

# City of Downey

FUTURE UNLIMITED

## INITIAL STUDY FOR MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACT FOR PLN-12-00063, A REQUEST TO INSTALL AND OPERATE AN OUTDOOR DYNAMOMETER FOR CUMMINS CAL PACIFIC, LLC, ON PROPERTY LOCATED AT 9520 STEWART & GRAY ROAD, DOWNEY, CALIFORNIA

### 1. INTRODUCTION

Cummins Cal Pacific, LLC, the Petitioner, has filed an application to install and operate a dynamometer equipment at their industrial property at 9520 Stewart & Gray Road, Downey, California. Cummins Cal Pacific representatives indicate they plan to site the dynamometer equipment inside the new freestanding shade structure which is locating at the northeasterly portion of the property. The City application that will allow the dynamometer to operate takes the form of a modification to the recently approved site plan review (SPR) case PLN-11-00180. According to Zoning Ordinance Section 9820.08, a SPR is required to establish the freestanding shade structure, on properties that maintain the M-2, or General Manufacturing zone. The project site is zoned M-2.

Cummins Cal Pacific's purpose in installing the dynamometer is to provide additional service to the company's activities. Cummins Cal Pacific's application materials have indicated that the dynamometer will operate an average of five times a day, six days a week (Monday through Saturday) and each test lasts approximately 25 minutes.

This Initial Study has been prepared in accordance with California Environmental Quality Act (CEQA), as amended, to determine if the approval of this discretionary action, the recently approved site plan review, and the operation of the dynamometer could have a significant impact on the environment. This analysis will provide the City of Downey with information to document the potential impacts of the proposed project.

#### **Organization and Content of Initial Study**

The Initial Study contains analyses and other supportive evidence by which the Lead Agency can determine whether the approval and implementation of the proposed project will create a significant adverse environmental effect(s). The format and structure of this document reflects the City's Initial Study Checklist (Section 3.0) provided herein. The following outlines the contents of this Initial Study.

Section 1., Introduction, provides the procedural context surrounding the Initial Study's preparation and insight into its composition.

Section 2., Project Location/Description, describes the proposed project.

Section 3., Initial Study Checklist, is a form summarizing the contents of the next two sections, particularly with regard to the issue-by-issue determination of significant impact. It also serves as the document in which the Lead Agency's determination is formally declared and signed.

Section 4., Discussion of Environmental Evaluation, describes the environmental effects anticipated to result from implementing the proposed project and provides a discussion of how, or in what way, if any, the development contemplated might adversely impact one of the Checklist's environmental areas.

Section 5., Documents Referenced, provides source of information related to the project.

## 2. PROJECT LOCATION

The City of Downey, which is in southeastern Los Angeles County, is an urbanized community located about 12 miles southeast of downtown Los Angeles. The city is bounded by the San Gabriel River on the east, Telegraph Road on the north, the Rio Hondo River on the west and Gardendale Street and Foster Road on the south. Cities bordering Downey include: Pico Rivera on the north, Santa Fe Springs on the northeast, Norwalk on the east, Bellflower and Paramount on the south, South Gate on the west and the City of Commerce on the northwest.

Downey's land area totals about 12.8 square miles and its topography is relatively level. The City's elevations range from approximately 90 feet above sea level in the southern part of the community to 140 feet in the northernmost portion. Approximately 63% of the City is developed with residential uses, while both commercial and industrial areas account for about 9% of its land area. Open space accounts for about 9%. The balance is devoted to schools (5%), public use (3%) or is vacant (2%). As of January, 2010, the City's population was estimated to be 113,715 by the California Department of Finance.

The 4.92-acre project site is located at 9520 Stewart & Gray Road, near the easterly City boundary. Streets bordering the project site include Regentview Avenue and Firestone Boulevard on the east and Woodruff Avenue on the west. The Union Pacific Railway line defines the site's northeasterly boundary.

### 2.1 PROJECT DESCRIPTION

Cummins Cal Pacific, LLC indicated that the purpose of the dynamometer is twofold: 1) to provide engine testing services such as measuring mechanical force, speed and power of bus and truck; and 2) to increase its business revenues significantly. Cummins Cal Pacific officials have also noted that in addition the dynamometer, there is also a steamer area that has been constructed and operated within the same structure as the dynamometer. This steamer area is being used daily to clean trucks' and buses' engines.

There are different types of dynamometers, including the kind that test springs and shocks. The applicant is proposing an inertia-type chassis dynamometer that uses to measure the force and power that the spinning wheels of an automobile produce. It consists of two great big heavy drums hooked up to a computer. The wheels of an automobile spin the dynamometer drums, and the computer measures the speed.

Each dyno drum weighs approximately 2,700 pounds and it would take a pretty impressive force to spin those drums. Imagine the weight of a bus or truck is rested on the dyno drums and the engine is accelerating to a certain speed so the computer can calculate horsepower. The faster the dyno drums and vehicle's wheels are spinning, the noisier they will become. In many situations, if the computer fails to pick up the torque reading accurately, it will be retest at an acceptable speed level until the rpm readings are perfect. The noise produces from the testing area can be extremely loud if it does not contain and mitigate by a professional sound engineer.

The dynamometer and its testing area are housed in sound controlled enclosure that is fitted with industrial sound barrier material. And they each produce a noise impact of 82 decibels at 50 feet from the unit under full throttle. According to the applicant, there will be an average of five dyno tests per day at an approximate testing time between 20 and 30 minutes per test.

### 2.2 ENVIRONMENTAL SETTING

The project site is located in a developed portion of the community and neighboring land uses consist of a mix of activities; they include industrial, service and retail commercial, and multiple-family residential.

Four freeways frame the city. They include, Interstate 105 (Glenn Anderson Freeway), Interstate 710 (Long Beach Freeway), Interstate 5 (Santa Ana Freeway) and the 605 (San Gabriel Freeway). Freeway access for the site is provided at Woodruff Avenue, Firestone Boulevard, and Imperial Highway.

## Existing Land Use

The project site supports Cummins Cal Pacific truck and bus servicing facility, which can be characterized as services. Cummins Cal Pacific has been operating there since 2008. Their service operation consists of the following activities: 1) engine repair and part replacement; 2) tire changes; 3) engine steaming; and 4) engine testing. Depending on the types of services, most buses, trucks, and motor coaches will be brought to the facility for diagnoses and repairs. In general, for services that involve dynamometer testing, it would be by appointment and only take approximately 25 minutes per vehicle.

Cummins Cal Pacific recently submitted a site plan review application, which the Planning Commission approved in September 21, 2011. Implementing this plan involved adding a 900 square feet, freestanding shade structure. The site also supports 16,346 square feet of office space and a fleet maintenance building and a truck wash facility.

## Surrounding Land Uses

A mix of apartment complexes and general commercial occupy the properties northwest of the project site. Properties in this area are zoned R-3 (i.e., Multi-Family Residential Zone) and C-2 (General Commercial).

Industrial uses occupy the properties northeast of the project site; specifically, those properties on the north side of Union Pacific rail road track, between Stewart and Gray Road and Regentview Avenue. They are zoned M-1 (Light Manufacturing zone).

Properties west and south of the project site, support a combination of warehousing and industrial uses. These properties are zoned M-2 (General Manufacturing).

## 2.3 DISCRETIONARY APPROVAL AUTHORITY

The applicant is requesting approval of PLN-12-00063 (Site Plan Review). This is a revision to the previously approved Site Plan Review application (PLN-11-000180) to allow the installation and operation of the dynamometer. The shade structure that houses the dynamometer is located in the M-2 (General Manufacturing) zone; according to Municipal Code Section 9820, the above request requires the approval from the City of Downey Planning Commission.

## 2.4 ENVIRONMENTAL CHECKLIST

### 2.4.1 Project Title:

PLN-12-00063 (Site Plan Review) – Installation and operation of dynamometer equipment.

