

**Notice of Preparation and Scoping Document for an  
Environmental Impact Report (EIR)  
for the  
Whittier Main Oil Field Development Project  
*REVISED***

**California Environmental Quality Act (CEQA) Lead Agency**  
City of Whittier  
Community Development Department

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## 1.0 Introduction

The City of Whittier will be the lead agency and will prepare a revised Environmental Impact Report (EIR) for the Project described herein. This EIR is being prepared consistent with Section 15088.5. of the California Environmental Quality Act (CEQA) Guidelines, that govern recirculation of an EIR prior to certification. Although not required by Section 15088.5 of the CEQA Guidelines, the City of Whittier is sending this Notice of Preparation and Scoping Document (NOP) to responsible agencies, trustee agencies responsible for natural resources affected by the Project, federal agencies that may be involved in permitting or approving the Project, and interested persons. Consistent with Section 15082 of the CEQA Guidelines, within 30 days after receiving this NOP, each agency is requested to provide the City of Whittier with specific details about the scope and content of the environmental information to be contained in the EIR related to that agency's area of statutory responsibility. The NOP is also being sent to interested persons to solicit input from the public as to the scope of the EIR. Scoping hearings will be held to receive comments on the NOP from agencies and from interested members of the public. Agencies and members of the public can also comment in writing on the scope of the document.

CEQA Guidelines Section 15082 requires that the NOP provide a description of the Project, including the location, and a summary of the potential environmental effects. This NOP is in response to a revision to the originally proposed Project by Matrix, which was the subject of a previous NOP in January 2010. A Public Draft EIR was written for that Project under SCH #2010011049 and the Project was subsequently revised by Matrix, which is now the subject of this NOP.

The City owns approximately 1,290 acres of former oil fields in the hills north of the developed areas of the City. This area was commonly known as the Whittier Main Field, which produced oil for more than 100 years as an active oil field and drilled about 550 wells in that time until the early 1990s. The majority of the land encompassing the oil field was purchased from Chevron and Unocal with Measure A funds in order to preserve the land as open space and wildlife habitat. The land is currently managed for the City by the Puente Hills Landfill Native Habitat Preservation Authority (Authority), a joint powers agency whose members include the City of Whittier, County of Los Angeles, and Los Angeles County Sanitation Districts. On October 28, 2008, the City awarded a lease to Matrix Oil Corporation that could permit resumption of oil and gas extraction from the site. The agreement leases the City's mineral rights underlying the Whittier Main Field to Matrix and provides that subject to a conditional use permit and numerous contractual provisions, Matrix could have certain rights, including drilling exploratory oil wells and extracting oil, gas, and other hydrocarbons from the land. In exchange for these rights, the project could generate a substantial long-term income stream for the City and for the preservation and enhancement of the Preserve's ecological resources and native habitat. Matrix Oil Corp., the operator of the Whittier Main Oil Field and the Applicant, has submitted a Conditional Use Permit (CUP) application to the City of Whittier to drill for the purpose of exploration and production of remaining oil and gas reserves at the site.

In order to assist the City evaluate the suitability of the Matrix CUP application, the EIR will assess the environmental impacts of future drilling and operational activities in the area and, where appropriate, develop mitigation measures to reduce potentially significant impacts. These

mitigation measures can then be incorporated as conditions of approval for the CUP to be considered by the City.

**Table 1.1 Project Details**

<b>Project Information</b>	
Project Title	Whittier Main Oil Field Project
Case Number	CUP09-004, DRP09-015
Lead Agency	City of Whittier, 13230 Penn Street, Whittier, California 90602-1772.
Contact Person	Jeff Adams, City of Whittier, Community Development Department, (562) 567-9320
Applicant	Matrix Oil Corporation, 104 W. Anapamu, Suite C, Santa Barbara, CA 93101, (805) 884-9000
General Plan Designation	Open Space
Zoning Designation	Open Space
Site Size	Project oil and gas production and processing operations are expected to be physically located at a single site. This site is approximately 6.9 acres and will contain wells, processing equipment and a truck loading facility. Electrical and pipeline interconnections will be made to the Southern California Edison grid, the Southern California Gas Company pipeline and the City of Whittier Water District system. Oil and gas pipeline connections of approximately 2.8 miles will be constructed to connect the oil field to the existing Crimson Oil Pipeline System at La Mirada Boulevard and Leffingwell Road and tie to the Gas Company pipeline tie-in located at the intersection of Colima Road and Lambert Road. Of the 1,290 acres owned by the City of Whittier within the Preserve, the Whittier Main Oil Field Project will need a total of approximately 6.9 acres for pads to support the proposed oil and gas production and processing facilities.
Project Location	Located on City owned land within the Puente Hills Landfill Native Habitat Preservation Authority, generally located north of Mar Vista Street and west of Colima Road. (See Figure 2-1, Whittier Main Oil Field Vicinity Map).
Assessor Parcel Numbers	8137-028-900, 8137-021-907, 8137-021-902, 8137-021-908, 8139-021-909, 8289-007-908, 8138-033-914, 8138-033-915, 8138-033-913, 8289-007-909, 8289-007-907, 8138-032-901, 8289-021-904, 8289-021-903, 8291-005-900, 8291-004-900, 8289-020-900, 8291-003-901.
Access	Vehicular access is planned from north Catalina St. off of Mar Vista Ave. and from the existing North Access Road through an existing access through the Savage Canyon Landfill. Access to the Landfill would occur through the entrance on Penn Street.
Latitude and Longitude	33°56'54.82" N and 118°00'23.96"W

