

4.1 Aesthetics and Visual Resources

The issue of Aesthetics is relevant to all three major components of The Project: (1) The Proposed Oil Project (all phases), (2) Proposed City Maintenance Yard Project, and (3) The Pipelines. Each of these components has the potential to significantly alter the existing character and quality of the visual environment into which they are planned.

The aesthetics and visual resources chapter of this EIR discusses the environmental setting, regulatory framework, potential Project impacts on the visual environment in the area, and mitigation measures to reduce the significance of these potential impacts. The character of the existing visual environment and potential sensitive aesthetic resources are described to set the baseline against which impacts may be evaluated. Section 4.1.1 describes the methodology used to evaluate the potential impacts that may result from implementation of the Proposed Project. Mitigation measures are proposed to lessen these impacts.

Information used to prepare this draft section was obtained through aerial photography, publically-available ground-level photography, digital terrain models, GIS mapping software, a three-dimensional city massing model, site visits, review of the regulatory and planning documents which govern the Project area (See Section 4.1.3), and Project-specific materials submitted as part of the application process.

The Proposed Oil Project, the Pipeline and the Proposed City Maintenance Yard Project would each have the potential for impacts on aesthetics. As the Proposed Oil Project and the Pipelines would operate together during the operational phases, these have been discussed in the same sub-section. The Proposed City Maintenance Yard Project has been discussed in a separate impacts sub-section.

4.1.1 Methodology

Evaluation of aesthetic and visual resource impacts can be subjective in nature, and therefore requires that an objective methodology be established. The process used in this EIR was adapted from the guidelines used by the Federal Highway Administration for assessment of visual impacts (USDOT, 1981). Impact intensity was established based on evaluating the baseline environmental setting and visual conditions against those depicted in the photo simulations. See section 4.1.4 for significance criteria under CEQA. The principal steps used to define and discuss visual impacts in this EIR are described in the following sections.

4.1.1.1 Assessing Existing Visual Environment

The existing daytime visual environment is evaluated in terms of its visual character and quality. The existing night time visual environment for lighting is also inventoried. The character, intactness, and unity of the night time visual environment are set as the baseline condition. Numerous terms are used to assess visual impacts. These are discussed below.

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- Visual character is descriptive and non-evaluative which means it is based on defined attributes that are neither good nor bad. It includes descriptive language related to land form, land cover and land use. The character of the existing visual environment is inventoried for pattern elements and pattern character:
- Pattern Elements:
 - Form: the mass or shape of an object. This is the strongest pattern element.
 - Line: Geometrically, a point that has been extended, or the intersection of two planes. e.g., a silhouette or a boundary between patterns in the landscape. This is the second strongest of the visual pattern elements.
 - Color: The hue (e.g. red or blue) and value (light or dark) of the light reflected or emitted by an object. This is the third strongest of the visual pattern elements.
 - Texture: The visual or tactile surface characteristic of various elements in the landscape. This is often the least dominant of the four visual pattern elements.
- Pattern Character:
 - Dominance: The degree of visual presence because of prominence of positioning, contrast, extent or importance of pattern elements.
 - Scale: The apparent size relationship between landscape components or features and their surroundings.
 - Diversity: The number of pattern elements as well as the variety among them, and edge relationships between them.
 - Continuity: The uninterrupted flow of pattern elements, maintenance of visual relationships between immediately connected or related landscape components or features.
- Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed.
 - Vividness is the memorability or visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern.
 - Intactness is the visual integrity of visual order in the natural and man-built landscape and the extent to which the landscape is free from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.
 - Unity the degree to which the visual resources of a landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements. It frequently attests to the careful design of individual components in the landscape.

4.1.1.2 Evaluating Project Impacts

The visual impacts of the Proposed Project and its alternatives are determined by assessing the visual resource change (from a change in access or quality) due to the project and predicting viewer response to that change. The resulting level of visual impact is determined by combining the level of resource change with the degree to which users are likely to support or oppose the change. For the Proposed Project, evaluations of potential visual impacts were based on information provided in the project planning application and expected impacts resulting from the

implementation of those plans. These impacts are documented in Section 4.1.5, Project Impacts and Mitigation Measures.

- Visual resource change is the sum of the change in visual character and change in visual quality.
 - The first step in determining visual resource change is to assess the compatibility of the Proposed Project within the visual character of the existing landscape. Compatibility is assessed by comparing pattern elements and pattern character before and after the project.
 - The second step is to compare the visual quality of the existing resources with the anticipated visual quality after the project is constructed. This includes evaluating changes to the vividness, intactness and unity of the Project viewshed.
- Viewer response is the sum of viewer exposure and viewer sensitivity to the project.
 - Viewer exposure is assessed by evaluating the potential viewshed, viewing groups and numbers, view location, distance and positions, and the duration and frequency of the view. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.
 - § Viewshed: Areas from which a critical object or viewpoint is seen. This analysis is done through evaluation of topography and built form. The screening effects of intermediate vegetation are also considered during analysis, though it was not included in the mapping process.
 - § Viewing groups and numbers: The two basic user groups are users with a view of the project and users with a view of the surrounding area of the Project. Consideration is given to the number of residents as well as visitors.
 - § View location, distance and position: the viewers' physical location as it relates to the area/s of impact is evaluated in terms of distance zones (foreground, middleground and background), position (superior/above, normal/level, inferior/below) and direction of view (north, east, south, west).
 - § View duration and frequency: As duration and frequency increase, exposure increases. Consideration is given to whether the viewers are stationary or moving. In general, impacts less than one year are considered temporary, though significant impacts can still occur in timeframes less than one year where sensitivity levels are high. Impacts occurring over the course of one to five years are considered short-term. Impacts lasting greater than 5 years are considered long-term.
 - Viewer sensitivity is defined both as the viewers' concern for visual quality and the viewers' response to change in the visual resources that make up the view. The viewers' activity and awareness, local values, and cultural significance affect sensitivity level.
 - § Activity and Awareness: A viewer's current activity and past experience with a landscape can heighten or decrease the ability to perceive the landscape and its detail. Awareness or receptivity to the visual character of the landscape can be affected by elements and relationships in the

landscape setting itself, or by expectations about the setting. Areas considered to have high sensitivity include: public views from road ROWs that serve to directly access residential or recreational areas, designated parks and open spaces, culturally and historically significant sites, and areas in which aesthetic values are protected in laws and public planning documents.

§ Local Values: Through review of the goals and policies relating to visual resources in local planning documents, sensitivity levels can be evaluated. The CUP for the Project and public scoping meeting comments are also indicators of public values.

§ Cultural Significance: Visual resources may have sensitivity due to history, scientific or recreational resources, or uniqueness.

4.1.1.3 Assessment of Key Observation Points

As part of the process to assess the Project's potential impacts on visual resources, identification was made of representative public view locations called Key Observation Points (KOPs). KOPs from public locations were selected where viewer exposure and sensitivity are both high, are listed in planning documents or where prominent ocean views may be compromised. Although there are conflicting judicial interpretations, the CEQA Guidelines do not limit consideration to public views. CEQA cases have stated that both "public and private views are properly studied in an Environmental Impact Report to assess the impacts of a project" (Ocean View Estates Homeowners Assn., Inc. v. Montecito Water Dist. (2004)), however, the lead agency can decide to address private views and establish the significance criteria as they see fit. While specific private KOP simulations were not included, the Project Site would be a small area so that impacts to public views would be the same or similar to impacts from private views. The number and range of views from public areas was sufficient to allow a determination of significance.

For each KOP, photo documentation and simulation was conducted to serve as a basis for evaluating the Proposed Project's potential effects. A summary of the process and methodology used to prepare the photo simulations is included below. Key Observation Points selected were as follows (see KOP Map in Section 4.1.5 for locations).

Views from/near public roads which serve as a primary or secondary access to residential subdivision areas and/or recreation areas:

- Pacific Coast Hwy 1 (Primary); KOP 12;
- Hermosa Ave (Primary); KOP 9;
- Pier Ave (Primary); KOPs 3 and 4;
- Valley Drive (Primary); KOP 5, 15, 16;
- 6th Street (Secondary); KOPs 10, 13, 14 and 19;
- 8th Street (Secondary); KOP 16, 17, and 18;

Views from Recreation Areas:

- Hermosa Valley Greenbelt (Veterans Parkway); KOPs 2, 15 and 20
- Ardmore Park; KOP 20
- Civic Center; KOP 5
- Community Center (Tennis Court Access); KOP 1
- South Park; KOP 11
- The Strand; KOP 8
- Hermosa Beach; KOP 7
- Hermosa Beach Pier; KOP 6

Photo Simulation

Photo simulations of the Proposed Oil Project (KOPs 6-20) were produced by E&B consultant Focus 360. The photo simulations in the Planning Application were updated at the request of the EIR consultant to use a 50mm lens, show the rig in a 'worst-case scenario' drilling location for each view and adjust landscape size depictions per the supplemental landscape information provided after the original simulations were produced. Additional locations were requested by the EIR consultant at Hermosa Beach and Hermosa Beach Pier. As discussed in the project documents, the rig location is variable and could occur at any one of the first four well locations in Phase 2, or any well locations in Phase 4. The rig is expected to move approximately once per month during drilling operations.

Photo simulations of the Proposed City Maintenance Yard Project (KOPs 1-5) were produced by the EIR consultant in coordination with City Staff and the architect working with the City on the project (RNL). The process for producing the simulations is summarized below.

Photography for Photo Simulation

The camera used was a full-sized CCD (charge-coupled device) digital camera with a fixed 50mm lens. A full-sized CCD camera was used because it records the entire frame of view the same way the visualization software recreates the image. A 50mm lens is used in photo simulations because it most closely reproduces the way a human eye sees the world and therefore provides the most "fair" visual representation of the distance and magnitude of Project impacts. The fixed 50mm lens is used in the simulations to ensure that the focal length does not change from image to image. Limitations in photography at this focal length do not always allow all project elements to be fully captured in a single frame, especially in close proximity to large elements of great vertical scale. The fact that these elements do not fit within a single frame is an indication of their potential for dominance within the viewsheds. Therefore, for views where the drilling rig extend above the frame, simulations at 28mm lens simulation (wide angle) was also included. A 28mm lens causes the feature of interest (the drill rig) to appear smaller and is therefore not ideal, but due to the dominance of the drill rig at foreground locations, a 28mm lens simulation was included.

Camera location and direction of view for each KOP were recorded using a handheld GPS device with sub-meter accuracy. The camera was adjusted to the eye level of the photographer for each KOP.

Modeling for Photo Simulation

The process used for modeling the Proposed Oil Project was included in the supplemental planning information submitted by the Applicant. This information was reviewed during the EIR process, and where necessary updates and clarifications were made. At the outset of the study, pertinent Project information was provided: surveyed topographic information, civil and Project design files, and details. Through the use of computer simulation software, this information was combined together to create a three-dimensional model of the Proposed Project. The Proposed Oil Project was “built” in the computer. Potentially visible production equipment, drill and workover rigs, walls, fences, and landscaping were created and placed according to the civil and site design plans.

Information and modeling related to the permanent Proposed City Maintenance Yard Project is still in the preliminary planning stages. A preliminary ‘massing model’ was provided to the EIR consultant by the City’s architectural consultant for the Project (RNL). In consultation with the Architect working with the City, preliminary architectural details, materials, and landscaping were added by the EIR consultant to the base massing model that was provided.

Composite Imaging of Photo Simulation

Within the three-dimensional model, a virtual camera is then placed at the selected viewpoints using the field data collected at the time of photography (horizontal and vertical geographic position). The visible elements of the model are exported using the time of day and location of the original photo to produce shade and shadow conditions consistent with the image. Adjustments are made to allow the two images to blend together (foreground elements, such as trees, shrubs and buildings are adjusted to appear in front of Proposed Project elements). The resulting image is the completed photo simulation.

Viewshed Mapping

Viewshed mapping for the Proposed Oil Project was done to approximate the extents of potential visibility of major project components including the 87-foot electric drill rig and 110-foot workover rig (See Figures 4.1-1 and 4.1-2). This mapping was produced using geographic information software, digital terrain modeling, and 3D representations of built forms in the project area. The terrain and three-dimensional buildings of the City were provided by CyberCity 3D. The model included building massings and roof heights/pitches accurate to within six inches. The E&B City model was produced based on the built form of the city as of 2006 (CyberCity3D, 2013). Using this analysis tool, potential visibility from public road rights of way, parks and open spaces was established. It is important to note that the model does not include the ability of existing vegetation to provide visual screening, nor does it represent built forms that have been constructed since the model was built.

4.1.1.4 Lighting and Glare Methodology

The level of light that is projected into the environment by the current operations during the nighttime hours, and the additional light that will be generated by the Proposed Project, are important in determining the Project’s impacts. If an area is relatively dark, with minimal night lighting, then the addition of even a single strong light could produce impacts on receptors,

particularly if those receptors are a residential area. However, if the area already has substantial lighting, and some additional lighting is added, then the impacts would be considered minimal.

Light is generally measured in lumens, which is the total amount of light energy produced by a given light source. Light levels, or luminance, are measured in terms of the amount of light falling on a unit area. The measurement is in “footcandles (fc)” or “lux”, which is defined as the amount of lumens per square foot or square meter, respectively. Light measured by the amount of lumens given off in a defined angle is called a candela. The light levels of a starry night without a moon in a rural area is less than 0.001 fc, a moonlit night 0.1 fc, a parking lot 1-10 fc and a bright sunny day 10,000 fc.

Reflectance is the ratio of the amount of light leaving a surface to the amount of light incident on it. Reflectance can be expressed as a percentage or a fraction, and is affected by factors such as color, finish, and surface texture. Materials are measured by their Light Reflectance Value (LRV). LRV values are between 1 and 0, with a theoretical perfect white achieving a value of 1, reflecting 100% of visible light, and a theoretical perfect black achieving a value of 0, absorbing 100%. In practice LRVs will not reach the theoretical limits with white surfaces achieving values up to 0.85. For example, the reflectance (expressed as a fraction) of concrete ranges from 0.34-0.67.

4.1.2 Environmental Setting

The environmental setting section describes the existing visual resources in the vicinity of the Proposed Project. The character and quality of these existing visual resources is established here as the baseline against which project impacts are later measured (see section 4.1.5 Project Impacts and Mitigation Measures). The visual resources in the vicinity of each major project component are evaluated in terms of different landscape types/units. A landscape type/unit is an area of landform plus land cover forming a distinct, homogenous component of a landscape, differentiated from other areas by its degree of slope and pattern of land cover (USDOT, 1981). The two landscape units for this project are developed/roaded and open space/park. Further detail on how the existing visual environment is evaluated and described in this EIR can be found in section 4.1.1 Methodology. Existing lighting and glare are also discussed.

4.1.2.1 Local Setting

Below is a description of the existing visual environment surrounding each of the major Project component sites/alignments. The Key Observation points in Section 4.1.5 include existing site photos which depict many of the viewsheds described below.

Proposed Oil Project Site

The Proposed Oil Project Site is located in a densely developed area. The parcel is immediately surrounded by light manufacturing and open space land uses. One- and Two-family residential and open space land uses border the light manufacturing district (See Figure 2.4, Project Description). The built environment is comprised of primarily one to three-story masses with a relatively high degree of architectural variety and character. Development of individual parcels

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has typically been maximized making built form the dominant physical/visual feature on most parcels. Planted landscape features have been integrated where feasible to complement and enhance the built environment. City streets, parks, the Veterans Parkway (Hermosa Valley Greenbelt), and public beach provide the public network that links and provides physical and visual access to the built environment.

The Project Site sits within a slight depression along Valley Drive between Loma Drive and PCH, which provide some reduction in views from the beach area, but provides for an elevated viewing location as the viewer moves east to PCH and beyond.