### 2.4.2 Lead Agency Name and Address:

City of Downey  
Community Development Department, Planning Division  
11111 Brookshire Avenue  
Downey, CA 90241

### 2.4.3 Contact person and phone number:

Kevin Nguyen, Assistant Planner -- (562) 904-7154

### 2.4.4 Project Location:

The 4.92-acre project site is located at 9520 Stewart & Gray Road, near the easterly City boundary. Streets bordering the project site include Regentview Avenue and Firestone Boulevard on the east and Woodruff Avenue on the west. The Union Pacific Railway line defines the site's northeasterly boundary. (AIN 6284-026-026 & 027)

**2.4.5 Property Owners and Representatives:**

Property Owner: Hager Regentview Partner  
16027 Ventura Boulevard  
Encino, CA 91436

Representative: Randy Steinberg  
Phil Stutzel  
Cummins Cal Pacific, LLC  
1939 Deere Avenue  
Irvine, CA 92606

**2.4.6 General Plan Designation:**

G-M (General Manufacturing)

**2.4.7 Zoning:**

M-2 (General Manufacturing)

**2.4.8 Description of project:**

The requested PLN-12-00063 (Site Plan Review) includes a revision 'A' to PLN-11-00180 to allow the installation and operation of an outdoor dynamometer for Cummins Cal Pacific, LLC, on property at 9520 Stewart and Gray Road.

**2.4.9 Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement.)**

None

**2.5.0 Disposition of this Initial Study**

As indicated previously, the City of Downey, serving as the Lead Agency, has determined a mitigated negative declaration will be prepared for the proposed project.

Certain projects or actions undertaken by a Lead Agency may require oversight, approvals, or permits from other public agencies. These agencies are referred to as Responsible and Trustee Agencies. Pursuant to Sections 15381 and 15386 of the state CEQA Guidelines as amended, responsible agencies and trustee agencies are defined as follows:

**"Responsible Agency** is a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval over the project."

**"Trustee Agency** is a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the state of California" (such as the California Department of Fish and Game).

**3. INITIAL STUDY CHECKLIST OF POTENTIALLY AFFECTED ISSUES:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in section III.

- |   |  |
|---|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Land Use and Planning       |
| <input type="checkbox"/> Agriculture Resources              | <input type="checkbox"/> Mineral Resources           |
| <input type="checkbox"/> Air Quality                        | <input checked="" type="checkbox"/> Noise            |
| <input type="checkbox"/> Biological Resources               | <input type="checkbox"/> Population and Housing      |
| <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Public Services             |
| <input type="checkbox"/> Geology and Soils                  | <input type="checkbox"/> Recreation                  |
| <input type="checkbox"/> Hazards & Hazardous Materials      | <input type="checkbox"/> Transportation/Traffic      |
| <input type="checkbox"/> Hydrology & Water Quality          | <input type="checkbox"/> Utilities & Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance |  |

**DETERMINATION:** (To be completed by the Lead Agency)

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 the mitigation measures described on an attached sheet have been added to the project. A 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 significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated". 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, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Signature: Kevin Nguyen  
 Kevin Nguyen, Assistant Planner  
 for the City of Downey

Date: May 30, 2012

#### 4. DISCUSSION OF ENVIRONMENTAL EVALUATION

This section analyzes the potential environmental impacts which may result from the proposed project. For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and answers are provided according to the analysis undertaken as part of the Initial Study. They outline the following issues:

1. Aesthetics
2. Agriculture Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Geology and Soils
7. Hazards and Hazardous Materials
8. Hydrology and Water Quality
9. Land Use and Planning
10. Mineral Resources
11. Noise
12. Population and Housing
13. Public Services
14. Recreation
15. Transportation and Traffic
16. Utilities and Service Systems
17. Mandatory Findings of Significance

The analysis considers the project's short-term impacts (construction-related), and its operational or day-to-day impacts. For each question, there are four possible responses. They include:

1. ***No Impact.*** Future development arising from the project's implementation will not have any measurable environmental impact on the environment and no additional analysis is required.
2. ***Less Than Significant Impact.*** The development associated with project implementation will have the potential to impact the environment; these impacts, however, will be less than the levels or thresholds that are considered significant and no additional analysis is required.
3. ***Potentially Significant Impact Unless Mitigated.*** The development will have the potential to generate impacts which will have a significant effect on the environment; however, mitigation measures will be effective in reducing the impacts to levels that are less than significant.
4. ***Potentially Significant Impact.*** Future implementation will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>1. AESTHETICS.</b> Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Response:**

**(a and b):** The City of Downey, which is located in southeast Los Angeles County, is an urban environment with few vacant properties available for new development. There are no scenic vistas, scenic resources or scenic highways within the City boundaries or any that are visible from within the City.

**(c):** The subject site is currently developed with multiple industrial and warehouse buildings, which Cummins Cal Pacific operates. The proposal will allow the installation and operation of a dynamometer within an enclosed structure. Thus, the dynamometer will not be visible from the public view.

**(d):** As part of the proposal, the applicant will be relocating light standards in the parking lot and around the shade structure area. Nevertheless, due to proximity of the businesses nearby, all outdoor lighting shall be required at a low level and it shall be shield as not to direct light on any street and adjoining properties. Any impact created from the new light sources would be minimal.

**2. AGRICULTURE RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a through c):** The City of Downey is an urbanized area that is mostly built out with only infill development potential. There are no agricultural lands within the City’s boundaries. Furthermore, the City’s General Plan (Vision 2025) does not include provisions for agricultural uses in the future.

	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>3. AIR QUALITY.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create objectionable odors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a through c):** Short term air quality impacts can be anticipated from construction equipment operating on the site and dust created during construction operations. Nevertheless, these impacts are considered less than significant due to the short term nature of the construction, construction equipment is already required to comply with the California Air Resource Board’s (CARB) regulations, and all construction activity is subject to the South Coast Air Quality Management District’s (SCAQMD) regulations regarding fugitive dust.

Long term air quality impacts are not typically generated from the operation of the impound yard. In considering the operational characteristics of the vehicle impound and storage yard, the only known potential source of air pollution comes from the increase in vehicle trips to and from the site. It is anticipated that at full capacity, the business will generate between 40 and 50 average daily vehicle trips, which is considered insignificant in comparison to the 14,000 daily vehicle trips occurring on Stewart and Gray Road, between Woodruff Avenue and Regentview Avenue. Accordingly, the impacts are considered less than significant.

**(d):** Sensitive receptors include day care centers (adult & child), schools, hospitals, churches, rehabilitation centers, and long-term care facilities (i.e. assisted living facilities). A review of the area shows that there no sensitive receptors within ¼ mile of the subject site.

**(e):** The key source of odor generation from the business is from the trash enclosure, in which the applicant has located at the northwestern property line. This provides over 300 feet buffer between the trash enclosure and the apartment complex located on Stewart and Gray Road. With this buffer, no impact is anticipated.

**4. 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 U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
regional plans, policies, and regulations or by the California Department of Fish and Game or 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources? (i.e. tree preservation ordinance).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a through f):** The subject site is a vacant lot that only has limited vegetation that consists mainly of weed growth. In fact, the entire City of Downey is an urbanized area that is mostly built out with only infill development potential. According to the Final Environmental Impact Report (FEIR) that was prepared for the Downey Vision 2025 Comprehensive General Plan Update (SCH #2004031159), which was certified on January 25, 2005, there are no known species identified as a candidate, sensitive, or special status species; no known wetlands; and no known native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors, or native wildlife nursery sites within the City. Furthermore, the City of Downey does not have any local policies or ordinances protecting biological resources, nor is there any adopted Habitat Conservation, Natural Community Conservation or other approved local, regional or state habitat conservation plans.

**5. CULTURAL RESOURCES.** Would the project:

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines 5064.85?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 5064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a):** The subject site is a 4.92 acre irregular-shaped lot that is being used as automobile and truck repair. The site is not known to be associated with events of persons of historically significant importance. Furthermore, the site is not listed on any potential historical resource list.

