetland determination should be done to determine its actual size and whether mitigation is necessary.

Migration Corridors

The project would not interfere with the movement of any native resident or migratory fish or wildlife species, although the adjacent riparian area and drainage do provide a linear corridor for the local movement of resident wildlife species. Because the project area is located in an urbanized area, and is bordered on all sides by heavily travelled roadways, it offers minimal opportunities as a suitable movement corridor for wildlife species with larger home ranges. Construction of the proposed project would be confined to the ruderal area; therefore, it will not have any direct or indirect impacts to wildlife.
using the drainage as a movement corridor. As there would be no project impact, no mitigation measures would be required.

Conformance with Local Policies and Ordinances

The project does not conflict with any local policies or ordinances protecting biological resources. No trees are located on the project site. Because there is no impact, no mitigation measures would be required.

Consistency with HCPs and NCCPs

No Habitat Conservation Plans (HCPs), Natural Community Conservation Plans (NCCPs), or other approved local, regional, or state habitat conservation plans are in place that includes the project site. Therefore, the proposed project would not conflict with any local, regional or state HCPs and no mitigation measures would be required.

REFERENCES


<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status Federal/State/CNPS</th>
<th>Habitat, Elevation, and Bloom Time</th>
<th>Occurrence on Project Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceanothus rodackii</td>
<td>Pine Hill ceanothus</td>
<td>E/R/1B.2</td>
<td>Chaparral, cismontane woodland, serpentinite or gabbroic, 853 to 2,067 ft.; May -- June</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Chlorogalum grandiflorum</td>
<td>Red Hills soapoot</td>
<td>-/*-1B.2</td>
<td>Chaparral, cismontane woodland, gabbro or serpentinite soils, 100 to 200 ft.; May -- June</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Clarkia biloba ssp. brandegeae</td>
<td>Brandegee’s clarkia</td>
<td>-/*-4.2</td>
<td>Chaparral, cismontane woodland, &lt;300 ft.; May -- July</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Crocanthemum suffrutescens</td>
<td>Bisbee Peak rush-rose</td>
<td>-/*-1.2</td>
<td>Chaparral, often serpentinite, gabbroic or lorne soils, ca. 300 ft.; April -- May</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Downingia puella</td>
<td>Dwarf downingia</td>
<td>-/*-2B.2</td>
<td>Vernal pools, valley and foothill grassland (mesic), 0 to 1,350 ft.; March to May</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Fremontodendron decumbens</td>
<td>Pine Hill flannelbush</td>
<td>E/R/1B.2</td>
<td>Chaparral, cismontane woodland, serpentinite or gabbroic, rocky, 1394 to 2,494 ft.; April -- July</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Galium californicum ssp. sierrae</td>
<td>El Dorado bedstraw</td>
<td>E/R/1B.2</td>
<td>Chaparral, cismontane woodland, lower montane coniferous forest, gabbroic, 328 to 1,919 ft.; May -- June</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Navarretia myersii ssp. myersii</td>
<td>Pincushion navarretia</td>
<td>-/*-1B.1</td>
<td>Vernal pools, 60 to 270 ft.; May</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Orcuttia viscosa</td>
<td>Sacramento cricut grass</td>
<td>E/E/1.1</td>
<td>Vernal pools, 98 to 328 ft.; April - July</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Packera layneae</td>
<td>Layne’s ragwort</td>
<td>T/R/1B.2</td>
<td>Chaparral, cismontane woodland, serpentinite or gabbroic, rocky, 656 to 3,281 ft.; April -- July</td>
<td>No suitable habitat present; not observed</td>
</tr>
<tr>
<td>Sagittaria sandfordii</td>
<td>Sanford’s arrowhead</td>
<td>-/*-1B.2</td>
<td>Shallow freshwater channels; marshes and swamps, 0 to 2,000 ft.; May -- November</td>
<td>Marginal habitat present in ditch; not observed</td>
</tr>
<tr>
<td>Wyttha reticulata</td>
<td>El Dorado County mule cars</td>
<td>-/*-1B.2</td>
<td>Chaparral, cismontane woodland, lower montane coniferous forest, clay or gabbroic, 607 to 2,060 ft.; May -- July</td>
<td>No suitable habitat present; not observed</td>
</tr>
</tbody>
</table>
Legal Status Codes:

E = Federally or State listed as endangered
T = Federally or State listed as threatened
R = State listed as Rare
1B.1 = CNPS list 1B: Plants rare, threatened or endangered in California and elsewhere; seriously threatened in California
1B.2 = CNPS list 1B: Plants rare, threatened or endangered in California and elsewhere; moderately threatened in California
2B.2 = CNPS list 2: Plants rare, threatened or endangered in California, but more common elsewhere; moderately threatened in California
3.2 = CNPS list 3: Plants about which more information is needed – a review list; moderately threatened in California
4.2 = CNPS list 4: Plants of limited distribution – a watch list; moderately threatened in California

SOURCES:
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Legal Status* Federal/State</th>
<th>Habitat Requirements</th>
<th>Likely Presence on Project Site</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAMMALS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver-haired bat</td>
<td>-- / --</td>
<td>Primarily a coastal and montane conifer forest dweller feeding over streams, ponds, and beaches; roosts in crevices and hollows in trees</td>
<td>No suitable habitat; no roosting habitat present</td>
</tr>
<tr>
<td>(Lasiurus noveboracensis)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pallid bat</td>
<td>-- / SSC</td>
<td>Occurs in a variety of habitats from lowland deserts to montane forest; most common at mid to low elevations; roosts in crevices and hollows in trees, rocks and cliffs, bridges, buildings, mines, and tunnels</td>
<td>May forage over the area; no roosting habitat present</td>
</tr>
<tr>
<td>(Antrozous pallidus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American badger</td>
<td>-- / SSC</td>
<td>Occurs in lowland deserts to mid elevation grasslands; lives in underground burrows; eats primarily fossorial mammals such as mice, gophers, and ground squirrels</td>
<td>No suitable habitat; not observed</td>
</tr>
<tr>
<td>(Taxidea taxus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BIRDS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great blue heron</td>
<td>-- / --</td>
<td>Colonial nesting sites (rookeries) are considered special status; rookeries typically in large trees near lakes, rivers, marshes, and tidal flats</td>
<td>No rookeries in project area; not observed</td>
</tr>
<tr>
<td>(Ardea herodias)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great egret</td>
<td>-- / --</td>
<td>Typically inhabits dense stands of live oak, riparian woodlands, or other forested habitats near water</td>
<td>No suitable habitat; not observed</td>
</tr>
<tr>
<td>(Ardea alba)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double-crested cormorant</td>
<td>-- / --</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Phalacrocorax auritus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooper’s hawk</td>
<td>-- / --</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Accipiter cooperii)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golden eagle</td>
<td>-- / --, FP</td>
<td>Nests in open or broken forests and woodlands; forages in open habitats</td>
<td>No suitable nesting habitat; not observed</td>
</tr>
<tr>
<td>(Aquila chrysaetos)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bald eagle</td>
<td>D / E, FP</td>
<td>Inland nest sites in California primarily tall, live trees along shorelines of lakes and reservoirs; optimal nest sites are near open water providing foraging habitat</td>
<td>No suitable habitat; not observed</td>
</tr>
<tr>
<td>(Haliaeetus leucocephalus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swainson’s hawk</td>
<td>-- / T</td>
<td>Nests in valley oaks, cottonwoods, willows and a variety of other trees often in, or near, riparian habitats; forages in grasslands, irrigated pastures, and a variety of agricultural row and field crops, shows a preference for alfalfa</td>
<td>Does not occur in project area; not observed</td>
</tr>
<tr>
<td>(Buteo swainsoni)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White-tailed kite</td>
<td>-- / --, FP</td>
<td>Nests in low foothill or valley areas with valley or live oaks, riparian areas, and marshlands; forages in open grasslands</td>
<td>Occasional winter resident in general area; individuals may forage on project site; no suitable nesting habitat; not</td>
</tr>
<tr>
<td>Common Name (Scientific Name)</td>
<td>Legal Status Federal/State</td>
<td>Habitat Requirements</td>
<td>Likely Presence on Project Site</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------</td>
<td>----------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Merlin (Falco columbarius)</td>
<td>-- / --</td>
<td>Inhabits open country such as willow scrub, grasslands, and prairies; avoid dense forests</td>
<td>Individuals may occasionally occur during migration; not observed</td>
</tr>
<tr>
<td>Burrowing owl (Athene cunicularia)</td>
<td>-- / SSC</td>
<td>Occupies abandoned mammal burrows, especially those of California ground squirrels, along fence lines and in open grasslands with sparse vegetation</td>
<td>No suitable habitat; not observed</td>
</tr>
<tr>
<td>Tricolored blackbird (Agelaius tricolor)</td>
<td>-- / C, SSC</td>
<td>Typically nests colonially in dense stands of cattails and tules, or in upland sites with blackberries, nettles, or thistles</td>
<td>Individuals may forage sporadically on project site; no nesting habitat present on project site; nesting colony confirmed SE of Serpa Way in blackberries; main foraging area is south of Highway 50</td>
</tr>
<tr>
<td>REPTILES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western pond turtle (Emys marmorata)</td>
<td>-- / SSC</td>
<td>Occurs near a variety of aquatic habitats (e.g., ponds, marshes, sloughs, irrigation ditches, and wetlands), providing adequate basking sites from which turtles may readily escape to the water; females have been found to nest as far as 0.5 km from water</td>
<td>Low quality habitat in adjacent riparian channel; unlikely to occur on project site; not observed</td>
</tr>
<tr>
<td>FISH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steelhead (Central Valley DPS) (Oncorhynchus mykiss irideus)</td>
<td>T / --</td>
<td>Occurs in Sacramento and American rivers and their tributaries</td>
<td>No suitable habitat on project site</td>
</tr>
<tr>
<td>AMPHIBIANS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western spadefoot (Spea hammondii)</td>
<td>-- / SSC</td>
<td>Primarily a lowland species associated with valley and foothill grasslands; inhabits areas containing washes, floodplains of rivers, alluvial fans, and alkali flats; breeding and egg laying occur almost exclusively in shallow, temporary pools formed by heavy winter rains that are devoid of predatory fish and amphibians (e.g., bullfrogs)</td>
<td>No suitable habitat of project site; not observed</td>
</tr>
<tr>
<td>California red-legged frog (Rana draytonii)</td>
<td>T / SSC</td>
<td>Breeds in pooled and backwater aquatic habitat in ponds, lakes, reservoirs, and streams; may disperse far from water following breeding</td>
<td>No suitable habitat on project site; not observed</td>
</tr>
<tr>
<td>INVERTEBRATES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Name (Scientific Name)</td>
<td>Legal Status* Federal/State</td>
<td>Habitat Requirements</td>
<td>Likely Presence on Project Site</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Valley elderberry longhorn beetle (VELB) (<em>Deuropus californicus dimorphus</em>)</td>
<td>T / --</td>
<td>Associated exclusively with elderberry shrubs in Central Valley and foothills during its entire life cycle; larvae bore into elderberry stems and feed upon the pith during their 2-year life cycle</td>
<td>No elderberry shrubs on project site; therefore, no supporting habitat for VELB, not observed</td>
</tr>
<tr>
<td>Vernal pool fairy shrimp (<em>Branchinecta lynchii</em>)</td>
<td>T / --</td>
<td>Small, clear-water sandstone-depression pools and grassy swales, earth slumps, or basalt-flow depression pools in unplowed grasslands</td>
<td>No suitable habitat on project site</td>
</tr>
<tr>
<td>California linderella (<em>Linderiella occidentalis</em>)</td>
<td>-- / --</td>
<td>Seasonal pools and grass-bottomed swales in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions; also in mud-bottomed pools with lightly turbid water</td>
<td>No suitable habitat on project site</td>
</tr>
<tr>
<td>Blennosperma vernal pool andrenid bee (<em>Andrena blennosperma</em>)</td>
<td>-- / --</td>
<td>Associated with upland areas around vernal pools, especially blennosperma, in which bees nest</td>
<td>No suitable habitat; reported from around Bass Lake in 1998</td>
</tr>
<tr>
<td>Ricksecker's water scavenger beetle (<em>Hydrochera rickseckeri</em>)</td>
<td>-- / --</td>
<td>Associated with aquatic habitats; precise habitat unknown</td>
<td>Closest reported occurrence is in Blue Ravine, south of Mormon Island Dam, Folsom Lake</td>
</tr>
</tbody>
</table>

*Legal Status Definitions*

**Federal**
- E = listed as endangered under the federal Endangered Species Act
- T = listed as threatened under the federal Endangered Species Act
- D = Delisted
- ** = Currently under review for listing as endangered by the U.S. Fish and Wildlife Service [public comment period ends November 17, 2015]
- -- = no designation

**State**
- C = candidate under the California Endangered Species Act
- E = listed as endangered under the California Endangered Species Act
- T = listed as threatened under the California Endangered Species Act
- SSC = Species of Special Concern
- FP = fully protected under the California Fish and Game Code (fully protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or the Department of Fish and Wildlife)
- -- = no designation

USGS 7.5-minute topographic quadrangles searched: Clarksville and Folsom
Photo 1. Looking south at the project site in the foreground, the riparian trees in the mid-ground, and Cavitt Drive, Costco, and Green Acres nursery in the background

Photo 2. Looking west across the project site towards Cavitt Drive (2 hotels across the road)
Photo 3. Looking northeast at the drain for the perimeter ditches in the southwest corner of project site

Photo 4. Aerial photo with red polygon indicating project site and green diamond indicating 2016 tricolored blackbird breeding site
This page intentionally left blank.
APPENDIX B

SMAQMD Asbestos Dust Mitigation Plan
Application and Requirements
This page intentionally left blank.
Asbestos Dust Mitigation Plan Application

1. ADMINISTRATIVE INFORMATION

<table>
<thead>
<tr>
<th>Size of Project</th>
<th>Fees (See Rule 304, Section 303.1 for current base fee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Size of entire Project (total acres)</td>
<td>$389 Base Fee + $____ $23 / Acre</td>
</tr>
<tr>
<td></td>
<td>$____ Total Fees Due</td>
</tr>
</tbody>
</table>

2. GEOLOGIST INFORMATION

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Contact</td>
</tr>
<tr>
<td>Email</td>
</tr>
</tbody>
</table>

3. CONTRACTOR AND OWNER INFORMATION

<table>
<thead>
<tr>
<th>Contractor Information</th>
<th>Owner Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td>City/State</td>
<td>City</td>
</tr>
<tr>
<td>Contact</td>
<td>Email</td>
</tr>
<tr>
<td>Phone</td>
<td>Fax</td>
</tr>
<tr>
<td>Email</td>
<td>Contact</td>
</tr>
</tbody>
</table>

4. PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of NOA Samples Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Number of NOA Samples ≥ 0.25%</td>
</tr>
<tr>
<td>City/State</td>
<td>Zip</td>
</tr>
<tr>
<td>Date of Asbestos Discovery</td>
<td>Thomas Guide Page(s)</td>
</tr>
<tr>
<td>Start Date</td>
<td>Estimated Completion Date</td>
</tr>
</tbody>
</table>
ASBESTOS DUST MITIGATION PLAN APPLICATION
SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

5. MAP INFORMATION

Map(s) clearly indicating the following MUST be included:

- Property lines / boundaries
- Rights of way / easements
- Areas to be cleared or graded
- Trenching areas
- Excavation sites
- Storage areas / piles
- Staging areas for removal
- Truck routes
- On-site parking lots
- Landmarks and roads
- Sampling locations (label as positive or negative for asbestos)

6. PROJECT TYPE

Activity: (Check all that apply)

- Construction
- Grading
- Road or Railway Construction
- Road Maintenance
- Housing Development
- Commercial Property Development
- Quarrying
- Surface Mining
- Trenching / Utilities Work
- Other (please describe)

7. TRACK-OUT PREVENTION

The following control measure MUST be addressed:

- Any visible track-out on a paved public road where vehicles enter and exit the work area must be removed at the end of the work day or at least one time per day. Removal shall be accomplished by using wet sweeping or a HEPA filter equipped vacuum device.