Views of the Proposed Oil Project Site

The Project Site is in a light manufacturing area within a densely developed area within a mostly single-family residential region of the City of Hermosa Beach approximately 0.31 miles east of the Pacific Ocean. The Project Site is located within an approximately 6.2-acre region made up of light manufacturing uses that contain a variety of small commercial/manufacturing businesses. The form and scale of these uses are generally of the same size as the surrounding residential buildings, though their character and quality is of a light manufacturing district. Beach Cities Self Storage is the largest built mass in the immediate project vicinity. The structure is set back from Valley Drive approximately 20 feet and a small parking lot sets the mass back from the corner of Valley and 6th Street. The height of the structure varies with changes in grade, but generally ranges between 20-25 feet tall. The character and quality of the structure is consistent with the adjacent light manufacturing land uses. The building incorporates architectural façade enhancements to break down the scale of its mass. Additionally it includes landscape treatments along Valley Drive to reduce its mass and provide visual screening.

The Project Site is currently developed as the City Maintenance Yard. The Maintenance Yard would be relocated for development of the Proposed Oil Project. The most prominent architectural masses at the City Maintenance Yard consist of two single story rectangular-shaped storage buildings. The largest building is located along the northern Project Site boundary oriented in the east-west orientation and measures approximately 145 feet by 50 feet, and is 16-20 feet tall. The building is light industrial in character with a uniform standing seam metal panel exterior, shallow hip roof, several large vehicular openings with rolling doors and few windows. The second largest building is located in the southeast corner of the Project Site oriented in the north-south direction and measures approximately 95 feet by 44 feet and is approximately 10-12 feet in height. This building also has a light industrial character but is less uniform in terms of architectural finishes and forms. It also has several large vehicular openings but with swinging wooden doors, exposed utility connections and a flat roof form. Architectural masses occupy approximately 15-20 percent of the Project Site.

Asphalt, gravel, and sand storage areas are located in the northwest corner of the Project Site; a row of storage containers line the middle of the western boundary (see Figure 2.3). A 15-stall surface parking lot for City employees is located in the southwest corner of the Project Site. The maintenance yard includes trash bins, a propane tank, concrete paving and asphalt surfacing. Property edge visual screening features include masonry walls with sections of screened chain link fencing along the south, west, and northern boundary. A 6-8 foot chain-link fence with privacy inserts and security wire borders Valley Drive to the east. The fence is partially covered with a dense deciduous flowering vine which provides additional privacy screening during

months it is in-leaf. A row of approximately 40-foot tall evergreen fig trees line Valley Drive at the Project boundary. The yard is moderately to highly visually accessible in its immediate vicinity and has low levels of intactness, vividness and unity.

Views Surrounding the Proposed Oil Project Site

The City Maintenance Yard is located on land zoned M-1 Light Manufacturing and is surrounded by zoned M-1 Light Manufacturing uses to the immediate north, south, and west. OS-1 Restricted Open Space occurs to the immediate east. The majority of land immediately surrounding the City Maintenance Yard is developed with the exception of the land zoned OS-1 Restricted Open Space (Hermosa Valley Greenbelt/Trail). Other properties in the vicinity of the Project Site are zoned R-2 Two Family Residential and R-3 Multiple Family Residential.

Viewshed components surrounding the Project Site generally include a variety of architectural masses of light industrial and residential character and an approximately 100-foot wide linear greenbelt. A general viewshed inventory in each direction surrounding the project is as follows (see Figure 2.5):

- To the north is a row of single-story light manufacturing uses and beyond that R-3 multi-family residence one- to three-stories in height. Built masses of residential character, overhead utility lines, and the canopy of few mature trees populate the viewshed.
- To the east are Valley Drive and the Veterans Parkway (Hermosa Valley Greenbelt). The Greenbelt is an approximately 100-foot wide linear greenbelt trail planted with evergreen groundcover (iceplant) and low-lying shrubs and trees which typically range from 10-30 feet in height. Further east, beyond the Greenbelt are views of residential development with a mix of one- to three-story homes with ocean views (due to the elevated terrain). Few large mature tree canopies and some overhead utilities are also components of this viewshed.
- To the south are 6th Street and a two-story light manufacturing building (Beach Cities Self Storage), which takes up a large portion of the block and limits distant views surrounding the Project Site in this direction. The building is of a light commercial character with large architectural masses, façade enhancements, and few windows or doors. From the southeast corner of the Project Site, there are distant views farther to the south where the Veterans Parkway, a community park (South Park) and zoned R-2 Two-Family Residential development with attached garages that stand at one- to three- stories are visible.
- To the west, viewshed components include a row of light one and two-story manufacturing buildings, Cypress Avenue, and residential development further west. These architectural masses combined with a soft topographic ridge generally parallel with Loma Drive limits views toward the Pacific Ocean immediately surrounding the Project Site.

Proposed City Maintenance Yard Site

Relocation of the City Maintenance Yard would occur to a densely developed area of multi-family residential, Open Space, and restricted open space area in the City of Hermosa Beach (See Figure 2.4, Project Description). The temporary City Maintenance Yard would be located

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immediately adjacent to the City Hall along bard Street and 11th Place. Both are adjacent to residential and open space land uses.

Views of the Proposed City Maintenance Yard Project Site

The proposed site for the Proposed City Maintenance Yard currently houses large single-story Hermosa Self Storage Facility, along with a surface parking lot on the east side of the lot. The building footprint is approximately 140 feet by 200 feet and ranges in height from 17-20 feet. It occupies approximately sixty-five percent of the lot. The building is light commercial in character with concrete block construction, few windows or doors, little architectural detail or façade enhancements, and an expansive mostly flat roof. The building is set below perimeter grade conditions by an approximate range of 2-8 feet, with the most significant grade differential on the west property boundary.

The City Maintenance Yard Project Site perimeter includes a landscape strip with low iceplant groundcover to the north, an approximately 4-6-foot (height varies) masonry wall with landscaping along the east boundary, and combination concrete wall and wood fencing along the south and west boundaries.

Views Surrounding the Proposed City Maintenance Yard Project Site

The City Maintenance Yard Project Site is surrounded by a mix of land uses including City Hall, a fire station, a public library, a community theater, residential areas and a public greenbelt for open space/recreation. A general viewshed inventory in each direction surrounding the project is as follows:

- To the north are the three-story City Hall, large surface parking areas, single story Public Library, and the one to three-story police and fire stations, which also include a five-story concrete tower. These structures are civic in architectural character and quality with a generally high degree of façade articulation and detail. The concrete tower bears the city name and by virtue of its location and relative vertical scale is one of the more visible architectural elements in the community. The tower is approximately 12'x16' and is approximately 60 feet tall.
- To the east, Valley Drive and Veterans Parkway (Hermosa Valley Greenbelt/Trail) are lined with a variety of hedges and trees ranging from 10-40 feet in height. Further to the east are six tennis courts and The Hermosa Beach Community Center.
- To the south and west are two- to three-story multi-family residential structures of varying architectural styles and forms. Few large mature tree canopies and overhead utilities are also components of this viewshed.

The Pipelines (Includes Valve Boxes and Metering Station)

The proposed crude oil pipeline alignment scenarios would traverse the cities of Hermosa Beach, Redondo Beach, and Torrance, within existing street and utility rights of way (ROW).

Views of the Pipeline Route, Valve Boxes and Metering Station

The views are consistent with those of a large roadway and include expansive areas of pavement, areas of streetscape enhancement, landscaping, street lighting and traffic signals. The utility ROW includes large transmission towers, areas of undeveloped grassland (Metering Station site),

an entry monument for the City of Redondo Beach, a container plant nursery and a dog park (Dominguez Park).

Views Surrounding the Pipeline Route, Valve Boxes and Metering Station

The oil pipeline would be constructed underground for a distance of 0.39 miles in the ROW of southbound Valley Drive (which is one-way starting at 2nd Street) in the City of Hermosa Beach to the corner of Valley Drive/N. Francisca Avenue and Herondo Street in the City of Redondo Beach. One- to three-story residential buildings line Valley Drive to the west and Veterans Parkway (Hermosa Valley Greenbelt/Trail) and more one- to three- story residences are located to the immediate east.

At this point, the oil pipeline would be constructed underground for a distance of approximately 3.55 miles to its valve box locations. From Valley Drive it would turn to the east and follow the alignment of Herondo Street and Anita Street before connecting with 190th Street. The north side of Herondo Street is lined with a mix of residence, commercial and residential-professional uses ranging in height from two- to three- stories. The south side of Herondo Street is lined with designated right-of-way which supports a high-powered transmission line with transmission towers that are approximately 90-feet in height. These towers span a commercial plant nursery which operates in the ROW. The transmission line and commercial nursery continue along the south side of Anita Street at its connection with 190th Street and take up an area that is approximately 180-feet wide along its path.

The following pipeline alignment scenarios could occur once the pipeline enters 190th Street:

- Scenario 1 and 2 consist of construction of the pipeline alignment within 190th Street to the intersection of 190th Street/Hawthorne Boulevard in the City of Torrance or the City of Redondo Beach. This area is in a high density built out condition. At this point, Scenario 2 would continue to one of the four valve box options discussed below. The area around 190th Street between Anita Street and Hawthorne is characterized by residential uses ranging from one- to two–stories high on the north side of the street mixed with a small number of industrial and commercial uses approximately at the midpoint of the proposed pipeline alignment. The south side of 190th Street from Anita Street includes a dog park, called Dominguez Park (24 acres); a mix of three-story medium high residential uses (i.e., apartments) followed by a few blocks of big box commercial developments, then single family residences one- to three-stories high, more commercial uses and light and heavy industrial uses up to the intersection of Hawthorne Boulevard. Scenario 1 and 2 would continue to one of the four valve box options discussed below.
- Scenario 3 consists of construction of the pipeline alignment within the approximately 190-foot wide SCE utility corridor consisting of a high-powered transmission line with transmission towers that are approximately 90-feet in height that runs through a commercial container plant nursery in the Cities of Redondo Beach and Torrance. This area is in a medium-density built-out condition. The SCE utility corridor is located parallel to and approximately 300 feet south of 190th Street behind the land uses along the south side of 190th Street: a mix of three-story medium high residential uses (i.e., apartments) east to a few blocks of big box commercial developments, single family residences one- to three– stories high, more commercial uses and light and heavy

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industrial uses up to the intersection of Hawthorne Boulevard. South of the utility corridor are low density single family homes. Some existing mature trees occur within or immediately adjacent the ROW, such as North Prospect Ave, parallel with Agate street (between Harkness and Flagler), in Dominguez Park, and where residential properties are adjacent. When the oil pipeline meets Hawthorne Boulevard in the City of Torrance, Scenario 3 would continue to one of the four valve box options discussed below.

- The oil Pipeline would end at one of the valve box locations discussed below:
 - Valve Box Option 1 – For Pipeline Scenarios 1 and 2, the pipeline would continue from the Hawthorne Boulevard/190th Street intersection down 190th Street to the Exxon Mobil Refinery, where it would connect with a valve box location within the refinery site. For Pipeline Scenario 3, the pipeline would turn north in Hawthorne Boulevard and east in 190th Street to the refinery site. This area is dominated by heavy industry uses associated with the Refinery tanks and facilities.
 - Valve Box Option 2 - For Pipeline Scenarios 1 and 2, the pipeline would turn south in Hawthorne Boulevard to the SCE Utility Corridor where it would turn east to the valve box location. For Pipeline Scenario 3, the pipeline would continue east in the SCE Utility Corridor across Hawthorne Boulevard to the valve box location;
 - Valve Box Option 3 – For Pipeline Scenarios 1, 2, and 3, the pipeline would turn north in Hawthorne Boulevard to the valve box location adjacent to the Santa Fe Rail Road line; and
 - Valve Box Option 4 - For Pipeline Scenarios 1, 2, and 3, the pipeline would turn north in Hawthorne Boulevard to the valve box location northeast of the intersection of 190th Street/Hawthorne Boulevard.

4.1.2.2 Light and Glare

The Proposed Oil Project Site is located in a densely developed area. The parcel is immediately surrounded by light manufacturing and open space land uses. One- and Two-family residential and open space land uses border the light manufacturing district, characterized by low to medium ambient nighttime artificial light levels. During nighttime hours, the surrounding residential as well as commercial and industrial areas typically utilize moderate levels of interior and exterior lighting for nighttime activities, security, parking, and signage. The majority of these light sources are shielded and directed towards the ground so as to minimize impacts on surrounding uses. Other exterior lighting sources include pole-mounted street lighting along adjacent streets. The most significant night time lighting observed in the Project area was from Clark Stadium where light levels exceeded 35 footcandles (as measured at the tennis courts adjacent to Valley Drive). Lighting near or exceeding this level is evenly distributed across the active use areas of the park site. South Park light levels were considerably lower with only occasional low-level light fixtures along the main path and parking area. The Hermosa Greenbelt adjacent the Project Site is not lit at night. Interior lighting spill-over from windows and porches of the residential uses contribute to the ambient nighttime levels. With the exception of Clark Stadium (when in night time use) the character, intactness and unity of the lit environment is fairly uniform and consistent with a Lighting Zone 2 (LZ-2) (IES/IDA, 2011). Lower light levels are located on undeveloped parcels, non-active-use parks and open spaces.

Light levels generated within the Project Site are low to moderate. Light sources include exterior security lighting on building facades and light poles located in the surface of parking areas. The buildings and tanks on the Project Site have painted metal finishes and do not contain large glare-producing windows. Existing fixtures are not full cut-off and some light spill into the night sky was observed.

Light levels generated at the Proposed City Maintenance Yard Site are low to moderate. Light sources include exterior security lighting on building facades and light poles located in the surface of parking areas on the east third of the site. Existing fixtures are not full cut-off and some light spill into the night sky was observed.

4.1.3 Regulatory Framework

Various plans and policy documents set forth regulations and guidelines for aesthetics, visual resources, vistas, light and glare that relate to the development of the Proposed Project. These include the California Coastal Act, City of Hermosa Beach General Plan, City of Redondo Beach General Plan, City of Torrance General Plan, and local planning and zoning ordinances. Objectives, goals, and policies from these documents that are pertinent to the Proposed Project are listed below.

4.1.3.1 California Coastal Act

Chapter 3 Article 6 Section 30251 Scenic and Visual Qualities

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

4.1.3.2 Title 24 – Part 11 – California Green Building Standards Code

Chapter 5 Nonresidential Mandatory Measures

5.106.8 Light Pollution reduction. Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code;
2. Backlight, Uplight and Glare (BUG) ratings as defined in IESNA TM-15-11; and
3. Allowable BUG ratings not exceeding those shown in Table 5.106.8.

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The Proposed Oil Project Site and Proposed City Maintenance Yard Project Site have been determined to be in Lighting Zone 2.

4.1.3.3 City of Hermosa Beach

City of Hermosa Beach General Plan

City of Hermosa Beach General Plan – Urban Design Element outlines policies and objectives to preserve the scale of the community. It maintains that: “introduction of massive land uses such as large buildings or new transportation corridors should be carefully evaluated”. It is concerned with abrupt changes in scale and form resulting in a land use overwhelming another. But it suggests that this visual shock can be lessened by generous landscaping and limiting the apparent size of buildings and parking lots near the boundary. To encourage development that coincides with the City’s urban design goals of scale and form, it offers:

- Policy 1 - Maintain the present scale of the City, but modify those elements which by their massiveness are overwhelming and unacceptable.
- Program 1 - Discourage massive single uses through limitations on height and density to protect surrounding uses and community values.

The General Plan's urban design policies and programs include the following objectives that must be addressed when design decisions are made:

- Preserve Hermosa Beach as a creative environment where people can live and work.
- Identify and maintain the smaller scale visual features that give character to Hermosa Beach and its neighborhoods.
- Retain the uniqueness and diversity of Hermosa Beach's neighborhoods.

City of Hermosa Beach Municipal Code

Chapter 17.28 (M-1 Light Manufacturing Zone) of the Municipal Code sets forth the following requirements for building height and landscaping, which effect visual quality of the Project Site and surrounding area:

- 17.28.010.E. Ensure that the appearance and effects of manufacturing and commercial buildings in the M-1 zone are harmonious with the character of the area which they are located.
- 17.28.030.D. Building Height - Any building may have a maximum of thirty-five (35) feet in height and have a maximum of two stories. Oil and gas operations may exceed this height for a temporary period of time and to a height as set forth in an approved conditional use permit pursuant to Ordinance No. 85-803.