**(b and c):** Archaeological and/or paleontological resources are not typically encountered within the City of

Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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Downey and there are no known archaeological or paleontological resources on the site. Nevertheless, should any be discovered during construction, the applicant is required to comply with the provisions set forth Section 15064.5 of Title 14, Chapter 3 of the California Code of Regulations (CEQA Guidelines).

(d): Since burials within the City of Downey have occurred in the Downey Cemetery since the late 1880's, human remains are not typically encountered during construction. Nevertheless, should any be discovered during construction, the applicant is required to comply with the provisions set forth Section 15064.5 of Title 14, Chapter 3 of the California Code of Regulations (CEQA Guidelines).

**6. GEOLOGY AND SOILS.** Would the project:

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

1) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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2) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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3) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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4) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d. Be located on expansive soil, as defined in the California Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Response:**

(a1 and a2): The City of Downey is not located within an Alquist-Priolo Earthquake Fault Zone. Nevertheless, the City, like much of Southern California, is located in an area that is considered seismically active. The nearest known fault to the City is the Whittier fault, which is approximately 5 miles from the City's boundaries. According to the Southern California Earthquake Data Center, the maximum probable earthquake that can be generated by the Whittier Fault is a magnitude 7.2. This impact is considered to be less than significant since all construction is required to be designed and built to the seismic safety standards set forth in the Building Code, which will minimize the risk of loss, injury, or death due to seismic activity.

(a3): According to the Final Environmental Impact Report (FEIR) that was prepared for the Downey Vision 2025 Comprehensive General Plan Update (SCH #2004031159), which was certified on January 25, 2005, the entire City is within a Liquefaction Zone. According to the Building Code, all new construction is required to submit a soil and geological report prior to the issuance of building permits. Said report shall include an analysis of the liquefaction potential and recommend a foundation design to address the local condition.

Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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(a4): The project site is adjacent to Stewart and Gray Road and the Union Pacific rail road track, where there is transitional slope and a slightly one foot grade difference. Even with this grade difference, landslides would not be expected because the Building and Engineering Codes require a soil and geological report that includes a recommendation for a design for the foundation system. Furthermore, the structural engineer is required to follow the recommendations of the Geologist and to meet the minimum standards set forth in the Building Code for structures adjacent to the slope.

(b): Long term loss of topsoil and/or soil erosion is not expected since the site is improved with the manufacture buildings, office building, storage shed, and parking lot. Moreover, construction activities are required to incorporate Best Management Practices (BMP's) to prevent soil erosion during construction.

(c and d): Prior to the issuance of building permits, the applicant is required to submit a soil and geological report. Said report shall demonstrate how the project will mitigate any soil stability issued, including lateral spreading, subsidence, liquefaction, and expansive soils.

(e): The City of Downey is a fully developed urban environment. The use of new septic tanks is prohibited within the City.

**7. 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h. Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
lands are adjacent to urbanized areas or where residences are intermixed with wild lands?				
<b>Response:</b>				
<b>(a through c):</b> The proposed project is for the installation and operation of a dynamometer. The operation of the dynamometer will only involve with an engineering technician and the use of a computerize equipment. Thus, there will be no transport or storage of hazardous material, there is no potential for the release of toxic or hazardous material.				
<b>(d):</b> The subject site is currently occupied by Cummins Cal Pacific, LLC, a company that provides engine repairs and service (diesel and natural gas engines). The site is not included on a hazardous materials sites list.				
<b>(e and f):</b> The City of Downey is not located within an airport land use plan nor is it within two miles of an airstrip.				
<b>(g):</b> The project site is not utilized for emergency response or evacuation plans. Furthermore, construction and long term operation will not have an impact on Stewart and Gray Road or the Union Pacific rail road track, so the project will not result in future impacts to emergency response or evacuation plans.				
<b>(h):</b> The City of Downey is within an urbanized area in the southeast portion of Los Angeles County. There are no wild lands within the vicinity.				

**8. HYDROLOGY AND WATER QUALITY.** Would the project:

a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a through f):** No structure is proposed for the installation of a dynamometer. Thus, the project will not impact the existing drainage. In addition, the recently constructed steaming area has complied with the National Pollution Discharge Elimination System (NPDES). This includes retaining storm water from the CULTEC recharger system that was constructed along with the shade structure and allowing it to recharge into the ground. By retaining the water on site, there will be no violations to water quality standards, no additional impact to the storm water system, and no alterations to existing drainage patterns from the site and surrounding area.

**(g and h):** Pursuant to Flood Zone Map No. 060645-0005A, as revised on January 11, 2002, the subject site is in Zone X, which is a 500-year flood zone. Accordingly, impacts from a 100-year flood event are not anticipated.

**(i):** The subject site, as with most of the City, is located between the San Gabriel River and the Rio Hondo Flood Control Channel. According to the Final Environmental Impact Report (FEIR) that was prepared for the Downey Vision 2025 Comprehensive General Plan Update (SCH #2004031159), which was certified on January 25, 2005, both of these flood control channels have been designed to meet or exceed the discharge capacity for a 100-year flood. Furthermore, the FEIR notes that there are no concerns with a potential levee break on either channel.

**(j):** The City of Downey is relatively flat and is not located near a dam, lake, or ocean. As such, impacts from a seiche, tsunami, or mudflow are not anticipated.

**9. LAND USE AND PLANNING.** Would the project:

a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a):** The project site is bounded by Stewart and Gray Road and the Union Pacific rail road track on the north, industrial businesses on the south and west and east. Installation of a dynamometer will not alter access to or across these properties. Furthermore, the proposed project will not divide or otherwise impact the surrounding neighborhoods.

**(b)** The General Plan Land Use Designation of the subject site is General Manufacturing, while the zoning is M-2 (General Manufacturing). The proposed installation of a dynamometer to its existing business is consistent with the type of uses that are envisioned in the proposed Manufacturing Land Use Designation and the M-2 zone. Furthermore, the project meets or exceeds all development standards for the M-2 zone.

Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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(c): The City of Downey is an urbanized area that is fully developed with only a few sites for infill development available. There are no habitat conservation plans or natural community conservation plans that have jurisdiction over the area.

**10. MINERAL RESOURCES.** Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Response:**

(a and b): There are no known mineral resources on the site. Accordingly, approval of the project will not result in the loss of any mineral resources with local, regional, or State-wide importance.

**11. 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?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 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 area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Response:**

(a through d): Due to the proximity of a residential area to the north, across Stewart and Gray Road, long term noise impacts are anticipated from the operation of the dynamometer. It is necessary to conduct a noise study analyzing the potential noise impacts that may create from the proposed dynamometer.

As part of the application submittal, the applicant prepared a noise impact study, which was conducted by Wieland Acoustic, Inc., a noise consultant company. The purpose for the study is to access the dynamometer's potential impacts to determine whether they exceed the City of Downey noise standards. This noise study

Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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included noise measurements obtained at four locations around the project's property lines and one location at an apartment complex across Stewart and Gray Road. In addition, to determine the noise levels of a future dynamometer at the Downey site, noise measurements were obtained at the existing dynamometer operation, located in the City of Montebello, CA. The results of the noise measurements concluded that the average noise levels obtained from three different front-engine vehicles (i.e. dumb truck, school bus and cement truck) during the use of dynamometer were far exceed the noise standards established by the City of Downey. Downey Municipal Code Section 4606.3 stipulates that the maximum permissible noise level shall not exceed five (5) dBA above the ambient noise level. Ultimately, these estimated noise levels are measured at the existing ambient noise level without the addition of a train noise. The attached report from Wieland Acoustics indicated that the proposed project will potentially create significant noise impacts to the surrounding areas unless mitigation measures are implemented.

Using SoundPLAN software to computerize the noise modeling as outlined in the report by Wieland Acoustics. Table below shows the City's noise standards, the estimated dynamometer noise level and an assessment of the project's impact.