Other control measures: (Check all that apply)

- A gravel pad designed using good engineering practices to clean the tires of exiting vehicles
- A tire shaker
- A wheel wash system
- Pavement extending for not less than fifty (50) consecutive feet from the intersection with the paved public road
- Any other measure(s) as effective as the measures listed above (please describe)
# ASBESTOS DUST MITIGATION PLAN APPLICATION

**SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT**

## 8. ACTIVE STORAGE PILES

The following control measure MUST be addressed:

- Keeping active storage piles adequately wetted or covered with tarps (please describe)

## 9. INACTIVE STORAGE PILES

Control for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days shall include one or more of the following: (Check all that apply)

- Keep the surface adequately wetted
- Establish and maintenance of surface crusting sufficient to satisfy the test in subsection §93105(h)(6)
- Application of chemical dust suppressants or chemical stabilizers according to the manufacturer’s recommendations
- Covering with tarp(s) or vegetative cover
- Installation of wind barriers of fifty (50) percent porosity around three (3) sides of a storage pile
- Installation of wind barriers across open areas
- Any other measure(s) as effective as the measures listed above (please describe)

## 10. TRAFFIC CONTROL ON ON-SITE UNPAVED ROADS, PARKING LOTS AND STAGING AREAS

The following control measure MUST be addressed:

- A maximum speed limit of fifteen (15) miles per hour (mph) or less

**Additional control measures:** (Check all that apply)

- Water every two hours of active operation or sufficiently often to keep the area adequately wetted
- Apply chemical dust suppressants consistent with manufacturer’s directions
- Maintain a gravel cover with a silt content that is less than five (5) percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of three (3) inches on the surface being used for travel
- Any other measure(s) as effective as the measures listed above (please describe)
### 11. EARTHMOVING ACTIVITIES

**Controls for earthmoving activities will include:** (Check all that apply)

- [ ] Pre-wetting the ground to the depth of the anticipated cuts
- [ ] Suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures
- [ ] Application of water prior to any land clearing
- [ ] Any other measure(s) as effective as the measures listed above (please describe)

### 12. BLASTING

**Is Blasting Required?**  [ ] Yes  [ ] No (If Yes, Check all that apply.)

- [ ] Pre-wetting the ground
- [ ] Concurrent misting or water application during blast
- [ ] Application of soil overburden
- [ ] Blast mats
- [ ] Suspending blasting operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures
- [ ] Any other measure(s) as effective as the measures listed above (please describe)
### 13. OFF-SITE TRANSPORT

The owner and/or operator must ensure that no trucks are allowed to transport excavated material off-site unless:

- Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments
- Loads are adequately wetted

**AND either:** (Check all that apply)

- [ ] Covered with tarps
- [ ] Loaded such that the material does not touch the front, back or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment

### 14. POST CONSTRUCTION STABILIZATION OF DISTURBED AREAS

Upon completion of the project, disturbed surfaces shall be stabilized using one or more of the following: (Check all that apply)

- [ ] Establish a vegetative cover (detail type of vegetative cover to be used below)

- [ ] Placement of at least three (3.0) inches of non-asbestos-containing material
- [ ] Paving
- [ ] Any other measure deemed sufficient to prevent wind speeds of ten (10) miles per hour (mph) or greater from causing visible dust emissions (please describe)
This page intentionally left blank.
APPENDIX C

Environmental Noise Assessment
This page intentionally left blank.
Environmental Noise Assessment

Quick Quack Car Wash at Iron Point Road

Folsom, California

BAC Job # 2016-131

Prepared For:

Environmental Planning Partners, Inc.

Mr. Bob Klousner
3110 Gold Canal Drive, Ste. D
Rancho Cordova, CA 95670

Prepared By:

Bollard Acoustical Consultants, Inc.

Paul Bollard, President

September 30, 2016
This page intentionally left blank.
Introduction

The proposed project consists of the construction of a Quick Quack Car Wash located at Iron Point Road in the City of Folsom, California. Existing land uses in the project vicinity include single-family homes to the northeast, a hotel to the immediate west, and commercial uses to the south and northwest. The project area and proposed site plan are shown on Figures 1 and 2, respectively.

Due to the proximity of the project site to existing noise-sensitive residential uses, the project applicant has retained Bollard Acoustical Consultants, Inc. (BAC) to prepare an acoustical analysis for this project. Specifically, the purpose of this analysis is to quantify noise levels associated with the proposed project and to assess the state of compliance of those noise levels with the applicable City of Folsom noise standards.

Noise Fundamentals and Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard, and thus are called sound. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Appendix A contains definitions of Acoustical Terminology. Appendix B shows common noise levels associated with various sources.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, L_{dn}, and shows very good correlation with community response to noise.
Figure 1
Project Area and Long-Term Ambient Noise Monitoring Location
Quick Quack Car Wash at Iron Point Road - Folsom, California
Figure 2
Proposed Project Site Plan
Quick Quack Car Wash at Iron Point Road - Folsom, California

Legend
- Proposed Car Wash Tunnel
- Proposed Vacuum Motor Enclosure

BOLLARD
Acoustical Consultants

Scale (feet)
0  50  100
Criteria for Acceptable Noise Exposure

City of Folsom Municipal Code

Table 8.42.040 of the City of Folsom Municipal Code establishes exterior noise level standards. Those standards are reproduced below in Table 1. The Table 1 standards include adjustments for the time of day the noise occurs, the duration of intrusive sound, and the characteristics of the noise (impulsive, tonal, speech or music, etc.). Section 8.42.040 of the City of Folsom Municipal Code states:

It is unlawful for any person at any location within the incorporated area of the city to create any noise, or to allow the creation of any noise, on property owned, leased, occupied or otherwise controlled by such person which causes the exterior noise level when measured at any affected single- or multiple-family residence, school, church, hospital or public library situated in either the incorporated or unincorporated area to exceed the noise level standards as set forth in the following table:

<table>
<thead>
<tr>
<th>Cumulative Minutes per Hour of Noise Generation (Lₐ)¹</th>
<th>Exterior Noise Level Standard (dB)²,³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daytime (7 a.m. – 10 p.m.)</td>
</tr>
<tr>
<td>30 (Lₐ0)</td>
<td>50</td>
</tr>
<tr>
<td>15 (Lₐ5)</td>
<td>55</td>
</tr>
<tr>
<td>5 (Lₐ)</td>
<td>60</td>
</tr>
<tr>
<td>1 (Lₐ2)</td>
<td>65</td>
</tr>
<tr>
<td>0 (Lₐmax)</td>
<td>70</td>
</tr>
</tbody>
</table>

Notes:
1. Lₐ means the percentage of time the noise level is exceeded during an hour. Lₐ0 means the level exceeded 50% of the hour, Lₐ5 is the level exceeded 25% of the hour, etc.
2. In the event the measured ambient noise level exceeds the applicable noise level standard in any category above, the applicable standard shall be adjusted so as to equal the ambient noise level.
3. Each of the noise level standards specified above shall be reduced by 5 dB(A) for simple tone noises, noises consisting primarily of speech or music, or for recurring noises.

According to section 8.42.040 of the City of Folsom Municipal Code, the Table 1 standards apply to the noise-generating aspects of the project as measured at the nearest single-family residences shown on Figure 1. For this project, the applicable noise metric would be the Lₐ0 since the car wash blower and vacuums would operate for approximately 30 minutes or more during a busy hour.
In addition to the identified single-family residences to the north, a hotel is located to the west of the proposed car wash. Although the exterior noise standards in Table 1 would not be applicable to the hotel (the Table 1 standards are applicable to noise-sensitive exterior spaces of residences, schools, churches, hospitals or public libraries), the city's interior noise level standards were conservatively applied to the interior spaces of the nearest hotel rooms in order to evaluate the potential for sleep disturbance due to the car wash operations. The lowest interior noise level standard of 35 dB, section 8.42.050, was applied to the car wash operations.

Existing Ambient Noise Environment

The noise environment in the vicinity of the nearest noise-sensitive residential receivers is defined primarily by traffic noise from Iron Point Road. To generally quantify background noise levels at the nearest residences, BAC conducted a long-term ambient noise level survey in the backyard of 1739 Abbeyfeale Court on August 5-8, 2016. The noise monitoring location is depicted on Figure 1 and a summary of the measurement results is provided in Table 2. Detailed noise measurement results are shown numerically and graphically in Appendices C and D, respectively.

A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used to complete the noise level measurement survey. The meter was calibrated before use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

<table>
<thead>
<tr>
<th>Date</th>
<th>L_{dn}, dB</th>
<th>Average Measured Hourly Noise Levels (dB)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daytime (7 a.m. to 10 p.m.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>L_{25}</td>
<td>L_{50}</td>
<td>L_{max}</td>
</tr>
<tr>
<td>Friday 8/5/16</td>
<td>57</td>
<td>54</td>
<td>53</td>
<td>66</td>
</tr>
<tr>
<td>Saturday 8/6/16</td>
<td>57</td>
<td>53</td>
<td>52</td>
<td>66</td>
</tr>
<tr>
<td>Sunday 8/7/16</td>
<td>56</td>
<td>52</td>
<td>52</td>
<td>68</td>
</tr>
<tr>
<td>Monday 8/8/16</td>
<td>58</td>
<td>54</td>
<td>54</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nighttime (10 p.m. to 7 a.m.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Long-term ambient noise monitoring conducted within backyard of 1739 Abbeyfeale Court, identified on Figure 1.
2. Detailed ambient noise level measurement results are provided in Appendices C and D.
The results of the long-term noise measurements indicate that existing ambient noise levels at the nearest residences are in close agreement with the City of Folsom noise level standards presented in Table 1. As a result, satisfaction of the Table 1 noise level standards would ensure that project operations do not result in a significant noise increase in the community.

Evaluation of Project-Related Noise Levels

Noise generated by project-related activities were quantified through a combination of reference noise level measurements and application of accepted noise modeling techniques. Noise sources associated with the proposed project include the car wash blower and the vacuum equipment. Predicted noise levels resulting from these sources are evaluated in the following sections.

Car Wash Noise

Based on the experience of Bollard Acoustical Consultants, noise levels generated by car washes are primarily due to the drying portion of the operation. As a means of determining the potential noise impacts associated with the proposed car wash, Bollard Acoustical Consultants, Inc. utilized noise level data provided by Sonny’s Enterprises/The Car Wash Factory for the Blower Assembly, One Arch 45HP Part # BL1-45HP-1. The reference noise level at the entrance, where the blowers would be located, is 86 dB $L_{max}$ at 20 feet. Appendix E provides the noise specification sheet for the proposed project blowers.

BAC staff conducted reference noise level measurements at an existing Quick Quack Car Wash located at 3050 Sunrise Boulevard in March 2008. Measurements were conducted at the exit of the car wash to quantify the noise level generation of the blower assembly. Directly facing the exit of the car wash, 0 degrees off-axis, the blower assembly was measured to generate a noise level of 86 dB $L_{max}$ at 25 feet. The measured equipment noise level at the Sunrise location is comparable to the proposed equipment at the project site (86 dB $L_{max}$ at 20 feet).

Noise level measurements were also conducted at off-axis positions in order to quantify the noise level reduction provided by the building structure. Specifically, measurements were conducted at positions 45 and 90 degrees relative to the façade of the car wash exit, both at a reference distance of 25 feet. At 45 degrees off-axis, the blowers generated a noise level of 78 dB $L_{max}$. At 90 degrees off-axis, the blowers generated a noise level of 70 dB $L_{max}$. This represents noise level reductions of 8 and 16 dB due to the intervening building structure at positions 45 and 90 degrees off-axis, respectively.

The nearest noise-sensitive receivers are three single-family residences located immediately north of the project, identified as Sites 1-3 on Figure 1. Because Sites 1 and 2 are located at a position that is 90 degrees off-axis of the tunnel entrance, reference blower noise levels in the direction of those residences was assumed to be 70 dB at 25 feet. Because Site 3 is located at a position that is 45 degrees off-axis of the tunnel exit, reference blower noise levels in the direction of that residence was assumed to be 78 dB at 25 feet. Because Site 4 is directly facing the tunnel entrance, a blower assembly reference noise level of 86 dB at 25 feet was assumed.
Assuming standard spherical spreading loss (-6 dB per doubling of distance), car wash blower noise exposure at the nearest residential property lines was calculated and the results of those calculations are presented in Table 3. The predicted noise levels in Table 3 take into consideration the shielding provided by the existing property line CMU noise barrier illustrated on Figure 1. A conservative 6 dB offset was applied to the predicted car wash blower noise levels to account for the attenuation provided by the property line noise barrier.

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Reference Noise Level</th>
<th>Distance (feet)</th>
<th>Attenuation due to Distance (dB)</th>
<th>Predicted Noise Levels, L50 (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70 dB at 25 feet</td>
<td>320</td>
<td>-22</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>70 dB at 25 feet</td>
<td>300</td>
<td>-22</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>78 dB at 25 feet</td>
<td>350</td>
<td>-23</td>
<td>49</td>
</tr>
<tr>
<td>4</td>
<td>86 dB at 25 feet</td>
<td>360</td>
<td>-23</td>
<td>33</td>
</tr>
</tbody>
</table>

Notes:
1. Receiver locations are indicated on Figure 1.
2. Reference noise levels vary depending on the receiver location relative to the car wash tunnel. Detailed manufacturer reference noise level data for the proposed blower assembly is contained within Appendix E.
3. A conservative 6 dB offset has been applied to the predicted noise levels at receivers 1-3 to account for the screening provided by the existing property line noise barrier illustrated on Figure 1.
4. The reported noise level of 33 dB represents the predicted interior noise level within the nearest hotel rooms to the project site, and includes a 30 dB reduction provided by typical hotel façade construction.

