

October 2016 | Geologic and Environmental Hazards Assessment Report

# PROPOSED NEW SCHOOL 12870 PANAMA STREET

Ocean Charter Schools

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# 1. Introduction

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## 1.1 INTRODUCTION

The State of California’s standards for school site selection are found in Title 5 of the California Code of Regulations (CCR) Section 14010, and additional codes and regulations applicable to school facilities that are found in the Education, Government and Public Resources Codes (Ed. Code, Gov’t Code and PRC, respectively). This study provides an assessment and supporting documentation of State school facility standards applicable to State-funded new school buildings (SFPD 4.07, Part 4C) and modernization projects (SFPD 4.08B, Section 1).

The California Environmental Quality Act (CEQA) requires lead agencies to address the environmental impacts of a project on the environment. These are separate and distinct from the issues addressed in this study, which deal with a site’s ability to provide a safe and healthy environment for the school. Documentation of the project’s environmental impacts under CEQA is provided under separate cover.

## 1.2 PROJECT LOCATION

The project site is located on approximately 2.2 acre property at 12870 Panama Street in the community of Del Rey in the City of Los Angeles in Los Angeles County, California. Michael Watson of PlaceWorks performed a site reconnaissance on April 20, 2016 to confirm the current site conditions. Figure 1, *Site Location*, and Figure 2, *Aerial Photograph*, respectively show the project site from regional and aerial perspectives.

## 1.3 PROJECT DESCRIPTION

Ocean Charter Schools (District) is proposing to construct a new school. Prior to deciding whether to proceed with constructing the school, the District requested preparation of a feasibility study to determine if there were any “fatal flaws” at this site that would advise against such actions. This Geologic and Environmental Hazards Assessment (GEHA) is intended to help answer this question. A Preliminary Environmental Assessment will be prepared to address DTSC requirements.

## 1. Introduction

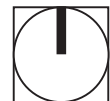
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Figure 1 - Site Location



— Site Boundary

0 500  
Scale (Feet)



Source: ESRI, 2015

December 2015

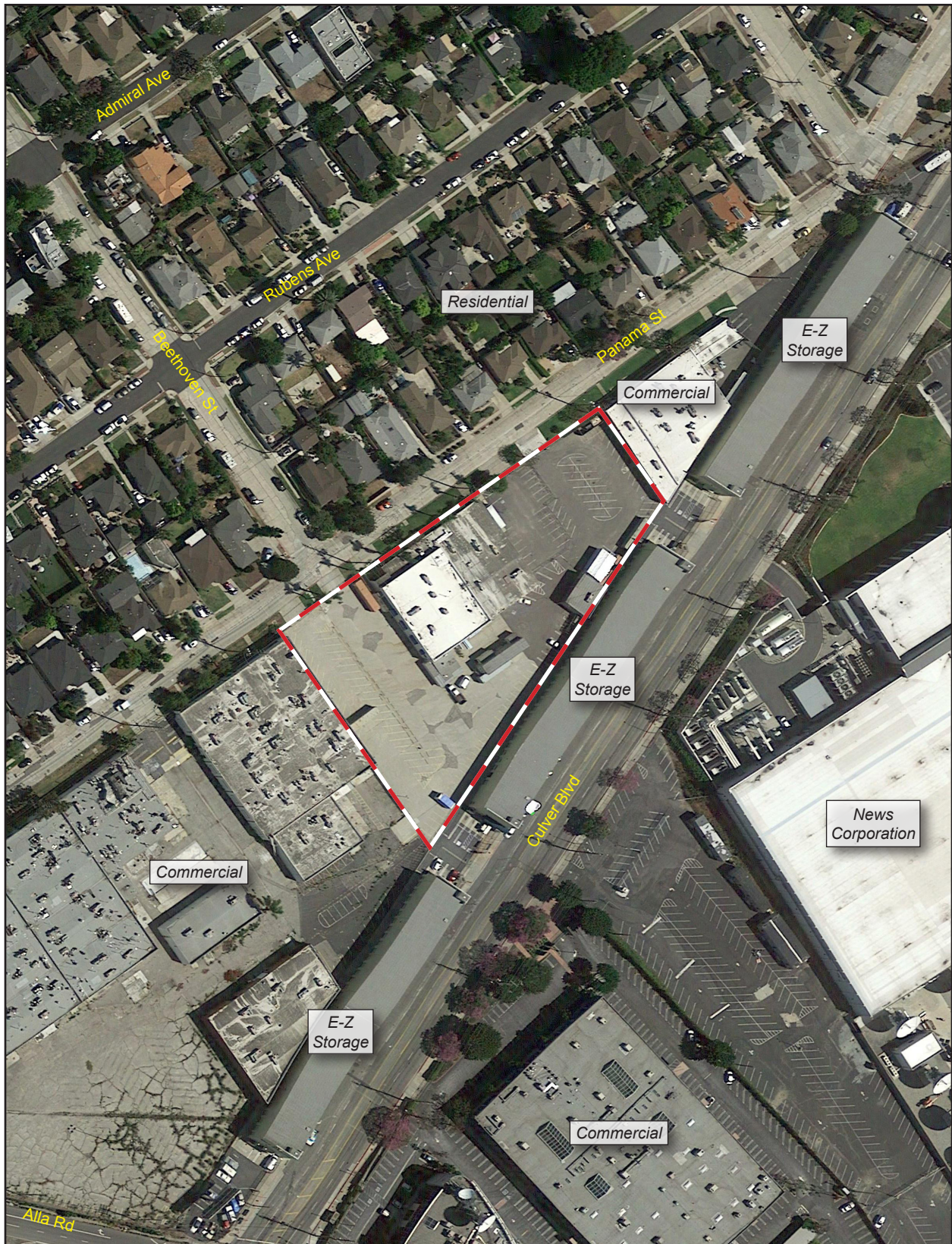
PlaceWorks

## 1. Introduction

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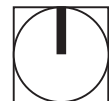


Figure 2 - Aerial Photograph



— Project Boundary

0 180  
Scale (Feet)



Source: Google Earth Pro, 2015

December 2015

PlaceWorks

## 1. Introduction

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## 2. Environmental Checklist

### 2.1 STATE STANDARDS FOR SCHOOL FACILITIES

The State of California's standards for school site selection are found in Title 5 of the California Code of Regulations (CCR) Section 14010 and additional codes and regulations applicable to school facilities are found in the Education, Government and Public Resources Codes (Ed. Code, Gov't Code and PRC, respectively). The following checklist provides a list of questions and code citations related to State-funded school site approvals. A Preliminary Environmental Assessment under the Department of Toxic Substances Control (DTSC) process is forthcoming.

#### STATE STANDARDS CHECKLIST FOR STATE-FUNDED SCHOOL FACILITIES— SCHOOL SITE APPROVAL

(Documentation for SFPD 4.0, 4.01-4.03, School Site Approval)

Topic	Code References
<b>Air Quality</b>	
Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the school?	Ed. Code § 17213(c)(2)(C); CCR Title 5 § 14010(q)
Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?	Ed. Code § 17213(b); CCR Title 5 § 14010(q)
<b>Geology and Soils</b>	
Does the site contain an active earthquake fault or fault trace, or is the site located within the boundaries of any special studies zone or within an area designated as geologically hazardous in the safety element of the local general plan?	Ed. Code, §17212 and §17212.5; CCR Title 5 §14010(f)
Would the project involve the construction, reconstruction, or relocation of any school building on a pressure ridge or the trace of a geological fault along which surface rupture can reasonably be expected to occur within the life of the school building?	Ed. Code §17212.5
Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to moderate-to-high liquefaction, landslides, or expansive soils?	CCR, Title 5 §14010(i) School Site Selection and Approval Guide, Appendix H
Are naturally occurring asbestos minerals located at the site?	School Site Selection and Approval Guide, Appendix H
<b>Hazards and Hazardous Materials</b>	
Does the proposed school site contain one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood?	Ed. Code § 17213(a)(3)

## 2. Environmental Checklist

### STATE STANDARDS CHECKLIST FOR STATE-FUNDED SCHOOL FACILITIES— SCHOOL SITE APPROVAL

#### (Documentation for SFPD 4.0, 4.01-4.03, School Site Approval)

Topic	Code References
Is the proposed school site located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?	CCR, Title 5 § 14010 (h)
Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? <i>(Does not apply to school sites approved by CDE prior to January 1, 1997.)</i>	Ed. Code § 17215.5
Is the property line of the proposed school site less than the following distances from the edge of respective power line easements: (1) 100 feet of a 50–133 kV line; (2) 150 feet of a 220–230 kV line; or (3) 350 feet of a 500–550 kV line?	CCR, Title 5 § 14010 (c)
Does the project site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?	Ed. Code § 17213(a)(1)
Is the project site a hazardous substance release site identified by the state Department of Health Services in a current list adopted pursuant to § 25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code?	PRC § 21151.8 (a)(1)(B); Ed. Code § 17213(a)(2)
If prepared, has the risk assessment been performed with a focus on children’s health posed by a hazardous materials release or threatened release, or the presence of naturally occurring hazardous materials on the school site?	Ed. Code § 17210.1(a)(3)
If a response action is necessary and proposed as part of this project, has it been developed to be protective of children’s health, with an ample margin of safety?	Ed. Code § 17210.1(a)(4)
Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste?	CCR, Title 5 § 14010 (l)
<b>Hydrology and Flooding</b>	
Is the project site subject to flooding or tank/dam inundation or street flooding?	Ed. Code § 17212 and 17212.5; CCR, Title 5 § 14010 (g) School Site Selection and Approval Guide, Appendix H
<b>Land Use and Planning</b>	
Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created?	Ed. Code § 17213; Gov’t. Code § 65402; CCR, Title 5 § 14010 (m)
Are there easements on or adjacent to the site that would restrict access or building placement?	CCR, Title 5 § 14010(r)
Has the district considered environmental factors of light, wind, noise, aesthetics, and air pollution in its site selection process?	CCR, Title 5 § 14010(q)
<b>Noise</b>	
Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program?	CCR, Title 5 § 14010 (e)
<b>Public Services</b>	
Does the site promote joint use of parks, libraries, museums, and other public services?	CCR, Title 5, § 14010 (o)
Is the site conveniently located for public services, including but not limited to fire protection, police protection, public transit and trash disposal wherever feasible?	CCR, Title 5, § 14010 (p)
<b>Transportation/Traffic</b>	
Are traffic and pedestrian hazards mitigated per Caltrans’ School Area Pedestrian Safety manual?	CCR, Title 5 § 14010 (l)

## 2. Environmental Checklist

### STATE STANDARDS CHECKLIST FOR STATE-FUNDED SCHOOL FACILITIES—

#### SCHOOL SITE APPROVAL

(Documentation for SFPD 4.0, 4.01-4.03, School Site Approval)

Topic	Code References
Is the proposed school site within 1,500 feet of a railroad track easement?	CCR, Title 5 § 14010 (d)
Is the proposed school site within two nautical miles, measured by air line, of that point on an airport runway or potential runway included in an airport master plan that is nearest to the site? (Does not apply to school sites acquired prior to January 1, 1966.)	Ed. Code § 14010 (d)
<u>School building</u> *means and includes any building used, or designed to be used, for elementary or secondary school purposes and constructed, reconstructed, altered, or added to..." (Ed. Code § 17283).	

## 2. Environmental Checklist

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## 3. Environmental Analysis

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Section 2.1 provided a checklist of the State of California's health and safety standards for school sites. This section provides documentation and an evaluation of applicable standards, and mitigation measures where appropriate.

### 3.1 AIR QUALITY

- 3.1.1 Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the school?

**No Significant Hazard.** Public Resources Code Section 21151.8(b)(9) and Education Code Section 17213(d)(9) define a "freeway or other busy traffic corridors" as roadways that on an average day have traffic in excess of 50,000 vehicles in a rural area or 100,000 vehicles in an urban area. Culver Boulevard is located to the southeast. Culver Boulevard at the intersection with McConnell Avenue was reported to have a daily traffic volume of 17,250 vehicles per day in 2007 (LADOT 2010). There are no freeways or busy traffic corridors within 500 feet of the site.

- 3.1.2 Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?

**No Significant Hazard.** Based on a review of the South Coast Air Quality Management District's (AQMD) Facility Information Detail (FIND) database, there are eight permitted and no nonpermitted facilities within a quarter mile of the site (AQMD 2015). Teledyne Reynolds, Inc., located at 5005 McConnell Avenue, has five active permits and one inactive permit for activated carbon adsorber drum vents. Reynolds Ind. Inc., located at 5005 McConnell Avenue has an inactive permit for a degreaser. Teledyne Reynolds, Inc., located at 4935 McConnell Avenue has an inactive permit for an activated carbon adsorber drum vent. Teledyne Reynolds, Inc., located at 12820 Panama Street is listed as an active facility. Teledyne Microelectronic Technologies, located at 12964 Panama Street has nine inactive permits for various uses, including activated carbon adsorber drum vents, spray booths, a circuit board etcher, and degreasers. DirecTV Operations, located at 12800 Culver Boulevard, has eight active permits for emergency generators. Elogic Corporation, located at 12910 Culver Boulevard, has an inactive permit for an emergency generator. AEG Digital Media LLC, located at 12950 Culver Boulevard, has an inactive permit for an emergency generator. Based on a review of Google Earth (2015) and a site reconnaissance (PlaceWorks 2016), there are no large agricultural operations, or rail yards within a quarter mile of the site. State Route 90 (SR-90) is located about 0.13 mile south of the

### 3. Environmental Analysis

site. Based on the results of a Health Risk Assessment (PlaceWorks 2016a), no significant air quality hazards exist at the site.

#### 3.2 GEOLOGY AND SOILS

Based on a review of the United States Geological Survey (USGS) 7.5-minute Topographic Series, Venice, California Quadrangle Map (USGS 2015), the property is located in the Ballona Gap in the Coastal Plain of Los Angeles, in the northern part of the Peninsular Ranges Geomorphic Province. The Peninsular Ranges Geomorphic Province extends approximately 900 miles southward from the Los Angeles Basin to Baja California, Mexico and is characterized by elongated northwest-trending mountain ranges separated by sediment-floored valleys (Yerkes et al. 1965). The most dominant structural features of the province are the northwest-trending fault zones, most of which die out, merge with, or are terminated by the steep reverse faults at the southern margin of the Santa Monica and San Gabriel Mountains within the Transverse Ranges Geomorphic Province north of the site. The property itself sits atop late Holocene flood plain deposits (Saucedo et al 2003).