Chapter 17.30 (O-S Open Space) of the Municipal Code sets forth the following requirements for building height, landscaping, and lot coverage, which affect visual quality of the Project Site and surrounding area:

- 17.30.040 Height - No building shall exceed a height of two stories or twenty-five (25) feet above the existing or finished grade, whichever is less (Prior code Appx. A, § 9.5-3).
- 17.30.080 Landscaping - All yard or open areas shall be attractively landscaped with the possible exception of where such areas are used for court games, buildings or parking. All landscaped areas shall be permanently irrigated (Prior code Appx. A, § 9.5-7).
- 17.30.030 Lot coverage - Maximum building coverage of land area in the O-S zone shall not exceed ten percent (Prior code Appx. A, § 9.5-2).
- 17.30.090 Planned Development Permit required - All new construction within an O-S zone shall be subject to obtaining a planned development permit under procedures set forth in Chapter 17.24. Sections 17.30.030 through 17.30.080 may be waived or modified where in the opinion of the planning commission topography and/or design considerations warrant such waiver or modification

Local Coastal Plan

In 1972, the people of California passed the Coastal Act which provided the establishment of the California Coastal Commission and required local coastal communities to develop plans for the preservation, enhancement and access to the coastal zone areas within each community. The City of Hermosa Beach completed its Coastal Land Use Plan (called the Local Coastal Plan) in 1981. Policies related to aesthetics are addressed under section VI and in the Coastal Land Use Plan Appendix G and include goals and policies "To preserve and enhance coastal overviews and key view point areas (section VI.B.2)." Applicable policies include "that the City should restrict building height to protect overview and viewshed qualities and to preserve the City's' existing low-rise profile". Appendix J to the Coastal Land Use Plan includes a map designating a "Scenic Highways Plan" (dated 1972, and as Amendment 9 to the Hermosa Beach General Plan dated 2/25/75). The Scenic Highways Plan designates Valley Drive from Gould Avenue south to about 2nd Street as a Scenic Corridor. This would include the Proposed Oil Project Site and the Proposed City Maintenance Yard Site. Appendix G to the Coastal Land Use Plan also contains a Viewshed and landscape map, Figure XXII.

4.1.3.4 City of Redondo Beach

City of Redondo Beach General Plan

The City of Redondo Beach General Plan – Land Use Element establishes goals, objectives, policies, and implementation programs to guide the manner in which new development will occur and existing uses with light manufacturing be conserved in the City of Redondo Beach.

Implementation Program - I1.18 Formulate Architecture, Site, and Landscape Design Guidelines and Standards promotes the establishment of architecture, site, and landscape design guidelines for development throughout the City. It encourages development of salient design characteristics (i.e., for the height, massing, scale, articulation, and setbacks of structures) which are necessary to ensure that new development and renovation of existing structures attains the high quality

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which is desired in the City and does not adversely impact the character of existing districts which exhibit special design qualities.

Policy 1.57.2 of the *City of Redondo Beach – Land Use Element* maintains that the onsite lighting of commercial and industrial uses be unobtrusive and constructed or located so that only the intended area is illuminated, offsite glare is minimized, and adequate safety is provided (I1.1, I1.7, I1.18).

4.1.3.5 City of Torrance

City of Torrance General Plan

City of Torrance General Plan – Community Resources Element describes Torrance as a community of high aesthetic quality. The goals, objectives, and policies in this element are aimed to focus on the enhancement of community qualities that distinguish Torrance, including open space resources, community facilities and activities, educational and cultural facilities, and historic resources. Maintaining, preserving, and enhancing these resources are a priority for the City and the General Plan. The Community Resources Element combines three elements that were included as separate elements in the previous General Plan: the Conservation, Open Space, and Parks and Recreation Elements. With respect to aesthetic qualities, the Community Resources Element establishes the following objectives and policies:

- Objective CR.18: To preserve significant stands of trees and to establish a comprehensive plan to protect and enhance the urban forest
 - Policy CR.18.1 – Preserve specimen trees whether they occur on public or private property, and promote the planting of new trees.
 - Policy CR.18.2 – Provide, maintain, and encourage appropriate street trees along all sidewalks and property frontages.
 - Policy CR.18.3 - Develop and implement a comprehensive citywide street tree program that includes sidewalk-appropriate, drought-tolerant, and native species.
- Objective CR.19: To preserve scenic vistas wherever possible
 - Policy CR.19.1 - Make the preservation of scenic vistas an integral factor in land development decisions.
 - Policy CR.19.2 - Look for opportunities to create public open space areas with scenic vistas that all can enjoy.
 - Policy CR.19.3 - Coordinate with Southern California Edison and other utilities to underground utility lines in new developments and to systematically replace overhead lines with underground facilities, with a priority placed along major roadways, key commercial areas, and within viewsheds of the beach.
- Objective CR.20: To minimize sources and adverse effects of light pollution.
 - Policy CR.20.1 - Establish regulations for private lighting that minimize or eliminate light pollution, light trespass, and glare (obtrusive light).
 - Policy CR.20.2 - Require that nonresidential uses adjacent or near residential neighborhoods provide shielding or other protections from outdoor lighting and lighted signage.

City of Torrance Municipal Code

The City of Torrance Municipal Code contains standards addressing the reduction of glare throughout its design policies related to: building surfaces; lighting in residential areas, the City's historic districts, public spaces, pedestrian areas, and recreational open space; sign policies; and screening and buffering of commercial corridors and industrial areas.

4.1.4 Significance Criteria

Visual impacts are considered significant under CEQA if one or a combination of the following apply:

- A substantial adverse effect on a designated scenic vista;
- Substantial damage to scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway;
- Substantial degradation of the existing visual character or quality of the site and its surroundings;
- Creation of a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

4.1.5 Project Impacts and Mitigation Measures

Included below are general discussions of visual impacts under CEQA (1-4, above). These impacts have been divided by major project element:

- Proposed Oil Project
- Proposed City Maintenance Yard Project and;
- The Pipeline, (includes Valve Boxes and Metering Station)

The impacts at the Proposed Oil Project Site were found to be dependent on whether or not the drill rig/s were (1) present onsite or (2) were not present onsite. Accordingly, impact discussions at the Proposed Oil Project Site have been sub-divided into these two groups.

4.1.5.1 Proposed Oil Project and Pipeline Design Features

Phase 1

Design Features and Operational Practices

During Phase 1 of the Proposed Project, there would be demolition and construction activities with various combinations of construction equipment working on the Project Site. Phase 1 demolition and construction activities, as proposed by the Applicant and assumed in this analysis, would incorporate the following operational practices related to aesthetics:

- Prior to the initiation of Project Site clearance activities, temporary 16-foot high sound attenuation walls (acoustical barrier) would be erected around the perimeter of the Project

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Site, thereby reducing the views of the onsite demolition and construction activities. The walls are designed to be moveable depending on the location of the onsite activities.

- Demolition or construction activities would occur on the Project Site between the hours of 8 AM to 6 PM Monday to Friday and 9 AM to 5PM on Saturdays consistent with the requirements of the City Municipal Code. Therefore, no nighttime lighting would be provided on the Project Site. The perimeter of the Project Site would be illuminated by the existing street lights on Valley Drive and 6th Street.
- The Proposed Project would underground the existing overhead power lines and communication lines on poles that run through the existing trees along Valley Drive. The lines would be located underground adjacent to the Project Site at a location determined by the utility companies and the City.
- The electrical service for the Proposed Project would require the installation of underground conduit in Valley Drive from 8th Street to the northeast corner of the Project Site. The location of the underground conduit would be determined by Southern California Edison (SCE) and the City. The areas disturbed would be returned to their existing condition to the satisfaction of the City.
- Reclaimed water for use in irrigation of the landscape areas and drilling would be extended from an existing reclaimed waterline in the Veterans Parkway via a six-inch lateral water line brought across Valley Drive to a location south of the project entrance driveway to be constructed in Phase 3. The areas disturbed would be returned to their existing condition to the satisfaction of the City.
- Three of the four existing mature trees along the Project frontage on Valley Drive would be retained to help screen construction activities. The three remaining trees would be trimmed to keep branches from hanging over the onsite equipment and avoid trespass activities.
- After the completion of clearance, construction of retaining walls, and rough grading, the Project Site would be enclosed with a six-foot temporary perimeter chain link fence covered in green fabric material. The fence would include secured gates for the entrance off Valley Drive and the exit to 6th Street. The appropriate signage would be provided consistent with the requirements of the City.
- Phase 1 would include the construction of a well cellar for the first three oil wells and the first water injection well. The cement well cellar would be eight feet wide and 12 feet deep. The below ground well cellar would have stairs at one end that lead down into the cellar and the top of the well cellar would be covered by metal grating.
- The surface of the Project Site would be covered with crushed aggregate base material to serve as a dust inhibitor and driving surface.
- Temporary landscaping, including three large trees along 6th Street, would be provided along the eastern and southern perimeter of the Project Site within the 10-foot landscape area. A rolled asphalt curb would line the landscape area on 6th Street. The plant materials and irrigation would be consistent with the requirements of the City.
- The Proposed Project would include the construction of improvements to the intersection of 6th Street/Valley Drive to provide the necessary turning radius for the project-related trucks turning southbound on Valley Drive from 6th Street. As a part of the intersection improvements, the overhead power lines and utility poles on the corner of 6th Street and Valley Drive would be located underground at a location determined by the utility

companies and the City. The landscape area would be redesigned to allow for the improvements.

- At the completion of the improvements in Phase 1, a 32-foot sound attenuation wall would be erected inside the chain link construction fence.

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The demolition and construction activities for Phase 1 of the Proposed Project would be required to comply with the following conditions of approval:

- Pursuant to Assembly Bill 3180 the operation shall be monitored for all conditions of the approval of which the City has responsibility, which includes (but is not limited to) noise monitoring and inspection of the Project Site for proper maintenance (CUP Section 1. General, Condition 6).
- The Project Site shall be enclosed by a solid masonry or concrete wall with solid gates during all operations, protecting both against public entry, observation and attraction. A chain link fence to provide security is acceptable only through the exploratory phase (CUP Section 3. Public Services, Condition 1).
- The entire drilling operation shall be equipped with acoustical treatment for noise to be within the standards set forth in the City's Oil Ordinance.
- A sound attenuation wall of 30-feet in height shall be provided along the perimeter of Project Site as shown on plans during oil drilling phases (CUP Section 8. Noise/Vibration, Condition 1).
- A Detailed Landscape Plan for Phase I (exploratory and testing) and Phase II, indicating the type, size and quantity of plant materials shall be submitted to the Planning Director for review and approval, and it shall be consistent with the conceptual landscape plan reviewed by the Planning Commission, and shall comply with Section 21A-2.9 of the Oil Code (CUP Section 9. Landscaping, Condition 1).
- During Phase I, test facility, landscaping consisting of 24" box, or larger size trees may be installed without permanent planting (CUP Section 9. Landscaping, Condition 2).
- Minimum 24" boxed trees for Phase I and II shall be adequate in size to create a buffer effect to obscure visibility of oil production activity. Permanent trees planted around the perimeter of the Project Site for Phase II shall be a minimum sixteen (16) feet high at planting. (CUP Section 9. Landscaping, Condition 3).
- Trees along the lot perimeter shall be provided to create a dense landscape buffer to the satisfaction and field review of the Planning Director (CUP Section 9. Landscaping, Condition 4).
- Landscaping shall be maintained in a neat and clean condition (CUP Section 9. Landscaping, Condition 6).
- A complete automatic sprinkler system shall be provided prior to commencement of Phase II (CUP Section 9. Landscaping, Condition 7).
- All outdoor lighting shall be shielded and directed inward of the Project Site (CUP Section 10. Aesthetics, Condition 4).
- Lighting shall be limited solely to the amount and intensities necessary for safety and security purposes (CUP Section 10. Aesthetics, Condition 5).

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- Certain activities which might involve unshielded lighting (i.e., Project Site preparation and restoration) activities shall be limited to daylight hours and thus not require nighttime lighting (CUP Section 10. Aesthetics, Condition 6).
- A split-face block wall maintained graffiti free of a minimum of 12 feet in height shall be provided; wall materials shall be reviewed and approved by Planning Director. During test drilling minimum 6' high fencing shall be provided (CUP Section 10. Aesthetics, Condition 7).
- Onsite signs shall be limited to those needed for public health and safety (CUP Section 10. Aesthetics, Condition 12).
- Graded surfaces shall be paved or landscaped per approved plan (CUP Section 12. Grading/Storm Water/Site Runoff, Condition 3).

Phase 2

Design Features and Operational Practices

During Phase 2 of the Proposed Project, four wells would be drilled utilizing an electric drill rig and temporary production equipment would be installed and used to process the extracted oil, gas, and water. The processed oil would be removed from the Project Site by truck and delivered to an offsite location for sale. Phase 2 of the Proposed Project would incorporate the following design features and operational practices related to aesthetics during drilling activities and temporary production:

- For the entire duration of Phase 2, the 32-foot sound attenuation wall along the perimeter of the Project Site and the temporary landscaping along 6th Street and Valley Drive installed in Phase 1, along with the three existing mature trees, would be in place.
- The drilling of the wells would be conducted by an electric automated drill rig with an approximately 87-foot high rig mast. An acoustical shroud would enclose three sides of the drill rig mast. The shroud would be a neutral color to blend in with the surroundings. The color would be reviewed and approved by the Planning Commission.
- After the drilling of the wells for Phase 2, the drill rig would immediately be removed from the Project Site.
- The temporary construction trailer, temporary production equipment, and storage tanks brought to the Project Site would not be visible above the surrounding 32-foot noise attenuation wall.
- The Proposed Project would provide temporary nighttime lighting to address Project Site security and worker safety consistent with the requirements of the City. This would include the following:
 - To address Project Site security, light fixtures would be placed at the entrance and exit to the Project Site to provide temporary lighting. The light fixtures would be pole-mounted at a height of approximately 10 feet. The fixtures would have low energy lights that would be shielded/hooded and downcast so that it would not create light spill or glare beyond the property line.
 - To address Project Site security, lighting would be provided for the temporary construction trailer. The light would consist of two approximately 150-watt light fixtures at each end of the trailer. The fixtures would be shielded/hooded and downcast so that it would not create light spill or glare. In addition, the lights on

the temporary construction trailer would be located behind the 32-foot sound attenuation wall, which would block any light spill or glare from leaving the Project Site.

- To address worker safety, lighting would be provided for the drill rig. The drill rig would have pole-mounted lights on the rig platform (approximately 15 feet above the ground surface) and on the drill rig mast (starting at a height of approximately 19 feet above the ground surface and up to the top of the mast at a height of approximately 87 feet). The drill rig mast would be enclosed within an acoustical cover on three sides. Within the acoustical cover, there would be LED lights that run along one side of the mast structure at intervals of approximately 4 feet and on the other side there would be two lights, one located on the top of the mast and the other where the drill rig “function” would be occurring. These LED lights, which face towards the inside of the acoustical cover, are for the purpose of creating an ambient glow within the acoustical cover to provide visibility for the safety of the workers. Since the lights would be facing inward within the acoustical cover, the light bulbs would not be visible and no light spill or glare would be created. In addition, the lights on the rig platform at the base of the drill rig mast would be shielded/hooded and downcast. The lights on the rig platform and the lower portion of the drill rig mast would be located behind the 32-foot sound attenuation wall, which would block any light spills or glare from leaving the Project Site.
- To address worker safety, lighting would be provided for the drill rig equipment, the temporary production equipment, and the shipping tanks. The drill rig equipment would have pole-mounted lights along a walk platform approximately 19 feet above the ground surface. These lights would be facing downward towards the drill rig equipment. The lighting for the temporary production equipment and shipping tanks would consist of an approximately 150-watt hooded and downward cast flood lights hung where needed to provide visibility for the safety of workers. The lights for the drill rig equipment, the temporary production equipment, and the shipping tanks would be located behind the 32-foot sound attenuation wall, which would block any light spills or glare from leaving the Project Site.