Location	Ambient, dBA (without trains)	Downey Standards (Ambient + 5), dBA	Estimated Dynamometer Noise Level, dBA	Assessment of Impact
N.E. property line	63.6	68.6	86	Exceeds by 17.4 dBA
N.W. property line	60.3	65.3	66	Exceeds by 0.7 dBA
W. property line	62.6	67.6	72	Exceeds by 4.4 dBA
Apartment Complex	69.8	74.8	72	City's standards not applied here

#### Recommended Mitigation Measures:

1. The existing three-sided enclosures around the dynamometer test stand and the adjacent steamer area shall extend from ground level to the underside of the canopy. The wall panels shall be sealed airtight at all joints with each other, with the canopy, and with the ground with a resilient acoustical caulking material to form a continuous, solid barrier.
2. There shall be no gaps or openings for drainage, ventilation, etc., in the walls or canopies of the enclosures.
3. All three sides of the dynamometer enclosure, as well as the underside of the canopy over the dynamometer, shall be fully lined with an acoustical blanket material that provides a minimum noise reduction coefficient (NRC) of 0.85 and a minimum sound transmission class (STC) of 27. For example, the model BSC-31 acoustical blanket barrier provided by Sound Seal ([www.soundseal.com](http://www.soundseal.com)) complies with these requirements. The absorptive side of the acoustical blanket material shall face the interior of the enclosure. A qualified structural engineer shall review this recommendation to verify that the existing structure can support the additional weight of the blankets.
4. A free-standing barrier shall be used to extend the north wall of the dynamometer enclosure by a length of 20 feet to the west. (Refer to Figure 6-1.) This barrier shall have a minimum height of 12 feet, and shall be constructed of a material or product that provides a minimum NRC of 1.00 and a minimum STC of 31. For example, the "Silent Protector" wall provided by AIL Sound Walls ([www.ailsoundwalls.com](http://www.ailsoundwalls.com)) complies with these requirements. The barrier shall be sealed airtight to the ground and to the north wall of the dynamometer enclosure, and the absorptive side of the barrier shall be oriented to the south. There shall be no gaps or openings for drainage, ventilation, etc. A qualified architect or engineer shall design the free-standing barrier to accommodate the anticipated wind loads.
5. A portable barrier shall be placed in front of any front-engine vehicles that are tested with the dynamometer. (Refer to Figure 6-1.) The portable barrier shall be a minimum of 12 feet high and a minimum of 22 feet wide (i.e., of sufficient width to fully block the opening of the dynamometer enclosure). It shall be constructed of the same acoustical blanket barrier material recommended in Item #3, above, and attached

Potentially Significant Impact - EIR Analysis Is required      Potentially Significant Unless Mitigation Incorporated      Less Than Significant Impact      No Impact

to a supporting structural frame. Where the portable barrier meets the west end of the free-standing barrier (recommended in Item #4, above), the acoustical blanket shall extend past the portable barrier and be secured to the freestanding barrier in order to block any gaps. The acoustical blanket material on the portable barrier shall extend as close to the ground as is practical in order to minimize any gaps. The recommended portable barrier shall be in place whenever a front-engine vehicle is being tested on the dynamometer. For tests of rear-engine vehicles, the portable barrier is not required.

- 6. Three storage containers with a length of at least 40 feet and a height of at least 9 feet shall be placed along the northeast property line as shown in Figure 6-2. The containers shall be butted snugly up against each other to eliminate gaps.
- 7. Large trucks and/or buses shall be parked as shown in Figure 6-2 during a dynamometer test. If this cannot be assured, then a barrier with a minimum height of 10' shall be constructed along the northeast property line.

The following table provides the estimated noise levels that will be generated by the dynamometer with the above recommended mitigation measures:

Location	Abmient, dBA (without trains)	Downey Standards (Ambient + 5), dBA	Estimated Dynamometer Noise Level, dBA	Assessment of Impact
N.E. property line	63.6	68.6	68	Complies
N.W. property line	60.3	65.3	53	Complies
W. property line	62.6	67.6	67	Complies
Apartment Complex	69.8	74.8	60	City's standards not applied here

(e and f): The City of Downey is not located within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip.

**12. POPULATION AND HOUSING.** Would the project:

- a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

**Response:**

(a through c): The site is occupied by Cummins Cal Pacific, LLC, a trucking repair company. Consequently, the installation and operation of a dynamometer will not displace any housing or people. Furthermore, the project will not induce population growth, inasmuch as it does not require an extension of infrastructure and create a substantial number of jobs.

**13. PUBLIC SERVICES.**

- 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

	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 for any of the public services:				
1) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Response:</b>				
<b>(a1):</b> Fire protection in the area is provided by the City of Downey Fire Department. They reviewed the proposed project and determined that the existing fire services have sufficient capacity to accommodate the proposed project and will not require new or altered facilities.				
<b>(a2):</b> Police protection in the area is provided by the City of Downey Police Department. They reviewed the proposed project and determined that the existing police services have sufficient capacity to accommodate the proposed project and will not require new or altered facilities.				
<b>(a3):</b> The proposed project will not induce growth in the area, nor will it create new housing or increase existing densities. As such, it will not increase demand on the school system.				
<b>(a4 and a5):</b> The proposed project will not induce growth to the area. Thus it will not create an impact to parks or other public facilities.				

**14. RECREATION.**

a. Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a and b):** The proposed project will not induce growth and it will not result in an increase in the use of or the demand for recreational facilities.

**15. TRANSPORTATION/TRAFFIC.** Would the project:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

**(a and b):** The project implementation will add vehicle trips to the site’s neighboring roadways and intersections. The additional trips will not result in an increase in traffic congestion. As noted earlier, Cummins Cal Pacific has been operating at the subject site since 2007, and the addition of a dynamometer to the business’s current daily traffic volumes are not expected to impact any of the nearby intersections.

**(c):** The project will not alter existing air traffic patterns or create additional air traffic.

**(d):** Cummins Cal Pacific, LLC has been operating at the site since 2007. Thus, the use of dynamometer will not increase additional traffic significantly and the location of the existing driveway will not be a conflict with left turn movement out of the site.

**(e):** Emergency access to the site is provided through the driveway on Stewart and Gray Road and past the east side of the site. This includes a 25’ wide drive aisle and a 5’ wide walkway, which meets the Fire Department’s minimum standards for access. Additionally, the applicant has provided a Fire Department turnaround on the site.

**(f):** The proposed project will not result in insufficient on-site parking; the number of on-site parking spaces shown on the most recent site plan approval exceeds the City’s parking requirements. As such, there is sufficient parking being provided on the site to accommodate the use.

**(g):** The proposed project will not alter the existing width of the public right-of-way or the sidewalk; therefore it will not affect the bus route, bicycles, or pedestrians on Stewart and Gray Road. Although some of the project’s employees may use bus service for transportation to and from the site, they are not expected to adversely impact the existing transit system. Furthermore, the project is not expected to impact adopted policies, plans, or programs supporting alternative transportation.

**16. UTILITIES AND SERVICE SYSTEMS.** Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
facilities, the construction of which could cause significant environmental effects?				
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Response:**

(a and g): The proposed project is within a fully developed urban community. All water, sewer, storm water, and solid waste services are provided directly or through contracts by the City of Downey. The existing systems are in place and have sufficient capacity to accommodate the proposed project.

**17. MANDATORY FINDINGS OF SIGNIFICANCE.**

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Response:**

(a): The City of Downey is an urbanized area that is mostly built out with only infill development potential. According to the Final Environmental Impact Report (FEIR) that was prepared for the Downey Vision 2025 Comprehensive General Plan Update (SCH #2004031159), which was certified on January 25, 2005, there are

Potentially Significant Impact - EIR Analysis Is required	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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no known species identified as a candidate, sensitive, or special status species. Additionally, there are no known wetlands, as defined by Section 404 of the Clean Water Act, within the City. Furthermore, the proposed project will not result in the demolition of any existing structures. As such, the proposed project will not 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.