According to Table 3, the predicted car wash noise level of 33 dB within the nearest hotel rooms would satisfy the City of Folsom daytime and nighttime interior noise level standards of 45 and 35 dB, respectively. As a result, no adverse noise impacts from the project are identified within the nearby hotel to the west from this component of the project.

The Table 3 data also indicate that predicted median car wash noise levels at receivers 1 and 2 of 42 dB L50 would satisfy the city's daytime and nighttime noise level criteria. At receiver 3, the predicted noise level of 49 dB L50 would satisfy the daytime criteria, but would exceed the nighttime criteria of 45 dB L50 by 4 dB. As a result, additional consideration of nighttime noise mitigation measures for the car wash blower operation would be warranted for the project. A discussion of potential noise mitigation measures are discussed later in the report.
Vacuum Noise

A central vacuum system is proposed for the project, however the exact model has yet to be determined. It has been our experience that the typical dome-style car wash vacuums are significantly louder than central vacuum systems, whose noise-generating motors are located within a masonry enclosure. Reference noise level data for the JE Adams Super Vac Model #9209LD, a dome-style vacuum, was conservatively used for this assessment. Reference noise level data for the vacuum system is provided in Appendix F. According to the noise level data in Appendix F, the vacuum generates a noise level of approximately 62 dB L_{max} at a distance of 50 feet.

Assuming standard spherical spreading loss (-6 dB per doubling of distance), vacuum noise exposure at the nearest residential property lines was calculated and the results of those calculations are presented in Table 4. A conservative 6 dB offset was applied to the predicted vacuum noise levels to account for the attenuation provided by the existing property line noise barrier.

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Reference Noise Level</th>
<th>Distance (feet)</th>
<th>Attenuation due to Distance (dB)</th>
<th>Predicted Noise Levels, L_{50} (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>62 dB at 50 feet</td>
<td>380</td>
<td>-18</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>300</td>
<td>-16</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>300</td>
<td>-16</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>430</td>
<td>-19</td>
<td>&lt;20</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Receiver locations are indicated on Figure 1.
2. Detailed manufacturer reference noise level data for a dome-style vacuum is contained within Appendix E.
3. A conservative 6 dB offset has been applied to the predicted noise levels to account for the screening provided by the existing property line noise barrier illustrated on Figure 1.
4. The reported noise level of 20 dB or less represents the predicted interior noise level within the nearest hotel rooms to the project site, and includes a 30 dB reduction provided by typical hotel façade construction.

As indicated above in Table 4, predicted vacuum noise levels of 38-40 dB L_{50} at the nearest residences would satisfy the city’s daytime and nighttime noise level standards of 50 and 45 dB L_{50}, respectively. In addition, vacuum noise levels within the hotel rooms of less than 20 dB are predicted to satisfy the city’s interior noise level criteria. As a result, no additional noise mitigation measures would be warranted for this aspect of the project.
Mitigation Measures

Car wash blower noise levels at residential receiver 3 are predicted to exceed the City of Folsom Municipal Code nighttime noise level standard of 45 dB L50 by 4 dB. However, the predicted noise level conservatively assumes a full hour of car wash blower operation. It is our understanding that the demand for car washes significantly decreases during nighttime hours, 10 p.m. to 7 a.m. Due to the decreased demand during nighttime hours, car wash blower noise levels would likely be below 45 dB L50. Nonetheless, to ensure satisfaction of the city’s noise level standards and to reduce the potential for annoyance at the nearest residences, BAC recommends that the operation of the car wash be limited to daytime hours, 7 a.m. to 10 p.m.

Conclusions

Noise levels generated by the proposed car wash operations are predicted to satisfy the City of Folsom Municipal Code noise level standards at the nearest residences to the north provided that the following noise mitigation measure is implemented:

1. Car wash operation should be limited to daytime hours, 7 a.m. to 10 p.m.

Limiting the operation of the car wash to daytime hours would result in satisfaction of the City of Folsom noise level criteria at the nearest residences. This conclusions are based on the site plan shown on Figure 2 and on the manufacturers noise level data cited herein. Deviations from these plans or data could cause noise levels to differ from those predicted in this assessment.

This concludes BAC’s environmental noise assessment for the proposed Quick Quack Car Wash at Iron Point Road in Folsom, California. Please contact BAC at (916) 663-0500 or paulb@bacnoise.com with any questions regarding this assessment.
Appendix A  
Acoustical Terminology

Acoustics  
The science of sound.

Ambient Noise  
The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation  
The reduction of an acoustic signal.

A-Weighting  
A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB  
Fundamental unit of sound, a Bel is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bel.

CNEL  
Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency  
The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

Ldn  
Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

Leq  
Equivalent or energy-averaged sound level.

Lmax  
The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness  
A subjective term for the sensation of the magnitude of sound.

Masking  
The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise  
Unwanted sound.

Peak Noise  
The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.

RT60  
The time it takes reverberant sound to decay by 60 dB once the source has been removed.

Sabin  
The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.

SEL  
A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.

Threshold of Hearing  
The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.

Threshold of Pain  
Approximately 120 dB above the threshold of hearing.
### Appendix C-1
Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)
Quick Quack Car Wash at Iron Point Road - Folsom, California
Friday, August 05, 2016

<table>
<thead>
<tr>
<th>Hour</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>48</td>
<td>61</td>
<td>37</td>
<td>54</td>
<td>51</td>
<td>48</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td>1:00</td>
<td>46</td>
<td>63</td>
<td>35</td>
<td>51</td>
<td>48</td>
<td>46</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td>2:00</td>
<td>43</td>
<td>55</td>
<td>31</td>
<td>49</td>
<td>46</td>
<td>44</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>3:00</td>
<td>43</td>
<td>56</td>
<td>32</td>
<td>49</td>
<td>46</td>
<td>44</td>
<td>42</td>
<td>37</td>
</tr>
<tr>
<td>4:00</td>
<td>46</td>
<td>57</td>
<td>36</td>
<td>53</td>
<td>50</td>
<td>47</td>
<td>45</td>
<td>41</td>
</tr>
<tr>
<td>5:00</td>
<td>51</td>
<td>64</td>
<td>42</td>
<td>58</td>
<td>55</td>
<td>52</td>
<td>50</td>
<td>46</td>
</tr>
<tr>
<td>6:00</td>
<td>54</td>
<td>60</td>
<td>48</td>
<td>58</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>7:00</td>
<td>54</td>
<td>61</td>
<td>48</td>
<td>58</td>
<td>56</td>
<td>55</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>8:00</td>
<td>54</td>
<td>69</td>
<td>47</td>
<td>58</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>9:00</td>
<td>54</td>
<td>71</td>
<td>46</td>
<td>60</td>
<td>56</td>
<td>54</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>10:00</td>
<td>52</td>
<td>63</td>
<td>46</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>11:00</td>
<td>53</td>
<td>65</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>12:00</td>
<td>53</td>
<td>63</td>
<td>48</td>
<td>58</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>13:00</td>
<td>53</td>
<td>62</td>
<td>48</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>14:00</td>
<td>54</td>
<td>68</td>
<td>48</td>
<td>58</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>15:00</td>
<td>53</td>
<td>67</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>16:00</td>
<td>54</td>
<td>63</td>
<td>48</td>
<td>57</td>
<td>56</td>
<td>55</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>17:00</td>
<td>54</td>
<td>66</td>
<td>49</td>
<td>58</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>18:00</td>
<td>53</td>
<td>75</td>
<td>46</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>19:00</td>
<td>53</td>
<td>65</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>20:00</td>
<td>54</td>
<td>65</td>
<td>49</td>
<td>57</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>21:00</td>
<td>51</td>
<td>72</td>
<td>44</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
<td>47</td>
</tr>
<tr>
<td>22:00</td>
<td>50</td>
<td>62</td>
<td>43</td>
<td>55</td>
<td>53</td>
<td>51</td>
<td>49</td>
<td>46</td>
</tr>
<tr>
<td>23:00</td>
<td>51</td>
<td>61</td>
<td>43</td>
<td>56</td>
<td>53</td>
<td>51</td>
<td>50</td>
<td>47</td>
</tr>
</tbody>
</table>

#### Daytime

<table>
<thead>
<tr>
<th></th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>53</td>
<td>66</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>High</td>
<td>54</td>
<td>75</td>
<td>49</td>
<td>60</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Low</td>
<td>51</td>
<td>61</td>
<td>31</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
<td>47</td>
</tr>
</tbody>
</table>

#### Nighttime

<table>
<thead>
<tr>
<th></th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>48</td>
<td>60</td>
<td>39</td>
<td>53</td>
<td>51</td>
<td>49</td>
<td>47</td>
<td>43</td>
</tr>
<tr>
<td>High</td>
<td>54</td>
<td>64</td>
<td>48</td>
<td>58</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Low</td>
<td>43</td>
<td>55</td>
<td>31</td>
<td>49</td>
<td>46</td>
<td>44</td>
<td>42</td>
<td>37</td>
</tr>
</tbody>
</table>

Ldn: 57  
% Daytime Energy: 80%  
% Nighttime Energy: 20%
# Appendix C-2

*Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)*

**Quick Quack Car Wash at Iron Point Road - Folsom, California**

*Saturday, August 06, 2016*

<table>
<thead>
<tr>
<th>Hour</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>48</td>
<td>64</td>
<td>42</td>
<td>53</td>
<td>51</td>
<td>49</td>
<td>48</td>
<td>45</td>
</tr>
<tr>
<td>1:00</td>
<td>47</td>
<td>57</td>
<td>39</td>
<td>52</td>
<td>51</td>
<td>48</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td>2:00</td>
<td>43</td>
<td>52</td>
<td>34</td>
<td>48</td>
<td>46</td>
<td>44</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>3:00</td>
<td>42</td>
<td>53</td>
<td>33</td>
<td>48</td>
<td>45</td>
<td>43</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>4:00</td>
<td>45</td>
<td>58</td>
<td>34</td>
<td>51</td>
<td>49</td>
<td>46</td>
<td>44</td>
<td>41</td>
</tr>
<tr>
<td>5:00</td>
<td>50</td>
<td>60</td>
<td>40</td>
<td>55</td>
<td>52</td>
<td>50</td>
<td>49</td>
<td>47</td>
</tr>
<tr>
<td>6:00</td>
<td>53</td>
<td>71</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>7:00</td>
<td>50</td>
<td>59</td>
<td>43</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>49</td>
<td>46</td>
</tr>
<tr>
<td>8:00</td>
<td>51</td>
<td>65</td>
<td>45</td>
<td>56</td>
<td>54</td>
<td>52</td>
<td>50</td>
<td>48</td>
</tr>
<tr>
<td>9:00</td>
<td>51</td>
<td>60</td>
<td>45</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>10:00</td>
<td>52</td>
<td>67</td>
<td>46</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>11:00</td>
<td>53</td>
<td>71</td>
<td>44</td>
<td>58</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>12:00</td>
<td>53</td>
<td>64</td>
<td>48</td>
<td>56</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>13:00</td>
<td>53</td>
<td>68</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>14:00</td>
<td>54</td>
<td>61</td>
<td>48</td>
<td>57</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>15:00</td>
<td>54</td>
<td>69</td>
<td>49</td>
<td>57</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>16:00</td>
<td>54</td>
<td>65</td>
<td>49</td>
<td>57</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>17:00</td>
<td>54</td>
<td>64</td>
<td>49</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>18:00</td>
<td>53</td>
<td>66</td>
<td>47</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>19:00</td>
<td>54</td>
<td>71</td>
<td>47</td>
<td>58</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>20:00</td>
<td>54</td>
<td>73</td>
<td>48</td>
<td>59</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>21:00</td>
<td>53</td>
<td>60</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>22:00</td>
<td>55</td>
<td>78</td>
<td>48</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>23:00</td>
<td>50</td>
<td>60</td>
<td>41</td>
<td>55</td>
<td>52</td>
<td>51</td>
<td>49</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daytime</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>53</td>
<td>66</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>High</td>
<td>54</td>
<td>73</td>
<td>49</td>
<td>59</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Low</td>
<td>50</td>
<td>59</td>
<td>33</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>49</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nighttime</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>48</td>
<td>61</td>
<td>40</td>
<td>53</td>
<td>51</td>
<td>49</td>
<td>47</td>
<td>44</td>
</tr>
<tr>
<td>High</td>
<td>55</td>
<td>78</td>
<td>48</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Low</td>
<td>42</td>
<td>52</td>
<td>33</td>
<td>48</td>
<td>45</td>
<td>43</td>
<td>42</td>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ldn:</th>
<th>% Daytime Energy:</th>
<th>% Nighttime Energy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>77%</td>
<td>23%</td>
</tr>
</tbody>
</table>

*Image: Bollard
Acoustical Consultants*
### Appendix C-3
Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)
Quick Quack Car Wash at Iron Point Road - Folsom, California
Sunday, August 07, 2016

<table>
<thead>
<tr>
<th>Hour</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>49</td>
<td>62</td>
<td>41</td>
<td>54</td>
<td>52</td>
<td>50</td>
<td>48</td>
<td>45</td>
</tr>
<tr>
<td>1:00</td>
<td>48</td>
<td>60</td>
<td>40</td>
<td>54</td>
<td>51</td>
<td>49</td>
<td>47</td>
<td>45</td>
</tr>
<tr>
<td>2:00</td>
<td>45</td>
<td>61</td>
<td>35</td>
<td>50</td>
<td>47</td>
<td>45</td>
<td>44</td>
<td>41</td>
</tr>
<tr>
<td>3:00</td>
<td>43</td>
<td>57</td>
<td>33</td>
<td>49</td>
<td>46</td>
<td>44</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>4:00</td>
<td>44</td>
<td>59</td>
<td>36</td>
<td>49</td>
<td>47</td>
<td>45</td>
<td>43</td>
<td>40</td>
</tr>
<tr>
<td>5:00</td>
<td>47</td>
<td>60</td>
<td>37</td>
<td>51</td>
<td>49</td>
<td>47</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td>6:00</td>
<td>49</td>
<td>64</td>
<td>44</td>
<td>55</td>
<td>53</td>
<td>50</td>
<td>48</td>
<td>45</td>
</tr>
<tr>
<td>7:00</td>
<td>48</td>
<td>57</td>
<td>42</td>
<td>54</td>
<td>52</td>
<td>49</td>
<td>47</td>
<td>44</td>
</tr>
<tr>
<td>8:00</td>
<td>51</td>
<td>63</td>
<td>43</td>
<td>56</td>
<td>54</td>
<td>51</td>
<td>49</td>
<td>46</td>
</tr>
<tr>
<td>9:00</td>
<td>50</td>
<td>58</td>
<td>44</td>
<td>55</td>
<td>53</td>
<td>50</td>
<td>48</td>
<td>47</td>
</tr>
<tr>
<td>10:00</td>
<td>51</td>
<td>63</td>
<td>46</td>
<td>56</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>11:00</td>
<td>51</td>
<td>61</td>
<td>45</td>
<td>56</td>
<td>54</td>
<td>52</td>
<td>50</td>
<td>48</td>
</tr>
<tr>
<td>12:00</td>
<td>55</td>
<td>78</td>
<td>47</td>
<td>62</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>13:00</td>
<td>59</td>
<td>82</td>
<td>46</td>
<td>67</td>
<td>56</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>14:00</td>
<td>54</td>
<td>75</td>
<td>47</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>15:00</td>
<td>53</td>
<td>75</td>
<td>46</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>16:00</td>
<td>53</td>
<td>67</td>
<td>47</td>
<td>56</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>17:00</td>
<td>53</td>
<td>70</td>
<td>47</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>18:00</td>
<td>51</td>
<td>63</td>
<td>43</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>47</td>
</tr>
<tr>
<td>19:00</td>
<td>52</td>
<td>63</td>
<td>45</td>
<td>56</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>20:00</td>
<td>54</td>
<td>71</td>
<td>49</td>
<td>57</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>21:00</td>
<td>52</td>
<td>69</td>
<td>45</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>22:00</td>
<td>53</td>
<td>63</td>
<td>46</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>23:00</td>
<td>50</td>
<td>60</td>
<td>40</td>
<td>54</td>
<td>53</td>
<td>51</td>
<td>50</td>
<td>45</td>
</tr>
</tbody>
</table>