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The drilling activities and operations in Phase 2 of the Proposed Project would comply with the following conditions of approval:

- Pursuant to Assembly Bill 3180 the operation shall be monitored for all conditions of the approval of which the City has responsibility which includes (but not limited to) noise monitoring and inspection of the Project Site for proper maintenance (CUP Section 1. General, Condition 6).
- Except for the drill rig and drawworks, no equipment or appurtenant structures shall exceed 16 feet in height from grade as defined by the Oil Code (CUP Section 2. Land Use Development, Condition 5).
- The entire drilling operation shall be equipped with acoustical treatment for noise to be within the standards set forth in the City’s Oil Ordinance.

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- A sound attenuation wall of 30-feet in height shall be provided along the perimeter of Project Site as shown on plans during oil drilling phases (CUP Section 8. Noise/Vibration, Condition 1).
- Landscaping shall be maintained in a neat and clean condition (CUP Section 9. Landscaping, Condition 6).
- The use of architectural lighting beyond safety and security requirements shall be prohibited (CUP Section 10. Aesthetics, Condition 2).
- All outdoor lighting shall be shielded and directed inward of the Project Site (CUP Section 10. Aesthetics, Condition 4).
- Lighting shall be limited solely to the amount and intensities necessary for safety and security purposes (CUP Section 10. Aesthetics, Condition 5).
- Onsite signs shall be limited to those needed for public health and safety (CUP Section 10. Aesthetics, Condition 12).
- All derricks hereafter erected for drilling, re-drilling or remedial operations or for use in production operations shall be removed within 45 days after completion of the work unless otherwise ordered by the Division of Oil and Gas of the state (CUP Section 10. Aesthetics, Condition 13).

Phase 3

Design Features and Operational Practices

During Phase 3 of the Proposed Project, there would be construction activities resulting in various vehicles traveling to and from the Project Site, including trucks used in the export of soil during the implementation of the remedial action plan for the Proposed Project. In addition, there would be construction activities associated with the installation of offsite pipelines resulting in short-term road closures in the Cities of Hermosa Beach, Redondo Beach, and Torrance. Phase 3 construction activities would incorporate the following design features and operational practices related to aesthetics:

- The 32-foot sound attenuation wall and the six-foot temporary perimeter chain link fence would be removed and 16-foot sound attenuation walls (acoustical barrier) would be used on the Project Site during soil remediation, grading, and construction activities. The walls are designed to be movable depending on the location of the onsite activity.
- Grading and construction activities would occur on the Project Site between the hours of 8 AM to 6 PM Monday to Friday and 9 AM to 5PM on Saturdays consistent with the requirements of the City Municipal Code. Therefore, no nighttime lighting would be provided on the Project Site. The perimeter of the Project Site would be illuminated by the existing street lights on Valley Drive and 6th Street.
- The temporary oil, water, and gas production equipment installed on the Project Site during Phase 2 would be removed from the Project Site. In addition, the three remaining mature trees along Valley Drive and the temporary landscaping installed in Phase 2 would be removed from the Project Site.
- The Remedial Action Plan (RAP) would be implemented to remove the contaminated soil within the former landfill area on the northeastern portion of the Project Site. It is anticipated that approximately 9,000 cubic yards of contaminated soil would be removed from the Project Site and hauled to a Class 1 landfill. In addition, total petroleum

hydrocarbon (TPH) contaminated soil would be treated onsite via vapor extraction. The vapor extraction would be conducted by two to four extraction wells on the northern portion of the Project Site. The only visible indication that the wells are present would be a grade level metal cover on the ground.

- Following the completion of the RAP, the construction of the remaining retaining walls and the final grading of the Project Site would occur. The final grading would not require the import and export of fill material.
- Phase 3 would include the completion of the first well cellar and the construction of a second well cellar for the remaining oil wells and water injection wells. The cement well cellars would be eight feet wide and 12 feet deep. The below ground well cellar would have stairs at both ends that lead down into the cellar and the top of the well cellar would be covered by metal grating.
- A 16-foot split-faced block wall would be installed around the perimeter of Project Site. The wall would be set back 10 feet from the Valley Drive and 6th Street property lines to allow for a permanent landscape area. The wall would have a gated entrance off of Valley Drive and a gated exit to 6th Street. The gates would be metal and motor operated. The wall and gate colors would be reviewed and approved by the Planning Director. The appropriate signage would be provided consistent with the requirements of the City.
- After the completion of the RAP, final grading, and construction of the well cellars and perimeter wall, the 16-foot temporary sound attenuation wall would be removed from the Project Site.
- A small office building consisting of approximately 650 square feet would be constructed on the northeast portion of the Project Site. The building would be a neutral color to blend with the surroundings.
- The permanent oil, gas, and water production equipment would be installed on the eastern portion of the Project Site. This would include storage tanks with a maximum height of 16 feet. The area on the Project Site with the tanks would have a finished grade of 6 to 7 feet below the ground surface and be surrounded by a 6 to 7-foot retaining wall in the interior of the Project Site and the 16-foot split-face block wall around the perimeter of the Project Site. The storage tanks and any piping for the vapor recovery system would be below the height of the 16-foot perimeter wall.
- The ground surface of the Project Site would be paved with concrete or asphaltic concrete. In addition, the construction of final street improvements along the frontage of the Project Site along 6th Street and Valley Drive would occur. This would include the installation of new curbs, gutters, and sidewalks.
- The permanent landscaping, including nine large trees, would be provided within the 10-foot landscape area along the eastern and southern perimeter of the Project Site. In addition, landscaping consisting of vines would be provided on the visible portion of the western-facing perimeter wall. The plant materials and irrigation would be consistent with the requirements of the City. To the extent feasible, the landscaping from Phase 2 would be reused.
- A 32-foot sound attenuation wall would be installed behind the 16-foot split-faced block wall to encompass the Project Site.
- During Phase 3, offsite gas and oil pipelines would be constructed to transport product for sale. The pipelines would be constructed underground within road right-of-ways

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and/or within the SCE utility corridor within the Cities of Hermosa Beach, Redondo Beach, and Torrance. Temporary portable acoustical barriers would be positioned on either side of the pavers and trenchers, blocking the line-of-sight of the construction area from the nearest sensitive locations. The barriers would be moved alongside the equipment as it progresses along the pipeline route.

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The construction activities that would occur in Phase 3 of the Proposed Project would comply with the following conditions of approval:

- Pursuant to Assembly Bill 3180 the operation shall be monitored for all conditions of the approval of which the City has responsibility which includes (but not limited to) noise monitoring and inspection of the Project Site for proper maintenance (CUP Section 1. General, Condition 6).
- The maximum size for any storage tank of any type shall be forty feet in diameter and sixteen feet in height, appurtenances not included (CUP Section 2. Land Use Development, Condition 1).
- The entire drilling operation shall be equipped with acoustical treatment for noise to be within the standards set forth in the City's Oil Ordinance.
 - A sound attenuation wall of 30-feet in height shall be provided along the perimeter of the Project Site as shown on plans during oil drilling phases (CUP Section 8. Noise/Vibration, Condition 1).
- A Detailed Landscape Plan for Phase I (exploratory and testing) and Phase II, indicating the type, size and quantity of plant materials shall be submitted to the Planning Director for review and approval, and it shall be consistent with the conceptual landscape plan reviewed by the Planning Commission, and shall comply with Section 21A-2.9 of the Oil Code (CUP Section 9. Landscaping, Condition 1).
- Minimum 24" boxed trees for Phase I and II shall be adequate in size to create a buffer effect to obscure visibility of oil production activity. Permanent trees planted around the perimeter of the Project Site for Phase II shall be a minimum sixteen (16) feet high at planting (CUP Section 9. Landscaping, Condition 3).
- Trees along the lot perimeter shall be provided to create a dense landscape buffer to the satisfaction and field review of the Planning Director (CUP Section 9. Landscaping, Condition 4).
- The aesthetic impact of the exposed masonry walls on the west and northern sides shall be softened with the planting of climbing vines to the satisfaction and field review of the Planning Director (CUP Section 9. Landscaping, Condition 5).
- Landscaping shall be maintained in a neat and clean condition (CUP Section 9. Landscaping, Condition 6).
- The tanks, acoustical wrap and wall, and production facility shall be painted a neutral color to blend in with the surroundings; color shall be reviewed and approved by the Planning Commission (CUP Section 10. Aesthetics, Condition 1).
- The use of architectural lighting beyond safety and security requirements shall be prohibited (CUP Section 10. Aesthetics, Condition 2).

- The location for drilling equipment and the storage facilities shall be depressed in combination with walls so that the visual impact is minimized (CUP Section 10. Aesthetics, Condition 3).
- All outdoor lighting shall be shielded and directed inward of the Project Site (CUP Section 10. Aesthetics, Condition 4).
- Lighting shall be limited solely to the amount and intensities necessary for safety and security purposes (CUP Section 10. Aesthetics, Condition 5).
- Certain activities which might involve unshielded lighting (i.e., Project Site preparation and restoration) activities shall be limited to daylight hours and thus not require nighttime lighting (CUP Section 10. Aesthetics, Condition 6).
- A spilt-face block wall maintained graffiti free of a minimum of 12 feet in height shall be provided; wall materials shall be reviewed and approved by Planning Director. During test drilling minimum 6' high fencing shall be provided (CUP Section 10. Aesthetics, Condition 7).
- The height of the Project Site's perimeter wall shall be increased to at least 16 feet if beam pumping units taller than 12 feet are installed, or if perimeter trees, when planted for Phase II, are not a minimum of sixteen (16) feet in height when installed (CUP Section 10. Aesthetics, Condition 8).
- Tanks shall be submerged 6 to 8 feet or more below grade and will be adjacent to the 12-foot high privacy wall (CUP Section 10. Aesthetics, Condition 9).
- All production equipment and structures shall be painted to blend with the surrounding environment with review and approval by the Planning Director (CUP Section 10. Aesthetics, Condition 11).
- Onsite signs shall be limited to those needed for public health and safety (CUP Section 10. Aesthetics, Condition 12).
- Graded surfaces shall be paved or landscaped per approved plan (CUP Section 12. Grading/Storm Water/Site Runoff, Condition 3).
- In order to reduce visual impacts and possible safety hazards [during pipeline construction], storage of pipes and other materials, as well as construction equipment, shall not be permitted on any street during non-construction hours (CUP Section 13. Pipeline Construction 11).

Phase 4

Design Features and Operational Practices

During Phase 4 of the Proposed Project, remaining wells would be drilled utilizing an electric drill rig and production equipment would be installed and used to process the extracted oil, gas, and water. Phase 4 of the Proposed Project has been designed to incorporate the following design features and operational practices to address aesthetics:

- During the drilling activities in Phase 4, the 32-foot sound attenuation wall installed in Phase 3 would be along the perimeter of the Project Site. In addition, during all of Phase 4, the 16-foot block wall and landscaping installed in Phase 3 would remain in place.
- The drilling of the wells would be conducted by an electric automated drill rig with an approximately 87-foot high rig mast. An acoustical shroud would enclose three sides of

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the drill rig mast. The shroud would be a neutral color to blend in with the surroundings. The color would be reviewed and approved by the Planning Commission.

- After the drilling of the wells for Phase 4, the drill rig would immediately be removed from the Project Site.
- The Proposed Project would provide nighttime lighting to address Project Site security and worker safety consistent with the requirements of the City. This would include the following:
 - To address Project Site security, light fixtures would be placed at the Project Site entrance and exit. The lights would consist of an approximately 150-watt light fixture adjacent to the gate that would be mounted on the perimeter wall at a height of approximately 15 feet. The light fixtures would be shielded/hooded and downcast so that they would not create light spill or glare beyond the property line.
 - To address Project Site security, lighting would be provided for the small office building. The light would consist of an approximately 150-watt light fixture wall-mounted at a height of approximately 10 feet at the building entrance. The fixture would be shielded/hooded and downcast so that it would not create light spill or glare. In addition, the light on the office building would be located behind the 16-foot split-faced block wall, which would block any light spill or glare from leaving the Project Site.
 - To address worker safety, lighting would be provided for the drill rig and drill rig platform as discussed above for Phase 2. The lights on the rig platform and the lower portion of the drill rig mast would be located behind the 32-foot sound attenuation wall, which would block any light spills or glare from leaving the Project Site.
 - To address worker safety, lighting would be provided for along the interior of the 16-foot perimeter split-faced block wall and incorporated into the pipe rack and equipment design. The lighting would be shielded/hooded and downcast so that it would not create light spill or glare. In addition, this lighting would be located behind the 16-foot split-faced block wall, which would block any light spill or glare from leaving the Project Site.
 - The maintenance activities on the Project Site that would require the use of a workover rig would occur between the hours of 8:00 a.m. and 6:00 p.m. Therefore, no nighttime lighting would be required.

1993 Conditional Use Permit Conditions of Approval

The drilling and ongoing operations that would occur in Phase 4 of the Proposed Project would comply with the following conditions of approval:

- Pursuant to Assembly Bill 3180 the operation shall be monitored for all conditions of the approval of which the City has responsibility, which includes (but is not limited to) noise monitoring and inspection of the Project Site for proper maintenance (CUP Section 1. General, Condition 6).
- Except for the drill rig and drawworks [and the workover rigs], no equipment or appurtenant structures shall exceed 16 feet in height from grade as defined by the Oil Code (CUP Section 2. Land Use Development, Condition 5).

- The Project Site shall be enclosed by a solid masonry or concrete wall with solid gates during all operations, protecting both against public entry, observation and attraction. A chain link fence to provide security is acceptable only through the exploratory phase (CUP Section 3. Public Services, Condition 1).
- The entire drilling operation shall be equipped with acoustical treatment for noise to be within the standards set forth in the City's Oil Ordinance.
 - A sound attenuation wall of 30-feet in height shall be provided along the perimeter of Project Site as shown on plans during oil drilling phases (CUP Section 8. Noise/Vibration, Condition 1).
- Landscaping shall be maintained in a neat and clean condition (CUP Section 9. Landscaping, Condition 6).
- The tanks, acoustical wrap and wall, and production facility shall be painted a neutral color to blend in with the surroundings; color shall be reviewed and approved by the Planning Commission (CUP Section 10. Aesthetics, Condition 1).
- The use of architectural lighting beyond safety and security requirements shall be prohibited (CUP Section 10. Aesthetics, Condition 2).
- All outdoor lighting shall be shielded and directed inward of the Project Site (CUP Section 10. Aesthetics, Condition 4).
- Lighting shall be limited solely to the amount and intensities necessary for safety and security purposes (CUP Section 10. Aesthetics, Condition 5).
- If the drill derrick remains idle for more than one year, review and approval by the City Planning Commission or City Council shall be required, or the derrick with review and approval by the Planning Director (CUP Section 10. Aesthetics, Condition 10).
- Onsite signs shall be limited to those needed for public health and safety (CUP Section 10. Aesthetics, Condition 12).
- All derricks hereafter erected for drilling, re-drilling or remedial operations or for use in production operations shall be removed within 45 days after completion of the work unless otherwise ordered by the Division of Oil and Gas of the state (CUP Section 10. Aesthetics, Condition 13).
- The operator shall diligently and continuously pursue drilling operations until all 30 oil wells and all five (5) water disposal wells are completed or abandoned to the satisfaction of the Division of Oil and Gas of the states and upon completion or abandonment shall remove all drilling equipment from the drill site within 45 days following ordered by the Division of Oil and Gas (CUP Section 10. Aesthetics, Condition 14).