##### 3.2.1 Does the site contain an active earthquake fault or fault trace, or is the site located within the boundaries of any special studies zone or within an area designated as geologically hazardous in the safety element of the local general plan?

**No Significant Hazard.** The site is not within or immediately adjacent (i.e., within a few hundred feet) to an Alquist-Priolo Earthquake Fault Zone (California Geological Survey [CGS] 2015). The nearest Alquist-Priolo Earthquake Fault Zone is located approximately 3.5 miles east of the site for the Newport-Inglewood Fault. Based on a review of readily-available geologic literature (Morton 2004; CGS 2015; Jennings and Bryant 2010) and the City of Los Angeles (2016), there are no known active faults or geologically hazardous areas on or within 1,500 feet of the site.

##### 3.2.2 Would the project involve the construction, reconstruction, or relocation of any school building on a pressure ridge or the trace of a geological fault along which surface rupture can reasonably be expected to occur within the life of the school building?

**No Significant Hazard.** The site is not within or immediately adjacent (i.e., within a few hundred feet) to an Alquist-Priolo Earthquake Fault Zone (California Geological Survey 2015). The nearest Alquist-Priolo Earthquake Fault Zone is located approximately 3.5 miles east of the site for the Newport-Inglewood Fault. Based on a review of readily-available geologic literature (Morton 2004; CGS 2015; Jennings and Bryant 2010) and the City of Los Angeles (2016), the site is not on a pressure ridge, and there are no known active faults on or immediately adjacent to the site. On this basis, the potential for tectonic fault rupture at the site is considered negligible.

##### 3.2.3 Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to moderate-to-high liquefaction, landslides, or expansive soils?

**No Significant Hazard.** Liquefaction refers to loose, saturated sand, or gravel deposits that lose their load-supporting capability when subjected to intense shaking. Liquefaction potential varies based upon three main



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contributing factors: 1) cohesionless, granular soils having relatively low densities (usually of Holocene age); 2) shallow groundwater (generally less than 50 feet); and 3) moderate to high seismic ground shaking.

Based on seismic hazard mapping by CGS (1999) and site-specific testing by GeoSystems, Inc. (2016), the site is susceptible to liquefaction. In addition, the project will be evaluated for the potential for liquefaction under the oversight of California Geological Survey [CGS] and Division of the State Architect [DSA]. The Geotechnical Engineer of Record for the project will provide recommendations and design standards to mitigate potential hazards associated with liquefaction. Therefore, the project will not expose people or the new school buildings to adverse effects associated with liquefaction.

Landsliding is a type of erosion in which masses of earth and rock move down slope as a single unit. Susceptibility of slopes to landslides and other forms of slope failure depend on several factors. These factors are usually present in combination and include steep slopes, condition of rock and soil materials, the presence of water, formational contacts, geologic shear zones, and seismic activity.

The project site and its adjoining properties are relatively flat and exhibit no substantial elevation changes or unusual geographic features. Based seismic hazard mapping by on CGS (1999), the site has no susceptibility for landslides or debris flows. Therefore, the project will not expose people or the new school buildings to adverse effects associated with landslides.

Expansive soils swell when they become wet and shrink when they dry out, resulting in the potential for cracked building foundations and in some cases, structural distress of the buildings themselves. In each case, minor to severe damage to overlying structures is possible. Based on a review of Saucedo et al (2003), the soils beneath the project are likely to be expansive. CGS and DSA will ensure that the buildings are sufficiently mitigated for the condition. Therefore, the project will not expose people or the new school buildings to adverse effects associated with expansive soils.

#### 3.2.4 Are naturally occurring asbestos minerals located at the site?

**No Significant Hazard.** Based on available data, no naturally-occurring serpentine rock or rock formations that may contain a significant quantity of asbestos are located in within 10 miles of the site (CGS 2000; Van Gosen and Clinkenbeard 2011). The nearest outcrop of serpentine rock is located on Santa Catalina Island offshore and south of the site.

### 3.3 HAZARDS AND HAZARDOUS MATERIALS

**3.3.1 Does the proposed school site contain one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood? Does the proposed school site contain pressurized sewer lines and high pressure water pipelines within 1,500 feet of the proposed site?**

**No Significant Hazard.** As discussed in Section 3.3.2, there are no pipelines that pose a significant hazard to the site.

### 3. Environmental Analysis

- 3.3.2 Is the proposed school site located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?

#### Aboveground Water or Fuel Storage Tank

**No Significant Hazard.** No aboveground water or fuel storage tanks were identified within a 1,500-foot radius, based on a site reconnaissance (PlaceWorks 2016), and review of a topographic map (USGS 2015). The development of the project will not create a new hazard or exacerbate the current conditions.

#### Hazardous Substance Pipelines

**No Significant Hazard.** There are no petroleum or chemical pipelines within a 1,500-foot radius, according to the National Pipeline Mapping System (online mapping database (NPMS 2015)). In addition, based on a response from Southern California Gas Company, no high pressure natural gas pipelines are located within a 1,500-foot radius of the project site.

#### Sewer and Water Pipelines

**No Significant Hazard.** Based on plans provided from Los Angeles Department of Water and Power, there are six large volume (>12 inch diameter) water pipelines within 1,500 feet of the school site. A 20-inch diameter water line is located beneath Culver Boulevard to the southeast of the site. A 16-inch diameter water line segment is located at the intersection of Culver Boulevard and McConnell Avenue, and the line continues southeast on McConnell Avenue as a 12-inch line. A 20-inch water line is located northeast of the site under Braddock Drive. 12-inch water lines are located underneath Rubens Avenue and Glencoe Avenue north and west of the site. Based on the width of the roadways and diameter of the water lines, the water released from a full flow rupture of the Los Angeles Department of Water and Power water pipelines would be confined by street curbing to the roadways and would not result in the flooding of the project site.

- 3.3.3 Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? (Does not apply to school sites approved by CDE prior to January 1, 1997.)

**No Significant Hazard.** Based on a site reconnaissance (PlaceWorks 2016), there are no agricultural uses neighboring the site. The site and adjoining land are not designated for agricultural use in the ZIMAS database (City of Los Angeles 2016).

- 3.3.4 Is the property line of the proposed school site less than the following distances from the edge of respective power line easements: (1) 100 feet of a 50–133 kV line; (2) 150 feet of a 220–230 kV line; or (3) 350 feet of a 500–550 kV line?

**No Significant Hazard.** Based on the responses from Southern California Edison and Los Angeles Department of Water and Power, there are no power lines 50 kV or greater within the CDE setback criteria. An underground 230 kV power line is located beneath Culver Boulevard about 95 feet southeast of the site.

### 3. Environmental Analysis

The CDE setback for a 230 kV underground power line is 37.5 feet. Based on the response from Southern California Edison and Los Angeles Department of Water and Power, the project will not create any new significant safety hazards to students.

**3.3.5 Does the project site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?**

**No Significant Hazard.** Based on the Submittal of Phase I Environmental Site Assessment prepared for the site, the site is not a current or former hazardous waste disposal site (PlaceWorks 2016c).

**3.3.6 Is the project site a hazardous substance release site identified by the state Department of Health Services in a current list adopted pursuant to §25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code?**

**No Significant Hazard.** Based on a review of the database search within the Submittal of Phase I Environmental Site Assessment prepared for the site, the project site is not a hazardous substance release site identified by the state Department of Health Services in a current list adopted pursuant to §25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code (PlaceWorks 2016c).

**3.3.7 If prepared, has the risk assessment been performed with a focus on children's health posed by a hazardous materials release or threatened release, or the presence of naturally occurring hazardous materials on the school site?**

**No Significant Hazard.** A Submittal of Phase I Environmental Site Assessment was prepared for the site (PlaceWorks 2016c), which summarized the soil, soil gas and groundwater investigations at the site to date. Based on the response from DTSC, a Preliminary Environmental Assessment is necessary before the California Department of Toxic Substances Control (DTSC) would permit a school to be constructed on the site (EnviroStor 2016). In addition, as stated in Section 3.2.4, there are no naturally-occurring asbestos deposits in the vicinity of the site.

**3.3.8 If a response action is necessary and proposed as part of this project, has it been developed to be protective of children's health, with an ample margin of safety?**

**No Significant Hazard.** Based on the findings of the Submittal of Phase I Environmental Site Assessment and the response from DTSC, a response action is not likely to be necessary at the site (PlaceWorks 2016c; EnviroStor 2016). A PEA will be conducted under the oversight of the DTSC. The response letter from DTSC is included in Appendix A.

**3.3.9 Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste?**

**No Significant Hazard.** Based on a 2015 review of the EnviroStor and GeoTracker databases, the project is not within 2,000 feet of a significant disposal of hazardous waste (DTSC 2016; SWRCB 2015). Based on a review of GeoTracker database, a groundwater plume is located southwest of the site, but the groundwater flow is toward the southwest, away from the site (SWRCB 2015).

### 3. Environmental Analysis

#### 3.3.10 Is the proposed school site situated within a City of Los Angeles Methane Zone or Methane Buffer Zone?

**No Significant Hazard.** Based on a review of the Los Angeles Department of Building and Safety ZIMAS database, the project is within a methane zone (LADBS 2016). A methane investigation was conducted on the site, and did not find hazardous concentrations of methane in soil gas beneath the site (PlaceWorks 2016b). The methane test results indicate that hazardous oilfield gases are not present beneath the Site at concentrations that would pose a significant threat to human health or safety. The maximum detected methane concentration was 52.4 parts per million by volume (ppmv) and hydrogen sulfide was not detected (<0.003 ppmv). The DTSC does not consider methane concentrations below 1,000 ppmv to be of significant concern and would not require further investigation or a mitigation response based on the test results (DTSC, 2005). Methane testing information conducted at the site is included in Appendix B.

#### 3.3.11 Is the proposed school site situated within 1,500 feet of an oil field, oil production facilities or and existing or former oil well?

**No Significant Hazard.** Based on a review of the Wildcat Map W1-5, the site is located about 1,390 feet northeast of the edge of the Playa Del Rey oil field. No oil wells or oil production facilities were found within 1,500 feet of the site based on a review of the Well Finder database and a site reconnaissance.

### 3.4 HYDROLOGY AND FLOODING

#### 3.4.1 Is the project site subject to flooding or tank/dam inundation or street flooding?

**No Significant Hazard.** According to the FEMA Map Service Center website and California Office of Emergency Services maps (2007), the site does not lie within a 100-year flood zone, but is within dam hazard zones for Mulholland Reservoir, Lower Franklin Reservoir, and the Stone Canyon Reservoir. The maps assume that the reservoirs would be at full capacity when ruptured. The closest edges of the inundation zones for Mulholland and Lower Franklin reservoirs are each less than 0.3 miles from the project site. Based on the map, the flood waters for Stone Canyon Reservoir would arrive at the site over one hour after dam inundation, which is sufficient time to evacuate to higher ground on the bluff less than a mile south of the site.

A seiche is an oscillating surface wave in a restricted or enclosed body of water, generated by ground motion, usually during an earthquake. Seiches are of concern relative to water storage facilities, because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. As there are no large bodies of water on, or topographically upgradient in the immediate vicinity of the subject site, seiching is not considered to be a potential hazard for the site.

Tsunamis are a type of earthquake-induced flooding produced by large-scale sudden disturbances of the sea floor. Tsunami waves interact with the shallow sea floor bathymetry upon approaching a landmass, resulting in an increase in wave height, and a destructive run-up (wave surge) into low-lying coastal areas. Based on the elevation of the site and the distance from the ocean, the potential for tsunamis at the site is negligible.

### 3. Environmental Analysis

Project implementation would not expose people or structures to adverse effects associated with flooding or inundation.

## 3.5 LAND USE AND PLANNING

### 3.5.1 Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created?

**No Significant Hazard.** As shown in the aerial photograph in Figure 2, the project site is in an area characterized with suburban and commercial development. Properties within a quarter-mile radius of the site are generally zoned for residential and commercial. Based on a review of the ZIMAS website, there are currently no proposed land use or zoning changes in the project area (City of Los Angeles 2015). Therefore, there is no significant hazard to the project.

### 3.5.2 Are there easements on or adjacent to the site that would restrict access or building placement?

**No Significant Hazard.** Based on a review of the ZIMAS website (City of Los Angeles 2015), no easements are located on the project site. Therefore, there is no significant hazard to the project.

### 3.5.3 Has the district considered environmental factors of light, wind, noise, aesthetics, and air pollution in its site selection process?

#### Light and Wind

**No Significant Hazard.** The project site would be exposed to standard climate conditions experienced by Los Angeles, which is generally characterized by Mediterranean conditions. As applicable, operation of the proposed project would consider these environmental conditions. Therefore, project implementation would not expose site occupants to adverse light or wind conditions.

#### Aesthetics

**No Significant Hazard.** The completed school would be an aesthetic improvement over the existing graded site. Project development would not degrade the existing visual character of the site. The project site is in an area with suburban land uses. Development of the proposed project would be consistent with the surrounding land uses. The character and quality of the site would not be incompatible with the nearby structures.

#### Air Pollution

**No Significant Hazard.** Public Resources Code Section 21151.8 and Education Code Section 17213 prohibit the approval of a project involving acquisition of a school site unless the following occur:

1. Consultation with an air pollution control district or air quality management district indicates that permitted and non-permitted facilities (including, but not limited to, freeways and other busy traffic corridors, large agricultural operations, and railyards, within one-fourth of a mile of the proposed schoolsite that might

### 3. Environmental Analysis

be reasonably be anticipated to emit hazardous air emissions, or to handle hazardous or extremely hazardous materials, substances, or waste) or significant pollution sources do not exist; or

2. The facilities or other pollution sources exist, but one of the following conditions applies:

A. The health risks from the facilities or other pollution sources do not and will not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the school.

B. The governing board finds that corrective measures required under an existing order by another government entity that has jurisdiction over the facilities or other pollution sources will, before the school is occupied, result in the mitigation of all chronic or accidental hazardous air emissions to levels that do not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the proposed school. If the governing board makes this finding, the governing board shall also make a subsequent finding, prior to the occupancy of the school, that the emissions have been mitigated to these levels.