## 2.0 Proposed Project Description

The Project is a revision to the previous Oilfield project, described in the Draft Environmental Impact Report (SCH# 2010011049), previously distributed for public review from October 6, 2020 through December 6, 2010. The revised Project incorporates aspects of the environmentally superior project alternative and is being proposed by the applicant in order to reduce areas of disturbance and potentially significant environmental impacts.

As proposed, the revised Project (Project), when fully developed, will consist of wells, an oil processing plant, a gas plant, oil and gas pipelines, and a oil truck loading facility, to be located within portions of the 1,290-acre City owned Whittier Main Field, now part of the Authority Habitat Preserve. The oil and gas production and processing facilities will be physically located at one site within the Whittier Main Oil Field (see Figure 2-2). This Project Site is approximately 6.9 acres. An additional 6 acres may be temporarily disturbed for construction and grading of the site.

The Project Site is generally located in the area of the Central Consolidated Site, identified as the environmentally superior alternative in the previous Oilfield project Draft EIR. The Project Site will contain well cellars, well test stations, and liquid and gas separating equipment. In addition, the site will contain the oil processing facility and gas plant. Roads, pipelines, and power poles would be constructed. Electrical and pipeline interconnections would be made to the Southern California Edison (SCE) grid and the City of Whittier Sewer and Water District systems. Access to the Project would be both from Catalina Avenue and along the North Access roadway from Penn Street through the landfill property and through the Preserve to the Project Site. For vehicles two tons and under, the Project Site would be accessed through Catalina Avenue. For vehicles larger than two tons, the Penn Street entrance and the landfill road would be used to access the site through the North Access Road (see Figure 2-2.) Approximately 3 miles of the North Access roadway would have to be aligned, stabilized and widened to safely accept vehicles. In addition, approximately 700 feet of new roadway would have to be built to access the well pad area located within the Project Site and approximately 1,800 feet of existing asphalt road within the Preserve adjacent to the Project Site would have to be realigned.

Two methods for transporting the marketable crude oil are proposed by Matrix. One method would be via the Truck Loading Facility located inside the Project Site area, where the oil would be loaded onto oil tanker trucks and transported through the North Access Road to a nearby receiving terminal and then be transferred into the Crimson Pipeline System. This oil transportation method would be used during the testing phase of the Project until the permanent oil pipeline is constructed and during rare periods in the event the pipeline system is shut down.

The second oil transportation method would transfer the marketable crude oil by pipeline from the Project Site to the existing Crimson Pipeline System. This would involve building an oil pipeline from the Project Site under existing roadways through the Preserve to Colima Road and then through a new 2.8-mile pipeline connecting to a tie-in point at Leffingwell Road and La Mirada Boulevard. (See Figure 2-3.) The Crimson Pipeline System would transport the crude to the ConocoPhillips Refinery in Wilmington. This pipeline would be constructed at the same time and in the same trench as the natural gas line, which would follow the same route to tie into the Southern California Gas Company (SCGC) line at the intersection of Colima and Lambert

Roads. Oil transportation via pipeline would occur for the duration of the project except for brief and rare periods when the pipeline or refinery are temporarily shut down for maintenance, in which case oil would be temporarily transported via truck from the Truck Loading Facility.

A new gas pipeline would also be built next to the oil pipeline from the Project Site under existing roadway through the Preserve to Colima Road. From Colima Road the gas pipeline would follow the oil pipeline to the SCGC line interconnection at Lambert Road. In addition, during the Drilling and Testing Phase and during the Design and Construction Phase, a gas pipeline could be constructed above ground next to the landfill road from the Project Site to the landfill to be connected to the City of Whittier pipeline system.

The proposed Project would involve three distinct development phases. The first phase, the Drilling and Testing Phase, would involve drilling three test wells at the Project Site and assessing the quality and quantity of oil and gas produced. Assuming successful testing, the second phase, the Design and Construction Phase, would involve the installation of gas and oil processing and crude transportation facilities.

The third phase, the Operations and Maintenance Phase, would involve drilling of the remaining wells (total of up to 60 wells), as well as the operation and maintenance of the gas and oil facilities and the wells, which would involve well workovers and occasional well re-drilling.