**(b and c):** Based on the analysis contained within this initial study, the proposed project is not anticipated to create a significant impact. When considered with past, current, and other proposed projects in the City, it is unlikely that the project will contribute towards any cumulative impact. Therefore, the project will not cause a substantial adverse effects on human beings, either directly or indirectly

## 5. DOCUMENTS REFERENCED

The following documents have been referenced in this Environmental Evaluation and are available for review of the City of Downey, Planning Division, 11111 Brookshire Ave, Downey, CA 90241

1. City of Downey General Plan, adopted January 25, 2005
2. City of Downey General Plan FEIR (SCH #2004031159), certified January 25, 2005
3. Cummings Cal Pacific, 9520 Stewart & Gray Road, Downey, CA 90241. Anderson Design Group. Signed October 18, 2011



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**Noise Study for the Proposed  
Cummins Cal Pacific Dynamometer  
in the City of Downey**

**Project File 11.027.00  
January 27, 2012  
(Revised April 26, 2012)**

Prepared for:

City of Downey  
11111 Brookshire Avenue  
Downey, CA 90241

Prepared by:

Jonathan Higginson, Senior Consultant  
David L. Wieland, Principal Consultant

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## *Table of Contents*

<b>1</b>	<b>INTRODUCTION/PROJECT DESCRIPTION .....</b>	<b>1</b>
<b>2</b>	<b>NOISE STANDARDS .....</b>	<b>2</b>
<b>3</b>	<b>EXISTING NOISE LEVELS.....</b>	<b>2</b>
<b>4</b>	<b>FUTURE DYNAMOMETER NOISE LEVELS.....</b>	<b>4</b>
4.1	MEASUREMENT OF DYNAMOMETER NOISE LEVELS .....	4
4.2	COMPUTER MODELING OF FUTURE DYNAMOMETER NOISE LEVELS.....	5
<b>5</b>	<b>ASSESSMENT OF IMPACT .....</b>	<b>7</b>
<b>6</b>	<b>NOISE CONTROL RECOMMENDATIONS.....</b>	<b>7</b>
<b>7</b>	<b>CONCLUSION .....</b>	<b>11</b>
<b>8</b>	<b>IMPLEMENTATION DISCLAIMER .....</b>	<b>11</b>
<b>9</b>	<b>REFERENCES .....</b>	<b>11</b>

### List of Tables

Table 4-1.	Estimated Project Noise Levels.....	5
Table 5-1.	Assessment of the Project’s Impact .....	7
Table 6-1.	Summary of Mitigated Noise Levels.....	8

### List of Figures

Figure 1-1.	Project Location.....	1
Figure 3-1.	Summary of Ambient Noise Measurements.....	3
Figure 4-1.	Estimated Noise Levels from One Large Truck on Enclosed Dynamometer .....	6
Figure 6-1.	Location of Recommended Free-Standing Barrier and Portable Barrier .....	9
Figure 6-2.	Estimated Noise Levels from One Large Truck on Dynamometer, with Recommended Mitigation Measures .....	10



## 1 Introduction/Project Description

The proposed Project involves the addition of a dynamometer at the existing Cummings Cal Pacific truck and bus servicing facility located at 9520 Stewart and Gray Road in the City of Downey, California. Figure 1-1 identifies the location of the Project site. The following report provides a description of the City's noise standards for the Project, a discussion of the existing noise environment in the vicinity of the Project, an assessment of Project's impact relative to the City standards, and recommendations for mitigating the significant impacts.



**Figure 1-1. Project Location**



## 2 Noise Standards

Article IV (*Public Welfare, Morals, and Policy*), Chapter 6 (*Unnecessary Noises*) of the City of Downey Municipal Code provides the noise standards for the proposed Project. Maximum permissible noise levels are provided in Section 4606.3, as follows:

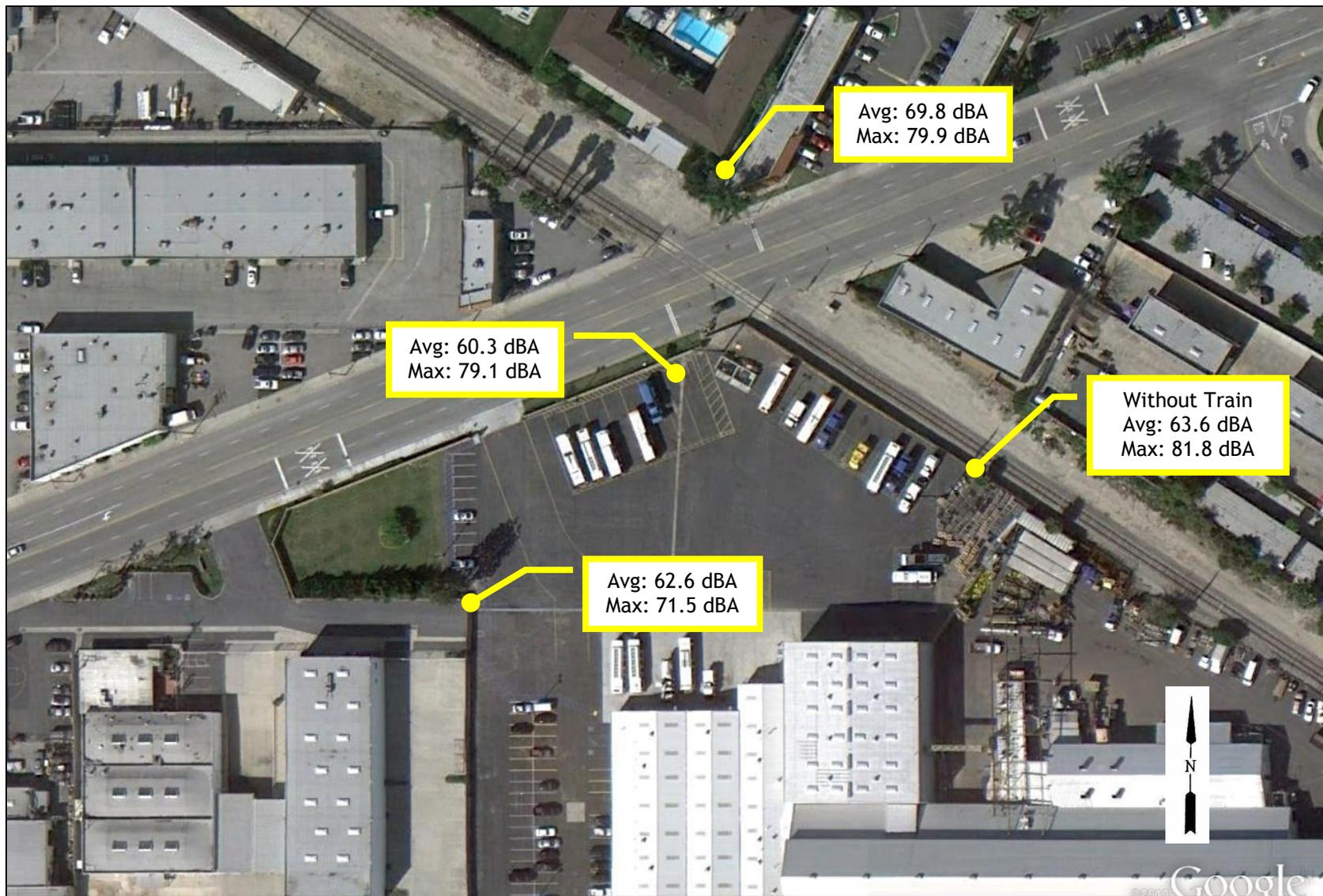
- (a) The maximum permissible sound pressure level measured at the property boundary of any land use in Subsection (b) of this section from any noise source not operating on a public right-of-way shall constitute prima facie evidence of a public nuisance when such noise level exceeds five (5) dBA above the ambient noise level at any period during the course of a twenty-four (24) hour day.
- (b) If the alleged noise source is of a continuous nature and cannot reasonably be discontinued for a time period wherein the ambient noise level can be determined, the maximum permissible steady noise level by sound sources across the property boundary of any land use cited below may be less, but not greater than:

Land Use	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Residential	55 dBA	45 dBA
Commercial	65 dBA	65 dBA
Manufacturing	70 dBA	70 dBA

- (c) If any parcel of real property is developed and used for multiple land uses, the lower land use noise level standard shall apply.
- (d) In the hours between 7:00 a.m. to 10:00 p.m., the noise levels permitted in Subsection (b) of this section may be adjusted by the inclusion of the following factors when applicable:
  - (1) Noise source operated 12 minutes per hour or less + 5 dBA
  - (2) Noise source operated 3 minutes per hour or less + 10 dBA
  - (3) Noise source operated 1 minute per hour or less + 15 dBA
- (e) Impulsive sounds, pure tone, or sounds with a cyclically varying amplitude shall be considered a public nuisance when such noises are at a sound pressure level of five (5) dBA less than those listed in Subsection (b) of this section, with the inclusion of the corrective factors listed in Subsection (d) of this section, when applicable.

## 3 Existing Noise Levels

Noise measurements were obtained at four locations around the Project’s property lines, as well as at one location at the multifamily residential development across Stewart and Gray Road. At the northeast property line the measurement was obtained continuously for approximately 24 hours. At the remaining four locations the measurements were obtained for a period of approximately 20 minutes each. The results of the noise measurements are summarized in Figure 3-1.



**Figure 3-1. Summary of Ambient Noise Measurements**



The primary noise source at the northwest and west property lines, and at the residential development, was traffic on Stewart and Gray Road. At the northeast property line the primary noise source was mechanical equipment and activities at the industrial site located adjacent to the Project's southeast fence line.

The instrumentation used to obtain the noise measurements consisted of integrating sound level meters (Models 820 and 870) and an acoustical calibrator (Model CAL200) manufactured by Larson Davis Laboratories. The accuracy of the calibrator is maintained through a program established by the manufacturer, and is traceable to the National Bureau of Standards. All instrumentation meets the requirements of the American National Standards Institute (ANSI) S1.4-1971.

## 4 Future Dynamometer Noise Levels

In order to estimate the future dynamometer noise levels at the Project site, noise measurements were obtained of an existing dynamometer operation at the Cummins Cal Pacific facility located at 1105 South Greenwood Avenue in Montebello, California. The noise data gathered during these measurements was then used in a computer noise model to predict the future dynamometer noise levels at the proposed Project site. The measurement and computer noise modeling procedures are explained in more detail in the following sections.

### 4.1 Measurement of Dynamometer Noise Levels

Measurements of the existing dynamometer were obtained on August 26, 2011. During our visit, three different vehicles were tested. The first vehicle was a large two-axle Caltrans truck, the second was a school bus, and the third was a three-axle cement truck. The observed test durations ranged from approximately five to fourteen minutes, which was long enough to obtain a measurement of the average noise levels. (It is understood, based on discussions with the dynamometer operator, that typical tests last 20 to 30 minutes.) The dynamometer test area was immediately adjacent to the service bay building and was enclosed on the front and left sides (relative to the test vehicle) by the walls of the building and above by a roof canopy. The right and rear sides of the test area were open to the exterior.

The primary noise measurement location was diagonally behind and to the right of the test vehicle at an angle of approximately 45°, and at a distance of 35 feet from the closest rear wheel on the dynamometer. This position was chosen because it matches the relative geometry of the closest property line to the proposed dynamometer at the Project site. Supplemental noise measurements were obtained in front of the test vehicle, to the side of the test vehicle, and adjacent to the exhaust stack of the test vehicle (except for the school bus, which did not have an exhaust stack) in order help quantify the relative noise contribution from the various noise sources (i.e., engine, exhaust, dynamometer/tire interface).

The results obtained at the primary measurement position indicated an average noise level of 81.1 dBA during the Caltrans truck test, 80.1 dBA during the school bus test, and 86.5 dBA during the cement truck test.



## 4.2 Computer Modeling of Future Dynamometer Noise Levels

All vehicle tests at the proposed dynamometer will have to comply with the applicable noise standards. Therefore, in order to examine the worst-case noise levels observed during our measurements, all computer modeling was based on the noise data gathered during the concrete truck testing described in Section 4.1, above.

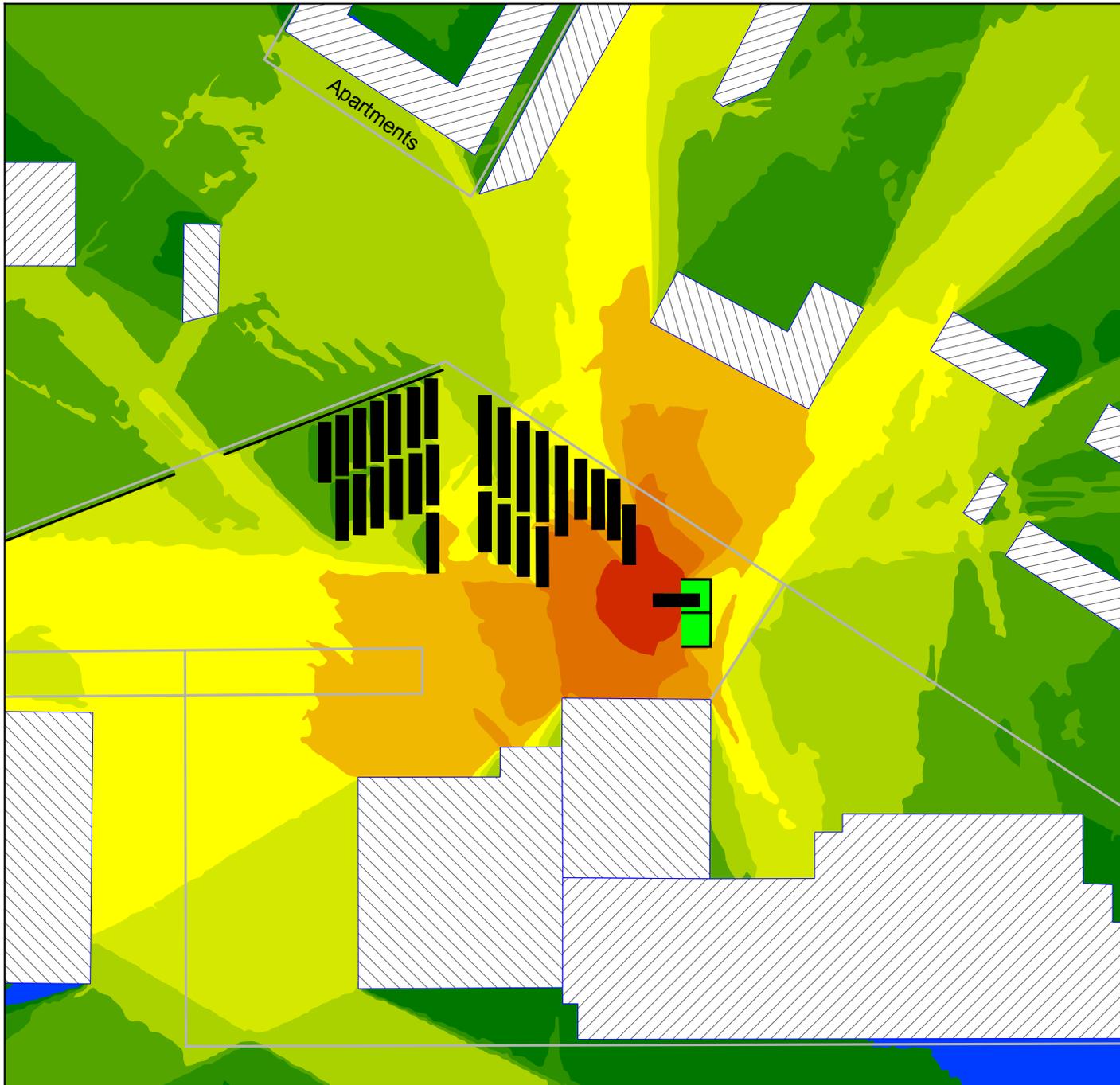
Computer noise modeling was conducted using SoundPLAN software. This software takes a number of significant variables into account, including source sound power levels, the distance from sources to receivers, the heights of sources and receivers, barrier effects provided by walls or buildings, and noise reflected from hard surfaces such as buildings.