C. For a school site with a boundary that is within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor, the governing board of the school district determines, through analysis pursuant to paragraph (2) of subdivision (b) of Section 44360 of the Health and Safety Code, based on appropriate air dispersion modeling, and after considering any potential mitigation measures, that the air quality at the proposed site is such that neither short-term nor long-term exposure poses significant health risks to pupils.

D. The governing board finds that neither of the conditions set forth in subparagraph (B) or (C) can be met, and the school district is unable to locate an alternative site that is suitable due to a severe shortage of sites that meet the requirements in subdivision (a) of Section 17213. If the governing board makes this finding, the governing board shall adopt a statement of Overriding Considerations pursuant to Section 15093 of Title 14 of the California Code of Regulations.

As stated in Section 3.1.2, based on a review of FIND, there are eight permitted and no nonpermitted facilities within a quarter mile of the site (AQMD 2015). Based on either the distance from the site, the status of the permit(s), and the materials and/or equipment permitted, none of the AQMD-identified facilities are expected to pose a significant air quality hazard to the site. In addition, there are no freeways or busy traffic corridors within 500 feet of the site.

#### 3.5.4 Is the proposed school site within 200 feet of cellular phone antennas?

**No Significant Hazard.** Based on a site reconnaissance, there are no cellular phone antennas within 200 feet of the project site. No impact is expected.

### 3. Environmental Analysis

#### 3.6 NOISE

##### 3.6.1 Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program?

**No Significant Hazard.** The project site is approximately 2.2 acres and consists of two buildings and a parking lot. The site is bounded by Panama Street to the northwest, a self-storage building to the southeast, and businesses to the northeast and southwest. Residential dwellings are located to the northwest, across Panama Street. No major arterial roadways or freeways are located near the site.

#### 3.7 PUBLIC SERVICES

##### 3.7.1 Does the site promote joint use of parks, libraries, museums, and other public services?

**No Significant Hazard.** The project involves the construction of a new school. The school campus could be made available for public use as the scheduling of scholastic purposes allows, in accordance with the Civic Center Act and District policy. No impacts to nearby public facilities and services would occur as a result of the proposed project. No significant impacts would occur as a result of the proposed project.

##### 3.7.2 Is the site conveniently located for public services, including but not limited to fire protection, police protection, public transit and trash disposal wherever feasible?

**No Significant Hazard.** The project site is located in a developed area that has easy access to SR-90. The project site is under the jurisdiction of the Los Angeles Police Department with a station less than a mile northeast of the project site. The closest fire station is Los Angeles Fire Department Station 67 located about a mile south of the site. The project site will have regularly scheduled trash collection and access to public transit. There is no significant hazard.

#### 3.8 TRANSPORTATION/TRAFFIC

##### 3.8.1 Are traffic and pedestrian hazards mitigated per Caltrans' School Area Pedestrian Safety manual?

**No Significant Hazard.** Based on existing conditions, the future project is not expected to have any significant traffic or pedestrian hazards to overcome.

##### 3.8.2 Is the proposed school site within 1,500 feet of a railroad track easement?

**No Significant Hazard.** Based on a review of Google Earth, the site is not located within 1,500 feet of a railroad track easement. A former Pacific Electric railroad track existed adjacent to the southeast of the site, but is currently occupied by a self-storage building.

##### 3.8.3 Is the proposed school site within two nautical miles, measured by air line, of the centerline of an airport runway or potential runway included in an airport master plan that is nearest to the site?

**No Significant Hazard.** Based on information obtained from the California Department of Transportation, Division of Aeronautics (2014), and a review of area maps and recent aerial photographs, the

### 3. Environmental Analysis

site is not located within two nautical miles of an existing airport or proposed airport runway. The nearest airports are Los Angeles International Airport located about 2.1 nautical miles to the south and Santa Monica Airport located about 2.2 nautical miles to the north. There is no significant hazard from proximity to an airport at the site.

#### 3.9 EXEMPTIONS TO SITING STANDARDS

3.9.1 Is the district seeking any exemptions to the standards found in CCR, Title 5, § 14010(c-i), (l), (m), (q), (c), (t)?

**No Significant Hazard.** The District is not seeking any exemptions to the standards found in CCR, Title 5 § 14010(c) through (t).



## 4. Conclusions and Recommendations

---

Based on the above literature review of geologic and environmental hazards that could potentially be a “fatal flaw” for the site, no known potential geologic or environmental hazards exist at the site that would disqualify the site for the proposed school improvements. A Preliminary Environmental Assessment will be conducted at the site under the oversight of the DTSC.

## 4. Conclusions and Recommendations

*This page intentionally left blank.*

## 5. References

---

### 5.1 PRINTED REFERENCES

- Alta Environmental, 2015. Additional Site Assessment, 12870 Panama Street, Los Angeles, California 90066, dated October 22, 2015.
- California Department of Transportation (Caltrans), 2014. Public Use Airports, Military Airfields, and Military Bases, January 2014.
- California Division of Oil, Gas and Geothermal Resources (DOGGR), 2010. Wildcat Map W1-5, scale 1:40,000.
- California Geological Survey (CGS), 2000a. Digital Images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, Southern Region, CD 2000-003.
- California Geological Survey (CGS), 2000b. "A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Natural Occurring Asbestos." August 2000.
- California Geological Survey (CGS), 1999. State of California Seismic Hazard Zones, Venice Quadrangle Official Map, dated March 25, 1999, scale 1:24,000.
- California Office of Emergency Services (OES) [currently California Emergency Management Agency], 2007. Registered Dam Inundation Images and Boundary Files in ArcView Format, Version DVD-2, CD-ROM.
- Department of Toxic Substances Control (DTSC). 2005. Advisory on Methane Assessment and Common Remedies at School Sites. June 16, 2005.
- GeoSystems, Inc., 2016. Preliminary Findings of Geotechnical Investigation for Proposed School Site, 12870 Panama Street, Los Angeles, California, dated March 30, 2016.
- Jennings, C. W., and W. A. Bryant, 2010. Fault Activity Map of California, California Geological Data Map Series, Map No. 6, scale 1:750,000.
- PlaceWorks, 2016a. Health Risk Assessment, Panama Street K-8 Charter School, dated April 2016.
- PlaceWorks, 2016b. Technical Memorandum, Methane Testing, 12870 Panama Street, Los Angeles, California 90066, dated July 5, 2016.

## 5. References

- PlaceWorks, 2016c. Ocean Charter School Proposed New Elementary School at 12870 Panama Street, Los Angeles, California 90066; Submittal of Phase I Environmental Site Assessment (ESA), dated July 11, 2016.
- United States Geological Survey, 2015. 7.5' Topographic Series, Venice, California Quadrangle Map, scale 1:24,000.
- Van Gosen, B. S., and J. P. Clinkenbeard, 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California, USGS Open-File Report 2011-1188, scale 1:990,000.

## 5.2 RECONNAISSANCE

PlaceWorks, 2016. Site reconnaissance by Mr. Michael Watson on April 20, 2016.

## 5.3 WEBSITES

- California Department of Toxic Substances Control, 2015. EnviroStor website. <http://www.envirostor.dtsc.ca.gov/public/>.
- California Division of Oil, Gas and Geothermal Resources (DOGGR), 2016. Well Finder database, <http://maps.conservation.ca.gov/doggr/#close>.
- California Geological Survey (CGS), 2015. Alquist-Priolo Earthquake Fault Zone maps. <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>.
- California State Water Resources Control Board (SWRCB), 2015. GeoTracker website. <http://geotracker.waterboards.ca.gov>.
- City of Los Angeles Department of Transportation (LADOT), 2010. 2001-10 Traffic Volume Book, [http://www.ladot.lacity.org/stellent/groups/Departments/@LADOT\\_Contributor/documents/Contributor\\_Web\\_Content/LACITYP\\_023705.xls](http://www.ladot.lacity.org/stellent/groups/Departments/@LADOT_Contributor/documents/Contributor_Web_Content/LACITYP_023705.xls).
- City of Los Angeles, 2016. ZIMAS website, <http://zimas.lacity.org/>.
- EnviroStor, 2016. Ocean Charter School New Elementary School (60002394), [http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=60002394](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002394).
- Google Earth Pro, 2015.
- National Pipeline Mapping System (NPMS), 2015. NPMS Public Map Viewer website, <https://www.npms.phmsa.dot.gov/PublicViewer/>.
- Southern California Air Quality Management District (AQMD), 2015. Facility Information Detail (FIND) database, <http://www.aqmd.gov/home/tools/public/find>.

## 6. List of Preparers

---

### 6.1 LEAD AGENCY

Ocean Charter Schools  
12606 Culver Boulevard  
Los Angeles, CA 90066  
Tel: 916.846.1902

### 6.2 PLACEWORKS

PlaceWorks  
2850 Inland Empire Boulevard, Suite B  
Ontario, CA 91764  
Tel: 909.989.4449  
Fax: 909.989.4447

Michael Watson, PG  
Associate Geologist

Dwayne Mears, AICP  
Principal

## 6. List of Preparers

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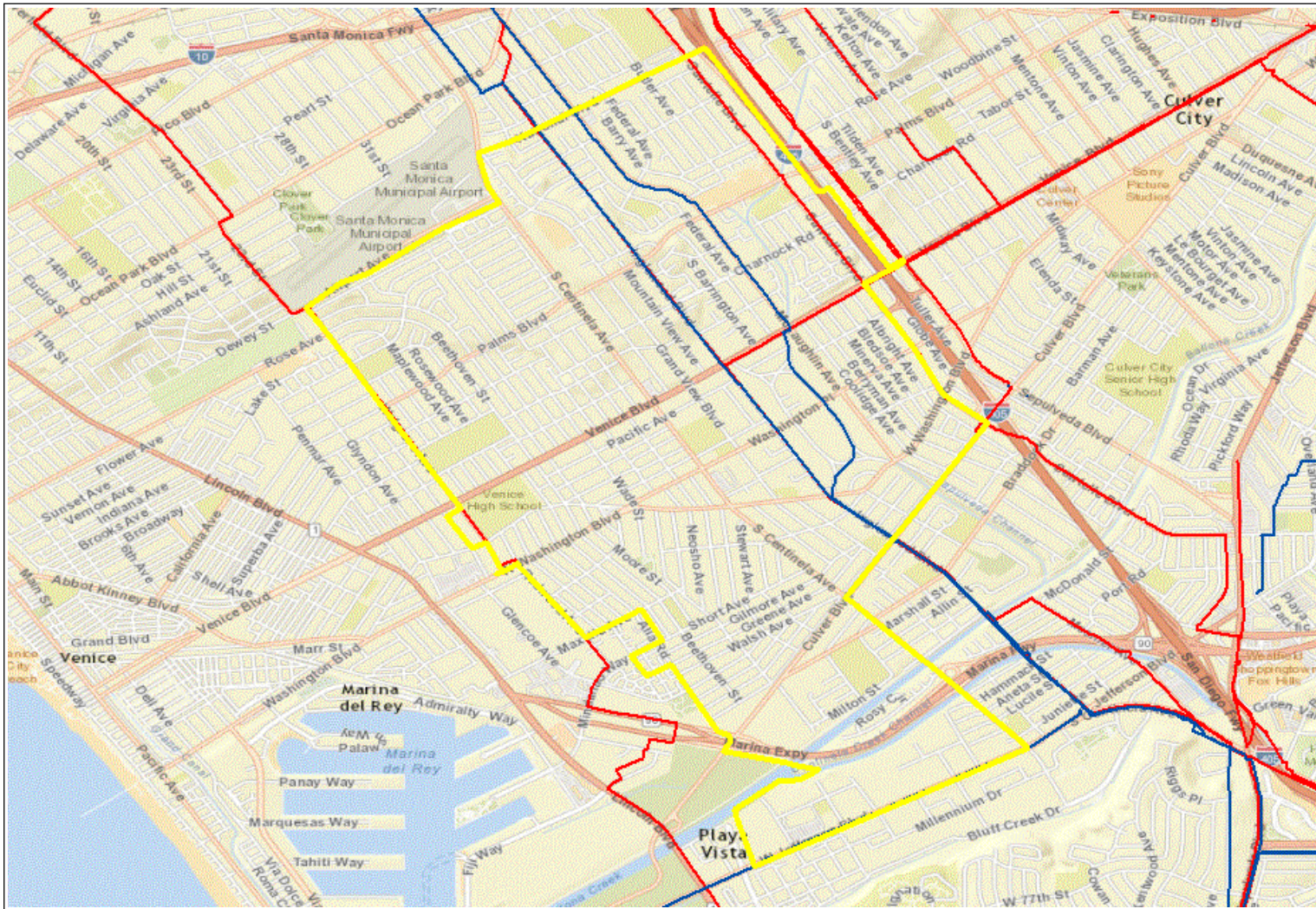
# Appendix A - Agency Records

## Appendix

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# NATIONAL PIPELINE MAPPING SYSTEM



## Legend

- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

0 0.3 Miles

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to [npmns-nr@mbakercorp.com](mailto:npmns-nr@mbakercorp.com).