### **3.0 Scope of the Environmental Impact Report**

Matrix Oil Corporation, the applicant for the Whittier Main Oil Field, has submitted a revised application to the City of Whittier for a CUP and Development Review Permit (DRP). As such, these applications are the discretionary actions required to permit the proposed Project as defined by CEQA.

The EIR will assess the impacts of exploratory and production drilling and operational activities in the Whittier Main Oil Field and, where appropriate, develop mitigation measures to reduce significant impacts. These mitigation measures will then be used in developing the conditions of approval and requirements that would be part of the discretionary action the City could take on the Project.

The City of Whittier and the EIR consultant had previously prepared a Public Draft EIR for an earlier version of the Project. It is expected that the same issue areas analyzed previously would also be analyzed as part of this Revised Draft EIR. The analysis in the EIR for each of these issue areas will address the environmental baseline, the impacts associated with the exploratory and possible production drilling and operational activities, cumulative impacts, and mitigation monitoring. The mitigation monitoring plan will include the requirements, the responsible agencies and the timelines for each mitigation measure.

Figure 2-1 Whittier Main Oil Field Vicinity Map

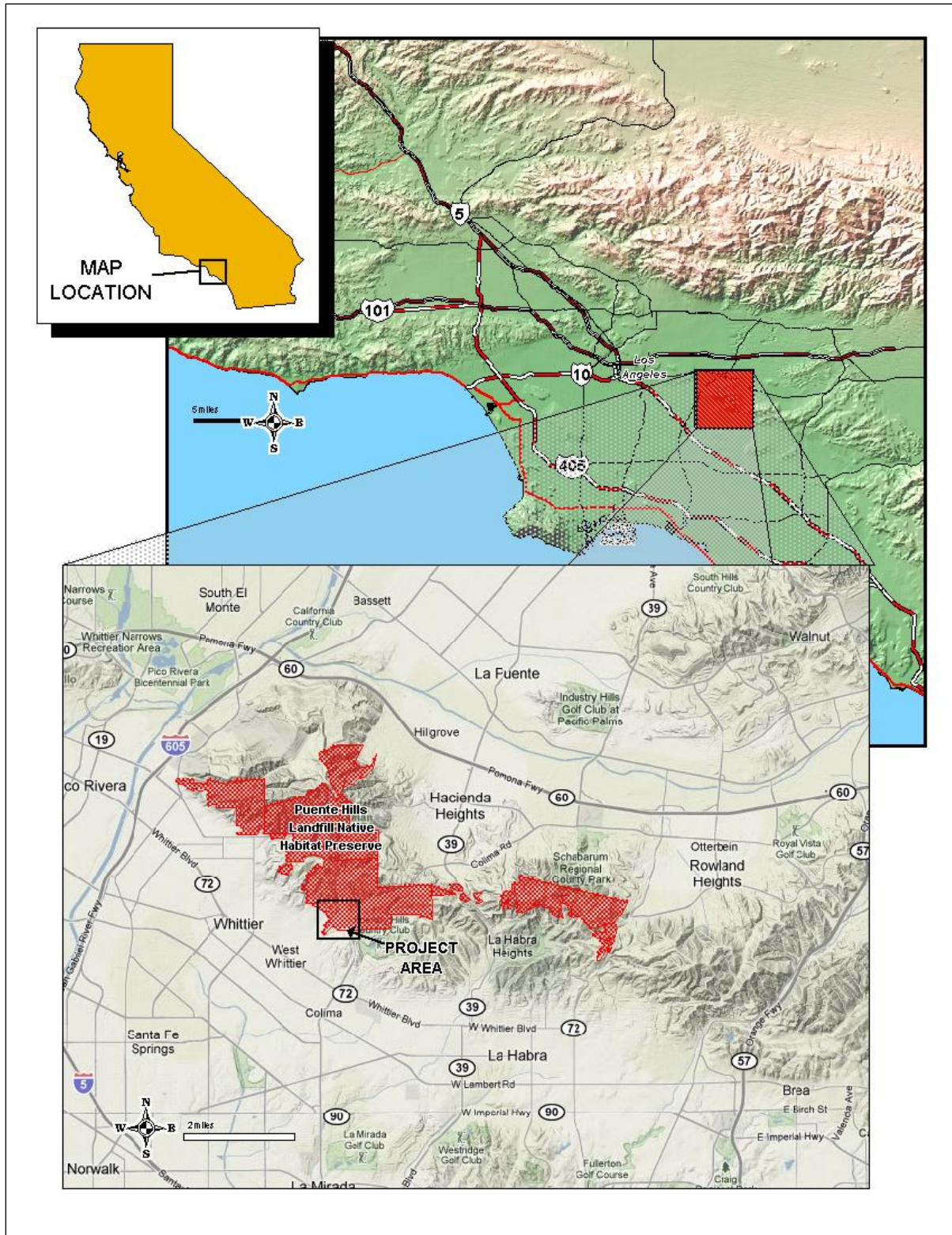




Figure 2-2 Proposed Project Site Locations

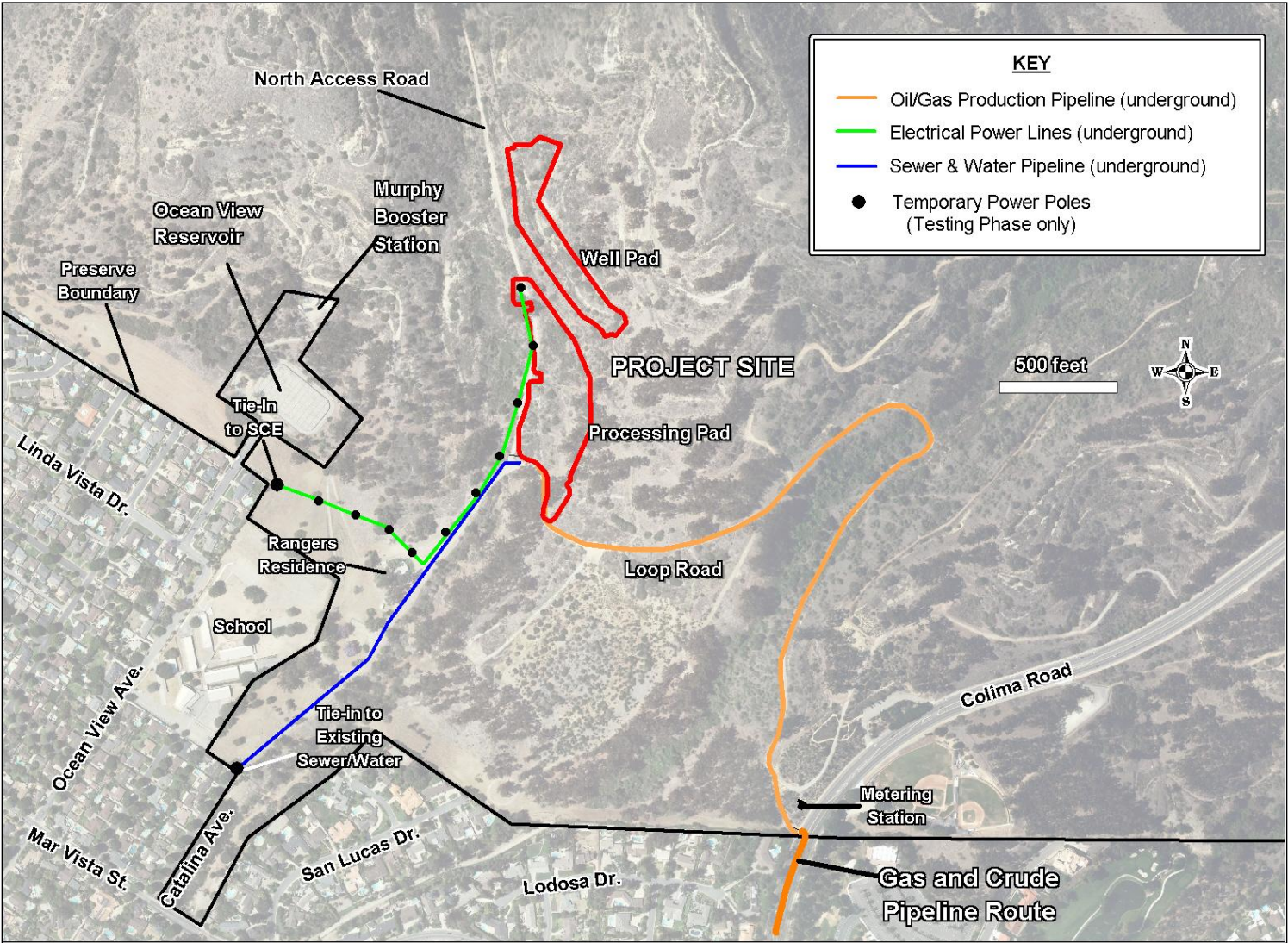
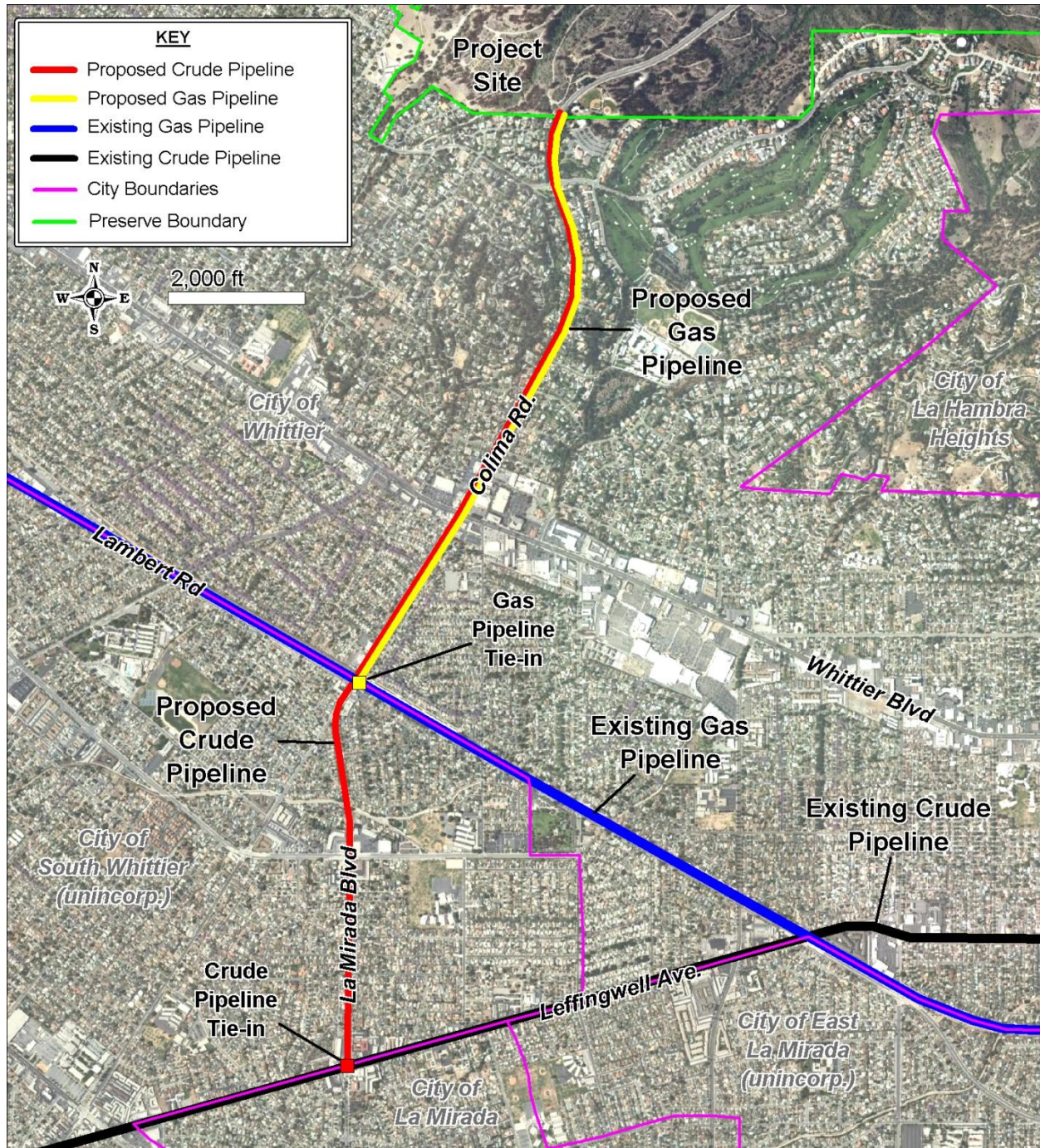