#### Daytime

<table>
<thead>
<tr>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>53</td>
<td>68</td>
<td>46</td>
<td>57</td>
<td>54</td>
<td>52</td>
<td>51</td>
</tr>
<tr>
<td>High</td>
<td>59</td>
<td>82</td>
<td>49</td>
<td>67</td>
<td>56</td>
<td>54</td>
<td>53</td>
</tr>
<tr>
<td>Low</td>
<td>48</td>
<td>57</td>
<td>33</td>
<td>54</td>
<td>52</td>
<td>49</td>
<td>47</td>
</tr>
</tbody>
</table>

#### Nighttime

<table>
<thead>
<tr>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>48</td>
<td>61</td>
<td>39</td>
<td>53</td>
<td>50</td>
<td>48</td>
<td>47</td>
</tr>
<tr>
<td>High</td>
<td>53</td>
<td>64</td>
<td>46</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>Low</td>
<td>43</td>
<td>57</td>
<td>33</td>
<td>49</td>
<td>46</td>
<td>44</td>
<td>42</td>
</tr>
</tbody>
</table>

- **Ldn:** 56
- **% Daytime Energy:** 83%
- **% Nighttime Energy:** 17%

---

BOLLARD
Acoustical Consultants
# Appendix C-4

**Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)**

**Quick Quack Car Wash at Iron Point Road - Folsom, California**

**Monday, August 08, 2016**

<table>
<thead>
<tr>
<th>Hour</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>49</td>
<td>61</td>
<td>38</td>
<td>53</td>
<td>52</td>
<td>50</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>1:00</td>
<td>47</td>
<td>58</td>
<td>36</td>
<td>51</td>
<td>50</td>
<td>49</td>
<td>46</td>
<td>42</td>
</tr>
<tr>
<td>2:00</td>
<td>47</td>
<td>63</td>
<td>32</td>
<td>52</td>
<td>50</td>
<td>47</td>
<td>45</td>
<td>41</td>
</tr>
<tr>
<td>3:00</td>
<td>49</td>
<td>63</td>
<td>34</td>
<td>54</td>
<td>51</td>
<td>50</td>
<td>47</td>
<td>43</td>
</tr>
<tr>
<td>4:00</td>
<td>51</td>
<td>59</td>
<td>41</td>
<td>56</td>
<td>54</td>
<td>52</td>
<td>50</td>
<td>47</td>
</tr>
<tr>
<td>5:00</td>
<td>55</td>
<td>63</td>
<td>48</td>
<td>59</td>
<td>57</td>
<td>56</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>6:00</td>
<td>56</td>
<td>63</td>
<td>50</td>
<td>60</td>
<td>58</td>
<td>57</td>
<td>56</td>
<td>54</td>
</tr>
<tr>
<td>7:00</td>
<td>54</td>
<td>64</td>
<td>46</td>
<td>59</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>8:00</td>
<td>53</td>
<td>61</td>
<td>46</td>
<td>57</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>9:00</td>
<td>52</td>
<td>70</td>
<td>46</td>
<td>57</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>10:00</td>
<td>51</td>
<td>62</td>
<td>46</td>
<td>56</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>11:00</td>
<td>52</td>
<td>66</td>
<td>45</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>12:00</td>
<td>53</td>
<td>61</td>
<td>47</td>
<td>56</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>13:00</td>
<td>53</td>
<td>62</td>
<td>48</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>14:00</td>
<td>53</td>
<td>61</td>
<td>48</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>15:00</td>
<td>54</td>
<td>65</td>
<td>48</td>
<td>57</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>16:00</td>
<td>54</td>
<td>61</td>
<td>49</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>17:00</td>
<td>54</td>
<td>73</td>
<td>49</td>
<td>57</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>18:00</td>
<td>53</td>
<td>63</td>
<td>47</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>19:00</td>
<td>54</td>
<td>66</td>
<td>48</td>
<td>57</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>20:00</td>
<td>54</td>
<td>71</td>
<td>48</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>21:00</td>
<td>52</td>
<td>64</td>
<td>47</td>
<td>56</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>22:00</td>
<td>52</td>
<td>68</td>
<td>44</td>
<td>56</td>
<td>54</td>
<td>53</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>23:00</td>
<td>51</td>
<td>64</td>
<td>43</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>51</td>
<td>47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daytime</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>53</td>
<td>65</td>
<td>47</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>High</td>
<td>54</td>
<td>73</td>
<td>50</td>
<td>59</td>
<td>57</td>
<td>55</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Low</td>
<td>51</td>
<td>61</td>
<td>32</td>
<td>56</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nighttime</th>
<th>Leq</th>
<th>Lmax</th>
<th>Lmin</th>
<th>L02</th>
<th>L08</th>
<th>L25</th>
<th>L50</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>51</td>
<td>62</td>
<td>41</td>
<td>55</td>
<td>53</td>
<td>52</td>
<td>50</td>
<td>46</td>
</tr>
<tr>
<td>High</td>
<td>56</td>
<td>68</td>
<td>50</td>
<td>60</td>
<td>58</td>
<td>57</td>
<td>56</td>
<td>54</td>
</tr>
<tr>
<td>Low</td>
<td>47</td>
<td>58</td>
<td>32</td>
<td>51</td>
<td>50</td>
<td>47</td>
<td>45</td>
<td>41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ldn:</th>
<th>% Daytime Energy:</th>
<th>% Nighttime Energy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>70%</td>
<td>30%</td>
</tr>
</tbody>
</table>

---

**BOLLARD**

Acoustical Consultants
Appendix D-1
Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)
Quick Quack Car Wash at Iron Point Road - Folsom, California
Friday, August 05, 2016

Ldn: 57

- Lmax
- L02
- L08
- L25
- L50
- Leq
Appendix D-2
Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)
Quick Quack Car Wash at Iron Point Road - Folsom, California
Saturday, August 06, 2016

Ldn: 57

BOLLARD
Acoustical Consultants
Appendix D-3
Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)
Quick Quack Car Wash at Iron Point Road - Folsom, California
Sunday, August 07, 2016

![Graph showing sound level measurements over the day with Ldn: 56 and various markers for Lmax, L02, L08, L25, L50, and Leq.](image_url)
Appendix D-4
Ambient Noise Monitoring Results - 1739 Abbeyfeale Court (Backyard)
Quick Quack Car Wash at Iron Point Road - Folsom, California
Monday, August 08, 2016

Sound Level, dBA

Hour of Day

Ldn: 58

BOLLARD
Acoustical Consultants
## Appendix F

JE Adams Vacuum Reference Noise Level Data

![Image of a vacuum cleaner](image.png)

<table>
<thead>
<tr>
<th>2 Motor Vac - Small Dome</th>
<th>Distance From Vac in Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wide Open With Attachment</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>Sound Level (dB)</strong></td>
<td>76.4</td>
</tr>
<tr>
<td><strong>Sealed Attachment</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>Sound Level (dB)</strong></td>
<td>80.5</td>
</tr>
<tr>
<td><strong>Attachment Removed</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>Sound Level (dB)</strong></td>
<td>74.5</td>
</tr>
</tbody>
</table>
This page intentionally left blank.
APPENDIX D

Traffic Access and Circulation Analysis
This page intentionally left blank.
September 30, 2016

Mr. Bob Klousner
Environmental Planning Partners, Inc.
3110 Gold Canal Drive, Suite D
Rancho Cordova, California 95670-6164

Subject: Quick Quack Car Wash Traffic Access & Circulation Analysis

Dear Mr. Klousner:

MRO Engineers, Inc., has completed a traffic access and circulation analysis for the proposed Quick Quack Car Wash project. As shown on Figure 1, the project site is located in the southeast quadrant of the intersection of Iron Point Road/Cavitt Drive. The proposed project will consist of a 3,599-square-foot (SF) car wash on a 3.7-acre site. Vehicular access will be via two driveways on Cavitt Drive, both of which are proposed to be full-access locations. The driveways will also serve an undefined “Future Development” area on the project site.

The recommendations resulting from the analysis are summarized below, followed by a detailed discussion of the analysis procedures and results.

ANALYSIS SUMMARY

This analysis addressed the long-term (year 2035) access needs of the proposed Quick Quack Car Wash project. The project site plan is presented on Figure 2, and Figure 3 illustrates the features of the existing transportation system in the immediate vicinity of the project site.

Primary vehicular access for the proposed project will be via two new driveways at the west edge of the project site on Cavitt Drive. Both STOP-sign controlled driveways are proposed to serve all turning movements, both inbound and outbound.

In addition to the project driveways, the analysis addressed conditions at the off-site intersection of Iron Point Road/Cavitt Drive. The analysis focused on the PM peak hour, as it is expected that only minimal activity would occur in the AM peak hour. Two levels of project-related activity were addressed: “average” and “peak.”

Because a portion of the site has been reserved for future development, the analysis also included the traffic associated with that potential project. According to the project applicant, the future development is expected to be a 3,800 SF quick lubrication shop (e.g., Jiffy Lube) or something similar.

The key findings and recommendations resulting from the analysis are summarized below.
KEY FINDINGS AND RECOMMENDATIONS

The results of the access analysis are summarized below. These results reflect conditions in the year 2035 upon completion of both the Quick Quack Car Wash project and the assumed future development. Excerpts from the California Manual on Uniform Traffic Control Devices (CA MUTCD) illustrating the various signs and pavement markings are presented in Attachment A. Also, Figure 4, which is presented later, provides appropriate CA MUTCD references for the signs and markings.

Cavitt Drive/North Driveway

- To avoid creating conflicts with the northbound dual left-turn lanes at the Iron Point Road/Cavitt Drive intersection (which are protected by a raised median along Cavitt Drive), this driveway should be restricted to right-turns only, both inbound and outbound.

- Traffic exiting the project driveway should be controlled by a STOP sign and corresponding pavement markings (i.e., stop bars and legends), as the driveway intersection will not meet the “Peak Hour” warrant for consideration of installation of a traffic signal.

- A RIGHT TURN ONLY sign should be posted below the STOP sign and a RIGHT TURN ONLY pavement arrow should be painted on the driveway approach to its intersection with Cavitt Drive.

- A ONE WAY sign should be installed in the Cavitt Drive median, directly across from the outbound lane at the driveway.

- With completion of both the proposed project and the future development, the Cavitt Drive/North Driveway intersection is projected to operate at Level of Service (LOS) B in the PM peak hour on an average day and LOS C on a peak day.

- The North Driveway has adequate sight distance along Cavitt Drive, so drivers will be able to exit safely.

- No right turn lane or taper is recommended on northbound Cavitt Drive at the North Driveway.

- The site plan provides adequate space at the North Driveway to accommodate the queues of vehicles exiting to Cavitt Drive in the PM peak hour.

Cavitt Drive/South Driveway

- No turn restrictions are recommended in conjunction with the project; full access is acceptable.

- Traffic exiting the project driveway should be controlled by a STOP sign and corresponding pavement markings (i.e., stop bars and legends), as the driveway intersection will not meet the “Peak Hour” warrant for consideration of installation of a traffic signal.

- With completion of both the proposed project and the future development, the Cavitt Drive/South Driveway intersection is projected to operate at Level of Service (LOS) C in the PM peak hours on both an average day and a peak day.
- The South Driveway has adequate sight distance along Cavitt Drive, so drivers will be able to enter and exit safely.

- No right turn lane or taper is recommended on northbound Cavitt Drive at the South Driveway.

- The site plan provides adequate space at the South Driveway to accommodate the queues of vehicles exiting to Cavitt Drive in the PM peak hour.

**Off-Site Improvement Recommendations**

- No off-site improvements are recommended beyond the median-mounted **ONE WAY** sign described above at the North Driveway.

**On-Site Traffic Circulation Recommendations**

The access and circulation recommendations to be implemented on the project site are summarized below. They are illustrated on Figure 4, which is presented later in this report.

- STOP signs and appropriate pavement markings should be installed at the project driveway intersections with Cavitt Drive, as well as near the exits from the car wash tunnel area and the vacuum area.

- A **DO NOT ENTER** sign should be installed at the exit from the one-way vacuum area near the northeast corner of the site to prevent drivers from traveling the wrong way through this area.

- A **KEEP CLEAR** pavement legend should be painted in the on-site intersection immediately east of the car wash tunnel exit. It should be oriented toward drivers entering the car wash area. This is intended to ensure that entering vehicles do not block the ability of drivers to exit the tunnel.

- The circulation aisle along the southwesterly edge of the Future Development area narrows from a two-way road at its northwest end to a single-lane, one-way road at its southeasterly end. It should be widened to allow two-way traffic along its entire length.

- As shown on the project site plan, directional arrows should be painted on the pavement throughout the site to reinforce the appropriate travel paths.

- The project’s signage and any landscape materials located along the Cavitt Drive frontage should not impede the ability of drivers to see oncoming vehicles on Cavitt Drive.
PROPOSED ACCESS SYSTEM

Vehicular access for the proposed project will be via a pair of proposed STOP-sign-controlled driveways on Cavitt Drive. The North Driveway is proposed to be located about 280 feet south of the southerly edge of Iron Point Road. The driveway is proposed to be a full-access location, allowing all turning movements both inbound and outbound.

The South Driveway would be located about 175 feet south of the North Driveway. It is also proposed to be a full-access, STOP-sign-controlled location.

Both driveways will also serve the access needs of the future development area.

ACCESS ANALYSIS

The proposed project consists of a 3,599 SF car wash facility plus a future development area, which is assumed to be a 3,800 SF quick lubrication shop. It is to be located in the southeast quadrant of the intersection of Iron Point Road/Cavitt Drive.

This analysis addressed the cumulative conditions time frame (i.e., the year 2035), to ensure that the resulting recommendations will be applicable to all foreseeable conditions.