Projection: Geographic

Datum: NAD83

Map produced by the NPMS Public Viewer at [www.npmns.phmsa.dot.gov](http://www.npmns.phmsa.dot.gov)

Date Printed: Dec 18, 2015



## Design Lookup

County   
 Place   
 Page or Grids

[Exit](#)

Design Lookup on 12/15/15 01:44 PM  
 County: LOS ANGELES Place: LOS ANGELES  
 Grids: 0672D06

ATTD SOUTH  
 AT&T - DISTRIBUTION  
 SUBSTRUCTURE RECORDS REQUEST  
 CONSTRUCTION & ENGINEERING  
 CALL FOR MAILING ADDRESS, CA  
 (510) 645-2929

CITYLA  
 CITY OF LOS ANGELES  
 RECORDS SECTION  
 1149 S BROADWAY #200  
 LOS ANGELES, CA 90015  
 (213) 847-1498

LAWP3  
 LADWP-JOINT LOCATING  
 UNDERGROUND STRUCTURE DESIGN  
 111 N HOPE ST RM 813  
 LOS ANGELES, CA 90012  
 (213) 367-2659

LVL3CM  
 LEVEL 3 COMMUNICATIONS  
 JOHN TRUJILLO  
 1025 ELDORADO BLVD BLDG 33A-522  
 BROOMFIELD, CO 80021  
 (720) 888-4465  
 JOHN.TRUJILLO@LEVEL3.COM

MCISOCAL  
 MCI (VERIZON BUSINESS)  
 DEAN BOYERS  
 2400 N GLENVILLE DR  
 RICHARDSON, TX 75082  
 (972) 729-6322  
 INVESTIGATIONS@VERIZON.COM

METFIBNET  
 ZAYO FNA ABOVENET  
 GEORGE HUSS  
 1060 HARDEES DRIVE  
 ABERDEEN, MD 21001  
 (443) 403-2023  
 GEORGE.HUSS@ZAYO.COM

NEXTGLAVEN  
 CROWN CASTLE- LA & VEN  
 BRYANT LOWE  
 2000 CORPORATE DR  
 CANONSBURG, PA 15317  
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QWESTCA  
 CTLQ-CENTURYLINK  
 GEORGE MCELVAIN  
 700 W MINERAL AVE  
 LITTLETON, CO 80120  
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SCG3Z6  
 SC GAS - SANTA MONICA  
 PAUL BLOOD  
 701 N BULLIS RD  
 COMPTON, CA 90221  
 (310) 687-2011  
 pblood@semprautilities.com

UTWCLA3  
 UTILIQUEST FOR TIME WARNER CABLE - LA3  
 EMIR ERBA  
 6357 ARIZONA PLACE  
 LOS ANGELES, CA 90045  
 000000000

UVZIRWN  
 UTILIQUEST FOR VERIZON-IRWINDALE

WILCON  
 WILSHIRE CONNECTION LLC  
 NOC  
 624 S GRAND AVE #1200

'  
(661) 948-4803

LOS ANGELES, CA 90017  
(213) 542-0100  
NOC@WILCON.COM



December 15, 2015

Paul Blood  
Southern California Gas Company  
701 N Bullis Road  
Compton, CA 90221

Subject: Information Request for Proposed New School – 12870 Panama Street

Dear Mr. Blood:

Ocean Charter Schools (District) is evaluating the possible construction of a new charter school. In compliance with CCR Title V Section 14010 (h), the District has contracted the services of PlaceWorks (formerly The Planning Center|DC&E) to complete safety hazard assessments related to high pressure (over 80 psig) gas pipelines located within a 1,500-foot radius of the proposed school site. The project site is located at 12870 Panama Street in Los Angeles, California 90066 (Thomas Guide 2005, Los Angeles County, page 672, grid D6). This letter requests the location and diameter of all high pressure gas pipelines operated by SCGC located within a 1,500-foot radius of 12870 Panama Street.

Thank you for your assistance and please forward this information to my attention at the below address or via email, [mwatson@placeworks.com](mailto:mwatson@placeworks.com). Feel free to contact me with any questions.

Sincerely,

**PLACEWORKS**

A handwritten signature in blue ink that reads "Michael Watson".

Michael Watson, PG  
Associate Geologist

# Site Location

## Legend

Feature 1



Google earth

© 2015 Google

H-37

300 ft



## Valerie Dew

---

**From:** Phil Hung <Phil.Hung@sce.com>  
**Sent:** Tuesday, November 17, 2015 3:15 PM  
**To:** Mike Watson  
**Subject:** RE: EMF Inquiry  
**Attachments:** Ocean Charter School on Panama Street Voltage ID Report.pdf

Here you go Mike. There is no SCE facilities above 50 kV near this parcel. But please double check with LADWP to make sure this parcel is not within their service territory.

Phil Hung, P.E.  
EMF Program Manager  
Corporate Health & Safety  
Southern California Edison  
626-462-2551

---

**From:** Mike Watson [mailto:mwatson@placeworks.com]  
**Sent:** Wednesday, November 11, 2015 12:29 PM  
**To:** Phil Hung <Phil.Hung@sce.com>  
**Cc:** Stuart Michener <smichener@placeworks.com>  
**Subject:** EMF Inquiry

Hi Phil,

We are writing up reports for a potential school in Los Angeles. The proposed Ocean Charter School project is located at 12870 Panama Street in the community of Del Rey in the City of Los Angeles, Los Angeles County, California. I have attached a map to this email. Given the following parameters, could you help us determine if this site is located near power transmission or distribution lines?

The property line of the site shall be at least the following distance from the edge of respective power line easements:

- (1) 100 feet for 50-133 kV line.
- (2) 150 feet for 220-230 kV line.
- (3) 350 feet for 500-550 kV line.

The Client for this project is:

Ocean Charter School  
12606 Culver Blvd.  
Los Angeles, CA 90066

Thank you so much for all your help. Please contact me if you have any questions or need more information.



**MICHAEL J. WATSON, PG**

**Associate Geologist**

Professional Geologist CA #8177

2850 Inland Empire Boulevard, Suite B  
Ontario, California 91764  
909.989.4449 | [mwatson@placeworks.com](mailto:mwatson@placeworks.com)  
[placeworks.com](http://placeworks.com)



**Phil Hung, P.E.**  
EMF Program Manager  
1218 South 5<sup>th</sup> Avenue  
Monrovia, CA 91016  
Phone: (626) 462-2551  
E-mail: phil.hung@sce.com

---

## **SCE EMF & Energy Group Report of Proposed or Existing School Site Support**

---

Request Received:      **11/11/2015**                      Received By:      **Phil Hung**

Requesting Entity:      \_\_\_ School      \_\_\_ District      **X** Consultant      \_\_\_ School Representative:

**Michael Watson**  
**mwatson@placeworks.com**  
**The Planning Center**  
**2850 Inland Empire Boulevard, Suite B**  
**Ontario, California 91764**  
**(909) 989-4449**

Nature of Request:      Voltage ID **X**      Msmt. Req. \_\_\_\_\_      Information \_\_\_\_\_

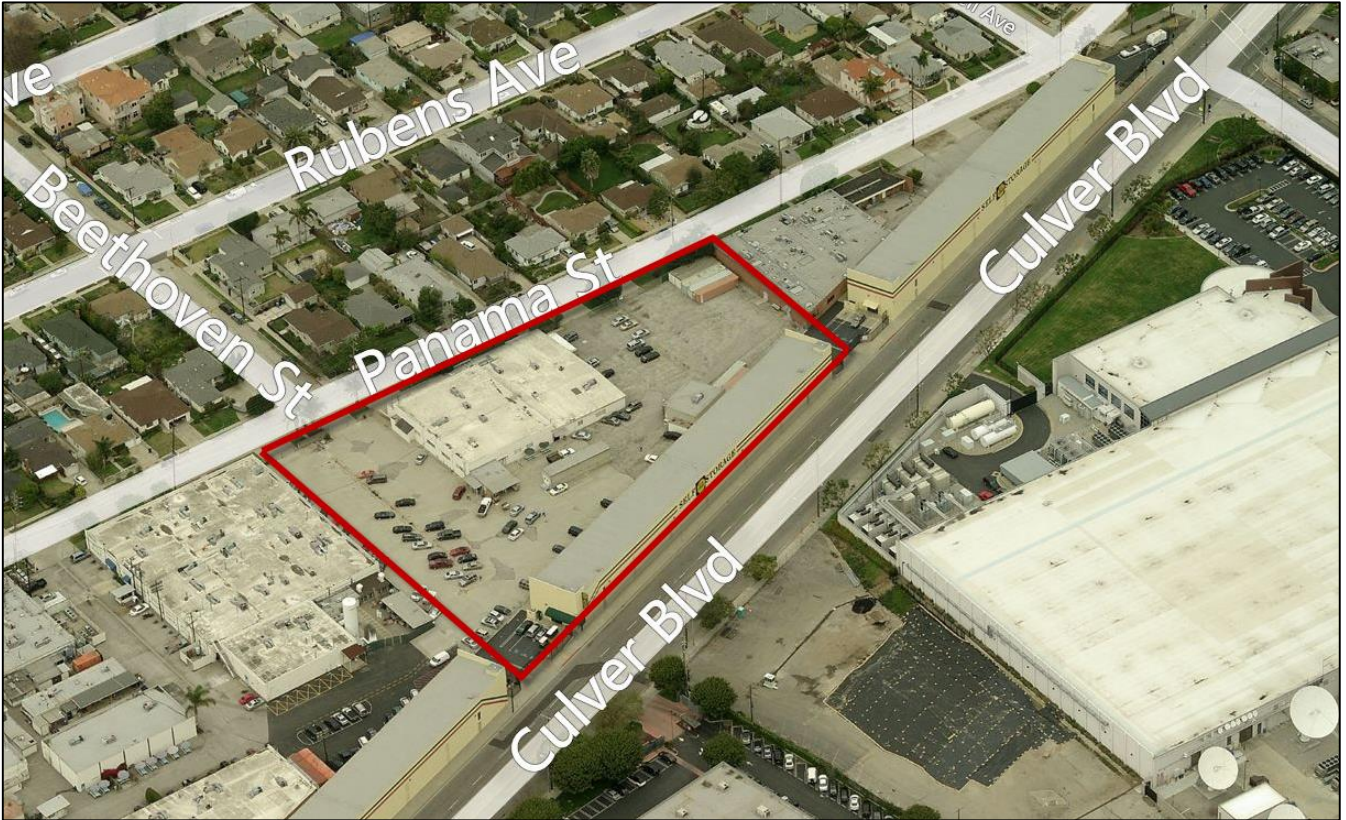
Other: \_\_\_\_\_

Site Name:                      **Ocean Charter School**  
Site Address:                  **12870 Panama Street**  
City:                              **Los Angeles, CA 90066**  
County:                         **Los Angeles**  
Cross Streets:                **Beethoven Street**



**Photo(s):**

**Aerial View**



**Street View**



Date of Site Visit: **11/17/2015 (Bing Maps)**  
Support Action(s) Taken: **SCE system database lookup**

SCE Facilities Identified Within California Code of Regulations (CCR) Title 5 Prescribed Distances:  
**There are no SCE facilities of 50kV or higher within the CCR Title 5 setback distances.**

**Please double-check with Los Angeles Department of Water & Power to find out whether there are any electrical facilities in this area.**

Date(s) responded to Requestor:  
**11/17/2015: Acknowledged, (E-mail) 11/17/2015:  
Supplied Information (E-mail)**

## Valerie Dew

---

**From:** Jones, Bill <Bill.Jones@ladwp.com>  
**Sent:** Thursday, December 17, 2015 10:50 AM  
**To:** Mike Watson  
**Cc:** Gonzalez, Josephine  
**Subject:** FW: Send data from ToshibaA13688 12/17/2015 10:00  
**Attachments:** DOC121715-12172015100031.pdf

**Importance:** High

Mike;

Regarding the location of a 230 kV power line, identified as the SCATTERGOOD - OLMPIC LINE - 2 UNDERGROUND. The line is running along Culver Blvd. You may gain a quick reference to the lines location using the Dig Alert service.

No other LADWP power lines meeting the criteria you call out exist in the area.

Happy Holidays

Yours truly

Bill Jones  
OFFICE ENGINEERING TECHNICIAN  
ENVIRONMENTAL AFFAIRS  
SITE INVESTIGATION & REMEDIATION  
ELECTRIC & MAGNETIC FIELDS, EMF  
111 NORTH HOPE STREET - ROOM 1050  
LOS ANGELES, CA 90012 - 213-367-2612

---

Hi Bill,

We are writing up reports for a potential school in Los Angeles. The proposed Ocean Charter School project is located at 12870 Panama Street in the community of Del Rey in the City of Los Angeles, Los Angeles County, California. I have

attached a map to this email. Given the following parameters, could you help us determine if this site is located near power transmission or distribution lines?

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- (1) 100 feet for 50-133 kV line.
- (2) 150 feet for 220-230 kV line.
- (3) 350 feet for 500-550 kV line.

The Client for this project is:

Ocean Charter School  
12606 Culver Blvd.  
Los Angeles, CA 90066

Thank you so much for all your help. Please contact me if you have any questions or need more information.

MICHAEL J. WATSON, PG  
Associate Geologist  
Professional Geologist CA #8177  
2850 Inland Empire Boulevard, Suite B  
Ontario, California 91764  
909.989.4449 | [mwatson@placeworks.com](mailto:mwatson@placeworks.com)  
[placeworks.com](http://placeworks.com)

-----Original Message-----

From: Copier [<mailto:Scanner@ladwp.com>]  
Sent: Thursday, December 17, 2015 10:01 AM  
To: Jones, Bill  
Subject: Send data from ToshibaA13688 12/17/2015 10:00