Figure 2-3 Proposed Pipeline Routes



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## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors that would be potentially affected by this Project, involve Air Quality, Biological Resources, Risk Of Upset, Hazards & Hazardous Materials, Geological Resources, Noise and Vibration, Aesthetics and Visual Resources, Transportation and Circulation, Hydrology and Water Resources, Cultural Resources and Archaeology, Wastewater, Land Use and Policy Consistency Analysis, Fire Protection and Emergency Services, Public Services and Utilities, Recreation, Energy and Mineral Resources, and Environmental Justice. These environmental factors are generally discussed below.

### Air Quality

The construction and operation of the proposed Project would contribute to an increase in air quality emissions for which the region is in non-attainment. As such, air quality impacts from construction and operation of the new facilities will be evaluated using the thresholds of significance established by the SCAQMD. Short-term emissions would result from the use of drilling, grading and construction equipment, gas flaring, and trips generated by construction workers and haul/material delivery trucks. Long-term emissions would result predominately from the drilling and facility operations and truck transport, as well as from employees travelling to and from the site. These emissions could result in the violation of air quality standards or the exceedance of air quality thresholds of significance, which may contribute to an existing or projected air quality violation. Therefore, air quality impacts will be evaluated in the EIR to determine the level of significance of the short- and long-term impacts. Regional toxic air contaminant concentrations and trends will also be characterized based on available data from the SCAQMD, specifically the MATES III study. These various sources will be aggregated into a comprehensive database to characterize site-specific background conditions for pollutants.

The EIR will also assess emissions of greenhouse gasses (GHG) for all construction activities and operations. GHG emissions will be quantified in the same manner as criteria pollutants, with emission factors and tabulated in columns next to the criteria pollutants. The EIR will evaluate GHGs including carbon dioxide (from combustion), methane (from combustion and fugitive emissions), nitrous oxide, and hydrofluorocarbons. The EIR will also assess GHG emissions from both direct (located on-site) and indirect (from mobile sources and electricity generation) sources and will address life-cycle issues such as transportation.