In order to calibrate the software to the conditions observed during our noise measurements, and to determine the appropriate sound power levels for the truck noise sources, a calibration model was developed to represent the measurement conditions at the Montebello location. This model included the effects of the service bay building that enclosed the test area on the front and left sides.

Once the appropriate sound power levels for the truck noise sources had been determined from the calibration model, a new model was produced to represent the proposed layout of the Project site in Downey. This model was then used to estimate the dynamometer noise levels at the Project's property lines and surrounding land uses. The results of the modeling are illustrated in Figure 4-1. Referring to the figure the estimated dynamometer noise levels are as follows:

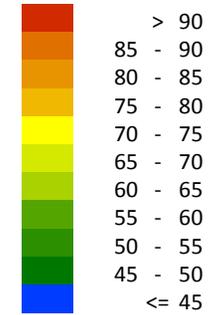
**Table 4-1. Estimated Project Noise Levels**

Location	Estimated Dynamometer Noise Level at Ambient Measurement Positions, dBA
NE property line	86
NW property line	66
W property line	72
Apartments (ground floor)	72



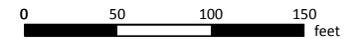
**Figure 4-1.**  
**Estimated Noise Levels**  
**from One Large Truck**  
**on Enclosed**  
**Dynamometer**

Leq, dBA



Signs and symbols

- Building
- Property Line
- Wall
- Truck/Bus



Date: April 26, 2012



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## 5 Assessment of Impact

At the direction of City Staff, the applicable noise standard for the Project is 5 dBA above the highest existing ambient noise level *without* the inclusion of train noise. With this in mind, Table 5-1 provides the City’s noise standard at each of the measurement locations, the estimated dynamometer noise level, and an assessment of the Project’s impact.

**Table 5-1. Assessment of the Project’s Impact**

Location	Ambient, dBA (without trains)	Standard (Ambient + 5), dBA	Estimated Dynamometer Noise Level, dBA	Assessment of Impact
NE property line	63.6	68.6	86	Exceeds by 17.4 dBA
NW property line	60.3	65.3	66	Exceeds by 0.7 dBA
W property line	62.6	67.6	72	Exceeds by 4.4 dBA
Apartments (ground floor)	69.8	74.8	72	City’s standards are not applied at this location.

## 6 Noise Control Recommendations

The following are recommended in order to comply with the City’s noise ordinance standards at the Project’s property lines:

1. The existing three-sided enclosures around the dynamometer test stand and the adjacent steamer area shall extend from ground level to the underside of the canopy. The wall panels shall be sealed airtight at all joints with each other, with the canopy, and with the ground with a resilient acoustical caulking material to form a continuous, solid barrier.
2. There shall be no gaps or openings for drainage, ventilation, etc., in the walls or canopies of the enclosures.
3. All three sides of the dynamometer enclosure, as well as the underside of the canopy over the dynamometer, shall be fully lined with an acoustical blanket material that provides a minimum noise reduction coefficient (NRC) of 0.85 and a minimum sound transmission class (STC) of 27. For example, the model BSC-31 acoustical blanket barrier provided by Sound Seal ([www.soundseal.com](http://www.soundseal.com)) complies with these requirements. The absorptive side of the acoustical blanket material shall face the interior of the enclosure. A qualified structural engineer shall review this recommendation to verify that the existing structure can support the additional weight of the blankets.
4. A free-standing barrier shall be used to extend the north wall of the dynamometer enclosure by a length of 20 feet to the west. (Refer to Figure 6-1.) This barrier shall have a minimum height of 12 feet, and shall be constructed of a material or product that provides a minimum NRC of 1.00 and a minimum STC of 31. For example, the “Silent Protector” wall provided by AIL Sound Walls ([www.ailsoundwalls.com](http://www.ailsoundwalls.com)) complies with these requirements. The barrier shall be sealed airtight to the ground and to the north wall of the dynamometer enclosure, and the absorptive side of the barrier shall be oriented to the south. There shall be no gaps or openings for drainage,



ventilation, etc. A qualified architect or engineer shall design the free-standing barrier to accommodate the anticipated wind loads.

5. A portable barrier shall be placed in front of any front-engine vehicles that are tested with the dynamometer. (Refer to Figure 6-1.) The portable barrier shall be a minimum of 12 feet high and a minimum of 22 feet wide (i.e., of sufficient width to fully block the opening of the dynamometer enclosure). It shall be constructed of the same acoustical blanket barrier material recommended in Item #3, above, and attached to a supporting structural frame. Where the portable barrier meets the west end of the free-standing barrier (recommended in Item #4, above), the acoustical blanket shall extend past the portable barrier and be secured to the free-standing barrier in order to block any gaps. The acoustical blanket material on the portable barrier shall extend as close to the ground as is practical in order to minimize any gaps. The recommended portable barrier shall be in place whenever a front-engine vehicle is being tested on the dynamometer. For tests of rear-engine vehicles, the portable barrier is not required.
6. Three storage containers with a length of at least 40 feet and a height of at least 9 feet shall be placed along the northeast property line as shown in Figure 6-2. The containers shall be butted snugly up against each other to eliminate gaps.
7. Large trucks and/or buses shall be parked as shown in Figure 6-2 during a dynamometer test. If this cannot be assured, then a barrier with a minimum height of 10' shall be constructed along the northeast property line.

Figure 6-2 provides the estimated noise levels that will be generated by the project with the recommended mitigation measures properly implemented. The results are also summarized in Table 6-1.

**Table 6-1. Summary of Mitigated Noise Levels**

Location	Ambient, dBA (without trains)	Standard (Ambient + 5), dBA	Estimated Mitigated Dynamometer Noise Level, dBA	Assessment of Impact
NE property line	63.6	68.6	68	Complies
NW property line	60.3	65.3	53	Complies
W property line	62.6	67.6	67	Complies
Apartments (ground floor)	69.8	74.8	60	City's standards are not applied at this location.