Scanned from ToshibaA13688

Date: 12/17/2015 10:00

Pages: 1

Resolution: 300x300 DPI

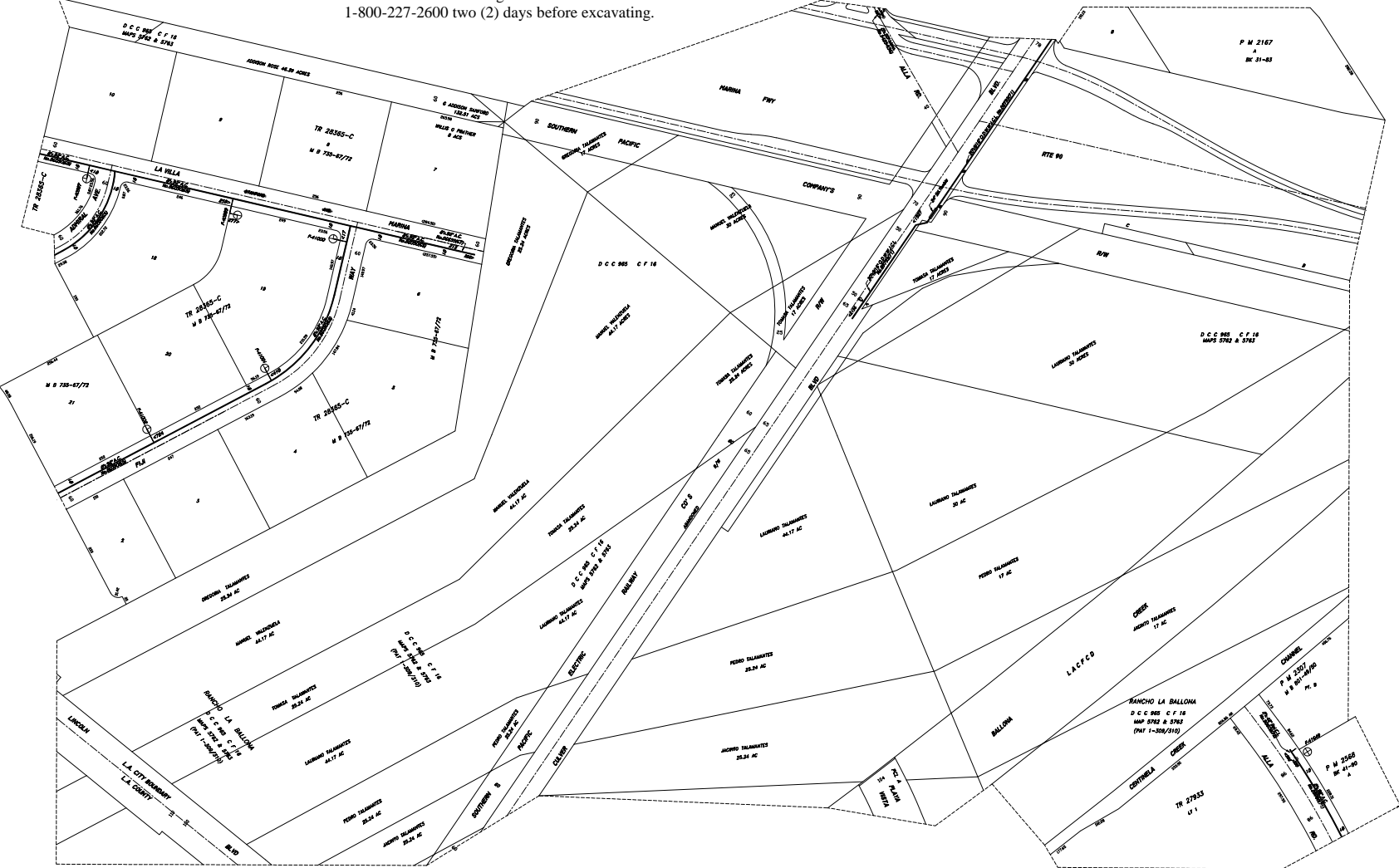
-----  
Do NOT reply, scan from copier.

-----Confidentiality Notice----- This electronic message transmission contains information from the Los Angeles Department of Water and Power, which may be confidential. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the content of this information is prohibited. If you have

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The Los Angeles Department of Water and Power (LADWP) assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavation and assumes all liabilities for damage to LADWP facilities as a result of such excavation. Call Underground Services alert on 1-800-227-2600 two (2) days before excavating.



108-156

106-153

106-159

N 1 818 251

E 1 818 251

104-156

The Los Angeles Department of Water and Power LADWP assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavation and assumes all liabilities for damage to LADWP facilities as a result of such excavation. Call Underground Service alert 1-800-227-2600 two (2) days before excavation.

LEGEND MAP SCALE: 1" = 50'	SYMBOLS AND NOTATIONS	DATE	BY	REV.	DESCRIPTION	REFERENCE
3/07 SINGLE						
3/07 2" S-BAL UP						
3/07 DOUBLE						
3/07 SINGLE						
3/07 2" S-BAL UP						
3/07 DOUBLE						
3/07 4" DOUBLE						

DEPARTMENT OF WATER AND POWER  
**WATER SERVICE MAP**  
 106-156

The Los Angeles Department of Water and Power (LADWP) assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavation and assumes all liabilities for damage to LADWP facilities as a result of such excavation. Call Underground Services alert on 1-800-227-2600 two (2) days before excavating.







Matthew Rodriguez  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Barbara A. Lee, Director  
5796 Corporate Avenue  
Cypress, California 90630



Edmund G. Brown Jr.  
Governor

August 10, 2016

Ms. Kristy Mack-Fett  
Director, Administration  
Ocean Charter School  
12606 Culver Blvd  
Los Angeles, CA 90066

**PHASE I ENVIRONMENTAL SITE ASSESSMENT DETERMINATION, OCEAN CHARTER SCHOOL PROPOSED NEW ELEMENTARY SCHOOL, 12870 PANAMA STREET, LOS ANGELES, LOS ANGELES COUNTY (SITE CODE: 304665)**

Dear Ms. Mack-Fett:

The Department of Toxic Substances Control (DTSC) reviewed the "Phase I Environmental Site Assessment" (Phase I) (Placeworks, July 11, 2016), received on July 12, 2016, for the Ocean Charter School Proposed New Elementary School site (Site). The Phase I describes current and historical land uses and identifies environmental conditions.

According to the Phase I, Ocean Charter School (OCS) intends to construct and operate a span school serving grades K-8 at the Site. The Site is approximately 2.15 acres and is situated in a mixed commercial and residential neighborhood in the community of Del Rey. It is bounded by Panama Street to the north, Teledyne Reynolds to the east, E-Z storage to the south, and former (now vacant) Teledyne Microelectronic Technologies buildings to the west. The Site is currently developed with a 17,178 square-foot one-story administration building, four accessory buildings (including a former facilities maintenance building), and associated storage sheds used for parking. According to the Phase I Report, the Site was used for agriculture as early as 1928. Between 1954 and the early 1970s, it was occupied by The Sprague Electric Company Facility, a business that apparently designed radio noise filters. After this time, a catering company began using the Site for business operations and vehicle maintenance involving a 250-gallon waste oil underground storage tank (UST), two subsurface hydraulic hoists, and a wastewater clarifier. By 1981, the property was owned and operated by Teledyne for business administration and to support its electronics and aerospace manufacturing operations on the adjacent off-site property to

Ms. Kristy Mack-Fett  
August 10, 2016  
Page 2

the west. General facilities maintenance support for the neighboring facility ceased in 2013 and a portion of the administration building was repurposed for planned use as a microelectronic circuit prototype laboratory. However, the laboratory was never brought online. The Phase I concludes that the Phase II assessment has not revealed any evidence of recognized environmental concerns at the Site.

The information submitted include sampling results and risk screening, which is outside the scope of a Phase I and need to be evaluated in detail as a Preliminary Environmental Assessment (PEA). DTSC hereby determines that completion of a PEA is needed for the Site. OCS may request DTSC to evaluate submitted information as a PEA equivalent and initiate a PEA public comment period. The purpose of the PEA is to determine whether a release or threatened release of hazardous material or naturally occurring hazardous material may pose a threat to public health or the environment.

DTSC's determination on the Phase I, pursuant to the Education Code (Ed. Code, § 17213.1, subd. (a)), does not constitute a determination that "all appropriate inquiry" has been conducted within the meaning of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601(35)(B)). DTSC review of the Phase I was conducted solely to identify recognized environmental conditions at this Site in accordance with requirements of the Education Code, and to determine whether further investigation is necessary prior to DTSC approval of this Site for future school use.

Pursuant to Education Code section 17213.1, subdivision (a)(4)(B), if the Ocean Charter School elects to pursue site acquisition or construction, OCS shall enter into an Environmental Oversight Agreement (EOA) with DTSC to oversee the preparation of the PEA. A copy of the Environmental Oversight Program application for the EOA is available on the DTSC School Site Evaluation Web page at [www.dtsc.ca.gov/Schools/index.cfm](http://www.dtsc.ca.gov/Schools/index.cfm). Please forward the completed application, signed by an authorized OCS representative, to:

Ellen DelMar  
School Evaluation and Brownfields Outreach  
Brownfields & Environmental Restoration Program  
5796 Corporate Avenue  
Cypress, CA 90630  
714.484.5482

Ms. Delmar will prepare and forward an agreement for review and signature. Subsequently, a project manager will contact OCS to schedule a scoping meeting. For additional information regarding the PEA process or entering into an agreement, please contact Shahir Haddad at (714) 484-5368 or [shaddad@dtsc.ca.gov](mailto:shaddad@dtsc.ca.gov).

Ms. Kristy Mack-Fett  
August 10, 2016  
Page 3

For all documents submitted to DTSC, please submit one hard (paper) copy and one electronic copy in Adobe Portable Document Format (PDF) in accordance with the enclosed guidelines. All submittals should include applicable signatures and certification stamps.

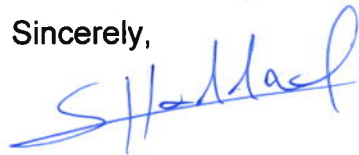
DTSC review of the Phase I exceeded the current fee (Ed. Code §17213.1, subd. (a)(2)) of \$1,500 due to the following issues:

- Evaluation of additional information pertaining to the Phase II investigation.

As a result, DTSC will forward an invoice for the amount in excess of the \$1,500 review fee.

If you have any questions regarding the project, please contact me at (714) 484-5368.

Sincerely,



Shahir Haddad, P.E.  
Supervising Engineer  
Brownfields Restoration and School Evaluation Branch  
Brownfields and Environmental Restoration Program

ed/as/sh

Enclosure

cc: See next page.

Ms. Kristy Mack-Fett  
August 10, 2016  
Page 4

cc: Mr. Michael O'Neill (via e-mail)  
Consultant/Environmental Coordinator  
School Facilities Planning Division  
California Department of Education  
[moneill@cde.ca.gov](mailto:moneill@cde.ca.gov)

Ron Cavagrotti (via e-mail)  
[rcavagrotti@placeworks.com](mailto:rcavagrotti@placeworks.com)

Mr. Shahir Haddad, Supervising Engineer (via e-mail)  
Brownfields Restoration and School Evaluation Branch – Cypress Office  
[shaddad@dtsc.ca.gov](mailto:shaddad@dtsc.ca.gov)

Ms. Ellen DelMar  
Brownfields Restoration and School Evaluation Branch – Cypress Office  
[ellen.delmar@dtsc.ca.gov](mailto:ellen.delmar@dtsc.ca.gov)

Brownfields Restoration and School Evaluation Branch Reading File – Cypress  
Office

## GUIDELINES FOR SUBMITTING PDF DOCUMENTS TO THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL

With the introduction of the Cleanup Program's database, EnviroStor, the public can now download and view project related documents online. To provide the public with this vital source of information, please provide a PDF copy of reports, even if a hard copy will be supplied.

Due to differences in internet downloading capabilities and resolutions of PDF files, many users have trouble downloading and viewing large PDF files. The following guidelines were created to provide consistency in PDF files and allow most users to access these files.

- 1) **File size:** For each file that needs to be uploaded, the maximum file size should be kept to **15 megabytes (MB)**. If you have a large file, please save large color images (e.g., figures, site photos, maps) and supplemental information (appendices) in separate PDF files. If you are creating PDF files by scanning a paper document, the recommended resolution setting is 200 SPI.
- 2) **Naming PDF files:** It is recommended that the files be named by using an abbreviated site name, report title, date, and, if multiple files are being uploaded, the section of report (e.g., Site\_report\_mmddyy\_section.pdf, 968-81stAve\_PEA\_072706\_text.pdf, etc). Please do not use spaces in your filename.
- 3) **Accessibility:** To ensure that all files uploaded into EnviroStor are searchable and comply with California's Web Accessibility law, please run all PDF files through an Optical Character Recognition (OCR) process prior to submitting the file to DTSC.
- 4) **Bookmarks:** For large reports, bookmarks should be created in the PDF for ease of navigation.
- 5) **FTP server:** To submit large files or a group of files that cannot be sent via e-mail, they can be sent to a DTSC staff member via the FTP server. It is recommended that if you are sending multiple files via the FTP server, that you place all files into a folder and ZIP the folder. Below are the instructions to submit files via the FTP server:

Link: [http://www.dtsc.ca.gov/database/DTSC\\_FTP\\_Requests/index.cfm](http://www.dtsc.ca.gov/database/DTSC_FTP_Requests/index.cfm)

- i. **Provide Upload File Information:** Please provide the requested information about yourself, the recipient, and the name of the computer file to be uploaded. This tells our system:
  - a. to expect and allow your file onto the FTP server,
  - b. to whom the recipient is, and
  - c. to let the recipient know who sent the file

Please assure that the file name and specified name of the file (with extension) exactly match the actual name of the file being sent. If the names do not match exactly, then the file will be deleted as spam. Do not specify a drive or directory.

- ii. **Transfer the File:** Once your information is provided in the first step, you have 60 minutes to send your file to our server. You will be provided with an FTP location after providing the information.

You will be notified upon the successful receipt or failure to receive your file.