In addition to the project driveways and on-site traffic circulation system, the off-site intersection of Iron Point Road/Cavitt Drive was analyzed, as no significant impacts are anticipated at other locations, given the results of previous analyses in the vicinity of the proposed project as well as the magnitude of the project. In recognition of the typical travel characteristics in the area and the anticipated demand patterns at the proposed project, the analysis focused on conditions in the PM peak hour (i.e., the highest hour between 4:00 and 6:00 PM). Two levels of activity at the proposed project were considered: “average” conditions (reflecting typical circumstances on a day-to-day basis) and “peak” conditions (reflecting the busiest days, potentially including Saturdays).

The analysis included the following basic components:

- PM peak-period turning movement forecasts for the intersection of Iron Point Road/Cavitt Drive were derived from information presented in the recently-completed traffic impact analysis for the Broadstone Apartments project. Those forecasts reflect cumulative conditions (year 2035) conditions, based on traffic volume projections developed in conjunction with the environmental analyses for the recently-approved Russell Ranch project. The peak-hour traffic volumes for Cumulative (2035) No Project conditions are included in Attachment B.

- Using information presented in the Institute of Transportation Engineers Trip Generation Manual (ITE, Ninth Edition, 2012), estimates of the volume of traffic to be generated by the proposed Quick Quack Car Wash project on an average day were developed. These estimates were prepared for the PM peak-hour period. Similar estimates were developed for the assumed quick lubrication shop. Attachment B illustrates the average peak-hour traffic volumes resulting from addition of the traffic associated with both projects at the project driveways and the Iron Point Road/Cavitt Drive intersection.

- The PM peak hour project-generated traffic on a “peak” day was estimated using the results of traffic counts at selected car wash facilities, which were conducted in conjunction with an analysis of a proposed Quick Quack Car Wash in Elk Grove, California. (Reference: KD Anderson & Associates, Inc., “Traffic Access Assessment: Quick Quack Car Wash on
Bruceville Road, Elk Grove,” October 30, 2015.) The peak-hour traffic volumes for Cumulative (2035) + Project conditions are presented in Attachment B.

- Using procedures documented in the *Highway Capacity Manual* (Transportation Research Board, 2010), intersection delay and level of service analyses were conducted for Iron Point Road/Cavitt Drive and the project access intersections under cumulative conditions (i.e., the year 2035). Attachment C contains a detailed description of the intersection analysis procedures. Attachment D contains the level of service worksheets.

- Queue length estimates were developed for the project driveways using the results of the *Highway Capacity Manual* calculations and the probability-based analysis procedure set forth in that document. The results of these analyses represent the expected “95th-percentile” queue length (i.e., there is a 95-percent probability that the actual queue at the driveway will be equal to or shorter than the projected queue and only a 5-percent probability that the queue will be longer than the estimated value).

- Signal warrant analyses were performed to determine whether the project driveway intersections would meet the minimum requirements for installation of a traffic signal. This analysis was based on the “Peak Hour” warrant presented in the *California Manual on Uniform Traffic Control Devices* (Caltrans, November 7, 2014).

- Field reconnaissance was conducted on Cavitt Drive to evaluate sight distance at the project driveways.

- The project site plan was evaluated to determine whether traffic would flow safely and efficiently at the project.

- Access and circulation recommendations were developed for presentation in this letter report. Those recommendations addressed driveway traffic control (i.e., signal or STOP-sign control), driveway turn restrictions, minimum recommended throat depth at the project driveways, and driveway queue length, as well as other on-site traffic circulation issues.

**Projected Traffic Volumes**

To ensure consistency with other ongoing or recently-conducted traffic analyses in Folsom, the future year traffic forecasts employed in this analysis are based on information developed in connection with the traffic analysis for the recently-approved Broadstone Apartments and Russell Ranch projects. The traffic forecasts reflect the level of development anticipated throughout the City of Folsom, including the Folsom Sphere of Influence (SOI) annexation area (i.e., the Folsom Plan Area Specific Plan) and the entire Sacramento region, through the year 2035. In addition, the traffic projections reflect completion of all roadway system improvements within the Folsom Plan Area Specific Plan, as well as the regional transportation system improvements identified in the SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

The year 2035 “no project” traffic forecasts are presented in Attachment B.

**Project Trip Generation**

Project-related trip generation estimates for “average” conditions were based on information published in the *Trip Generation Manual* (Institute of Transportation Engineers, Ninth Edition,
2012). Table 1 summarizes the trip generation rates (in terms of trips per 1,000 SF) and the resulting peak-hour trip generation estimates.

As described above, the “peak” conditions trip generation estimates were based on data collected as part of a recent traffic access analysis for a proposed Quick Quack Car Wash in Elk Grove. Specifically, traffic counts were performed at Kelly’s Car Wash in Elk Grove and Prime Shine Car Wash in Manteca, California. Conversion of those counts to trip generation rates (in terms of trips/1,000 SF) revealed that the Elk Grove location had a higher rate – 46.77 trips/1,000 SF (compared to 39.38 trips/1,000 SF at the Manteca facility), so that rate was employed in this analysis, as summarized in Table 1.

Also shown in Table 1 is the peak-hour trip generation estimate for the assumed 3,800 SF quick lubrication facility, based on application of trip rates from the ITE Trip Generation Manual.

Under average conditions, the proposed Quick Quack Car Wash project is expected to generate a total of 66 vehicle-trips in the weekday PM peak hour (34 inbound and 32 outbound), including the assumed quick lubrication facility. Under peak conditions, the total project is estimated to generate 184 peak hour trips (93 inbound and 91 outbound).

In order to ensure a conservative analysis, no internal trips or pass-by trips were assumed in conjunction with either of the two development projects and, therefore, no trip adjustments were applied.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Average Conditions(^7)</th>
<th>Peak Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Quack Car Wash (3,599 SF(^2))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trip Rate(^3)</td>
<td>7.06</td>
<td>23.39(^4)</td>
</tr>
<tr>
<td>Trips</td>
<td>25</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>14.12</td>
<td>168</td>
</tr>
<tr>
<td>Quick Lubrication Shop(^5) (3,800 SF)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trip Rate(^1,6)</td>
<td>2.85</td>
<td>2.85</td>
</tr>
<tr>
<td>Trips</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Total Trips</td>
<td>34</td>
<td>93</td>
</tr>
</tbody>
</table>

Notes:
2. Square feet.
3. Trips per 1,000 SF.
5. Assumed to have 3 service bays.
Project Trip Distribution

The geographic distribution of project-generated trips was estimated based on projected traffic patterns at Iron Point Road/Cavitt Drive and is summarized below:

- To/from the west on Iron Point Road: 60 percent
- To/from the east on Iron Point Road: 30 percent
- To/from the north on Cavitt Drive: 5 percent
- To/from the south on Cavitt Drive: 5 percent

Project Traffic Assignment

The project-generated traffic was assigned to the project driveways and Cavitt Drive in accordance with the geographic trip distribution described above to develop “Cumulative + Project” peak-hour traffic volumes for both average and peak conditions. These volumes are illustrated in Attachment B.

Traffic Operations Analysis

The results of the level of service analyses for Iron Point Road/Cavitt Drive and the STOP-sign-controlled project driveways are summarized in Table 2. Shown there are LOS results for cumulative conditions, both with and without the proposed project (for average and peak conditions). Attachment D presents the level of service worksheets.

Under Cumulative No Project conditions, Iron Point Road/Cavitt Drive will operate at LOS C. This conforms to the City of Folsom’s General Plan policy regarding intersection LOS. Under this scenario, the project driveways do not exist, so no LOS results are presented here.

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Cumulative No Project Delay</th>
<th>LOS</th>
<th>Cumulative + Project Average Conditions Delay</th>
<th>LOS</th>
<th>Peak Conditions Delay</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Point Rd./Cavitt Dr.</td>
<td>29.9</td>
<td>C</td>
<td>31.7</td>
<td>C</td>
<td>34.9</td>
<td>C</td>
</tr>
<tr>
<td>Cavitt Dr./North Driveway</td>
<td>--</td>
<td>--</td>
<td>14.8</td>
<td>B</td>
<td>16.0</td>
<td>C</td>
</tr>
<tr>
<td>Cavitt Dr./South Driveway</td>
<td>--</td>
<td>--</td>
<td>16.0</td>
<td>C</td>
<td>19.3</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
2. Average control delay (seconds per vehicle).
3. Level of service.
4. Project driveway does not exist under “no project” conditions.
5. Driveway delays represent the “worst-case” movement.
Under average conditions, with addition of the traffic associated with the proposed project (including both the car wash and the quick lubrication shop), a slight delay increase is projected at Iron Point Road/Cavitt Drive, but it will continue to operate at an acceptable LOS C. At the project’s North Driveway, the worst-case movement will operate at LOS B. At the South Driveway, LOS C is projected. These results conform to the City of Folsom General Plan policy calling for operation at LOS C or better.

Even under “peak” conditions, all of the study locations will operate at acceptable levels of service. Iron Point Road/Cavitt Drive will continue to operate at LOS C. Both driveways will also operate at LOS C.

Signal Warrant Analysis

The need for installation of a traffic signal at a given location is judged relative to a defined set of traffic signal “warrants.” The warrants applied in the State of California are established by Caltrans, based on essentially similar requirements documented in the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA). The current signal warrants are documented in “Part 4 – Highway Traffic Signals” of the California Manual on Uniform Traffic Control Devices (Caltrans, November 7, 2014). Nine such warrants have been defined, although not all warrants are relevant to each case. This analysis of the project driveway intersections was conducted using the “Peak Hour” warrant.

The analysis revealed that neither project driveway intersection is expected to meet the peak-hour signal warrant, either with or without the proposed project, and even under peak conditions.

Sight Distance Analysis

In general, sight distance is defined as, “... the continuous length of highway ahead visible to the driver.” (Reference: State of California, Department of Transportation, Highway Design Manual, Fifth Edition, November 1, 2001.) Of particular interest in this analysis is “stopping sight distance.” The Caltrans Highway Design Manual defines this factor as, “... the distance required by the driver of a vehicle, traveling at a given speed, to bring his vehicle to a stop after an object on the road becomes visible.”

To ensure that drivers will be able to enter and exit the site safely at the project driveways, a stopping sight distance analysis was conducted at the proposed driveway locations using information provided in A Policy on Geometric Design of Highways and Streets (American Association of State Highway and Transportation Officials, 2004).

Cavitt Drive south of Iron Point Road has no posted speed limit. The segment north of Iron Point Road is posted 35 MPH, though, which also seems appropriate for the segment along the project frontage. That speed calls for 250 feet of clear stopping sight distance. Accounting for the fact that some drivers will exceed the posted speed limit, a design value of 305 feet (representing the stopping sight distance at 40 MPH) was used for this analysis. The analysis was conducted relative to both inbound and outbound turns at the project driveways, to ensure that project-related drivers could see and react to approaching vehicles on Cavitt Drive.

At both project driveways, entering and exiting vehicles have clear visibility that exceeds 305 feet. Thus, adequate sight distance is available.
Driveway Turn Restrictions

Both project driveways are proposed as full access locations, at which all turning movements would be allowed in both the inbound and outbound directions. Under certain circumstances, it is advisable to prohibit particular turn movements (especially left turns). For example, the City of Folsom has a policy prohibiting outbound left turns from private property onto six-lane streets.

The North Driveway is located at the southerly end of the northbound left-turn lanes serving the Iron Point Road/Cavitt Drive intersection, approximately 280 feet from the near edge of the crosswalk on the south leg of that intersection. Those left-turn lanes are separated from southbound traffic by a narrow raised median. Immediately south of the raised median is a short section (approximately 100 feet) of painted barrier median (i.e., “double-double” yellow lines), which vehicles are prohibited from crossing. That painted barrier then transitions into a two-way center left-turn lane.

In recognition of the existing raised median and painted barrier median, and to avoid conflicts with left-turning vehicles queued on the northbound Iron Point Road/Cavitt Drive approach, it is recommended that left turns be prohibited at the North Driveway; that driveway should be restricted to right-turns only, both inbound and outbound.

The South Driveway is roughly 175 feet south of the North Driveway. This driveway would be served by the two-way center left-turn lane described above. This analysis has revealed no factors that would suggest a need for turn restrictions of any sort at this project driveway. The level of service analysis presented above indicates that a full access driveway would operate satisfactorily, with drivers experiencing low delay values. Further, field investigations revealed that adequate sight distance exists for drivers entering and exiting the site, and no safety problems are foreseen.

Consequently, no turn restrictions are recommended at the South Driveway; all turning movements should be allowed.

Project Driveway Queue Length Analysis

The minimum recommended throat depth (MRTD) for outbound traffic under “Cumulative Plus Project” conditions (both “average” and “peak”) was estimated at the project driveways. Adequate throat depth is necessary on the project driveways to provide enough stacking distance for exiting vehicles so that the first on-site parking space is not blocked.

An analysis was conducted to determine the expected “95-th-percentile” queue length (i.e., there is a 95 percent probability that the actual queue at the driveway will be equal to or shorter than the projected queue). Using the standard approach accepted by the City of Folsom, the MRTD was derived from the intersection level of service calculations.

Table 3 summarizes the results of the queue length analysis for both project driveway intersections. This analysis focused on the exiting movements from both project driveways to Cavitt Drive as well as the southbound left-turn movement from Cavitt Drive into the South Driveway.

In all cases, the projected queues can be accommodated within the space available.
<table>
<thead>
<tr>
<th>Turn Movement</th>
<th>Available Storage</th>
<th>Queue Length</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average Conditions</td>
<td>Peak Conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vehicles</td>
<td>Feet</td>
</tr>
<tr>
<td>North Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outbound Right</td>
<td>45 ft.</td>
<td>1</td>
<td>25 ft.</td>
</tr>
<tr>
<td>South Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inbound Left</td>
<td>75 ft.</td>
<td>1</td>
<td>25 ft.</td>
</tr>
<tr>
<td>Outbound Left/Right</td>
<td>40 ft.</td>
<td>1</td>
<td>25 ft.</td>
</tr>
</tbody>
</table>

**ON-SITE TRAFFIC CIRCULATION**

The project site plan was reviewed to ensure that drivers will be able to circulate through the project site safely. Although the review indicated that the on-site circulation system is generally adequate, the following suggestions are offered for consideration by City staff. The numbered items below correspond to the numbering on Figure 4, which illustrates the recommendations.

1. At the northeast corner of the project site:
   a. A STOP sign should be posted to control traffic exiting the vacuum area.
   b. On the reverse side of the STOP sign described above, a DO NOT ENTER sign should be installed to prevent drivers from entering the one-way vacuum area and traveling in the wrong direction.

2. A STOP sign and appropriate pavement markings should be installed at the South Driveway approach to Cavitt Drive.

3. A ONE WAY sign should be placed in the raised median on Cavitt Drive across from the North Driveway.

4. A STOP sign and appropriate pavement markings should be installed at the North Driveway approach to Cavitt Drive. Also, a RIGHT TURN ONLY arrow should be painted on the driveway approach to the intersection.

5. A STOP sign and appropriate pavement markings should be installed to control vehicles exiting the car wash tunnel who do not proceed to the vacuum area.