4.1.5.2 Dimensions of Major Visible City Maintenance Yard Project Components

Proposed City Maintenance Yard Project Temporary Facility

- New Fleet Maintenance Building:
 - Height: 17 feet
 - Length:
 - § North-South: 30 feet
 - § East-West: 75 feet
- Main Building:
 - Height: 17 feet

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- Length:
 - § North-South: 150 feet
 - § East-West: 50 feet
- Perimeter Block Wall:
 - Height: 8 feet

Proposed City Maintenance Yard Project Parking Option (See also, Appendix A)

- Main Building
 - Height: 15-20 feet
 - Length:
 - § North-South:
 - East end: 50 feet
 - West end: 60 feet
 - § East-West:
 - North End: 230 feet
 - South End: 230 feet
- Flex Building
 - Height: 20'
 - Length: 60 feet by 60 feet
- Perimeter Block Wall Height: Varies, 6 feet to 8 feet

Proposed City Maintenance Yard Project No Added Parking Option (See Appendix A)

- Main Building
 - Height: 20 feet
 - Length:
 - § North-South:
 - East end: 50 feet
 - West end: 144'
 - § East-West:
 - North End: 60'
 - South End: 210'
- Perimeter Block Wall Height: Varies, 6 feet to 10 feet

4.1.5.3 Dimensions of Major Visible Proposed Oil Project Components

The dimensions of the primary components of the Proposed Oil Project are listed below and were used in the analysis.

- Electric Drill Rig:
 - Height: 87 feet
 - Mass (with Acoustical Cover)
 - § Top 7.5-foot by 8-foot
 - § Mid-rig 11-foot by 12-foot
 - § Base 14-foot by 15-foot
- Workover Rig:

- Height: 110 feet
- Mass (Extents of open truss): 3-foot by 6-foot
- Phase 1 Sound Attenuation Wall:
 - Height: 32 feet
 - Length:
 - § North: 263 feet
 - § East: 232 feet
 - § South: 197 feet
 - § West façade: 222 feet
- Phase 3 Sound Attenuation Wall:
 - Height: 32 feet
 - Mass: similar to Phase 1, except the northernmost 50 linear feet of the east edge is set back approximately 65 feet.
- Phase 4 Perimeter Block Wall Height:
 - Height: 16 feet

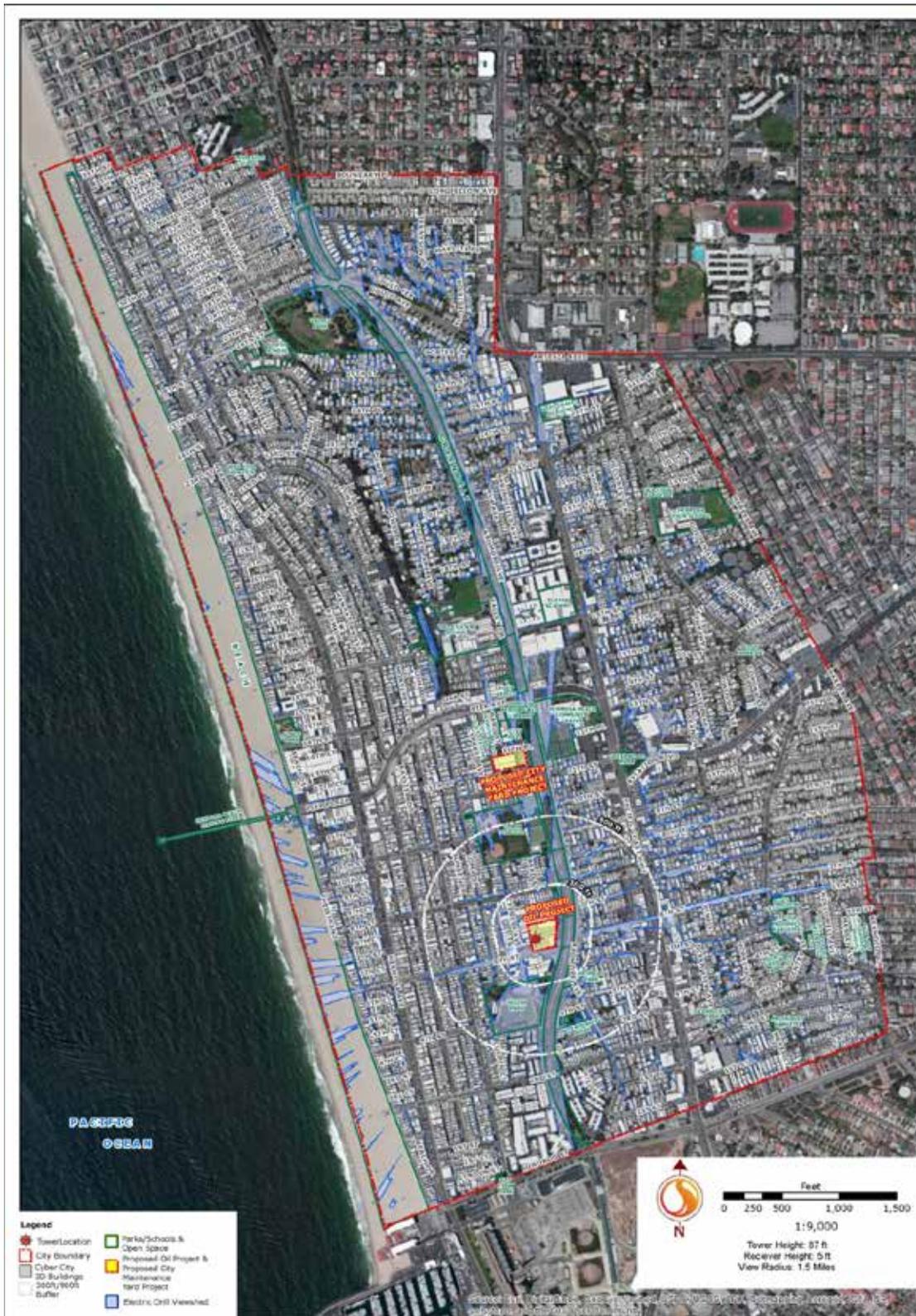
4.1.5.4 Proposed Oil Project Viewshed Mapping

Figures 4.1-1 and 4.1-2 depict the potential for visibility of the 87-foot electric drill rig and 110-foot workover rig (respectively) from public viewing areas. The general intent of the viewshed analysis is to approximate the extent of locations from which the drill rigs may be visible. As mentioned in the methodology portion of this section, this viewshed map was generated using a digital terrain model and three-dimensional representations of the buildings only, therefore it has inherent limitations which are important to recognize. First, it does not take into account the potential for vegetation to screen views. The screening potential of vegetation in the Greenbelt and some parks in particular is significant and would reduce the visibility of the rig. Second, these maps also do not factor in statements of significance and/or assign a level of impact. These criteria are driven by a number of factors including viewing distance, viewer position and presence of elements of competing interest. These discussions can be found below in the Key Observation Points section and individual impact statements. Also, the map does not indicate ‘how much’ of the rig would be visible, so areas that may see a small portion of the rigs are not distinguished from areas that may see a large portion. .

Based on the analysis conducted during the EIR process, the viewsheds from the foreground and middleground distances have a higher probably of significant visual impacts versus the background distance zone. Many of the background distance zone viewsheds would not actually have visibility because of vegetative screening. The rigs also have a lower potential for dominance in this distance zone due to a higher potential for dominance of other foreground and middleground elements. The ability of visual effects such as distance and patterning of the built environment also have greater potential to moderate impact significance in the background distance zone. Discussions of Key Observation Points are separated into distance zones below and include further evaluation of potential impacts.

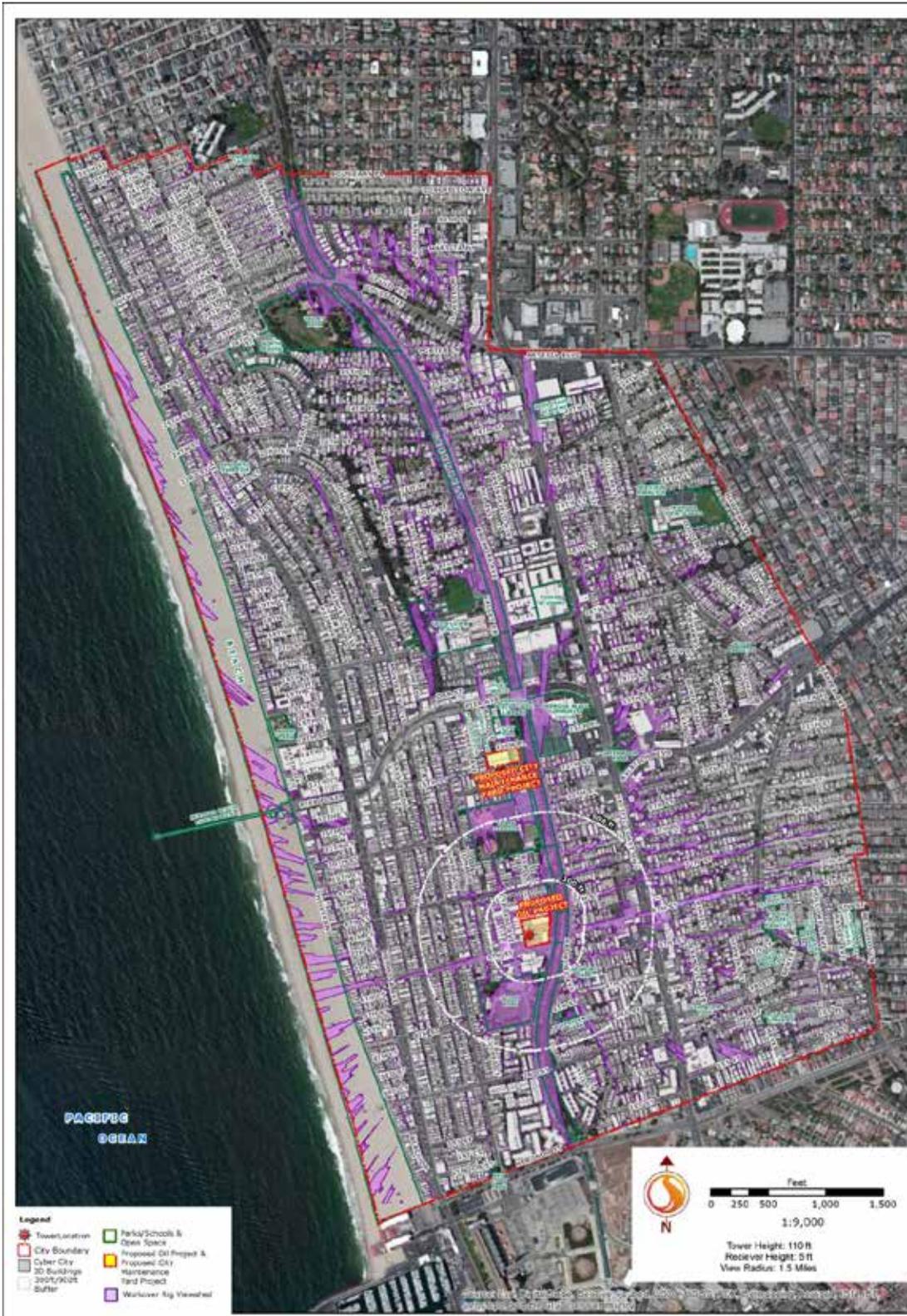
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Figure 4.1-1 Viewshed Analysis- Electric Drill Rig (Areas where the Drill Rig Can Be Seen)



Source: Stantec, 2014

Figure 4.1-2 Viewshed Analysis- Workover Rig (Areas where the Rig Can Be Seen)



Source: Stantec, 2014

4.1.5.5 Key Observation Points View Simulations

Discussion of the selection of Key Observation Points is included in Section 4.1.1, Methodology. KOP views are presented in this document at the locations in Figure 4.1-3. One before and after figure was produced for each KOP location for the Proposed City Maintenance Yard Project. Six before and after figures were produced for each KOP location for the Proposed Oil Project to adequately depict the varying built conditions that the Proposed Oil Project Site would undergo over its 30+ year lifespan. Each figure is labeled to display which phase of the Project it represents. Phase Four has three visual conditions.

Based on the distance viewed, potential for common visual impacts of the Proposed Oil Project became apparent, therefore the KOPs are discussed by distance zone. The Proposed City Maintenance Yard Project Site has very limited potential for visibility outside the foreground distance zone therefore impacts were evaluated from this distance zone only.

- Proposed City Maintenance Yard Project (KOPs 01-05);
- Background: (greater than 900'): KOPs (6, 7, 8, 9 and 12);
- Middleground: (300'-900'): KOPs (10, 11, 13, 16, and 17);
- Foreground: (0-300'): KOPs (14, 15, 18, 19, and 20);

The following sections summarize the existing visual setting and impact potential within each zone above. See Section 4.1.2.1 Local Setting for additional descriptions of existing visual environment of the Project. See individual impact discussions AE.1 - AE.5 for detailed evaluation of Project impacts.

Numerous photo simulations were developed for the Proposed Project, including many that provide views that do not show any Project components in order to provide views from each KOP for each Phase and sub-Phase of the Proposed Project. All views are included in Appendix O. Only the most important view simulations are shown in this section.

Proposed City Maintenance Yard Project (KOPs 1 through 5)

Existing Visual Setting

Temporary Location: The temporary City Maintenance Yard Project Site is immediately north of the permanent facility site. The site is primarily paved with asphalt and concrete. Seven mature trees are located within the area that is anticipated to be affected. These trees range in height from 15-50 feet. They contribute to the character of the existing site through their capacity to screen and soften views of continuous paved surfaces. By nature of proximity, other viewshed components are similar to the permanent facility site discussed below.

Permanent Location Options: Viewshed components include a variety of architectural masses of public/commercial and residential buildings with diverse mass/color and character. The Hermosa Valley Greenbelt/Trail is heavily planted with trees and shrubs that create a dense visual buffer from the Hermosa Beach Community Center tennis courts to the east. The large mature street trees along Valley Drive helps reduce the scale of the existing structures, cast long shadows and add vertical dominance with the utility poles. Except along Valley Drive,

surrounding landscaping and trees in the public streets and parking lots are limited but do have capacity to screen and soften some views. In the foreground, several additional elements that contribute to the existing visual character and views include overhead utility pole and lines, street signage, satellite dishes, light standards, and vehicles traveling and parked.

Impacts: Proposed City Maintenance Yard

Temporary Location

The temporary yard would have visibility from the adjacent roadways (Valley Drive, Pier Avenue, Bard Street and 11th Place), The Greenbelt the Civic Center and nearby residences. Views from the east (Greenbelt, Civic Center and Valley Drive) would be altered by the removal of 7 mature trees and the introduction of walls, gates, trash bins and staging areas adjacent to the Civic Center. 11th Place would terminate into the Main Gate East of the facility. Views from the north (Pier Avenue and Bard Street) would be altered by the removal of 4 trees and the removal/replacement of the building at the New Fleet Maintenance Building location. Bard Street would terminate into the Main Gate North of the facility. Construction is expected to last 9 months and the facility would be in operation until the completion of the permanent facility in Phase 3 (approximately 2.5 years). Following completion of the Permanent Yard, it is assumed that the site would be restored to its previous configuration and function, including the removal of walls, gates, buildings and the restoration of parking and traffic flow on Bard Street and 11th Place. Demolition and reconstruction of the site to its previous configuration is anticipated last an additional 3 months. The overall duration of impact at the temporary location is estimated at 3.5 years. The temporary location was not photo simulated.

Permanent Location Options

The permanent yard options would have visibility from the adjacent roadways (Valley Drive, Pier Avenue, Bard Street and 11th Place), The Greenbelt, the Civic Center and nearby residences. Views from the east are largely obscured by existing Greenbelt vegetation, though some select filtered views would be available (See KOPs 1 and 2). The scale and overall mass of the building at the site would appear to increase since the overall height of the building on the site would increase and the perimeter wall/deck would be closer to the public rights of way than the walls of the existing structure (See KOPs 4, 5 and 6). Unobstructed views of the site from immediately adjacent to the Project Site would experience significant visual changes. The public spaces are considered to have high sensitivity due to the civic nature of the land use as the City Hall. Demolition and construction of the permanent yard is expected to last 20 months for the Parking Option and 17 months for the No Added Parking Option.

Proposed Oil Project – Background (KOPs 6, 7, 8, 9 and 12)

Not all KOP are shown in this section. See Appendix O for a complete listing.