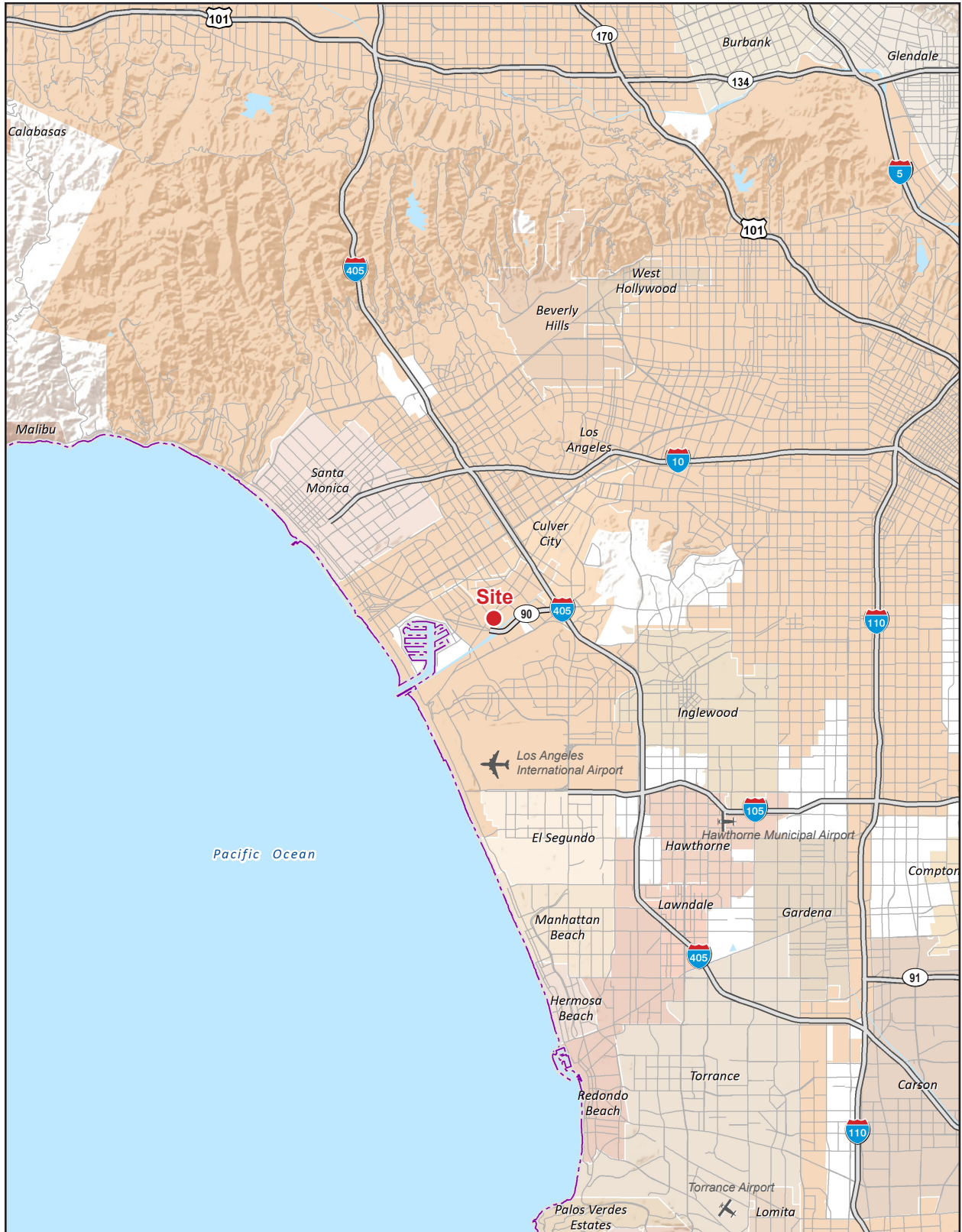
For further assistance about submitting PDF files, please contact the appropriate Cleanup Program Project Manager, or the EnviroStor Help Desk at (916) 323-3400, or by email to [EnviroStor@dtsc.ca.gov](mailto:EnviroStor@dtsc.ca.gov).

## Appendix B – Methane Testing

## Appendix

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Figure 1 - Regional Location



Note: Unincorporated areas are shown in white.



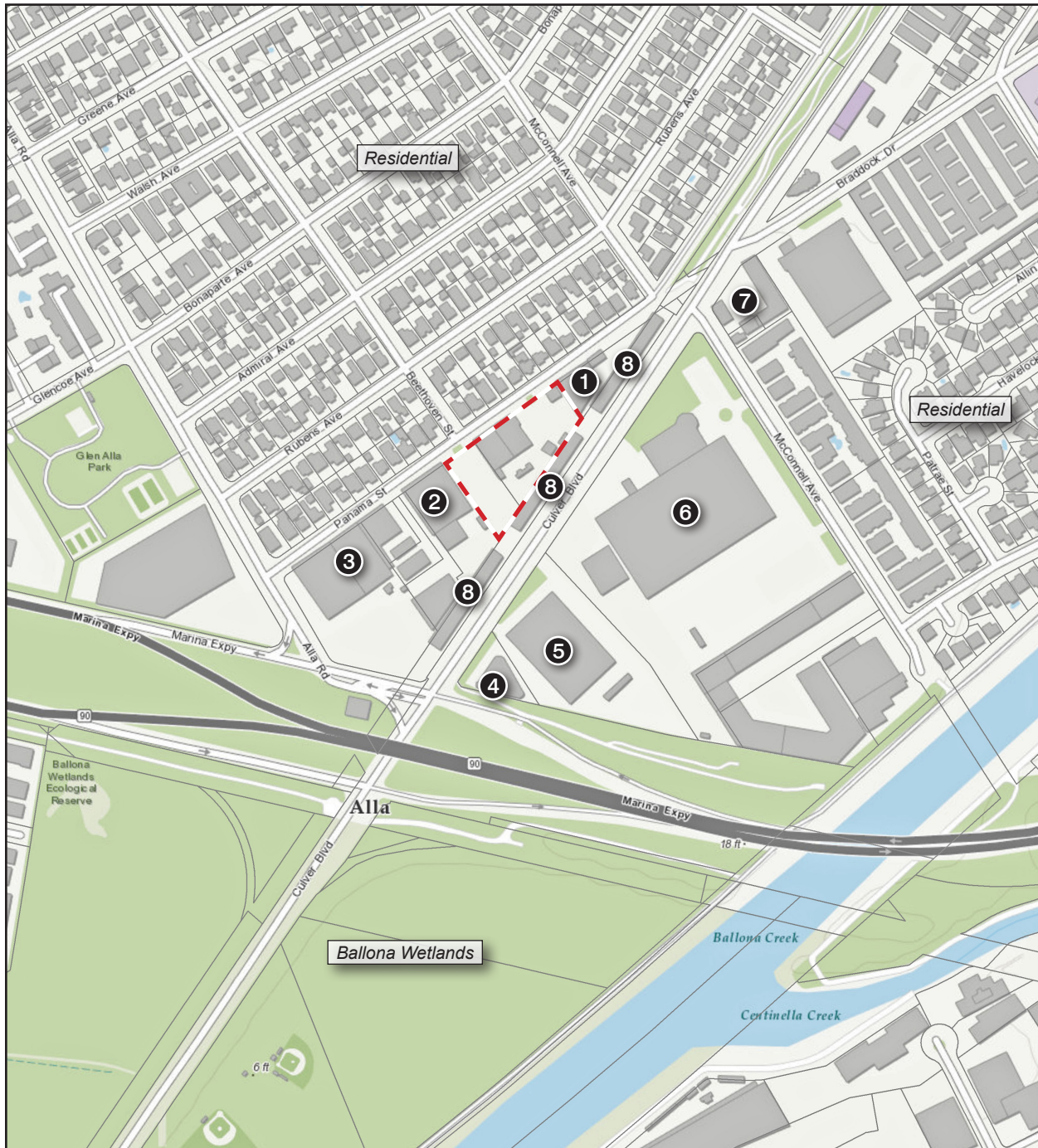
Base Map Source: ESRI, 2016

OCCD-04.0

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Figure 2 - Local Vicinity



- |                     |                     |               |
|---------------------|---------------------|---------------|
| ① Teledyne Reynolds | ④ AMV Digital Media | ⑦ Retail      |
| ② Vacant            | ⑤ Office            | ⑧ E-Z Storage |
| ③ Vacant            | ⑥ DirecTV           |               |

--- Site Boundary

0 500  
 Scale (Feet)



Base Map Source: ESRI, 2016

OCCD-04.0

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Figure 3 - Methane and Methane Buffer Zones

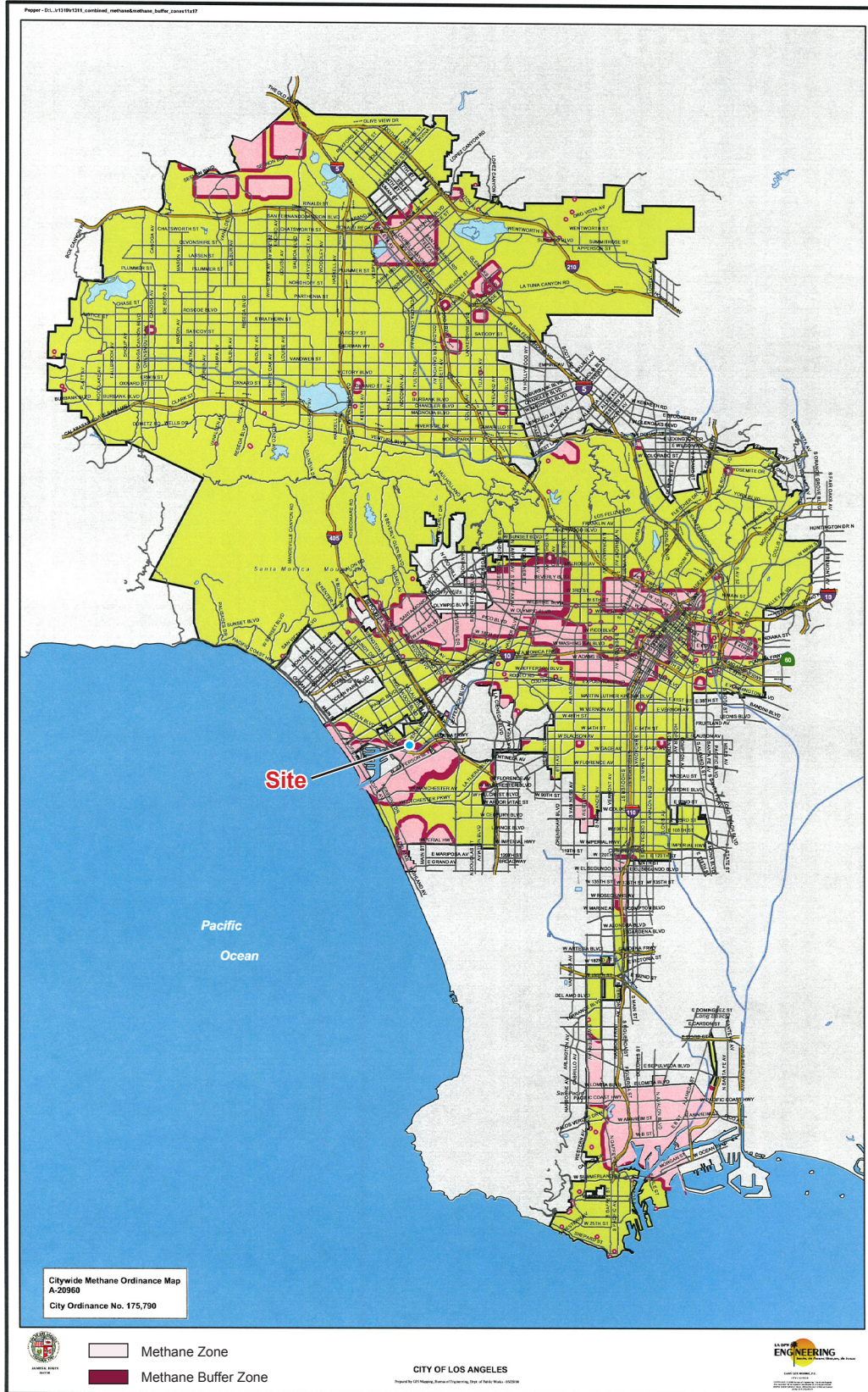


Figure 4 - Methane Testing Locations



— Project Boundary       SG1 Methane Sample Location

0      100  
Scale (Feet)



Base Map Source: Google Earth Pro, 2016

OCCD-04.0

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**TABLE 1**  
**METHANE TEST RESULTS**  
**Ocean Charter School**  
**12870 Panama Street, Los Angeles, California**

Probe ID	Depth (ft bgs)	Date Sampled	Pressure (in. H <sub>2</sub> O)	CH <sub>4</sub> (ppmv)	H <sub>2</sub> S (ppmv)	O <sub>2</sub> (%)	CO <sub>2</sub> (%)
SG1	4	4/19/2016	1.55	<0.5	<0.003	17.2	0.2
		4/20/2016	-30	5.9	<0.003	17.1	0.4
	7	4/19/2016	0	14.7	<0.003	9.8	5.9
		4/20/2016	0	<0.5	<0.003	9.2	8.4
SG2	4	4/19/2016	0	25.2	<0.003	6.5	9.1
		4/20/2016	0	<0.5	<0.003	5.4	10.4
	7	4/19/2016	0	16.7	<0.003	7.7	0.4
		4/20/2016	-4.0	23.4	<0.003	8.5	0.1
SG3	4	4/19/2016	3.0	21.2	<0.003	16.9	<0.1
		4/20/2016	6.0	27.1	<0.003	15.6	<0.1
	7	4/19/2016	0	<0.5	<0.003	14.5	3.6
		4/20/2016	0	<0.5	<0.003	14.0	5.9
SG4	4	4/19/2016	0	31.4	<0.003	11.3	6.2
		4/20/2016	0	32.3	<0.003	10.2	6.5
		Lab Dup	0	<5.0	--	10.3	6.68
	7	4/19/2016	0	19.1	<0.003	10.5	1.7
4/20/2016		0.05	24.1	<0.003	9.4	0.7	
SG5	4	4/19/2016	0	12.6	<0.003	16.7	0.6
		4/20/2016	0	21.0	<0.003	14.4	0.8
	7	4/19/2016	0	44.1	<0.003	12.2	6.8
		4/20/2016	0	52.4	<0.003	11.5	6.5
		Lab Dup	0	<5.0	--	11.3	7.24
SG6	4	4/19/2016	0	2.8	<0.003	2.6	7.7
		4/20/2016	0	<0.5	<0.003	0.7	12.7
	7	4/19/2016	0	<0.5	<0.003	1.5	11.2
		4/20/2016	0	15.7	<0.003	1.1	11.1
SG7	4	4/19/2016	0	18.9	<0.003	14.7	1.8
		4/20/2016	0	19.4	<0.003	12.2	2.3
	7	4/19/2016	0	20.8	<0.003	9.8	9.1
		4/20/2016	0	9.2	<0.003	9.7	8.0
SG8	4	4/19/2016	0	29.3	<0.003	15.0	1.4
		4/20/2016	0	6.9	<0.003	13.7	3.2
	7	4/19/2016	0	24.1	<0.003	13.8	4.3
		4/20/2016	0	17.4	<0.003	13.1	4.0
SG9	4	4/19/2016	0.05	25.6	<0.003	15.6	0.8
		4/20/2016	0	23.5	<0.003	13.4	1.2
	7	4/19/2016	0	24.0	<0.003	9.5	9.7
		4/20/2016	0	10.5	<0.003	9.2	10.3
<b>Maximum</b>			<b>6</b>	<b>52.4</b>	<b>&lt;0.003</b>	<b>17.2</b>	<b>12.7</b>

"--" = Not analyzed

ft bgs = feet below ground surface

in. H<sub>2</sub>O = inches water

ppmv = parts per million by volume

CH<sub>4</sub> = Methane

H<sub>2</sub>S = Hydrogen sulfide

O<sub>2</sub> = Oxygen

CO<sub>2</sub> = Carbon dioxide



# DAILY FIELD REPORT

PROJECT NAME	Methane Investigation	DATE	4/19/16
PROJECT LOCATION	12870 Panama St.	REPORT SEQUENCE NO.	1
CLIENT	Ocean Charter	CONTRACTOR	Interphase
SCHEDULED ACTIVITIES	TPC JOB NO. OCCD-04.0		
Clear borings with Goldak, drill & install soil gas probes with Interphase, take first round of samples with handheld equipment.			