Sensitive receptors, including nearby residences to the south and west are located in the immediate vicinity of the Project site. Construction of the proposed Project may expose these sensitive receptors to increased pollutant concentrations. This issue will be analyzed in the EIR.

Some objectionable odors may be temporarily created during construction activities, such as paving, tar, or diesel exhaust. These odors would likely occur in localized areas during Project construction. Some odors may occur as part of the oil and gas production at the site, but could be significantly diminished by the proposed underground concrete cellars for the oil wells. Other odors generated by the Project include exhaust from trucks travelling to and from the site. The EIR will include an assessment of odor generated by the Project, an assessment of violations and complaints at other oil fields, and an analysis of the potential sources of odors and their frequencies.

**Biological Resources**

Surveys were conducted in accordance with the current California Native Plant Society Botanical Survey Guidelines dated June 2001. These surveys did not identify federal or state listed or otherwise sensitive plants within the areas slated for Project development.

The general Project area is known to contain California gnatcatchers (*Polioptila californica*). The California gnatcatcher is a federally and state listed species. In 2005, at least three gnatcatcher pairs were present in a restoration area within the Preserve, east of Colima Road and one pair was found in lower Sycamore Canyon; scattered single birds observed late in the season are best considered wandering juveniles. However, protocol surveys of the areas slated for Project development found no nesting of gnatcatchers.

The proposed Project has the potential to temporarily impact the California gnatcatcher, yellow warbler, yellow breasted chat and San Diego desert woodrat and their critical habitat during the construction and development activities. Therefore, further analysis of potential impacts to these species and their critical habitat will be included in the EIR.

Development of the site could also impact coastal sage scrub, which has been designated critical habitat for the California gnatcatcher. Equally, potential oil spills from Project related activities could cause impacts to riparian habitats. These impacts could be significant and therefore, will be evaluated in the EIR.

Although the Habitat Preserve area is surrounded on most sides by urban development, the Preserve is considered essential to wildlife migratory corridors. Development of the area could interfere with the movement of wildlife species at the site such as resident birds and other small mammals. The development footprint could restrict resident wildlife from moving through the various portions of the permanent open space areas. Therefore, this issue will be analyzed in the EIR.

**Risks, Hazards and Hazardous Materials**

Analysis of potential impacts associated with accidental releases from the oil and gas operations will be included in the EIR. A hazardous materials/risk of upset analysis will be included in the EIR to evaluate the potential changes in risk associated with the proposed activities and alternatives. The analysis will utilize established risk guidelines to evaluate the significance of potential incremental risk increases/decreases associated with the proposed Project and alternatives. The analysis will focus on evaluating the proposed production, processing, and storage, use and transportation of hazardous materials.

The significance of potential impacts will be quantified using significance criteria for public safety. These criteria would be used for potential toxic exposure, fires, and explosions as well as transportation risk. Mitigation measures will be proposed, where possible, to reduce the impact to a level of insignificance.

The facility will also have truck traffic related to the use of natural gas odorant at the odorant station and potential truck trips of propane if that is required by the gas plant. These trips will be added by the EIR to the truck trips associated with crude oil transportation.

The EIR will evaluate potential Project impacts associated with hazardous emissions, materials, substances, or waste within one-quarter mile of an existing school.

### **Geological Resources**

The Whittier Main Oil Field is part of a larger oil producing trend that lies along the Whittier Fault Complex that runs southeast from Monterey Park through Montebello, Whittier, La Habra, Brea and Yorba Linda. The seismically active nature of these faults could be a potentially significant impact to the Project due to ground shaking, fault rupture, liquefaction, lateral spreading and seismic settlement. Therefore, further analysis of potential impacts associated with earthquake faults, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, will be included in the EIR. There are a number of regionally active faults and buried thrust faults that could produce strong seismic ground shaking at the Project site. The proximity of the Project site to these active faults will likely result in ground shaking during moderate to severe seismic events. Therefore, further analysis of potential impacts associated with seismic ground shaking will be included in the EIR.

Analysis of potential impacts associated with seismic-related ground failure including liquefaction and seismically induced landslides will be included in the EIR. Analysis of potential impacts associated with landslides and slope instability will be included in the EIR. Evaluation of potential impacts associated with soil erosion would need to be conducted as part of the EIR.

Overall, the Project site does not exhibit characteristics that would result in a high potential for geotechnical hazards. However, given the potential for these geotechnical issues and potential hazards that could affect Project development, further analysis of these potential impacts will be included in an EIR. Finally, further analysis of potential impacts associated with expansive soil will be included in the EIR.

### **Noise**

Construction and operation activities for the proposed Project and alternatives would potentially increase noise levels in the vicinity of the site and along transportation corridors. A noise study will be prepared as part of the EIR to determine expected Project construction and operation noise levels. The noise impact analysis will focus on construction, drilling, operations, and transportation related noise impacts to communities located near the construction sites and along transportation routes between the construction site and area freeways. In addition, as truck and vehicle traffic levels would increase along the transportation routes, the consequential increases in noise will be assessed. The EIR will assess this level of traffic increase for noise impacts.