Existing Visual Setting

The viewshed components in the background viewing distance group primarily include residential development to the east, north and south. Distant views to the Project Site are typically limited by the presence of buildings. Where these views exist, they are typically along

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roadway corridors or from locations that lack significant built form, such as the Beach, the Pier, or large parking lots.

KOP 6 represents views from the Pier, which are unique in that it presents expansive city views. The pier, ocean, beach and beachfront property facades are the primary visual elements that compose these views. The pattern and character of the City's built environment are uniform and consistent. The skyline is defined primarily by taller vegetation such as palm trees and other large mature trees, as well as structures situated along the east boundary of the City. To the southeast, the transmission towers leading to the AES Facility break the skyline and become distant focal elements of the view.

KOP 7 is representative of the views along the beachfront looking inland toward the City and Proposed Oil Project Site. In these views the sand and beachfront building facades are the primary visual elements that compose the view. In these viewsheds, the skyline is defined by the built forms in the foreground of the views.

KOPs 8, 9 (see Appendix O) and 12 are representative of views from City streets in this distance zone. Built elements, signage, cars parked and in motion, and the roadway in the immediate foreground are the primary visual elements that compose these views. In these viewsheds, the skyline is defined by the buildings in close proximity to the viewer as well as whatever overhead utilities, powerpoles, street lights, and/or taller vegetation project above these buildings.

Impacts: Background Distance Zone

Rigs Present: the 32-foot sound wall has a very low potential to be visible from the distance zone and would not be dominant in these views. The rigs have a moderate potential to be visible, but have a low potential to become dominant due to viewing distance, and a high potential for partial screening by vegetation, structures, and other vertical elements in close proximity to the viewer (signs, power poles, etc). Where visible, the rigs become elements of the background in most views, but may still be out of character and/or become distant focal elements at select locations.

Rigs Not Present: Impacts have a low potential to be visible. See Impacts AE.3 and AE.5 for discussion of impacts and mitigation measures at the Proposed Oil Project Site when rigs are not present.

Proposed Oil Project – Middleground (10, 11, 13, 16, and 17)

Not all KOP are shown in this section. See Appendix O for a complete listing.

Existing Visual Setting

These KOP views are representative of views from City streets and parks in this distance zone (300'-900' from the Project Site). The viewshed components in the middleground distance zone include primarily residential and light commercial buildings, Greenbelt vegetation, and parks/open space features. Public views to the Project Site in this distance zone are limited in many locations by buildings and Greenbelt vegetation. Where these views do exist, they are typically along roadway corridors or from locations that have large areas free of buildings or significant vegetation, such as South Park, Clark Stadium, or parking areas.

Similar to KOPs 8, 9 through 12 of the background distance zone, the primary visual elements that compose these views are buildings, signage, cars parked and in motion, and the roadway in the immediate foreground. In park/open space areas, vegetation plays a more dominant role in the viewsheds. Also similarly to KOPs 8, 9, and 12, the skyline is typically defined by the buildings in close proximity to the viewer as well as whatever overhead utilities, powerpoles, streetlights and/or taller vegetation project above these buildings.

Impacts: Middleground Distance Zone

Rigs Present: the 32-foot wall has a moderate potential to be visible but is less likely to be dominant than in the foreground distance zone because of the visual presence of additional viewshed elements such as other buildings with mass, street and ballfield lighting poles, utility poles and lines, and significant street trees. The rigs have a higher potential to be more visible and become dominant than the background distance zone views due to decreased viewing distance, and lower potential for partial screening by vegetation and structures. As isolated elements of significant vertical scale, the rigs (where visible) in this distance zone become dominant focal elements of the viewshed. They are uncharacteristic in form, line, scale, and material with the surrounding viewshed. Measures can be taken to select materials that have a lower potential for contrast against sky conditions, however material choice cannot account for the complexities of sunlight and shadow, as well as variations in atmospheric conditions (cloud cover, sky color, etc) throughout the days and seasons.

Rigs Not Present: Impacts have a moderate potential to be visible. Impacts during construction would be temporary and screened by the movable 16-foot sound wall (Phase 1) and/or permanent 16-foot sound wall (Phase 3).

Proposed Oil Project – Foreground (14, 15, 18, 19, 20)

Not all KOPs are shown in this section. See Appendix O for a complete listing.

Existing Visual Setting

These KOP views are representative of views from City streets and parks in this distance zone (0'-300' from the Project Site). The viewshed components in the foreground distance zone include primarily residential and light commercial, buildings, and Greenbelt vegetation. Public views to the Project Site in this distance zone are in close proximity with fewer obstructions than in other distance zones since the Greenbelt and public rights of way provide larger areas of open (unbuilt) viewshed. The visual conditions at the existing City Maintenance Yard are more visible from the south and east. Buildings obstruct most direct views from the north and west.

Impacts: Foreground Distance Zone

Rigs Present: The 32-foot wall and the rigs have a high potential to be dominant due to proximity, scale and viewing distance. The potential for screening by topography, buildings and landscape components is lowest in this zone. The proposed landscaping would enhance the visual quality but the drill rigs and walls would not be in character with the surrounding visual environment at this viewing distance. The 32-foot sound wall would become a dominant feature since its scale and mass are significantly larger than any adjacent structures. Its uniformity in line, form and materiality are also uncharacteristic of the surrounding visual environment. The

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rigs would become the dominant visual element in the viewshed. They are uncharacteristic in form, line, scale, and material with the surrounding viewshed.

Rigs Not Present: When the 16-foot wall is present with addition landscape, the visual character would be enhanced from its current character and wall scale similar to the existing surrounding massings. The landscaping is the most dominant at this visual distance and does not diminish the existing visual character. Impacts have a moderate to high potential to be visible but are less likely to be dominant or out of character or produce substantial degradation.

Figure 4.1-3 View Location Map



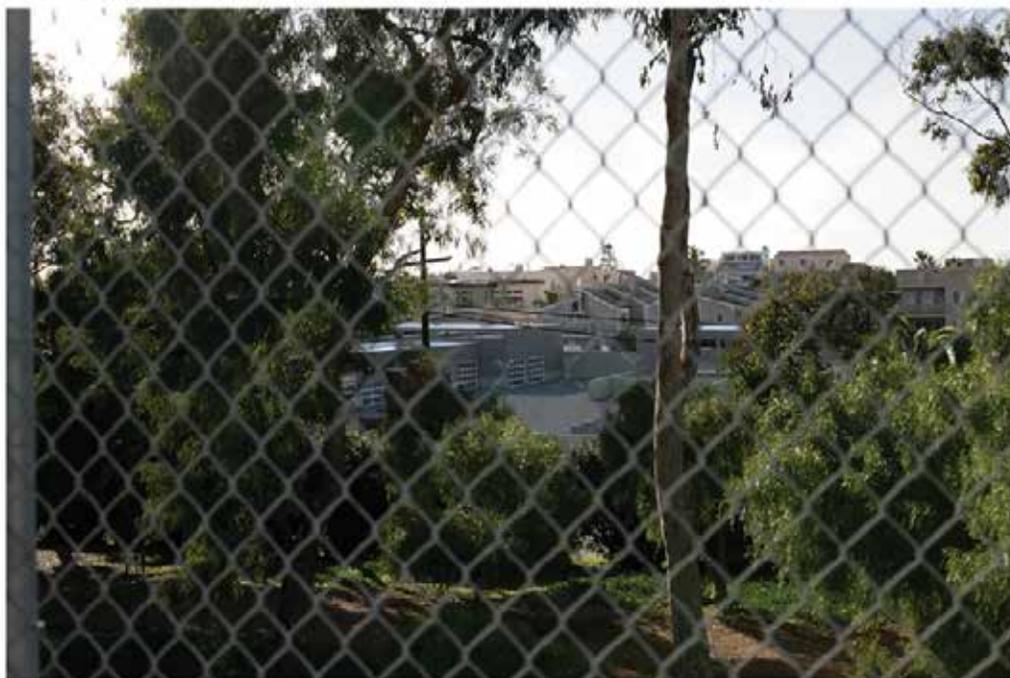
Note: Only selected simulations are shown in this section, Please see Appendix O for all simulations.
 Source: Stantec, Google Earth aerial dated March 7, 2011

4.1 Aesthetics and Visual Resources

Figure 4.1-4a KOP 1: Proposed City Maintenance Yard Permanent Facility: Parking Option



View 1: Existing Conditions



View 1: Completion of City Yard Relocation: Permanent Facility Parking Option

Source: Stantec 2014

Figure 4.1-4b KOP 1: Proposed City Maintenance Yard Permanent Facility: No Parking Option



View 1: Existing Conditions



View 1: Completion of City Yard Relocation: Permanent Facility No Added Parking Option

Source: Stantec 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-5a KOP 2: Proposed City Maintenance Yard Permanent Facility: Parking Option



View 2: Existing Conditions



View 2: Completion of City Yard Relocation: Permanent Facility Parking Option

Source: Stantec 2014

Figure 4.1-5b KOP 2: Proposed City Maintenance Yard Permanent Facility: No Parking Option



View 2: Existing Conditions



View 2: Completion of City Yard Relocation: Permanent Facility No Added Parking Option

Source: Stantec 2014

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Figure 4.1-6a KOP 3: Proposed City Maintenance Yard Permanent Facility: Parking Option



View 3: Existing Conditions



View 3: Completion of City Yard Relocation: Permanent Facility Parking Option

Source: Stantec 2014

Figure 4.1-6b KOP 3: Proposed City Maintenance Yard Permanent Facility: No Parking Option



View 3: Existing Conditions



View 3: Completion of City Yard Relocation: Permanent Facility No Added Parking Option

Source: Stantec 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-7a KOP 4: Proposed City Maintenance Yard Permanent Facility: Parking Option



View 4: Existing Conditions



View 4: Completion of City Yard Relocation: Permanent Facility Parking Option

Source: Stantec 2014

Figure 4.1-7b KOP 4: Proposed City Maintenance Yard Permanent Facility: No Parking Option



View 4: Existing Conditions



View 4: Completion of City Yard Relocation: Permanent Facility No Added Parking Option

Source: Stantec 2014

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Figure 4.1-8a KOP 5: Proposed City Maintenance Yard Permanent Facility: Parking Option



View 5: Existing Conditions



View 5: Completion of City Yard Relocation: Permanent Facility Parking Option

Source: Stantec 2014

Figure 4.1-8b KOP 5: Proposed City Maintenance Yard Permanent Facility: No Parking Option



View 5: Existing Conditions



View 5: Completion of City Yard Relocation: Permanent Facility No Added Parking Option

Source: Stantec 2014

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Figure 4.1-9 KOP 6: During Phase 2 and Phase 4 with Drill Rig



View 6: Existing Conditions



View 6: During Phase 2 with Drill Rig at well 2

Source: Focus 360, 2014

Figure 4.1-10 KOP 7: During Phase 2 and 4 with Drill Rig



View 7: Existing Conditions



View 7: During Phase 2 with Drill Rig at Well 2

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-11 KOP 10: During Phase 2 and 4 with Drill Rig



View 10: Existing Conditions



View 10: During Phase 2 with Drill Rig at Well 2

Source: Focus 360, 2014

Figure 4.1-12 KOP 10: Phase 4 with Workover Rig During Maintenance at Well 34



View 10: Existing Conditions



View 10: Phase 4 with Workover Rig During Maintenance at Well 34

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-13 KOP 11: During Phase 2 or 4 with Drill Rig



View 11: Existing Conditions



View 11: During Phase 2 with Drill Rig at Well 2

Source: Focus 360, 2014

Figure 4.1-14 KOP 11: Phase 4 with Workover Rig During Maintenance at Well 34



View 11: Existing Conditions



View 11: Phase 4 with Workover Rig During Maintenance at Well 34

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-15 KOP 11: Phase 4 During Ongoing Operations



View 11: Existing Conditions



View 11: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

Figure 4.1-16 KOP 12: During Phase 2 or 4 with Drill Rig



View 12: Existing Conditions



View 12: During Phase 2 with Drill Rig at Well 2

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-17 KOP 12: Phase 4 with Workover Rig During Maintenance at Well 2



View 12: Existing Conditions



View 12: Phase 4 with Workover Rig During Maintenance at Well 2

Source: Focus 360, 2014

Figure 4.1-18 KOP 13: Completion of Phase 1 Improvements



View 13: Existing Conditions



View 13: Completion of Phase 1 Improvements

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-19 KOP 13: During Phase 2 or 4 with Drill Rig



View 13: Existing Conditions



View 13: During Phase 2 with Drill Rig at Well 2

Source: Focus 360, 2014

Figure 4.1-20 KOP 13: Phase 4 with Workover Rig During Maintenance at Well 2



View 13: Existing Conditions



View 13: Phase 4 with Workover Rig During Maintenance at Well 2

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-21 KOP 13: Phase 4 During Ongoing Operations



View 13: Existing Conditions



View 13: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

Figure 4.1-22a KOP 14: During Phase 2 with Drill Rig at Well 1



View 14: Existing Conditions



View 14: During Phase 2 with Drill Rig at Well 1

Source: Focus 360, 2014,

4.1 Aesthetics and Visual Resources

Figure 4.1-22b KOP 14: During Phase 2 with Drill Rig at Well 1 WIDE ANGLE



Source: Focus 360, 2013, This shot is taken with a 28mm lens to show the entire drilling structure

Figure 4.1-23a KOP 14: Phase 4 with Drill Rig Onsite at Well 3



View 14: Existing Conditions



View 14: Phase 4 with Drill Rig Onsite at Well 3

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-23b KOP 14: Phase 4 with Drill Rig Onsite at Well 3 WIDE ANGLE



Source: Focus 360, 2013, This shot is taken with a 28mm lens to show the entire drilling structure

Figure 4.1-24a KOP 14: Phase 4 with Workover Rig during Maintenance at Well 3



Source: View 14 with workover rig. Focus 360 modified, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-24b KOP 14: Phase 4 with Workover Rig during Maintenance at Well 3 WIDE ANGLE



Source: Focus 360, 2013, This shot is taken with a 28mm lens to show the entire drilling structure

Figure 4.1-25 KOP 14: Phase 4 During Ongoing Operations



View 14: Existing Conditions



View 14: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-26 KOP 15: During Phase 2 with Drill Rig at Well 4



View 15: Existing Conditions



View 15: During Phase 2 with Drill Rig at Well 4

Source: Focus 360, 2014

Figure 4.1-27 KOP 15: Phase 4 with Drill Rig Onsite at Well 17



View 15: Existing Conditions



View 15: Phase 4 with Drill Rig Onsite at Well 17

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-28 KOP 15: Phase 4 with Workover Rig during Maintenance at Well 17



Notes: View 15 with workover rig, Source: Focus 360 modified, 2014

Figure 4.1-29 KOP 15: Phase 4 During Ongoing Operations



View 15: Existing Conditions



View 15: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-30 KOP 17: Phase 4 with Drill Rig Onsite at Well 17



View 17: Existing Conditions



View 17: Phase 4 with Drill Rig Onsite at Well 17

Source: Focus 360, 2014

Figure 4.1-31 KOP 17: Phase 4 with Workover Rig during Maintenance at Well 17



View 17: Existing Conditions



View 17: Phase 4 with Workover Rig During Maintenance at Well 17

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-32 KOP 17: Phase 4 During Ongoing Operations



View 17: Existing Conditions



View 17: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

Figure 4.1-33 KOP 18: During Phase 2 with Drill Rig at Well 4



View 18: Existing Conditions



View 18: During Phase 2 with Drill Rig at Well 4

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-34 KOP 18: Phase 4 with Drill Rig Onsite at Well 18



View 18: Existing Conditions



View 18: Phase 4 with Drill Rig Onsite at Well 18

Source: Focus 360, 2014

Figure 4.1-35 KOP 18: Phase 4 with Workover Rig during Maintenance at Well 18



View 18: Existing Conditions



View 18: Phase 4 with Workover Rig During Maintenance at Well 18

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-36 KOP 18: Phase 4 During Ongoing Operations



View 18: Existing Conditions



View 18: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

Figure 4.1-37 KOP 19: During Phase 2 with Drill Rig at Well 2 (rig not visible)



View 19: Existing Conditions



View 19: During Phase 2 with Drill Rig at Well 2

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-38a KOP 19: Phase 4 with Drill Rig Onsite at Well 34



View 19: Existing Conditions



View 19: Phase 4 with Drill Rig Onsite at Well 34

Source: Focus 360, 2014

Figure 4.1-38b KOP 19: Phase 4 with Drill Rig Onsite at Well 34 WIDE ANGLE



Source: Focus 360, 2013, This shot is taken with a 28mm lens to show the entire drilling structure.