6. A KEEP CLEAR legend should be painted in the intersection just east of the car wash tunnel exit. This legend should be oriented toward vehicles entering the car wash area, and is intended to ensure that queues of entering vehicles do not block the exit from the tunnel. If the tunnel exit were to be blocked, a potentially hazardous situation could be created for vehicles being conveyed through the tunnel.
1. CA MUTCD R1-1 ("STOP") sign facing exiting traffic and R5-1 sign ("DO NOT ENTER") facing entering traffic
2. CA MUTCD R1-1 ("STOP")
3. CA MUTCD R6-1 ("ONE WAY" Arrow) mounted on median
4. CA MUTCD R1-1 ("STOP") above with CA MUTCD R3-5 (Right) ("RIGHT TURN ONLY") below (both on the same post) plus Right Turn Arrow pavement marking (CA MUTCD Figure 3B-24 (CA) – Type IV (R))
5. CA MUTCD R1-1 ("STOP")
6. "KEEP CLEAR" pavement legend (CA MUTCD Figure 3B-18 (CA), Option D)
7. Allow two-way traffic flow.

Ref.: Caltrans, California Manual on Uniform Traffic Control Devices (CA MUTCD), 2014.
7. The circulation aisle along the southwesterly edge of the Future Development area narrows from a two-way road at its northwest end to a single-lane, one-way road at its southeasterly end. It should be widened to allow two-way traffic along its entire length.

8. As shown on the project site plan, directional arrows should be painted on the pavement throughout the site to assist drivers as they circulate internally.

9. The project’s signage and any landscape materials located along the Cavitt Drive frontage should not impede the ability of drivers to see oncoming vehicles on Cavitt Drive.

OFF-SITE IMPROVEMENTS

No off-site improvements are recommended, other than the median-mounted ONE WAY sign described in Item 3 above.

CONCLUSION

This analysis addressed a variety of traffic access and circulation issues associated with the proposed Quick Quack Car Wash project in the City of Folsom, California. Recommendations were provided with respect to the appropriate form of traffic control at the project driveways, sight distance at those locations, and the potential need to restrict turn movements. Queue length estimates were developed for entering and exiting movements at the project driveways. Several recommendations were also provided concerning on-site traffic circulation.

We hope this information is useful. Please feel free to contact me call if you have questions or need further information.

Sincerely,

MRO ENGINEERS, INC.

[Signature]

Neal K. Liddicoat, P.E.
Traffic Engineering Manager

Attachments

cc: Mr. Steve Banks, City of Folsom
ATTACHMENT A

Excerpts from California Manual on Uniform Traffic Control Devices
(Caltrans, November 7, 2014)
Figure 2B-1. STOP and YIELD Signs and Plaques

Figure 2B-2. Unsignalized Pedestrian Crosswalk Signs

* The legend STATE LAW is optional. A fluorescent yellow-green background color may be used instead of yellow for this sign.
Figure 2B-11. Selective Exclusion Signs

- DO NOT ENTER (R5-1)
- WRONG WAY (R5-1a)
- NO MOTOR VEHICLES (R5-3)
- NO COMMERCIAL VEHICLES (R5-4)
- NO VEHICLES WITH LUGS (R5-5)
- NO NON-MOTORIZED TRAFFIC (R5-6)
- NO MOTOR-DRIVEN CYCLES (R5-7)
- NO PEDESTRIANS OR BICYCLES (R5-10b)
- NO PEDESTRIANS (R5-10c)
- AUTHORIZED VEHICLES ONLY (R5-11)
- NO PEDESTRIANS (R9-3)
- NO PEDESTRIANS (R9-13)
- NO PEDESTRIANS (R9-14)

* An optional word message sign is shown in the “Standard Highway Signs and Markings” book.
Figure 2B-13. ONE WAY and Divided Highway Crossing Signs

- R6-1: ONE WAY
- R6-2: ONE WAY
- R6-3: DIVIDED HIGHWAY
- R6-3a: DIVIDED HIGHWAY
- R6-6: BEGIN ONE WAY
- R6-7: END ONE WAY
Figure 2B-4. Movement Prohibition and Lane Control Signs and Plaques

- R3-1: No Left Turn
- R3-2: No Right Turn
- R3-3: No U-Turn
- R3-4: Left Turn Only
- R3-5: Right Turn Only
- R3-6: OK to Turn Left
- R3-7: Left Lane Must Turn Left
- R3-8: Left Lane Only
- R3-8a: Left Lane Only OK
- R3-8b: Only Left Lane
- R3-9: Right Lane Only
- R3-10: Right Lane Only
- R3-11: Right Lane Only
- R3-12: Right Lane Must Exit
- R3-13: Begin Left Turn Lane
- R3-14: Begin Right Turn Lane
- R3-15: Limited Access Highway
- R3-16: Limited Access Highway
- R3-17: Limited Access Highway
- R3-18: Limited Access Highway
- R3-19: Limited Access Highway
- R3-20: Limited Access Highway
- R3-21: Limited Access Highway
- R3-22: Limited Access Highway
- R3-23: Limited Access Highway
- R3-24: Limited Access Highway
- R3-25: Limited Access Highway
- R3-26: Limited Access Highway
- R3-27: Limited Access Highway
- R3-28: Limited Access Highway
- R3-29: Limited Access Highway
- R3-30: Limited Access Highway
- R3-31: Limited Access Highway
- R3-32: Limited Access Highway
- R3-33: Limited Access Highway

* The diamond symbol may be used instead of the "HOV" word message. The minimum vehicle occupancy level may vary, such as 2+, 3+, 4+. The words "LANE" or "ONLY" may be used with this sign when appropriate.
Figure 3B-24 (CA). Examples of Standard Arrows for Pavement Markings (Sheet 1 of 8)

NOTE: The design details for various arrows are also shown in Department of Transportation's Standard Plans.
Figure 3B-18 (CA). Do Not Block Intersection Markings

Note: Align the edges of the box to define the specific area that is not to be blocked. The box does not have to be rectangular in shape.

Option B:
Box with "DO NOT BLOCK," "KEEP CLEAR," or similar text only message

Option D:
"DO NOT BLOCK," "KEEP CLEAR," or similar text only message (no box)

Legend:
→ Direction of travel

Direction of congested traffic

R10-7 (the R10-7 sign may also be mounted over the roadway)

Optional dotted extension

Optional dotted extensions

Adjacent signalized intersection

STOP

d01 S
ATTACHMENT B

PROJECTED PEAK-HOUR TRAFFIC VOLUMES
ATTACHMENT C

LEVEL OF SERVICE ANALYSIS METHODOLOGY
Intersection Analysis Methodology

Intersection and roadway operations are typically described in terms of level of service (LOS), which is reported on a scale from LOS A (representing free-flow conditions) to LOS F (which represents substantial congestion and delay). The level of service designations are based on a quantitative calculation of delay at the intersection. The specific approach to estimating delay is based on procedures documented in the Highway Capacity Manual (Transportation Research Board, 2010). Descriptions of operating conditions and delay values for signalized and unsignalized intersections are presented below.

Signalized Intersections

Signalized intersections are analyzed using the "operational analysis" methodology presented in the year 2010 edition of the Highway Capacity Manual (HCM 2010). This methodology determines signalized intersection level of service by comparing the "average control delay per vehicle" to the thresholds shown in Table C-1. Control delay represents the delay directly associated with the traffic signal.

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Description</th>
<th>Average Control Delay (Seconds/Vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Very low delay. Most vehicles do not stop</td>
<td>≤ 10.0</td>
</tr>
<tr>
<td>B</td>
<td>Slight delay. Generally good signal progression.</td>
<td>10.1 – 20.0</td>
</tr>
<tr>
<td>C</td>
<td>Increased number of stopped vehicles. Fair signal progression.</td>
<td>20.1 - 35.0</td>
</tr>
<tr>
<td>D</td>
<td>Noticeable congestion. Large proportion of vehicles stopped.</td>
<td>35.1 – 55.0</td>
</tr>
<tr>
<td>E</td>
<td>Operating conditions at or near capacity. Frequent cycle failure.</td>
<td>55.1 - 80.0</td>
</tr>
<tr>
<td>F</td>
<td>Oversaturation. Forced or breakdown flow. Extensive queuing.</td>
<td>&gt; 80.0</td>
</tr>
</tbody>
</table>

Unsignalized Intersections

The analysis of the unsignalized study intersection was conducted using the “two-way stop-control” method documented in Chapter 17 in the *Highway Capacity Manual*. Unlike signalized intersections, this method does not calculate the average control delay for the intersection as a whole. Instead, it provides a control delay value for each of the critical movements (i.e., those controlled by the stop sign or yielding right-of-way to oncoming traffic). For unsignalized intersections, control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For this study, the unsignalized intersection was analyzed using the *Synchro 8* software package, which performs level of service calculations in accordance with the *HCM* procedures. Intersection level of service results are based upon the criteria set forth in Table C-2. Queue length estimates are also provided for the key movements at unsignalized intersections.

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Description</th>
<th>Average Control Delay (Seconds/Vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Little or no conflicting traffic for minor movements.</td>
<td>≤ 10.0</td>
</tr>
<tr>
<td>B</td>
<td>Drivers on minor movements begin to notice absence of available gaps.</td>
<td>10.1 – 15.0</td>
</tr>
<tr>
<td>C</td>
<td>Drivers on minor movements begin to experience delays waiting for adequate gaps.</td>
<td>15.1 – 25.0</td>
</tr>
<tr>
<td>D</td>
<td>Queuing occurs on minor movements due to a reduction in available gaps.</td>
<td>25.1 – 35.0</td>
</tr>
<tr>
<td>E</td>
<td>Extensive minor movement queuing due to insufficient gaps.</td>
<td>35.1 – 50.0</td>
</tr>
<tr>
<td>F</td>
<td>Insufficient gaps of adequate size to allow minor movement traffic demand to be accommodated.</td>
<td>&gt; 50.0</td>
</tr>
</tbody>
</table>


The City of Folsom *General Plan* calls for maintaining LOS C throughout the City. However, this standard is intended for application to signalized intersections only (either existing or planned), and not to unsignalized intersections or private driveways. In this study, the LOS calculations for the STOP-sign controlled “Project Driveway” intersection are solely intended to provide a relative indication of expected delays and queue lengths for the minor movements at that location.
ATTACHMENT D

LEVEL OF SERVICE WORKSHEETS
CUMULATIVE NO PROJECT

PM PEAK HOUR
## 6: Cavitt Dr. & Iron Point Rd.
### HCM 2010 Signalized Intersection Summary

#### PM Peak Hour

<table>
<thead>
<tr>
<th>Movement</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>SEL</th>
<th>SET</th>
<th>SER</th>
<th>NWL</th>
<th>NWT</th>
<th>NWIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume (veh/h)</td>
<td>110</td>
<td>1430</td>
<td>440</td>
<td>200</td>
<td>880</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>170</td>
<td>500</td>
<td>35</td>
<td>190</td>
</tr>
<tr>
<td>Number</td>
<td>7</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>8</td>
<td>18</td>
<td>1</td>
<td>6</td>
<td>16</td>
<td>5</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Initial Q (Qb), veh</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ped-Bike Adj (A_pbT)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Parking Bus, Adj</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Adj Sat Flow, veh/h</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
</tr>
<tr>
<td>Adj Flow Rate, veh/h</td>
<td>112</td>
<td>1459</td>
<td>449</td>
<td>204</td>
<td>898</td>
<td>51</td>
<td>26</td>
<td>26</td>
<td>173</td>
<td>536</td>
<td>0</td>
<td>194</td>
</tr>
<tr>
<td>Adj No. of Lanes</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
</tr>
<tr>
<td>Percent Heavy Veh, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cap, veh/h</td>
<td>146</td>
<td>1865</td>
<td>581</td>
<td>249</td>
<td>2161</td>
<td>673</td>
<td>196</td>
<td>205</td>
<td>175</td>
<td>662</td>
<td>0</td>
<td>295</td>
</tr>
<tr>
<td>Arrive On Green</td>
<td>0.08</td>
<td>0.37</td>
<td>0.37</td>
<td>0.14</td>
<td>0.42</td>
<td>0.42</td>
<td>0.11</td>
<td>0.11</td>
<td>0.19</td>
<td>0.19</td>
<td>0.00</td>
<td>0.19</td>
</tr>
<tr>
<td>Sat Flow, veh/h</td>
<td>1774</td>
<td>5085</td>
<td>1583</td>
<td>1774</td>
<td>5085</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>3648</td>
<td>0</td>
</tr>
<tr>
<td>Grp Volume(v), veh/h</td>
<td>112</td>
<td>1459</td>
<td>449</td>
<td>204</td>
<td>898</td>
<td>51</td>
<td>26</td>
<td>26</td>
<td>173</td>
<td>536</td>
<td>0</td>
<td>194</td>
</tr>
<tr>
<td>Grp Sat Flow(s),veh/h/ln</td>
<td>1774</td>
<td>1695</td>
<td>1583</td>
<td>1774</td>
<td>1695</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>0</td>
<td>1583</td>
</tr>
<tr>
<td>Q Serve(g_s), s</td>
<td>5.0</td>
<td>20.8</td>
<td>20.4</td>
<td>9.1</td>
<td>10.1</td>
<td>1.6</td>
<td>1.1</td>
<td>1.0</td>
<td>8.9</td>
<td>11.8</td>
<td>0.0</td>
<td>9.3</td>
</tr>
<tr>
<td>Cycle Q Clear(g_c), s</td>
<td>5.0</td>
<td>20.8</td>
<td>20.4</td>
<td>9.1</td>
<td>10.1</td>
<td>1.6</td>
<td>1.1</td>
<td>1.0</td>
<td>8.9</td>
<td>11.8</td>
<td>0.0</td>
<td>9.3</td>
</tr>
<tr>
<td>Prop In Lane</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lane Grp Cap(c), veh/h</td>
<td>146</td>
<td>1865</td>
<td>581</td>
<td>249</td>
<td>2161</td>
<td>673</td>
<td>196</td>
<td>205</td>
<td>175</td>
<td>662</td>
<td>0</td>
<td>295</td>
</tr>
<tr>
<td>V/C Ratio(X)</td>
<td>0.77</td>
<td>0.78</td>
<td>0.77</td>
<td>0.82</td>
<td>0.42</td>
<td>0.08</td>
<td>0.13</td>
<td>0.13</td>
<td>0.99</td>
<td>0.81</td>
<td>0.00</td>
<td>0.66</td>
</tr>
<tr>
<td>Avail Cap(c_a), veh/h</td>
<td>522</td>
<td>1995</td>
<td>621</td>
<td>522</td>
<td>2161</td>
<td>673</td>
<td>196</td>
<td>205</td>
<td>175</td>
<td>826</td>
<td>0</td>
<td>369</td>
</tr>
<tr>
<td>HCM Platoon Ratio</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Upstream Filter(I)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Uniform Delay (d), s/veh</td>
<td>36.7</td>
<td>22.9</td>
<td>22.8</td>
<td>34.1</td>
<td>16.4</td>
<td>13.9</td>
<td>32.8</td>
<td>32.7</td>
<td>36.2</td>
<td>31.8</td>
<td>0.0</td>
<td>30.8</td>
</tr>
<tr>
<td>Incr Delay (d2), s/veh</td>
<td>8.2</td>
<td>2.0</td>
<td>5.7</td>
<td>6.6</td>
<td>0.1</td>
<td>0.0</td>
<td>0.3</td>
<td>0.3</td>
<td>65.2</td>
<td>4.9</td>
<td>0.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Initial Q Delay(d3), s/veh</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>%ile BackOfQ(50%),veh/ln</td>
<td>2.8</td>
<td>10.1</td>
<td>9.8</td>
<td>4.9</td>
<td>4.7</td>
<td>0.7</td>
<td>0.5</td>
<td>0.5</td>
<td>7.0</td>
<td>6.3</td>
<td>0.0</td>
<td>4.3</td>
</tr>
<tr>
<td>LnGrp Delay(d),s/veh</td>
<td>44.9</td>
<td>24.9</td>
<td>28.5</td>
<td>40.6</td>
<td>16.5</td>
<td>14.0</td>
<td>33.1</td>
<td>33.0</td>
<td>101.4</td>
<td>36.7</td>
<td>0.0</td>
<td>33.7</td>
</tr>
<tr>
<td>LnGrp LOS</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>F</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td>Approach Vol, veh/h</td>
<td>2020</td>
<td>1153</td>
<td>225</td>
<td>730</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Delay, s/veh</td>
<td>26.8</td>
<td>20.7</td>
<td>85.6</td>
<td>35.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach LOS</td>
<td>C</td>
<td>C</td>
<td>F</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned Phs</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phs Duration (G+Y+Rc), s</td>
<td>19.2</td>
<td>15.4</td>
<td>33.9</td>
<td>13.0</td>
<td>10.7</td>
<td>38.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change Period (Y+Rc), s</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Green Setting (Gmax), s</td>
<td>19.0</td>
<td>24.0</td>
<td>32.0</td>
<td>9.0</td>
<td>24.0</td>
<td>32.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Q Clear Time (g_c+H1), s</td>
<td>13.8</td>
<td>11.1</td>
<td>22.8</td>
<td>10.9</td>
<td>7.0</td>
<td>12.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Ext Time (p_c), s</td>
<td>1.4</td>
<td>0.4</td>
<td>7.1</td>
<td>0.0</td>
<td>0.2</td>
<td>16.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Intersection Summary
- HCM 2010 Ctrl Delay: 29.9
- HCM 2010 LOS: C