The impact discussion for this Project will identify any noticeable change in the existing noise levels that would result from construction and operation activities and the significance of that change. A change of 3 dBA is generally regarded as the threshold of noticeable change in an ambient noise environment. The EIR will estimate noise generated by equipment using existing databases on noise levels as available from the EPA and other sources.

### **Aesthetics**

The EIR will review the proposed Project for impacts to aesthetics resources. The new facilities would be constructed within the Whittier Main Field. They could be visible from a variety of locations, including nearby residential areas and public roads. In addition, there may also be

impacts to distal views of the Puente Hills. The proposed drilling rig could be as high as 144 feet (typical large scale drilling rig size from ground level) and highly visible from a number of public viewing locations. The EIR will include a viewshed analysis to determine the locations from which processing equipment, tanks and drilling rigs might be visible.

Increased night lighting due to the proposed Project may have significant night time impacts. The EIR will estimate the extent of illumination generated by the Project facilities on the surrounding area. While the safety lighting required for night operations is mandatory and would be shielded, the increased light glare could also generate impacts. Potential impacts of lighting to wildlife will also be addressed in the Biological Resources section of the EIR.

### **Transportation/Traffic**

Traffic generated by the Project would be from worker-related commuter traffic, trucks used for delivering construction equipment, trucks used for delivering and hauling construction materials and wastes, and trucks used to transport the crude oil to refineries during exploratory drilling and pipeline construction. The EIR will assess traffic related impacts from these vehicular trips. Although construction impacts may be relatively short-term, the workers' vehicles and trucks hauling equipment and material traveling to and from the site could have an adverse effect on traffic flow and safety. The effect of workers' vehicles parked in the Project vicinity is another temporary but potentially significant impact.

The EIR will evaluate the three Project phases, Drilling and Testing; Design and Construction; and Operations and Maintenance, in the analysis. The Project is required to comply with the City of Whittier's roadway safety design standards. However, proposed Project truck loading area ingress and egress and truck transportation routes could create roadway hazards, including sharp curves and intersection hazards. To assess impacts relative to road design hazards, the EIR will evaluate this issue.

### **Hydrology and Water Resources**

The EIR will evaluate the potential for the Project to violate any water quality standards or waste discharge requirements. Project development and operation could impact groundwater conditions. The EIR will evaluate these potential impacts.

Although the Project will include the construction of erosion control and siltation control devices, the evaluation of the grading plan and effectiveness of proposed erosion control improvements planned for incorporation into the Project will be evaluated in the EIR.

The Project will result in an increase in surface runoff due to an increase in impervious surfaces resulting from the construction of well pads, roads, and other improvements. Further analysis of potential impacts associated with water runoff will be included in the EIR.

The proposed Project could introduce additional sources of polluted runoff as a result of potential oil spills or other upset conditions. Protection of water quality will be evaluated in the EIR.

### **Cultural Resources**

The EIR will include a Phase 1 Cultural Resources Survey for the proposed Project site, in addition to other areas that may involve below ground disturbance as a result of Project development. Accordingly, a records search, site survey, and cultural resources technical report

will be included in the EIR. Mitigation measures will be provided to address potential impacts to unknown cultural resources if such resources are found during the construction activities. The EIR will include an assessment of potential Project impacts relative to paleontological resources. Finally, the EIR will include an assessment of potential Project impacts relative to human remains.

### **Wastewater**

During drilling operations, liquid slurry of drilling “mud” will be collected on site within bermed basins which would be protected by impermeable membrane. The wastewater section addresses potential proposed Project impacts on waste discharge requirements or the Los Angeles Basin Plan criteria for wastewater systems; surface and groundwater quality; and the wastewater service provider.

### **Land Use and Policy Consistency**

Oil and gas production is allowed by the City of Whittier within all zone districts with a conditional use permit. The Habitat Preserve RMP provides a blueprint for the management and use of the Preserve.

A land use and policy consistency analysis of the Project relative to the City General Plan and Habitat Preserve RMP will be included in the EIR to determine direct and indirect impacts associated with the Project activities in terms of effects on existing, planned, and future land uses in the Project vicinity. This section would build on the impact analysis from other issue areas to determine consistency and potential incompatibilities with surrounding land uses.

The EIR will establish the baseline setting and identify the governing land use policies and ordinances. The EIR will then assess the proposed Project’s potential impacts and compatibility with the existing and potential future land uses in the area.

The Puente Hills Landfill Native Habitat Preservation Authority adopted a RMP for the Habitat Preserve in July of 2007. The RMP provides a comprehensive, long-term management plan for the Preserve. The proposed Project could conflict with the provisions of the RMP and the EIR will include analysis of potential impacts that may occur as a result of conflicts with the RMP.