4.1 Aesthetics and Visual Resources

Figure 4.1-39 KOP 19: Phase 4 with Workover Rig during Maintenance at Well 34



View 19: Existing Conditions



View 19: Phase 4 with Workover Rig During Maintenance at Well 34

Source: Focus 360, 2014

Figure 4.1-39 KOP 19: Phase 4 with Workover Rig during Maintenance at Well 34: WIDE ANGLE



Source: Focus 360, 2013, This shot is taken with a 28mm lens to show the entire drilling structure.

4.1 Aesthetics and Visual Resources

Figure 4.1-40 KOP 19: Phase 4 During Ongoing Operations



View 19: Existing Conditions



View 19: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

Figure 4.1-41a KOP 20: During Phase 2 or 4 with Drill Rig



View 20: Existing Conditions



View 20: During Phase 2 with Drill Rig at Well 2

Source: Focus 360, 2014

4.1 Aesthetics and Visual Resources

Figure 4.1-41b KOP 20: During Phase 2 or 4 with Drill Rig: WIDE ANGLE



Source: Focus 360, 2013: This shot is taken with a 28mm lens to show the entire drilling structure.

Figure 4.1-41c KOP 20: During Phase 2 or 4 with Drill Rig and Crane: WIDE ANGLE



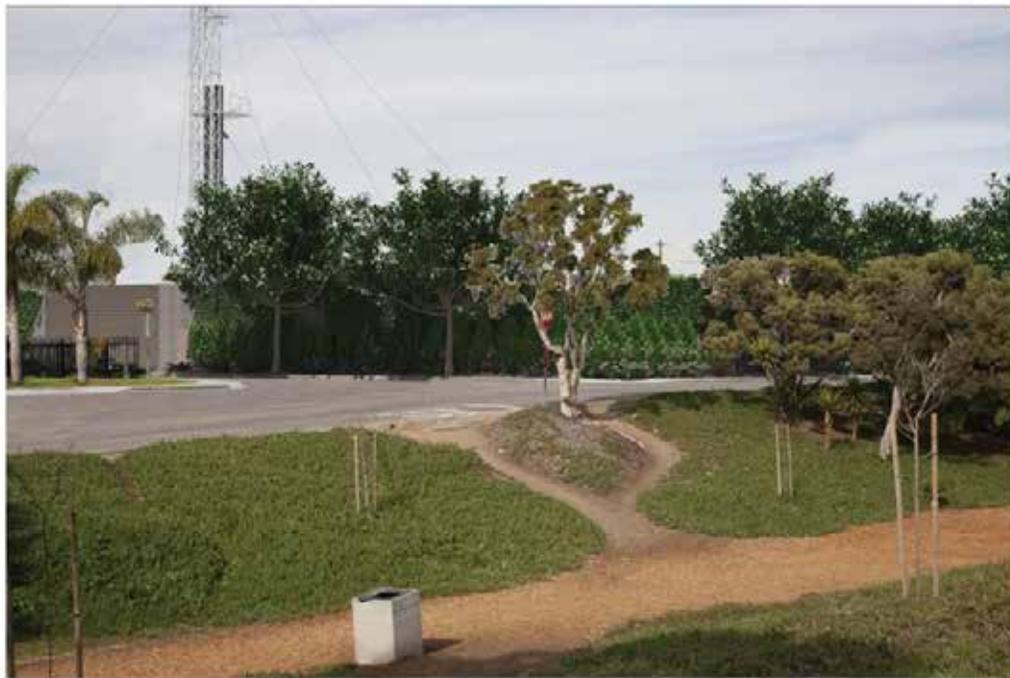
Source: Focus 360, 2013 with modifications: This shot is taken with a 28mm lens to show the entire drilling structure

4.1 Aesthetics and Visual Resources

Figure 4.1-42a KOP 20: Phase 4 with Workover Rig during Maintenance at Well 2



View 20: Existing Conditions



View 20: Phase 4 with Workover Rig During Maintenance at Well 2

Source: Focus 360, 2014

Figure 4.1-42b KOP 20: Phase 4 with Workover Rig during Maintenance at Well 2: WIDE ANGLE



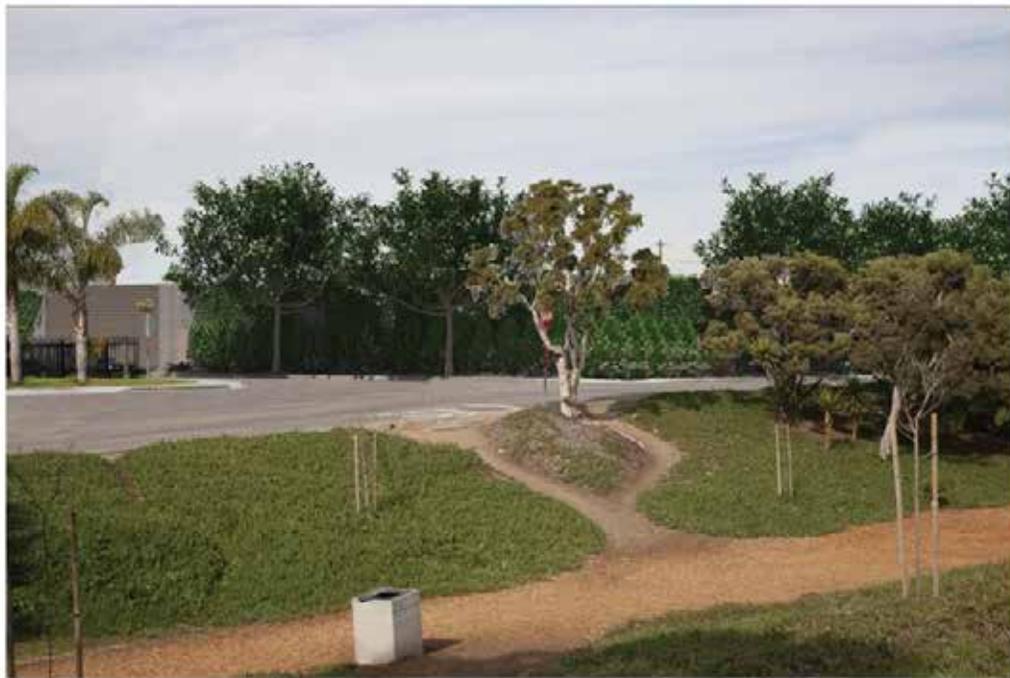
Source: Focus 360, 2013, This shot is taken with a 28mm lens to show the entire drilling structure

4.1 Aesthetics and Visual Resources

Figure 4.1-43 KOP 20: Phase 4 During Ongoing Operations



View 20: Existing Conditions



View 20: Phase 4 During Ongoing Operation

Source: Focus 360, 2014

4.1.5.6 Proposed Oil Project Impacts

The Proposed Oil Project components would create impacts to aesthetic resources in the community. These impacts are discussed below.

Impact #	Impact Description	Phase	Residual Impact
AE.1	The Proposed Oil Project during the drilling phases (<u>drilling or re-drilling</u>) or with a workover rig present has the potential to cause a substantial degradation to the character and quality of the existing site and its surroundings, including designated scenic highways and vistas.	Phases 2 and 4, when rigs are present on site.	Class I Significant and Unavoidable

Impacts on Designated Scenic Vistas and Designated Scenic Resources

The City of Hermosa Beach has a designated Scenic Highways and viewpoints in their LCP. For purposes of this analysis, representative views from Hermosa Beach/Strand and Hermosa Beach Pier were also recommended for further analysis as key observation points (See KOP 15 and KOP 16), though they are not considered scenic viewpoints in the LCP.

The Proposed Oil Project when there is a drill rig present would degrade designated scenic viewpoints and highways and would be a significant impact (see discussion below).

No designated State Scenic Highways occur in the Project vicinity (Cal Trans, 2013). Although Hwy 1 is not designated as State Scenic Highway in this segment, a photo simulated view from Highway 1 was completed as a representative view for sensitive public views in this general vicinity (See KOP 5).

Impacts On The Existing Visual Character Or Quality

Phase 2 – Drilling and Testing

During Phase 2, the 32-foot sound attenuation wall and temporary landscaping installed at the end of Phase 1 would stay on site through the beginning of Phase 3. The 87-foot electric drill rig with three-sided acoustical shield would be installed at the Project Site at the beginning of Phase 2. The installation would take approximately two weeks and include a large crane with 150-foot boom. The presence of the rig on-site during this phase is expected to last approximately 5-months (4 months drilling with 2-week setup and 2-week take down). The rig location would vary slightly as the four wells are drilled. The rig would introduce a visually dominant vertical feature primarily into the foreground and middleground environments which is distinct in form, mass, height, material and character from structures in the viewshed of locations which are considered to have high sensitivity. For the 5-months that it is up during this phase, the rig would break the skyline and become a dominant focal point. The effects of light, shade and shadow would produce contrasting geometric vertical planes which would project into a typically uniform (or otherwise naturally varied) sky backdrop. Removal of the rig would take an additional two weeks and also includes the use of a large crane with 150-foot boom. Impacts with the drill rig present would be a significant impact.

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Phase 4 – Development and Operations with Drill Rig On-site:

The 32-foot sound wall constructed at the end of Phase 3 is proposed to remain on site during the first 2.5 years of Phase 4. The intensity and screening capacity of the landscape design is increased on the west and south boundaries during Phase 4, but temporarily reduced on the east boundary (due to the removal of the mature trees). The presence of the block wall would help to divide the mass of the sound attenuation wall, however the overall form, scale and lack of visual articulation would be uncharacteristic of the surrounding environment (see Phase 1 discussion of 32-foot soundwall impacts below). Over time the landscape would mature and its capacity to soften the impact of the block retaining wall would increase. At the conclusion of drilling, the 32-foot sound wall and electric drilling rig are proposed to be removed from the site. Impacts associated with the electrical drill rig are discussed in Phase 2 and are similar for this Phase, with an increase in duration to 2.5 years. The period with the drill rig onsite would produce substantial degradation of the existing visual character and would be a significant impact.

Phase 4 – Development and Operations with the Workover Drill Rig

During periods of Phase 4, the 110-foot workover rig could be present on site for up to 90 days per year. The open truss structure of the workover drill rig introduces a focal element of industrial character into viewsheds of primarily residential and light industrial character. This visual element would diverge from the overall visual character to the point of distraction from viewing areas of high sensitivity, especially those where the rig is an element of the foreground or middleground of the view (KOPs in Foreground and Middleground zones). The Project Application indicates the potential for the workover rig to be delivered to the site up to 15 times per year. Since the workover rig operations have the potential to occur periodically throughout the year, this introduces the possibility for collective recurring visual impacts (see discussion below), particularly when the potential for re-drills is considered (see discussion below) over the 30-35 year length of Phase 4. This would be a significant impact.

Phase 4 – Re-drills:

The potential for up to 30 re-drills (average of one annually) over the life of the Project (30-35 years) is identified in the Project Description for purposes of worst-case scenario analysis. Each re-drill would include the re-installation of the 32-foot sound wall and the 87-foot electrical drill rig. The Applicant has stated that Phase 4 well re-drills may occur in groups of up to 5, which would introduce less frequent re-drills, but for longer durations, or could occur annually. Visual impacts associated with each re-drill are similar to Phase 2 and 4 drilling, with a decrease in duration of exposure to 24-hour drilling operations to an annual average of 30 days per year (meaning that some years could have more than 30 days of re-drilling). The overall setup, drilling time, and takedown of the elements associated with the electrical drilling rig are summarized in the Project Description section. In addition, workovers would also occur for a period of up to 90 days per year, totaling a peak of up to 240 days per year with a drilling or workover rig. The 32-foot sound attenuation wall setup is estimated at 3 weeks, the drill rig setup time is 2 weeks, drilling time is typically 30-days (~4 weeks) per well, drill take-down is 2 weeks, and wall take down is 2 weeks. This timeframe totals to approximately 7 months per re-drill if done in groups of 5, or 3 months per re-drill if done individually. As discussed above in Phase 4, re-drilling has the potential for collective recurring impacts (see discussion below), particularly when the potential for the presence of the workover rig is considered over the 30-35 year length of impact. This would be a significant impact.

Collective Recurring Impacts

The Project Site includes the installation and/or removal of significant, dominant and uncharacteristic visual masses and forms throughout its 35+ year lifespan. During Phase 2, the drill rig and/or boom crane are anticipated to be on site for 5 months and the 32-foot sound wall is scheduled to be on-site up to 62 weeks (One year, ten weeks). During Phase 4, the drill rig is anticipated to be on site for 2.5 years and the 32-foot sound wall is scheduled to be on-site up to 2 years 8 months. Although the number of redrills is uncertain, the potential for up to 30 re-drills (average of one annually) is a worst-case scenario during the lifespan of the project. Up to 5 redrills could occur in any given year.

Collectively re-drills could account for an additional 2.5 years of drilling time. Assuming all 30 re-drills are performed, the collective length of exposure to the drill rig/boom crane and 32-foot wall (when set-up and take down are factored in) is dependent on whether re-drills are conducted individually or in six groups of five. Additionally, the workover rig would be permitted to be installed up to 90 days (3 months) per year, which may be divided up into a maximum of 15 individual installations. Under these parameters, there is a potential for addition and/or removal of dominant and uncharacteristic vertical features on the site in any given month out of any given year. Although these are stated as worst case scenario conditions, they present a potential for collective recurring visual impacts, with substantial degradation of the visual environment, which would contribute to the significant impacts.

Mitigation Measures

- AE-1a Material choice of electrical drill rig acoustical shroud shall be of neutral sky color which is selected for its ability to reduce visual impact, in coordination with and approval by the City Community Development Director.
- AE-1b The sound attenuation wall shall be replaced by a permanent wall with design features installed at the end of Phase 3. The intent is to provide stability of views and opportunities for positive visual elements that partially mitigate the visual presence of the walls from the Hermosa Greenbelt and other sensitive views in the immediate Project vicinity. The permanent wall shall be allowed to be provided in lieu of the 16-foot block wall. Landscape design shall be allowed to be adjusted to respond to façade articulations, though quantities and densities shall be maintained. The permanent wall shall be designed with architectural features in coordination with and approval of the City Community Development Director.

Residual Impacts

The drilling rig would be covered to provide for sound reduction as well as to create a reduction in visual impact. Selection of the drilling rig covering material to be a neutral sky color would minimize the amount of visual impact.

A solution for reducing potentially significant day and night time impacts is a permanent well-designed architectural façade constructed at the conclusion of Phase 3. See Figure 4.1-44 for an example of a drill and production site located in Los Angeles at Pico and Doherty. This solution is proposed in lieu of a permanent 16-foot block wall and the potential for periodic set-up and take-down of a sound attenuation wall (up to 3 months in any given year). This façade would incorporate variations in form, height, color, architectural detail, fenestration and material use to

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blend with the surrounding visual environment. Other drill sites within Los Angeles utilize permanent structures to integrate architectural details into the drilling site, including Long Beach, Beverly Hills Oil Field (next to Beverley Hills High School), the Packard Site in Beverly Hills and Downtown Los Angeles (the Breitburn site) and the Pico Site shown in Figure 4.1-44.

Figure 4.1-44 Example of A Permanent Wall with Façade



Notes: Google Earth Street View. Breitburn Oil and Gas Drilling and Production Site, corner of W. Pico Blvd and Doherty Dr. in Los Angeles

A permanent wall would allow screening of day and nighttime operations and provide stability of visual conditions over the lifespan of the project. It would also be designed with features to soften the vertical facade, such as offsets. Reductions in impacts to other resource areas could also be achieved (traffic, air quality, noise, etc.) This mitigation is not capable of significantly mitigating the impacts of the boom-crane, drill rig or workover rig when they are on site. However creative form, material use, and landscape design integration may provide opportunities for positive visual elements that modulate the overall intrusive visual effects of alternating 16-foot and 32-foot walls.