### Notes
- User approved volume balancing among the lanes for turning movement.

Quick Quack Car Wash - Folsom, CA
9/30/2016

Synchro 8 Report
MRO Engineers, Inc.
CUMULATIVE + PROJECT

PM PEAK HOUR
(“AVERAGE” CONDITIONS)
## 6: Cavitt Dr. & Iron Point Rd.

### HCM 2010 Signalized Intersection Summary

#### PM Peak Hour ("Average" Conditions)

<table>
<thead>
<tr>
<th>Movement</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>SEL</th>
<th>SET</th>
<th>SER</th>
<th>NWL</th>
<th>NWT</th>
<th>NWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume (veh/h)</td>
<td>110</td>
<td>1510</td>
<td>460</td>
<td>211</td>
<td>910</td>
<td>50</td>
<td>25</td>
<td>27</td>
<td>170</td>
<td>519</td>
<td>37</td>
<td>200</td>
</tr>
<tr>
<td>Number</td>
<td>7</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>8</td>
<td>18</td>
<td>1</td>
<td>6</td>
<td>16</td>
<td>5</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Initial Q (Qb), veh</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ped-Bike Adj(A_pbT)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Parking Bus, Adj</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Adj Sat Flow, veh/h</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
</tr>
<tr>
<td>Adj Flow Rate, veh/h</td>
<td>112</td>
<td>1541</td>
<td>469</td>
<td>215</td>
<td>929</td>
<td>51</td>
<td>28</td>
<td>28</td>
<td>173</td>
<td>557</td>
<td>0</td>
<td>204</td>
</tr>
<tr>
<td>Adj No. of Lanes</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
</tr>
<tr>
<td>Percent Heavy Veh, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cap, veh/h</td>
<td>146</td>
<td>1839</td>
<td>573</td>
<td>250</td>
<td>2166</td>
<td>674</td>
<td>192</td>
<td>202</td>
<td>172</td>
<td>677</td>
<td>0</td>
<td>302</td>
</tr>
<tr>
<td>Arrive On Green</td>
<td>0.08</td>
<td>0.36</td>
<td>0.36</td>
<td>0.15</td>
<td>0.43</td>
<td>0.43</td>
<td>0.11</td>
<td>0.11</td>
<td>0.11</td>
<td>0.19</td>
<td>0.00</td>
<td>0.19</td>
</tr>
<tr>
<td>Sat Flow, veh/h</td>
<td>1774</td>
<td>5085</td>
<td>1583</td>
<td>1774</td>
<td>5085</td>
<td>1583</td>
<td>1774</td>
<td>1774</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>1583</td>
</tr>
<tr>
<td>Grp Volume[v], veh/h</td>
<td>112</td>
<td>1541</td>
<td>469</td>
<td>215</td>
<td>929</td>
<td>51</td>
<td>28</td>
<td>28</td>
<td>173</td>
<td>557</td>
<td>0</td>
<td>204</td>
</tr>
<tr>
<td>Grp Sat Flow(s),veh/h</td>
<td>1774</td>
<td>1695</td>
<td>1583</td>
<td>1774</td>
<td>1695</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>0</td>
<td>1583</td>
</tr>
<tr>
<td>Q Serve(g_s), s</td>
<td>5.1</td>
<td>23.0</td>
<td>22.3</td>
<td>9.8</td>
<td>10.6</td>
<td>1.6</td>
<td>1.1</td>
<td>1.1</td>
<td>9.0</td>
<td>12.5</td>
<td>0.0</td>
<td>9.9</td>
</tr>
<tr>
<td>Cycle Q Clear(g_c), s</td>
<td>5.1</td>
<td>23.0</td>
<td>22.3</td>
<td>9.8</td>
<td>10.6</td>
<td>1.6</td>
<td>1.1</td>
<td>1.1</td>
<td>9.0</td>
<td>12.5</td>
<td>0.0</td>
<td>9.9</td>
</tr>
<tr>
<td>Prop In Lane</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lane Grp Cap(c), veh/h</td>
<td>146</td>
<td>1839</td>
<td>573</td>
<td>250</td>
<td>2166</td>
<td>674</td>
<td>192</td>
<td>202</td>
<td>172</td>
<td>677</td>
<td>0</td>
<td>302</td>
</tr>
<tr>
<td>V/C Ratio(X)</td>
<td>0.77</td>
<td>0.84</td>
<td>0.82</td>
<td>0.83</td>
<td>0.43</td>
<td>0.08</td>
<td>0.14</td>
<td>0.14</td>
<td>0.10</td>
<td>0.82</td>
<td>0.00</td>
<td>0.68</td>
</tr>
<tr>
<td>Avail Cap(Qa), veh/h</td>
<td>513</td>
<td>1961</td>
<td>611</td>
<td>513</td>
<td>2166</td>
<td>674</td>
<td>192</td>
<td>202</td>
<td>172</td>
<td>812</td>
<td>0</td>
<td>362</td>
</tr>
<tr>
<td>HCM Platoon Ratio</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Upstream Filter(I)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Uniform Delay (d), s/veh</td>
<td>37.3</td>
<td>24.3</td>
<td>24.0</td>
<td>34.4</td>
<td>16.7</td>
<td>14.1</td>
<td>33.5</td>
<td>33.5</td>
<td>37.0</td>
<td>32.2</td>
<td>0.0</td>
<td>31.2</td>
</tr>
<tr>
<td>Incr Delay (d2), s/veh</td>
<td>8.3</td>
<td>3.2</td>
<td>8.2</td>
<td>6.6</td>
<td>0.1</td>
<td>0.0</td>
<td>0.3</td>
<td>0.3</td>
<td>70.7</td>
<td>5.8</td>
<td>0.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Initial Q Delay(d3), s/veh</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>%ile BackOfQ(50%),veh/h</td>
<td>2.9</td>
<td>11.2</td>
<td>10.9</td>
<td>5.3</td>
<td>5.0</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
<td>7.3</td>
<td>6.7</td>
<td>0.0</td>
<td>4.6</td>
</tr>
<tr>
<td>LnGrp Delay(d),s/veh</td>
<td>45.6</td>
<td>27.5</td>
<td>32.3</td>
<td>41.0</td>
<td>16.9</td>
<td>14.2</td>
<td>33.8</td>
<td>33.8</td>
<td>107.7</td>
<td>38.1</td>
<td>0.0</td>
<td>35.0</td>
</tr>
<tr>
<td>LnGrp LOS</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>F</td>
<td>D</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Vol, veh/h</td>
<td>2172</td>
<td>1195</td>
<td>227</td>
<td>761</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Delay, s/veh</td>
<td>29.5</td>
<td>21.1</td>
<td>90.1</td>
<td>37.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach LOS</td>
<td>C</td>
<td>C</td>
<td>F</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Timer

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned Phs</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Phs Duration (G+Y+Rc), s</td>
<td>19.8</td>
<td>16.2</td>
<td>34.0</td>
<td>13.0</td>
<td>10.8</td>
<td>39.4</td>
<td></td>
</tr>
<tr>
<td>Change Period (Y+Rc), s</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Max Green Setting (Gmax), s</td>
<td>19.0</td>
<td>24.0</td>
<td>32.0</td>
<td>9.0</td>
<td>24.0</td>
<td>32.0</td>
<td></td>
</tr>
<tr>
<td>Max Q Clear Time (g_c+11), s</td>
<td>14.5</td>
<td>11.8</td>
<td>25.0</td>
<td>11.0</td>
<td>7.1</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Green Ext Time (p_c), s</td>
<td>1.3</td>
<td>0.5</td>
<td>5.0</td>
<td>0.0</td>
<td>0.2</td>
<td>16.9</td>
<td></td>
</tr>
</tbody>
</table>

### Intersection Summary

- **HCM 2010 Ctrl Delay**: 31.7
- **HCM 2010 LOS**: C

### Notes

User approved volume balancing among the lanes for turning movement.

---

Quick Quack Car Wash - Folsom, CA  
9/30/2015

Synchro 8 Report  
MRO Engineers, Inc.
## Intersection

**Int Delay, s/veh**: 0.1

<table>
<thead>
<tr>
<th>Movement</th>
<th>WBL</th>
<th>WBR</th>
<th>SEL</th>
<th>SET</th>
<th>NWT</th>
<th>NWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol, veh/h</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>698</td>
<td>743</td>
<td>0</td>
</tr>
<tr>
<td>Conflicting Peds, #/hr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sign Control</td>
<td>Stop</td>
<td>Stop</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
</tr>
<tr>
<td>RT Channelized</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Storage Length</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Veh in Median Storage, #</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grade, %</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Heavy Vehicles, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mvmt Flow</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>759</td>
<td>808</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major/Minor</th>
<th>Minor2</th>
<th>Major1</th>
<th>Major2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflicting Flow All</td>
<td>1567</td>
<td>808</td>
<td>808</td>
</tr>
<tr>
<td>Stage 1</td>
<td>808</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stage 2</td>
<td>759</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Critical Hwy</td>
<td>6.42</td>
<td>6.22</td>
<td>4.12</td>
</tr>
<tr>
<td>Critical Hwy Stg 1</td>
<td>5.42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Critical Hwy Stg 2</td>
<td>5.42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Follow-up Hwy</td>
<td>3.518</td>
<td>3.318</td>
<td>2.218</td>
</tr>
<tr>
<td>Pot Cap-1 Maneuver</td>
<td>122</td>
<td>381</td>
<td>817</td>
</tr>
<tr>
<td>Stage 1</td>
<td>438</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stage 2</td>
<td>462</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Platoon blocked, %</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mov Cap-1 Maneuver</td>
<td>122</td>
<td>381</td>
<td>817</td>
</tr>
<tr>
<td>Mov Cap-2 Maneuver</td>
<td>122</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stage 1</td>
<td>438</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stage 2</td>
<td>462</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approach</th>
<th>WB</th>
<th>SE</th>
<th>NW</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCM Control Delay, s</td>
<td>14.8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HCM LOS</td>
<td>B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor Lane/Major Mvmt</th>
<th>NWT</th>
<th>NWR</th>
<th>NWR</th>
<th>VBLn1</th>
<th>SEL</th>
<th>SET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (veh/h)</td>
<td>-</td>
<td>381</td>
<td>817</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HCM Lane V/C Ratio</td>
<td>-</td>
<td>0.037</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HCM Control Delay (s)</td>
<td>-</td>
<td>14.8</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HCM Lane LOS</td>
<td>-</td>
<td>B</td>
<td>A</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HCM 95th %tile Q(veh)</td>
<td>-</td>
<td>0.1</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Quick Quack Car Wash - Folsom, CA  
9/30/2016  
Synchro 8 Report  
MRO Engineers, Inc.
### Intersection

**Int Delay, s/veh** 0.5

<table>
<thead>
<tr>
<th>Movement</th>
<th>SEL</th>
<th>SET</th>
<th>NWT</th>
<th>NWR</th>
<th>SWL</th>
<th>SWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol, veh/h</td>
<td>33</td>
<td>665</td>
<td>725</td>
<td>1</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Conflicting Peds, #/hr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sign Control</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td>Stop</td>
<td>Stop</td>
</tr>
<tr>
<td>RT Channelized</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Storage Length</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Veh in Median Storage, #</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grade, %</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Heavy Vehicles, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mvmt Flow</td>
<td>36</td>
<td>723</td>
<td>788</td>
<td>1</td>
<td>1</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major/Minor</th>
<th>Major1</th>
<th>Major2</th>
<th>Minor2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflicting Flow All</td>
<td>789</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stage 1</td>
<td></td>
<td></td>
<td>789</td>
</tr>
<tr>
<td>Stage 2</td>
<td></td>
<td></td>
<td>795</td>
</tr>
<tr>
<td>Critical Hdwy</td>
<td>4.12</td>
<td>-</td>
<td>6.42</td>
</tr>
<tr>
<td>Critical Hdwy Stg 1</td>
<td></td>
<td>-</td>
<td>5.42</td>
</tr>
<tr>
<td>Critical Hdwy Stg 2</td>
<td></td>
<td></td>
<td>5.42</td>
</tr>
<tr>
<td>Follow-up Hdwy</td>
<td>2.218</td>
<td>-</td>
<td>3.518</td>
</tr>
<tr>
<td>Pot Cap-1 Maneuver</td>
<td>831</td>
<td>-</td>
<td>119</td>
</tr>
<tr>
<td>Stage 1</td>
<td></td>
<td></td>
<td>448</td>
</tr>
<tr>
<td>Stage 2</td>
<td></td>
<td></td>
<td>445</td>
</tr>
<tr>
<td>Platoon blocked, %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mov Cap-1 Maneuver</td>
<td>831</td>
<td>-</td>
<td>114</td>
</tr>
<tr>
<td>Mov Cap-2 Maneuver</td>
<td></td>
<td></td>
<td>114</td>
</tr>
<tr>
<td>Stage 1</td>
<td></td>
<td></td>
<td>448</td>
</tr>
<tr>
<td>Stage 2</td>
<td></td>
<td></td>
<td>426</td>
</tr>
</tbody>
</table>