Arrived at the site at 630 and met with Al Becerra. Marked locations SG1 through SG9. Interphase and Goldak arrived at 705. Got them signed in at front office. Goldak cleared all 9 borings with no changes in location necessary. Interphase installed 9 borings, with soil gas probes at 4 foot bgs and 7 foot bgs. No groundwater was encountered. Calibrated instruments and tested all 18 probes.

FIELD HOURS		
ARRIVE SITE: 630 AM/PM		DEPART SITE: 330 AM/PM
REGULAR HOURS: 8	OVERTIME HOURS: 0.5	
TPC PROJECT MANAGER Ran Cavagrotti	TPC FIELD REPRESENTATIVE Mike Watson	SIGNATURE OF TPC FIELD REPRESENTATIVE 

### Soil Gas Sampling Log

Job Number: 06CD-04.0  
 Site Name: 12870 Paranna St.  
 Geologist/Engineer: Mike Watson  
 Field Crew: Mike Watson  
 Date: 4/19/16  
 Weather: Sunny

Probe Number	Probe Constructed (Date & Time)	Probe Depth (ft bgs)	Flow Rate (mL/min)	Purge Volumes (1, 3, 10)	Leak Test Compound	Sample Collected (Date & Time)	Initial Pressure ("H <sub>2</sub> O)	Final Pressure ("H <sub>2</sub> O)	Notes
SG1-4'	4/19/16 820	4	<200	1	NA	4/19/16 1220	1.55P	<0.05	-96V
SG1-7'	4/19/16 820	7	<200	1	NA	4/19/16 1230	<0.05	<0.05	
SG2-4'	4/19/16 902	4	<200	1	NA	4/19/16 1240	<0.05	<0.05	
SG2-7'	4/19/16 902	7	<200	1	NA	4/19/16 1250	<0.05	78V	
SG3-4'	4/19/16 835	4	<200	1	NA	4/19/16 1300	3P	91V	
SG3-7'	4/19/16 835	7	<200	1	NA	4/19/16 1310	<0.05	<0.05	
SG4-4'	4/19/16 915	4	<200	1	NA	4/19/16 1320	<0.05	<0.05	
SG4-7'	4/19/16 915	7	<200	1	NA	4/19/16 1330	<0.05	84V	
SG5-4'	4/19/16 1020	4	<200	1	NA	4/19/16 1340	<0.05	26V	
SG5-7'	4/19/16 1020	7	<200	1	NA	4/19/16 1350	<0.05	4V	
SG6-4'	4/19/16 1035	4	<200	1	NA	4/19/16 1405	<0.05	<0.05	
SG6-7'	4/19/16 1035	7	<200	1	NA	4/19/16 1415	<0.05	<0.05	
SG7-4'	4/19/16 930	4	<200	1	NA	4/19/16 1425	<0.05	4V	
SG7-7'	4/19/16 930	7	<200	1	NA	4/19/16 1435	<0.05	<0.05	



### Soil Gas Sampling Log

Job Number: 0CCD-04.0  
 Site Name: 2870 Panama St  
 Geologist/Engineer: Mike Watson  
 Field Crew: Mike Watson  
 Date: 4/19/16  
 Weather: Sunny

Probe Number	Probe Constructed (Date & Time)	Probe Depth (ft. bgs)	Flow Rate (mL/min)	Purge Volumes (1, 3, 10)	Leak Test Compound	Sample Collected (Date & Time)	Initial Pressure ("H <sub>2</sub> O)	Final Pressure ("H <sub>2</sub> O)	Notes
SG8-4'	4/19/16 945	4	200	1	NA	4/19/16 1448	<0.05	<0.05	
SG8-7'	4/19/16 945	7	200	1	NA	4/19/16 1455	<0.05	0.05V	
SG9-4'	4/19/16 1000	4	200	1	NA	4/19/16 1550	0.05P	2.0V	
SG9-7'	4/19/16 1000	7	200	1	NA	4/19/16 1515	<0.05	<0.05	



# Soil Gas Sampling Log

Job Number: OCCD-04.0  
 Site Name: 12870 Panama St  
 Geologist/Engineer: Mike Watson  
 Field Crew: Mike Watson  
 Date: 7/19/16  
 Weather: Sunny

Probe Number	Probe Depth (ft. bgs)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Carbon Dioxide (% volume)	Oxygen (% volume)	Notes
SG1-4'	4	<0.5	<0.003	0.2	17.2	
SG1-7'	7	14.7	<0.003	5.9	9.8	
SG2-4'	4	25.2	<0.003	9.1	6.5	
SG2-7'	7	16.7	<0.003	0.4	7.7	
SG3-4'	4	21.2	<0.003	<0.1	16.9	
SG3-7'	7	<0.5	<0.003	3.6	14.5	
SG4-4'	4	31.4	<0.003	6.2	11.3	
SG4-7'	7	19.1	<0.003	1.7	10.5	
SG5-4'	4	12.6	<0.003	0.6	16.7	
SG5-7'	7	44.1	<0.003	6.8	12.2	
SG6-4'	4	2.8	<0.003	7.7	2.6	
SG6-7'	7	<0.5	<0.003	11.2	1.5	
SG7-4'	4	18.9	<0.003	1.8	14.7	
SG7-7'	7	20.8	<0.003	9.1	9.8	





### Soil Gas Sampling Log

Job Number: OC2D-04.0  
Date: 4/19/16  
Site Name: 12870 Panama St.  
Weather: Sunny  
Geologist/Engineer: Mike Watson  
Field Crew: Mike Watson

Probe Number	Probe Depth (ft. bgs)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Carbon Dioxide (% volume)	Oxygen (% volume)	Notes
SG8-4'	4	29.3	<0.003	1.4	15.0	
SG8-7'	7	24.1	<0.003	4.3	13.8	
SG9-4'	4	25.6	<0.003	0.8	15.6	
SG9-7'	7	24.0	<0.003	9.7	9.5	





# DAILY FIELD REPORT

PROJECT NAME	Methane Investigation	DATE	4/20/16
PROJECT LOCATION	12870 Panama St.	REPORT SEQUENCE NO.	2
CLIENT	Ocean Charter	CONTRACTOR	N/A
SCHEDULED ACTIVITIES	Take second round of samples, then collect 2 Tedlar bags of highest 2 readings. Abandon probes, patch surface. Drop off equipment and samples to lab.		
TPC JOB NO.	OCCD-04.0		

Arrived at the site at 805 and signed in at front office. Calibrated instruments and tested all 18 probes. Collected two Tedlar bags at locations with the highest methane (SG4-4' & SG5-7'). Abandoned probes and patched surface with concrete. Dropped off equipment and delivered Tedlar bags to Enthalpy Labs in Orange.

FIELD HOURS		
ARRIVE SITE:	8 AM/PM	DEPART SITE: 1 AM/PM
REGULAR HOURS:	7	OVERTIME HOURS: NA
TPC PROJECT MANAGER	TPC FIELD REPRESENTATIVE	SIGNATURE OF TPC FIELD REPRESENTATIVE
Ron Caragrotti	Mike Watson	

# Soil Gas Sampling Log

Job Number: 0CCD-04.0  
 Date: 4/20/16  
 Site Name: 12870 Panama St  
 Geologist/Engineer: Mike Watson  
 Field Crew: Mike Watson  
 Weather: sunny

Probe Number	Probe Constructed (Date & Time)	Probe Depth (ft bgs)	Flow Rate (mL/min)	Purge Volumes (1, 3, 10)	Leak Test Compound	Sample Collected (Date & Time)	Initial Pressure ("H <sub>2</sub> O)	Final Pressure ("H <sub>2</sub> O)	Notes
SG1-4'	4/19/16 800	4	<200	1	NA	4/20/16 855	30V	98V	
SG1-7'	4/19/16 820	7	<200	1	NA	4/20/16 905	<0.05	<0.05	
SG2-4'	4/19/16 900	4	<200	1	NA	4/20/16 915	<0.05	<0.05	
SG2-7'	4/19/16 850	7	<200	1	NA	4/20/16 925	4V	100V	
SG3-4'	4/19/16 835	4	<200	1	NA	4/20/16 935	6P	82V	
SG3-7'	4/19/16 835	7	<200	1	NA	4/20/16 945	<0.05	<0.05	
SG4-4'	4/19/16 915	4	<200	1	NA	4/20/16 955	<0.05	<0.05	
SG4-7'	4/19/16 915	7	<200	1	NA	4/20/16 1005	0.05P	100V	
SG5-4'	4/19/16 1020	4	<200	1	NA	4/20/16 1015	<0.05	14V	
SG5-7'	4/19/16 1025	7	<200	1	NA	4/20/16 1025	<0.05	8V	
SG6-4'	4/19/16 1035	4	<200	1	NA	4/20/16 1040	<0.05	<0.05	
SG6-7'	4/19/16 1035	7	<200	1	NA	4/20/16 1050	<0.05	<0.05	
SG7-4'	4/19/16 930	4	<200	1	NA	4/20/16 1100	<0.05	40V	
SG7-7'	4/19/16 930	7	<200	1	NA	4/20/16 1110	<0.05	1.45V	



### Soil Gas Sampling Log

Job Number: OCCD-04.0  
 Date: 4/20/16  
 Site Name: 12870 Panama St  
 Weather: Sunny  
 Geologist/Engineer: Mike Watson  
 Field Crew: Mike Watson

Probe Number	Probe Constructed (Date & Time)	Probe Depth (ft. bgs)	Flow Rate (mL/min)	Purge Volumes (1, 3, 10)	Leak Test Compound	Sample Collected (Date & Time)	Initial Pressure ("H <sub>2</sub> O)	Final Pressure ("H <sub>2</sub> O)	Notes
SG8-41	4/19/16 945	4	<200	1	NA	4/20/16 1120	<0.05	<0.05	
SG8-71	4/19/16 945	7	<200	1	NA	4/20/16 1130	<0.05	5V	
SG9-41	4/19/16 1000	4	<200	1	NA	4/20/16 1140	<0.05	10V	
SG9-71	4/19/16 1000	7	<200	1	NA	4/20/16 1150	<0.05	<0.05	



# Soil Gas Sampling Log

Job Number: 0CCD-04.0  
 Site Name: 12870 Panama St.  
 Geologist/Engineer: Mike Watson  
 Field Crew: Mike Watson  
 Date: 4/20/16  
 Weather: Sunny

Probe Number	Probe Depth (ft. bgs)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Carbon Dioxide (% volume)	Oxygen (% volume)	Notes
SG1-4'	4	5.9	<0.003	0.4	17.1	
SG1-7'	7	<0.5	<0.003	8.4	9.2	
SG2-4'	4	<0.5	<0.003	10.4	5.4	
SG2-7'	7	23.4	<0.003	0.1	8.5	
SG3-4'	4	27.1	<0.003	<0.1	15.6	
SG3-7'	7	<0.5	<0.003	5.9	11.0	
SG4-4'	4	32.3	<0.003	6.5	10.2	
SG4-7'	7	24.1	<0.003	0.7	9.4	
SG5-4'	4	21.0	<0.003	0.8	14.4	
SG5-7'	7	52.4	<0.003	6.5	11.5	
SG6-4'	4	<0.5	<0.003	12.7	0.7	
SG6-7'	7	15.7	<0.003	11.1	1.1	
SG7-4'	4	19.4	<0.003	2.3	12.2	
SG7-7'	7	9.2	<0.003	8.0	9.7	



Soil Gas Sampling Log

Job Number: OCED-04.0 Date: 4/20/16  
 Site Name: 12870 Panama St. Weather: Sunny  
 Geologist/Engineer: Mike Watson  
 Field Crew: Mike Watson

Probe Number	Probe Depth (ft. bgs)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Carbon Dioxide (% volume)	Oxygen (% volume)	Notes
SG8-41	4	6.9	<0.003	3.2	13.7	
SG8-71	7	17.4	<0.003	4.0	13.1	
SG9-41	4	23.5	<0.003	1.2	13.4	
SG9-71	7	10.5	<0.003	10.3	9.2	





# Enthalpy Analytical, Inc.

**Formerly Associated Labs**  
806 N. Batavia - Orange, CA 92868  
Tel: (714)771-6900 Fax: (714)538-1209  
www.associatedlabs.com  
info-sc@enthalpy.com



Client: Placeworks  
Address: 9841 Airport Blvd.  
Suite 1010  
Los Angeles, CA 90045-5409  
Attn: Ron Cavagrotti

Lab Request: 368605  
Report Date: 05/02/2016  
Date Received: 04/20/2016  
Client ID: 10577

Comments: Methane Investigation  
OCCD-04.0  
12870 Panama St, Los Angeles, CA

REVISED REPORT. Methane was re-analyzed past the recommended holding time via ASTM D-1946 in order to report a lower detection limit.