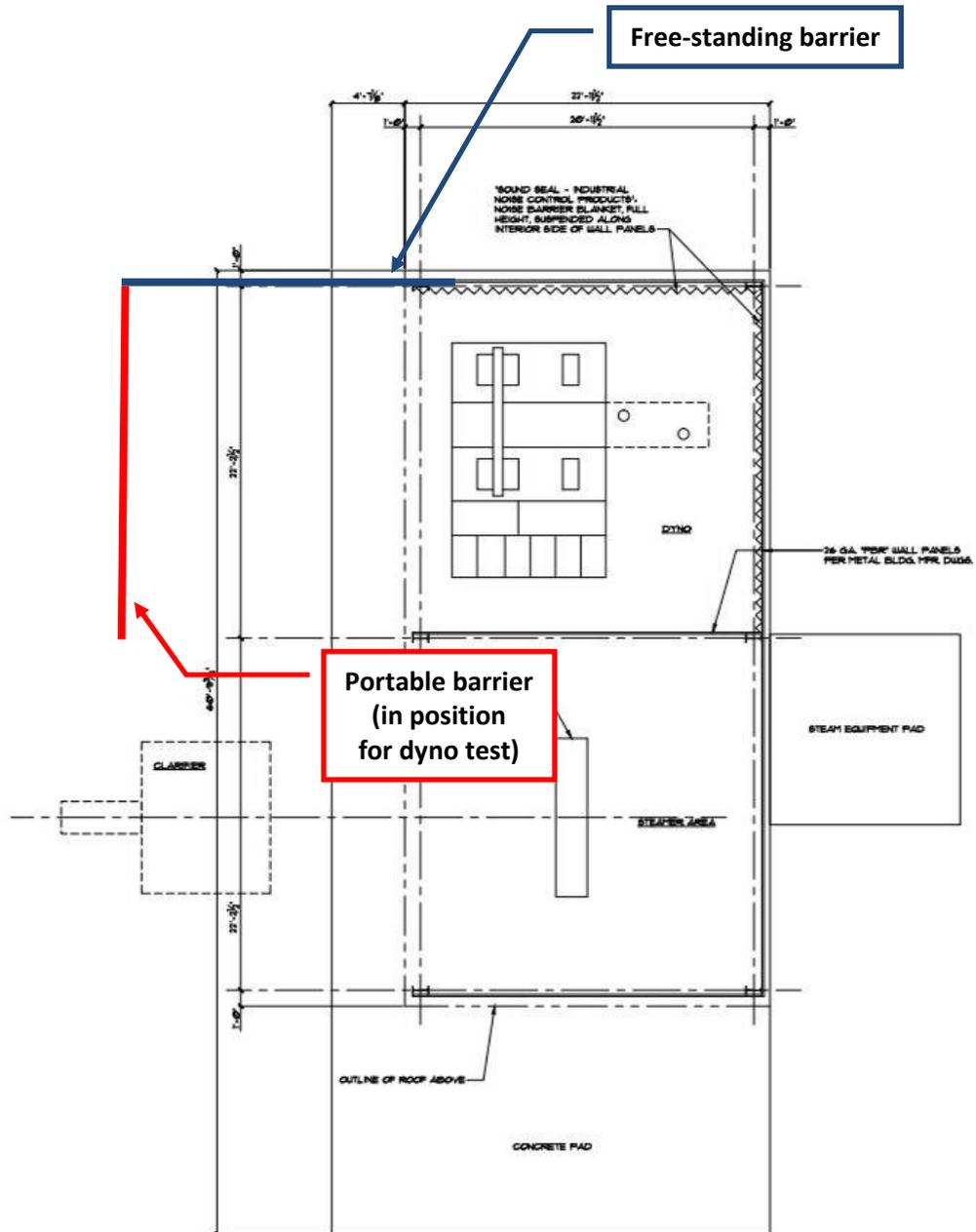
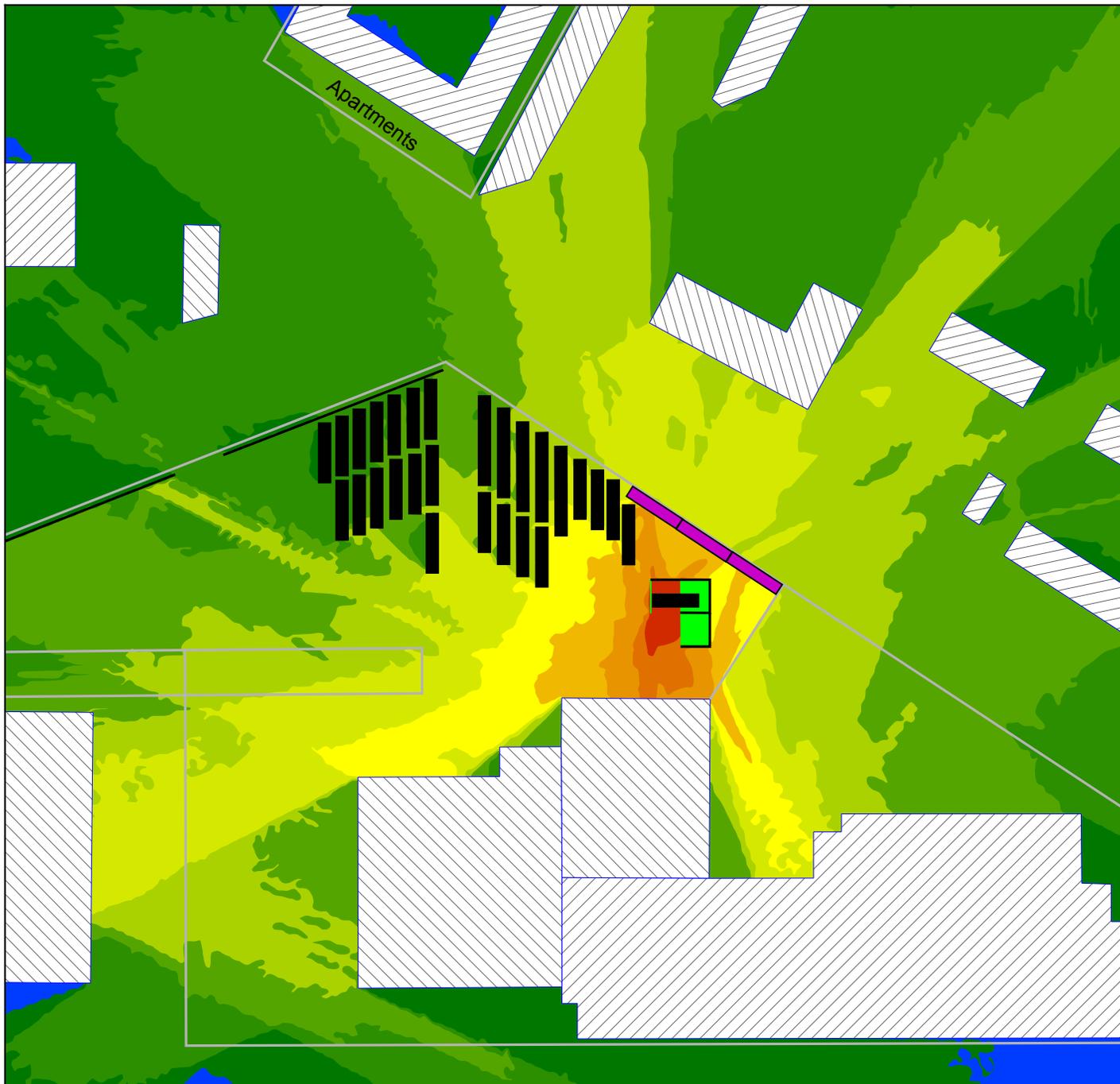
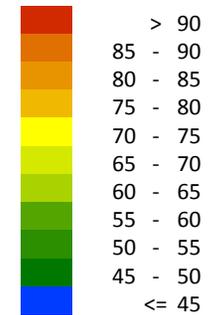


Figure 6-1. Location of Recommended Free-Standing Barrier and Portable Barrier



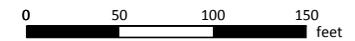
**Figure 6-2.**  
**Estimated Noise Levels**  
**from One Large Truck**  
**on Dynamometer, with**  
**Revised**  
**Mitigation Measures**

Leq, dBA



Signs and symbols

-  Building
-  Property Line
-  Wall
-  Truck/Bus
-  Container



Date: April 19, 2012



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## 7 Conclusion

Based on measurements obtained at the existing dynamometer test facility in Montebello, it is concluded that the noise levels generated by a test facility in Downey will exceed the City's noise standards at the northeast and west property lines. However, with the noise control recommendations provided herein, it is concluded that will noise levels produced during a dynamometer test will be reduced to a level of compliance.

## 8 Implementation Disclaimer

Wieland Acoustics, Inc. assumes no responsibility whatsoever for the implementation of the recommendations provided in this report, or for the details of construction or the final noise levels following completion of the Project. We are responsible only for the accuracy of our calculations, which are based on the construction elements detailed in this report. No guarantees or assurances are given or implied.

## 9 References

1. *Cummings Cal Pacific, 9520 Stewart & Gray Road, Downey, CA 90241.* Anderson Design Group. Signed October 18, 2011.