### Approach

<table>
<thead>
<tr>
<th>SE</th>
<th>NW</th>
<th>SW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
</tbody>
</table>

**HCM LOS** C

<table>
<thead>
<tr>
<th>Minor Lane/Major Mvmt</th>
<th>NWT</th>
<th>NWR</th>
<th>SEL</th>
<th>SETSWLn1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (veh/h)</td>
<td>-</td>
<td>-</td>
<td>831</td>
<td>347</td>
</tr>
<tr>
<td>HCM Lane V/C Ratio</td>
<td>-</td>
<td>-</td>
<td>0.043</td>
<td>0.06</td>
</tr>
<tr>
<td>HCM Control Delay (s)</td>
<td>-</td>
<td>-</td>
<td>9.5</td>
<td>16</td>
</tr>
<tr>
<td>HCM Lane LOS</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td>HCM 95th %tile Q(veh)</td>
<td>-</td>
<td>-</td>
<td>0.1</td>
<td>0.2</td>
</tr>
</tbody>
</table>
CUMULATIVE + PROJECT

PM PEAK HOUR
("PEAK" CONDITIONS)
### Movement

<table>
<thead>
<tr>
<th>Movement</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>SEL</th>
<th>SET</th>
<th>SER</th>
<th>NWL</th>
<th>NWT</th>
<th>NWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane Configurations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume (veh/h)</td>
<td>110</td>
<td>1510</td>
<td>495</td>
<td>228</td>
<td>910</td>
<td>50</td>
<td>25</td>
<td>31</td>
<td>170</td>
<td>554</td>
<td>41</td>
<td>217</td>
</tr>
<tr>
<td>Number</td>
<td>7</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>8</td>
<td>18</td>
<td>1</td>
<td>6</td>
<td>16</td>
<td>5</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Initial Q (Qb), veh</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ped-Bike Adj(A_pbT)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Parking Bus, Adj</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Adj Sat Flow, veh/h/ln</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
<td>1863</td>
</tr>
<tr>
<td>Adj Flow Rate, veh/h</td>
<td>112</td>
<td>1541</td>
<td>506</td>
<td>233</td>
<td>929</td>
<td>51</td>
<td>26</td>
<td>32</td>
<td>173</td>
<td>595</td>
<td>0</td>
<td>221</td>
</tr>
<tr>
<td>Adj No. of Lanes</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
</tr>
<tr>
<td>Percent Heavy Veh, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cap, veh/h</td>
<td>145</td>
<td>1810</td>
<td>564</td>
<td>277</td>
<td>2187</td>
<td>681</td>
<td>186</td>
<td>195</td>
<td>166</td>
<td>700</td>
<td>0</td>
<td>313</td>
</tr>
<tr>
<td>Arrive On Green</td>
<td>0.08</td>
<td>0.36</td>
<td>0.36</td>
<td>0.16</td>
<td>0.43</td>
<td>0.43</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.20</td>
<td>0.00</td>
<td>0.20</td>
</tr>
<tr>
<td>Sat Flow, veh/h</td>
<td>1774</td>
<td>5085</td>
<td>1583</td>
<td>1774</td>
<td>5085</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>1583</td>
<td>1583</td>
<td>3548</td>
<td>0</td>
</tr>
<tr>
<td>Grp Volume(v), veh/h</td>
<td>112</td>
<td>1541</td>
<td>506</td>
<td>233</td>
<td>929</td>
<td>51</td>
<td>26</td>
<td>32</td>
<td>173</td>
<td>595</td>
<td>0</td>
<td>221</td>
</tr>
<tr>
<td>Grp Sat Flow(s),veh/h/ln</td>
<td>1774</td>
<td>1695</td>
<td>1583</td>
<td>1774</td>
<td>1695</td>
<td>1583</td>
<td>1774</td>
<td>1583</td>
<td>1583</td>
<td>1583</td>
<td>1774</td>
<td>0</td>
</tr>
<tr>
<td>Q Serve(g_s), s</td>
<td>5.3</td>
<td>24.1</td>
<td>25.9</td>
<td>11.0</td>
<td>11.0</td>
<td>1.6</td>
<td>1.1</td>
<td>1.3</td>
<td>9.0</td>
<td>13.9</td>
<td>0</td>
<td>11.2</td>
</tr>
<tr>
<td>Cycle Q Clear(g_c), s</td>
<td>5.3</td>
<td>24.1</td>
<td>25.9</td>
<td>11.0</td>
<td>11.0</td>
<td>1.6</td>
<td>1.1</td>
<td>1.3</td>
<td>9.0</td>
<td>13.9</td>
<td>0</td>
<td>11.2</td>
</tr>
<tr>
<td>Prop In Lane</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lane Grp Cap(c), veh/h</td>
<td>145</td>
<td>1810</td>
<td>564</td>
<td>277</td>
<td>2187</td>
<td>681</td>
<td>186</td>
<td>195</td>
<td>166</td>
<td>700</td>
<td>0</td>
<td>313</td>
</tr>
<tr>
<td>V/C Ratio(X)</td>
<td>0.77</td>
<td>0.85</td>
<td>0.90</td>
<td>0.84</td>
<td>0.42</td>
<td>0.07</td>
<td>0.14</td>
<td>0.16</td>
<td>1.04</td>
<td>0.85</td>
<td>0.00</td>
<td>0.71</td>
</tr>
<tr>
<td>Avail Cap(c_a), veh/h</td>
<td>495</td>
<td>1892</td>
<td>589</td>
<td>495</td>
<td>2187</td>
<td>681</td>
<td>186</td>
<td>195</td>
<td>166</td>
<td>784</td>
<td>0</td>
<td>350</td>
</tr>
<tr>
<td>HCM Platoon Ratio</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Upstream Filter(l)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Uniform Delay (d), s/veh</td>
<td>38.7</td>
<td>25.6</td>
<td>26.2</td>
<td>35.3</td>
<td>17.1</td>
<td>14.4</td>
<td>35.0</td>
<td>35.1</td>
<td>38.5</td>
<td>33.3</td>
<td>0</td>
<td>32.2</td>
</tr>
<tr>
<td>Incr Delay (d2), s/veh</td>
<td>8.4</td>
<td>3.8</td>
<td>15.9</td>
<td>6.8</td>
<td>0.1</td>
<td>0.0</td>
<td>0.3</td>
<td>0.4</td>
<td>82.0</td>
<td>8.1</td>
<td>0</td>
<td>5.6</td>
</tr>
<tr>
<td>Initial Q Delay(d3),s/veh</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>%ile Back(ofQ(50%),veh/ln</td>
<td>3.0</td>
<td>11.9</td>
<td>13.7</td>
<td>5.9</td>
<td>5.1</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>7.7</td>
<td>7.6</td>
<td>0</td>
<td>5.4</td>
</tr>
<tr>
<td>LnGrp Delay(d),s/veh</td>
<td>47.1</td>
<td>29.4</td>
<td>42.1</td>
<td>42.1</td>
<td>17.2</td>
<td>14.5</td>
<td>35.3</td>
<td>35.5</td>
<td>120.6</td>
<td>41.4</td>
<td>0.0</td>
<td>37.8</td>
</tr>
<tr>
<td>LnGpr LOS</td>
<td>D</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>D</td>
<td>D</td>
<td>F</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Approach Vol, veh/h</td>
<td>2158</td>
<td>1213</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>231</td>
<td>816</td>
<td></td>
</tr>
<tr>
<td>Approach Delay, s/veh</td>
<td>33.3</td>
<td>21.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99.2</td>
<td>40.4</td>
<td></td>
</tr>
<tr>
<td>Approach LOS</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

### Timer

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned Phs</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Phs Duration (G+Y+Rc), s</td>
<td>21.0</td>
<td>17.4</td>
<td>34.6</td>
<td>13.0</td>
<td>11.0</td>
<td>41.0</td>
<td></td>
</tr>
<tr>
<td>Change Period (Y+Rc), s</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Max Green Setting (Gmax), s</td>
<td>19.0</td>
<td>24.0</td>
<td>32.0</td>
<td>9.0</td>
<td>24.0</td>
<td>32.0</td>
<td></td>
</tr>
<tr>
<td>Max Q Clear Time (g_c+11), s</td>
<td>15.9</td>
<td>13.0</td>
<td>27.9</td>
<td>11.0</td>
<td>7.3</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Green Ext Time (p_c), s</td>
<td>1.1</td>
<td>0.5</td>
<td>2.7</td>
<td>0.0</td>
<td>0.2</td>
<td>16.7</td>
<td></td>
</tr>
</tbody>
</table>

### Intersection Summary

- HCM 2010 Ctrl Delay: 34.9
- HCM 2010 LOS: C

### Notes

User approved volume balancing among the lanes for turning movement.

---

Quick Quack Car Wash - Folsom, CA
9/30/2016

Synchro 8 Report
MRO Engineers, Inc.
### Intersection

<table>
<thead>
<tr>
<th>Movement</th>
<th>WBL</th>
<th>WBR</th>
<th>SEL</th>
<th>SET</th>
<th>NWT</th>
<th>NWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol, veh/h</td>
<td>0</td>
<td>33</td>
<td>0</td>
<td>754</td>
<td>779</td>
<td>1</td>
</tr>
<tr>
<td>Conflicting Peds, #/hr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sign Control</td>
<td>Stop</td>
<td>Stop</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
</tr>
<tr>
<td>RT Channelized</td>
<td>-</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Storage Length</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Veh in Median Storage, #</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grade, %</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Heavy Vehicles, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mvmt Flow</td>
<td>0</td>
<td>36</td>
<td>0</td>
<td>820</td>
<td>847</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major/Minor</th>
<th>Minor2</th>
<th>Major1</th>
<th>Major2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflicting Flow All</td>
<td>1667</td>
<td>847</td>
<td>848</td>
</tr>
<tr>
<td>Stage 1</td>
<td>847</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stage 2</td>
<td>820</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Critical Hwvy Stage 1</td>
<td>5.42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Critical Hwvy Stage 2</td>
<td>5.42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Follow-up Hwvy</td>
<td>3.518</td>
<td>3.318</td>
<td>2.218</td>
</tr>
<tr>
<td>Pot Cap-1 Maneuver</td>
<td>106</td>
<td>382</td>
<td>790</td>
</tr>
<tr>
<td>Stage 1</td>
<td>420</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stage 2</td>
<td>433</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Platoon blocked, %</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mov Cap-1 Maneuver</td>
<td>106</td>
<td>362</td>
<td>790</td>
</tr>
<tr>
<td>Mov Cap-2 Maneuver</td>
<td>106</td>
<td>420</td>
<td>-</td>
</tr>
<tr>
<td>Stage 1</td>
<td>433</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approach</th>
<th>WB</th>
<th>SE</th>
<th>NW</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCM Control Delay, s</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HCM LOS</td>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor Lane/Major Mvmt</th>
<th>NWT</th>
<th>NWRWBLn1</th>
<th>SEL</th>
<th>SET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (veh/h)</td>
<td>-</td>
<td>362</td>
<td>790</td>
<td>-</td>
</tr>
<tr>
<td>HCM Lane V/C Ratio</td>
<td>-</td>
<td>0.089</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HCM Control Delay (s)</td>
<td>-</td>
<td>16</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>HCM Lane LOS</td>
<td>-</td>
<td>C</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>HCM 55th %tile Q(veh)</td>
<td>-</td>
<td>0.3</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>
## Intersection

<table>
<thead>
<tr>
<th>Movement</th>
<th>SEL</th>
<th>SET</th>
<th>NW</th>
<th>NWR</th>
<th>SWL</th>
<th>SWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol, veh/h</td>
<td>89</td>
<td>665</td>
<td>726</td>
<td>3</td>
<td>4</td>
<td>54</td>
</tr>
<tr>
<td>Conflicting Peds, #/hr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sign Control</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td>Stop</td>
<td>Stop</td>
</tr>
<tr>
<td>RT Channelized</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Storage Length</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Veh in Median Storage, #</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Grade, %</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Heavy Vehicles, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mvmt Flow</td>
<td>97</td>
<td>723</td>
<td>789</td>
<td>3</td>
<td>4</td>
<td>59</td>
</tr>
</tbody>
</table>

### Major/Minor

<table>
<thead>
<tr>
<th>Conflicting Flow All</th>
<th>Major1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>-</td>
<td>792</td>
</tr>
<tr>
<td>Stage 2</td>
<td>4.12</td>
<td>791</td>
</tr>
<tr>
<td>Critical Hdwy</td>
<td>6.42</td>
<td>6.22</td>
</tr>
<tr>
<td>Critical Hdwy Stg 1</td>
<td>5.42</td>
<td></td>
</tr>
<tr>
<td>Critical Hdwy Stg 2</td>
<td>5.42</td>
<td></td>
</tr>
<tr>
<td>Follow-up Hdwy</td>
<td>3.518</td>
<td>3.318</td>
</tr>
<tr>
<td>Pot Cap-1 Maneuver</td>
<td>829</td>
<td>100</td>
</tr>
<tr>
<td>Stage 1</td>
<td>447</td>
<td></td>
</tr>
<tr>
<td>Stage 2</td>
<td>390</td>
<td></td>
</tr>
<tr>
<td>Platoon blocked, %</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Mov Cap-1 Maneuver</td>
<td>829</td>
<td>88</td>
</tr>
<tr>
<td>Mov Cap-2 Maneuver</td>
<td>-</td>
<td>447</td>
</tr>
<tr>
<td>Stage 1</td>
<td>344</td>
<td></td>
</tr>
<tr>
<td>Stage 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Approach

<table>
<thead>
<tr>
<th>HCM Control Delay, s</th>
<th>SE</th>
<th>NW</th>
<th>SW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.2</td>
<td>0</td>
<td>19.3</td>
</tr>
</tbody>
</table>

### Minor Lane/Major Mvmt

<table>
<thead>
<tr>
<th>Capacity (veh/h)</th>
<th>NWT</th>
<th>NWR</th>
<th>SEL</th>
<th>SET</th>
<th>SWL</th>
<th>Ln1</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCM Lane V/C Ratio</td>
<td>0.117</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCM Control Delay (s)</td>
<td>9.9</td>
<td>19.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCM Lane LOS</td>
<td>A</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCM 95th %tile Q(veh)</td>
<td>0.4</td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attachment 11

Site Photographs