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
368605-001	SG4-4'
368605-002	SG5-7'

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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<b>Matrix:</b> Air	<b>Client:</b> Placeworks	<b>Collector:</b> Client
<b>Sampled:</b> 04/20/2016 12:07	<b>Site:</b>	
<b>Sample #:</b> <u>368605-001</u>	<b>Client Sample #:</b> SG4-4'	<b>Sample Type:</b>

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: ASTM D1946		Prep Method: Method		QCBatchID: QC1166312			
Methane	ND	1	5	Vppm	04/29/16 15:17	TT	T4
Method: EPA 3C		Prep Method: Method		QCBatchID: QC1166086			
<b>Carbon Dioxide</b>	<b>6.68</b>	1	0.2	%	04/22/16 13:09	EW	
Carbon Monoxide	ND	1	0.2	%	04/22/16 13:09	EW	
Hydrogen	ND	1	0.5	%	04/22/16 13:09	EW	
Methane	ND	1	0.2	%	04/22/16 13:09	EW	
<b>Nitrogen</b>	<b>83.0</b>	1	0.2	%	04/22/16 13:09	EW	
<b>O2 (Oxygen)</b>	<b>10.3</b>	1	0.2	%	04/22/16 13:09	EW	

<b>Matrix:</b> Air	<b>Client:</b> Placeworks	<b>Collector:</b> Client
<b>Sampled:</b> 04/20/2016 12:15	<b>Site:</b>	
<b>Sample #:</b> <u>368605-002</u>	<b>Client Sample #:</b> SG5-7'	<b>Sample Type:</b>

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: ASTM D1946		Prep Method: Method		QCBatchID: QC1166312			
Methane	ND	1	5	Vppm	05/02/16 15:21	TT	T4
Method: EPA 3C		Prep Method: Method		QCBatchID: QC1166086			
<b>Carbon Dioxide</b>	<b>7.24</b>	1	0.2	%	04/22/16 14:01	EW	
Carbon Monoxide	ND	1	0.2	%	04/22/16 14:01	EW	
Hydrogen	ND	1	0.5	%	04/22/16 14:01	EW	
Methane	ND	1	0.2	%	04/22/16 14:01	EW	
<b>Nitrogen</b>	<b>81.5</b>	1	0.2	%	04/22/16 14:01	EW	
<b>O2 (Oxygen)</b>	<b>11.3</b>	1	0.2	%	04/22/16 14:01	EW	



QCBatchID: **QC1166086**

Analyst: sandyw

Method: EPA 3C

Matrix: Air

Analyzed: 04/22/2016

Instrument: VOA-GC (group)

**Blank Summary**

Analyte	Blank Result	Units	RDL	Notes
<b>QC1166086MB1</b>				
Carbon Dioxide	ND	%	0.2	
Carbon Monoxide	ND	%	0.2	
Hydrogen	ND	%	0.5	
Methane	ND	%	0.2	
Nitrogen	ND	%	0.2	
O2 (Oxygen)	ND	%	0.2	

**Duplicate Summary**

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
<b>QC1166086DUP1</b>						<b>Source: 368605-001</b>
Carbon Dioxide	6.68	6.64	%	0.6	20	
Carbon Monoxide	ND	ND	%	0.0	20	
Hydrogen	ND	ND	%	0.0	20	
Methane	ND	ND	%	0.0	20	
Nitrogen	83.0	83.0	%	0.0	20	
O2 (Oxygen)	10.3	10.3	%	0.0	20	

<b>QCBatchID:</b> <u>QC1166312</u>	<b>Analyst:</b> ttran	<b>Method:</b> ASTM D1946
<b>Matrix:</b> Air	<b>Analyzed:</b> 05/02/2016	<b>Instrument:</b> VOA-GC (group)

**Blank Summary**

Analyte	Blank Result	Units	RDL	Notes
<b>QC1166312MB1</b>				
Methane	ND	Vppm	5	

**Duplicate Summary**

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
<b>QC1166312DUP1</b>						<b>Source: 368605-002</b>
Methane	ND	ND	Vppm	0.0	20	

# Data Qualifiers and Definitions

## Qualifiers

<b>A</b>	See Report Comments.
<b>B</b>	Analyte was present in an associated method blank.
<b>B1</b>	Analyte was present in a sample and associated method blank greater than MDL but less than DRL.
<b>BQ1</b>	No valid test replicates. Sample Toxicity is possible. Best result was reported.
<b>BQ2</b>	No valid test replicates.
<b>BQ3</b>	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
<b>C</b>	Possible laboratory contamination.
<b>D</b>	RPD was not within control limits. The sample data was reported without further clarification.
<b>D1</b>	Lesser amount of sample was used due to insufficient amount of sample supplied.
<b>D2</b>	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
<b>DW</b>	Sample result is calculated on a dry weigh basis.
<b>E</b>	Concentration is estimated because it exceeds the quantification limits of the method.
<b>I</b>	The sample was read outside of the method required incubation period.
<b>J</b>	Reported value is estimated
<b>L</b>	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
<b>M</b>	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
<b>M1</b>	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
<b>M2</b>	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
<b>N1</b>	Sample chromatography does not match the specified TPH standard pattern.
<b>NC</b>	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
<b>P</b>	Sample was received without proper preservation according to EPA guidelines.
<b>P1</b>	Temperature of sample storage refrigerator was out of acceptance limits.
<b>P2</b>	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
<b>Q1</b>	Analyte Calibration Verification exceeds criteria. The result is estimated.
<b>Q2</b>	Analyte calibration was not verified and the result was estimated.
<b>Q3</b>	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
<b>Q4</b>	Analyte result out of calibration range. Result was estimated.
<b>S</b>	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
<b>S1</b>	The associated surrogate recovery was out of control limits; result is estimated.
<b>S2</b>	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
<b>T</b>	Sample was extracted/analyzed past the holding time.
<b>T1</b>	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
<b>T2</b>	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
<b>T3</b>	Sample received and analyzed out of hold time per client's request.
<b>T4</b>	Sample was analyzed out of hold time per client's request.
<b>T5</b>	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
<b>T6</b>	Hold time is indeterminable due to unspecified sampling time.
<b>T7</b>	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

## Definitions

<b>DF</b>	Dilution Factor
<b>MDL</b>	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
<b>ND</b>	Analyte was not detected or was less than the detection limit.
<b>NR</b>	Not Reported. See Report Comments.
<b>RDL</b>	Reporting Detection Limit
<b>TIC</b>	Tentatively Identified Compounds



**Chain of Custody Record**

Lab Job No. 368605  
 Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X  
 72 Hours: \_\_\_\_\_ 48 Hours: \_\_\_\_\_ 24 Hours: \_\_\_\_\_

CUSTOMER INFORMATION		PROJECT INFORMATION		REQUIRED TURN AROUND TIME	
COMPANY: <u>PLATEWORKS</u>	PROJECT NAME: <u>METHANE INVESTIGATION</u>	72 Hours: _____	48 Hours: _____	24 Hours: _____	Standard: <u>X</u>
SEND REPORT TO: <u>KON CAVAGROTTI</u>	NUMBER: <u>0CCD-04.0</u>				
EMAIL: <u>KCAVAGROTTI@PLATEWORKS.COM</u>	ADDRESS: <u>12870 PAUAMA ST</u>				
ADDRESS: <u>9841 AIRPORT BL#1010</u>	ADDRESS: <u>LOS ANGELES CA</u>				
PHONE: <u>310 670 9001</u>	P.O. #: _____				
	SAMPLED BY: <u>MIKE WATTS</u>				

Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Analysis Request	Test Instructions & Comments
1	9/20/16	12:07	soil	1 gallon	NA	X	
2	9/20/16	12:15	↓	↓	↓	X	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

Total No. of Samples:		Method of Shipment:		Preservative:	
1.	Received By:	1.	Retinquished by	1 = Ice	2 = HCl
Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: _____	Signature: _____	3 = HNO <sub>3</sub>	4 = H <sub>2</sub> SO <sub>4</sub>
Printed Name: <u>MIKE WATTS</u>	Printed Name: <u>[Signature]</u>	Printed Name: _____	Printed Name: _____	5 = NaOH	6 = Other
Date: <u>9/20/16</u> Time: <u>14:31</u>	Date: <u>9/20/16</u> Time: <u>14:31</u>	Date: _____ Time: _____	Date: _____ Time: _____		



### SAMPLE ACCEPTANCE CHECKLIST

**Section 1**  
 Client: Placeworks Project: Methane Investigation  
 Date Received: 4-20-16 Sampler's Signature Present: Yes No  
 Sample temperature: Air Bag  
 Sample(s) received in cooler: Yes  No  (Skip Section 2)  
 Shipping Information: \_\_\_\_\_

**Section 2**  
 Was the cooler packed with: \_\_\_ Ice \_\_\_ Ice Packs \_\_\_ Bubble Wrap \_\_\_ Styrofoam  
 \_\_\_ Paper \_\_\_ None \_\_\_ Other \_\_\_\_\_  
 Cooler 1 Temperature: \_\_\_\_\_ Cooler 2 Temperature: \_\_\_\_\_ Cooler 3 Temperature: \_\_\_\_\_  
*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤ 10 Deg. C or arrival on ice)*

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Were IDs present?	<input checked="" type="checkbox"/>		
Were sampling dates & times present?	<input checked="" type="checkbox"/>		
Was a signature present?	<input checked="" type="checkbox"/>		
Were tests clearly indicated?	<input checked="" type="checkbox"/>		
Were custody seals present?		<input checked="" type="checkbox"/>	
If Yes – were they intact?			<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>		
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>		
Was there headspace in VOA vials?			<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?			<input checked="" type="checkbox"/>
Was total residual chlorine measured (Fish Bioassay samples only)? *			<input checked="" type="checkbox"/>
<i>*If the answer is no, please inform Fish Bioassay Dept. immediately.</i>			

**Section 4**  
 Explanations/Comments  
 \_\_\_\_\_  
 \_\_\_\_\_

**Section 5**  
 Was the Project Manager notified via email of discrepancies: Y / N  N/A  
 Project Manager's response: \_\_\_\_\_  
 \_\_\_\_\_

Completed By: [Signature] Date: 4-20-16

**MONITORING FORM 1**

**CALIBRATION AND BACKGROUND MONITORING FORM**  
12870 Panama Street

<b>PLACEWORKS</b> 9841 Airport Boulevard, Suite 1010 Los Angeles, California 90045 (310) 670.9221		<b>DAILY CALIBRATION AND BACKGROUND MEASUREMENTS</b>					
Project Name: 12870 Panama Street		Photovac MicroFID Serial Number: <i>CZUE308</i>					
Date: <i>4/19/16</i>		Jerome 631X Serial Number: <i>631-2170</i>					
Purpose: Methane Zone Investigation		GEM 2000 Serial Number: <i>GM13288</i>					
Field Personnel Present: <i>Mike Watson</i>							
Recorded by: <i>Mike Watson</i>							
Weather Conditions: <i>Sunny</i>							
<b>METEOROLOGICAL CONDITIONS (LAX)</b>							
Event	Time	Wind Speed/ Direction	Temp. (°F)	Date of Last Precipitation	Bar. Pressure (in. Hg)	Comments/Observations	
Initial	<i>1153</i>	<i>W7</i>	<i>82</i>		<i>29.98</i>		
Check #1	<i>1353</i>	<i>W10</i>	<i>78</i>		<i>29.96</i>	<i>Partly cloudy</i>	
Check #2							
Final	<i>1453</i>	<i>W12</i>	<i>78</i>		<i>29.96</i>		
<b>INSTRUMENT CALIBRATION</b>							
Event	Time	CH <sub>4</sub> (% LEL)		CH <sub>4</sub> (ppmv)		H <sub>2</sub> S (ppmv)	
		Standard	Result	Standard	Result	Standard	Result
Initial	<i>1150</i>	20	<i>20</i>	100	<i>99.9</i>	10	<i>9.7</i>
Check #1	<i>1400</i>	20	<i>20</i>	100	<i>99.7</i>	10	<i>9.6</i>
Final	<i>1520</i>	20	<i>20</i>	100	<i>99.8</i>	10	<i>9.6</i>
<b>AMBIENT AIR BACKGROUND</b>							
Location	Time	CH <sub>4</sub> (ppmv)	H <sub>2</sub> S (ppmv)	Comments/Observations			
<i>Near Front Office</i>	<i>1205</i>	<i>&lt;0.5</i>	<i>&lt;0.003</i>	<i>&lt;0.1% CH<sub>4</sub> w/ GEM, 20.5% O<sub>2</sub>, 40.1% CO<sub>2</sub></i>			

MONITORING FORM 1

CALIBRATION AND BACKGROUND MONITORING FORM  
12870 Panama Street

DAILY CALIBRATION AND BACKGROUND MEASUREMENTS				PLACEWORKS			
Project Name: 12870 Panama Street				9841 Airport Boulevard, Suite 1010 Los Angeles, California 90045 (310) 670.9221			
Date: 4/20/16				Photovac MicroFID Serial Number: CZV6308			
Purpose: Methane Zone Investigation				Jerome 631X Serial Number: 631-2170			
Field Personnel Present: Mike Watson				GEM 2000 Serial Number: GM13288			
Recorded by: Mike Watson							
Weather Conditions: Sunny							
METEOROLOGICAL CONDITIONS (LAX)							
Event	Time	Wind Speed/ Direction	Temp. (°F)	Date of Last Precipitation	Bar. Pressure (in. Hg)	Comments/Observations	
Initial	853	Variable 3mph	71		29.94	SUNNY	
Check #1	1053	W 7	79		29.95		
Check #2							
Final	1153	W 9	81		29.95		
INSTRUMENT CALIBRATION							
Event	Time	CH <sub>4</sub> (% LEL)		CH <sub>4</sub> (ppmv)		H <sub>2</sub> S (ppmv)	
		Standard	Result	Standard	Result	Standard	Result
Initial	838	20	20	100	99.9	10	9.6
Check #1	1035	20	20	100	99.8	10	9.7
Final	1200	20	20	100	99.9	10	9.7
AMBIENT AIR BACKGROUND							
Location	Time	CH <sub>4</sub> (ppmv)	H <sub>2</sub> S (ppmv)	Comments/Observations			
New Fract off	845	<0.5	<0.03	<0.1 CH <sub>4</sub> w/GEN, <0.1 CO <sub>2</sub> , 20.9 O <sub>2</sub>			



### Photovac FID Calibration Certificate

<b>Methane Gas</b>	<b>Lot #</b>	<b>Expiration</b>
	15-5193	2/26/2017

<b>Cal Standard</b> <b>500 ppm</b>	<b>Reading ppm</b>	<b>Acceptable Range</b>
	499.9	490 - 500 PPM ▼

<b>Pump Flow mL/min</b>	<b>Acceptable Range</b>
578	(596 - 606)

<b>H<sub>2</sub> Flow mL/min</b>	<b>Acceptable Range</b>
	(12.87 - 13.13)

<b>H<sub>2</sub> Pressure (psi)</b>
1700

Low Range

High Range

<b>Response Factor</b>
1.0

<b>Model</b>	MicroFID
<b>S/N</b>	CZUE308
<b>Barcode</b>	
<b>Order #</b>	309233

Calibrated By  ▼

Date of Calibration

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.

All calibration gas used is traceable to NIST. Additional documentation is available upon request.