### **Fire Protection and Emergency Services**

This section addresses the fire protection and emergency response resources related to the proposed Project. These resources include the existing services and capabilities of nearby fire departments and the systems and design of the proposed facilities and their associated pipelines. The emergencies that would require summoning these available resources include fire, oil spill, hazardous substance release, and other events that could lead to these emergency situations, such as earthquake, traffic accident, and pipeline rupture.

The proposed Project will require the preparation of an emergency response plan. The plan would need to include adequate access for emergency response and firefighting equipment to the various development sites. All of the roads within the development would need to be evaluated to ensure they would allow for emergency vehicle access. Further evaluation of potential impacts associated with emergency response will be included in the EIR.



The Project site is within the Puente Hills Preserve, which is subject to wildland fires. The Puente Hills have burned repeatedly in historic times, and the frequency and intervals between fires are likely reflected by the current vegetation on site. Exploratory drilling, construction and oil operation activities could spark a wildland fire that could impact portions of the surrounding residential developments. This issue will be evaluated in the EIR, and applicable mitigations measures to reduce the likelihood of wildland fires resulting from the oil and gas operations will be identified.

### **Public Services and Utilities**

The EIR will describe how sanitation service will be provided at the field office at the Project site. Water for drilling, construction, operations, fire protection and domestic consumption will be provided by Suburban Water Systems. The EIR will evaluate whether available water supplies are adequate to meet Project requirements.

Construction of the proposed Project would generate solid waste both from construction and from solid waste generated by the drilling and production activities. The EIR will identify the landfill(s) that would serve the Project and if there is adequate capacity to serve Project requirements. Project solid waste plans will be required to comply with governmental regulations. The EIR will identify the appropriate regulations and evaluate Project compliance, including compliance with requirements for recycling and transport and disposal of hazardous solid waste.

### **Recreation**

The Project site is located in a natural preserve area that provides outdoor recreational opportunities. The proposed Project may negatively impact the Habitat Preserve's recreational resources, including interference with trails. The EIR will examine potential Project recreational impacts. It will establish the baseline setting and governing policies relative to recreational facilities in the Preserve. The EIR will then assess the proposed Project's potential impacts and compatibility with the existing and potential future recreational uses in the area. Recreational opportunities could be impacted by Project noise, odors, visual obtrusions, traffic, physical obstructions, and accidental oil spills precluding use of resources and visually soiling the affected areas. Further, an oil spill, even when cleaned up, can result in a negative public perception of the recreational resources.

### **Energy and Mineral Resources**

The Project as proposed includes exploration and production of oil and gas from the Project area. With the development of any oil and gas resource, a large amount of energy is consumed and produced. Drilling operations, processing, and transportation require electricity and diesel fuel. Energy is produced in the form of natural gas and oil, which is refined to produce gasoline, diesel fuel, jet fuel, and other fuels. The EIR will assess these impacts focusing both on mineral consumption, and energy use and production. The overall approach to this section will be to determine the amount of existing oil and gas supplies expected to be consumed by the Project, the increased consumption of energy that be required for the proposed Project, and the amount of energy from natural gas and crude oil that would be produced by the Project. This section will provide a discussion of the current crude and natural gas balance in California and how the proposed Project production could affect this balance.

**Environmental Justice**

The EIR will include an analysis of potential Environmental Justice impacts that could occur as a result of the Project. This section will analyze the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations adjacent to the Whittier Oil Field and the potential future development activities. This analysis will primarily focus on whether the potential future development impacts would affect areas of high-minority populations and low-income communities disproportionately and thus create an adverse environmental justice impact. Potential environmental justice impacts will be quantified. This information will be used to evaluate whether the proposed Project would unduly burden the affected communities and industries.

**4.0 Alternatives to the Proposed Project**

The California Environmental Quality Act, Section 15126.6, requires an EIR to describe a reasonable range of alternatives to a Project or to the location of a Project which could feasibly attain its basic objectives and evaluate the comparative merits of the alternatives. CEQA Guidelines Section 15126.6 provides direction for the discussion of alternatives to the proposed Project.

The proposed Project is to conduct exploratory drilling and if successful, continue oil and gas production at the Whittier Main Oil Field. Proposed alternatives would include:

**No Project Alternative**

Under the No Project Alternative, the Project would not move forward and the area envisioned for development would continue as part of the existing Habitat Preserve.

**Alternative Drilling and Production Sites**

With this alternative, alternate locations for the proposed drilling sites are analyzed for potential reduction of environmental impacts.

**Alternative Access Roads**

With this alternative, alternate locations for access to the Project Site, including ingress and egress, are analyzed for potential reduction of environmental impacts.

**Pipeline Alternative Routes**

Another possible alternative is for Matrix to construct a pipeline connection down Colima Road to Lambert Road and onto the railroad right-of-way along Lambert Road to a tie-in to the Crimson Pipeline at the intersection of Lambert Road and Leffingwell Road. Other potentially suitable alternative routes would also be considered and analyzed as appropriate.

Other alternatives may be identified as part of the scoping process for the EIR.