Following the implementation of mitigation measures, impacts would be reduced but the impacts of the Proposed Oil Project while the drill rigs are on site are still considered to substantially degrade the visual environment and would be **significant and unavoidable (Class I)**.

Impact #	Impact Description	Phase	Residual Impact
AE.2	The Proposed Oil Project when no rig is present has the potential to cause a substantial degradation to the character and quality of the existing site and its surroundings.	All Phases, when rigs are not present.	Class II Less Than Significant with Mitigation

Phase 1 – Site Preparation

Phase 1 includes the demolition of the current City Maintenance Yard during a six to seven month construction Phase as well as site preparation activities. A 16-foot sound attenuation wall is proposed to move around the site and would also have the effect of screening views of active demolition activities. Overhead powerlines along Valley Drive would be placed underground, which can be considered an improvement to the visual environment for viewsheds along the Greenbelt in this vicinity. Visual impacts associated with demolition during this six month phase are temporary and considered to be less than significant due to their limited duration and limited degree of departure from existing site development conditions (see discussion of existing visual environment in section 4.1.2.1).

At the conclusion of this six month phase a 32-foot sound attenuation wall and temporary landscaping would be constructed in preparation for Phase 2 drilling activities. This wall would be on site starting at the end of Phase 1 through week two of Phase 3 for a total of approximately one year and two months, with periods during testing when no drill rig would be present.

For general comparison of mass and scale, it would be approximately 5-10 feet taller than the Beach Cities Self Storage building located immediately to the south of the Project Site. The portion of Beach Cities Storage that directly parallels Valley Drive (from the north edge of the south driveway to just south of the north driveway) is approximately 110' long and set back approximately twenty feet from the sidewalk. The portion of the proposed sound attenuation wall that directly parallels Valley Drive would be just over double that length and set back ten feet. Three of the four mature trees would be retained during this Phase and would have the effect of softening the magnitude of this mass. Along the west edge, the wall would be placed above and just behind an 8-foot block retaining wall (with 6-foot chain link fence), for an overall height of 40 feet from the downhill side of the slope. The wall would span 228' along this edge of the property with a 10' landscape planter to the south and 2' setbacks from the west and north property boundaries. The sound wall would be approximately six feet taller than the tallest adjacent structure. The sound wall would introduce an element of uncharacteristic uniform mass and scale to the site and its surroundings. As proposed, the visual articulation of this mass is minimal; material use, form and color are singular. These visual features are uncharacteristic of the existing visual environment and would constitute a potentially substantial degradation of the visual character of its surroundings. Impacts would be significant.

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Phase 2 – Testing

The soundwall would be installed at the end of Phase 1 and remain in place the duration of Phase 2. A drill rig would be present during only a portion of Phase 2; the remainder would have just the soundwall and the testing equipment. During this period, the soundwall would present a significant impact as discussed above.

Phase 3 – Final Design and Construction

Construction work at the site during this phase consists of the installation of the permanent oil production facilities during a sixteen month period. During this phase the remaining three large trees along Valley Drive are proposed to be removed during weeks 3 and 4. A 16-foot sound attenuation wall is proposed to move around the site and would also have the effect of screening views of active construction activities. A 16-foot permanent block wall is proposed to be installed during weeks 6-14. The block wall would screen much of the construction activity during this phase. Final landscaping is proposed to be installed during week 60 and 61. The landscape design would soften the visual mass and scale of the block wall and help the facility blend into the existing visual environment. Since the landscape design is essential to relieving the scale and mass of the wall, mitigation measures have been proposed to promote the probability of success to achieve full maturity. The 32-foot soundwall is proposed to be installed at the end of this phase. The impacts of the soundwall during Phase 4 are discussed in Phase 1 impact above.

Phase 4 – During On-going Operations

The ongoing operations condition occurs when the electrical drill rig or workover rig would not be present. The block wall with landscaping would buffer sensitive views from view locations which are inferior (below), normal (level), or slightly superior (greater than 16' at eye level). The character and quality of the Proposed Oil Project perimeter condition can be considered consistent with the character and quality of the existing visual environment from these viewing angles, due to the increased level of landscaping and screened views of site operations. The ability of the planting scheme to achieve its full screening potential is reliant on a number of factors: provision of adequate water, quality and depth of growth medium, installation of quality nursery stock free of disease and injury, and demonstrated success of the species and variety in the project vicinity. Failure of the landscaping elements could cause a significant impact. Mitigation measures have been provided to increase the potential for success of the planting scheme.

Similar to Phase 3 construction, visual conditions from superior (greater than 16 feet at eye level) sensitive viewing positions would present viewing angles which are capable of seeing over the 16-foot wall and into the Project Site. The character of these views is anticipated to be industrial in nature. The duration of this view is for the remaining life of the Project (less re-drill conditions). However, these views would be more industrial than the current industrial nature of the site (with the existing City Maintenance Yard) and this visual impact would therefore be significant.

Mitigation Measures

- AE-2a Design of the sound attenuation wall exterior façade shall be required to include design articulations that are complementary to the character, scale, and quality of the surrounding environment. The intent is to mitigate the visual impact of the wall from the Hermosa Greenbelt and other sensitive views in the immediate project vicinity. The following measures of success shall be met: 1) Articulations of façade decrease scale and proportion of mass into smaller increments that more closely resemble those of adjacent buildings; and 2) Colors, detailing and material use are varied to a level consistent with existing visual environment.
- AE-2b Planting area growth medium shall be capable of supporting the long term health and growth of the landscape design. Requirements shall be: 1) Demonstrated free of debris and construction waste (asphalt, concrete, etc) to a minimum depth of 3 feet within all planted areas. Wall footings shall be designed to limit encroachment into planted areas; 2) Soils analysis report shall be conducted by a certified soil scientist. Report shall include recommendations to meet the intent of this mitigation measure; and 3) If soils are determined to be unsuitable to support plant growth, they shall be amended or removed/replaced to meet requirements of soils analysis for plant palette selected.
- AE-2c Vine plantings where used shall meet the following conditions: 1) be self-attaching or structure supported; 2) have demonstrated success in the City; 3) be planted at a density to achieve full coverage at maturity; 4) be planted at a minimum 5 gallon size; and 5) be required on the visible portion of the west wall at the temporary parking facility.
- AE-2d All trees shall be required to be a minimum of 20' in height at installation and meet the American Standard for Nursery Stock (ANSI Z60.1-2004). If a tree species alternate is proposed, it shall be required to be an equal to the species proposed in the Project Application in the following characteristics: 1) Dense evergreen with similar form and habit; 2) Probability of achieving a minimum of 35-40 feet at maturity; and 3) Comply with Municipal Code Chapter 8.60 and 8.56.

Residual Impacts

Design of the 32-foot wall which includes architectural features would reduce the uniform mass associated with a 32-wall and reduce the substantial adverse effect. The inclusion of appropriately sized and maintained landscaping, with appropriate landscaping techniques to ensure landscaping vitality, would also reduce the adverse effects and reduce the degradation of views. Following the implementation of mitigation measures, the impacts of the Proposed Oil Project while the drill rigs are not on site is considered **less than significant with mitigation (Class II)**.

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Impact #	Impact Description	Phase	Residual Impact
AE.3	The Pipeline project has the potential to cause a substantial degradation to the character and quality of the existing site and its surroundings.	Phase 3	Class II Less Than Significant with Mitigation

Pipelines, Metering Station and Valve Boxes:

Visual impacts associated with this area of work occur primarily during construction and are associated with the presence of construction equipment. These impacts are temporary in nature (4-months total construction) and would be done in short segments which would further limit duration of impacts to any given viewshed along the alignment. The pipelines and valve boxes are proposed to be placed underground beneath existing roadway surfaces and/or within existing utility corridor rights-of-way in all three options. These impacts should not amount to a substantial degradation of the visual character or quality of the corridor and its surroundings, since the impacts are temporary and the visual environment would be restored to its original appearance at the conclusion of construction. Since the exact alignments within these ROWs have not been determined, and existing trees are known to exist at select locations within these ROWs, there is a potential that alignment options may be considered which include removal of trees. Where present along these corridor options, the trees are important elements of the visual environment which serve to screen and soften the impact of the powerline corridor. Mitigation measures have been included to limit potential for impacts to existing mature trees that currently exist within these rights of way.

Pipeline Alignment Options

Scenarios 1 and 2: This alignment includes a portion of the alignment along 190th within the City of Redondo Beach. Visual impact potential is considered equal in either of these alignments, though the location varies. These impacts include the potential for removal or modification of the urban forest's canopy or root zone and/or streetscape at select locations along the ROW.

Scenario 3: This alignment reduces the potential for urban forest and/or streetscape impacts along 190th, but increases the potential for temporary visual impacts to notable community facilities and features. A gateway plaza for the City of Redondo Beach is located within this ROW at the corner of Herondo St and Hwy-1. This feature is considered to have a high level of sensitivity to even temporary visual modification, due to its function as a City gateway. This alignment also has the potential to impact the Dog Park in Dominguez Park as well.

Valve Box Options

Option 1: This valve box option is in a parking lot at the end of a pipeline alignment which parallels 190th. The large evergreen hedgerow and stands of mature trees have the potential to be impacted depending on the selection of the pipeline location and installation method. These landscape features are critical to screening views of heavy industrial land uses to the south. Though the location is not publically visible, the potential for impacts to the hedgerow and street trees make it less preferable from a visual resource standpoint.

Option 2: This valve box option is located in a heavily disturbed area surrounded by non-sensitive land uses. Visibility of impacts would be minimal. This valve box location is most preferable from a visual resource standpoint.

Option 3: This valve box option is located adjacent a railroad corridor in a low visibility area next to a commercial parking lot. This valve box location is moderately preferable from a visual resource standpoint.

Option 4: This valve box option has the potential to involve the removal of the existing landscaping and paver turnaround area. Potential for removal/disturbance of a fairly well-articulated landscaped area with high visibility from major public roads is not a preferred option from a visual resource standpoint. This location can be considered to have the highest degree of visual sensitivity and impacts of the four options and is the least preferable.

Metering Station

The metering station site would include a 40-foot by 60-foot site with 8' high perimeter block wall. The materials and finishes of the wall and the landscape design have not been provided at this time. Given the character and quality of its existing setting, its size/scale and the low number of sensitive views, this station has a limited potential to cause a substantial degradation to the character or quality of the existing site or its surroundings.

Mitigation Measures

- AE-3a Pipeline alignments and valve box locations shall be designed to avoid the removal or modification of trees, hedgerows, and/or large shrubs to the extent feasible.
- AE-3b If landscaped areas, streetscapes, plazas and/or parklands are required to be temporarily disturbed, they shall be restored to their previous condition following completion of construction. Avoidance of disturbance shall be the preferred option, especially where landscape elements act to screen views (hedges, large shrubs, etc) or where they act as community gateways (Redondo Beach at Hwy-1).
- AE-3c Block color/s selection and pattern (if applicable) shall be complementary to adjacent buildings. A buffer of shrubs and vines shall be planted to match the existing character and quality of the adjacent properties.

Residual Impacts

Ensuring that minimal loss of mature landscaping occurs during the pipeline installation would reduce the adverse effects. Ensuring that any features added, such as walls, shall be complementary to adjacent buildings would also reduce the adverse effects. Following the implementation of mitigation measures, the impacts of the Proposed Project at the pipelines, metering station and valve boxes is considered **less than significant with mitigation (Class II)**.

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New Sources of Light or Glare

Impact #	Impact Description	Phase	Residual Impact
AE.4	The Proposed Oil Project with the drill rig has the potential to create a new source of light or glare that would adversely affect nighttime views in the area.	Phases 2 and 4	Class I Significant and Unavoidable

Phase 2 and Phase 4 – Drilling – 87-foot Electrical Drill Rig:

During Phase 2 and 4, the 87-foot electrical drill rig would be installed on-site and 24-hour drilling would occur for approximately 5 months. Per the Applicant Lighting Plan, the 87-foot electrical drill rig would be enclosed in a three-sided acoustical cover, the inside of which would be illuminated with in-ward facing LED lights 4-foot on-center to create an ‘ambient glow’ for the safety of workers. The light levels associated with the statements in the Applicant’s Lighting Plan are not available at this time. The Applicant has stated that measures have been taken in this design to minimize potential for light spill and glare from the open side, however the interior faces of the acoustical shroud and the elements of the mast structure would catch light and would have the effect of producing a vertical lighted column visible from areas in the foreground, middleground and background areas. Views of the open (illuminated) side of the drill rig would be limited to the direction the open side faces. The pattern and scale of this illuminated feature would be out of character with existing nighttime views. Similar to day time impacts, this vertical feature would project above the horizontal plane of the existing illuminated environment and would become a focal element. The duration of exposure, number of sensitive viewers, and nature of the visual change would result in impacts that would be significant.

During well workovers, the workover rig would not be used at night and would not produce lighting impacts, or only would during the short periods around dusk. Re-drills would produce the same impacts as drilling discussed above.

Mitigation Measures

- AE-4a Final acoustical cover material selection shall be required to be fully opaque. Fully opaque shall be defined as completely blocking all light from passing through its surface. The exterior finish shall be low reflectivity and not capable of producing glare.
- AE-4b Colors and finishes of equipment and surfaces within the soundwall (including the interior face of the soundwall, the interior face of the drill rig acoustical cover, and the physical structure of the drill rig within the acoustical shield) shall have a reflectivity rating of 0.3 or lower.
- AE-4c All proposed site lighting fixtures associated with the drilling activities shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.

Residual Impacts

The Mitigation measures provided above would reduce the lighting impacts of the drilling rig and drilling related area lighting. However, when a drilling rig is present, it would produce a lighted structure higher than surrounding structures and would be **significant and unavoidable (Class I)**.

Figure 4.1-45 View Simulation of Drilling Rig at Night



Notes: 4 second exposure, f5.3, 5/10/2014, 9:50 pm. no moon.

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Impact #	Impact Description	Phase	Residual Impact
AE.5	The Proposed Oil Project area lighting has the potential to create a new source of light or glare that would adversely affect day or nighttime views in the area.	Phases 2 and 4	Class II Less Than Significant with Mitigation

Phase 1 and Phase 3 – Site Preparation and Final Design and Construction

No nighttime lighting is proposed during these phases. The nighttime views to the site would experience a reduction in visible light as a result of the removal of the light fixtures currently illuminating the City Maintenance Yard at night. A 32-foot soundwall is proposed to be constructed around the site perimeter at the conclusion of Phase 1. The soundwall has the potential to catch light from existing street lights on Valley Drive and 6th Street, as well as lights from the adjacent Self Storage. While this would enable the wall to be visible at night, the reflections levels would be relatively low and these light levels are not anticipated to adversely affect day or nighttime views. Impacts during this phase would be considered Less Than Significant.

Phase 2 – Testing – General Site Lighting:

During Phase 2, the 32-foot sound wall installed at the end of Phase 1 would remain on site and would shield the majority of views of light fixtures and night operations on site. Some private views would have the potential to see over this wall; however these views would be limited to approximately the top third of the wall. The wall is proposed to stay on site through the beginning of Phase 3. Light levels at the facility have the potential to be significantly higher than those currently on site, since they are being provided for worker safety during a 24-hour drilling operation. Current Maintenance Yard operations do not require 24-hour lighting for worker safety. IES Industrial Illuminance Recommendations for Petroleum, Chemical, and Petrochemical Plants range from 1 footcandle for general area lighting to 50 footcandles for control panel task lighting (IES, 2010). As a reference, light level readings at the tennis courts at Clark Stadium were measured around 35 footcandles. The Applicant’s Lighting Plan proposes shielded, hooded, downfacing fixtures that would not create light spill or glare, however the potential for sky glow or corona as a result of reflected light over the top of the wall cannot be ruled out. These impacts would be significant. These impacts would be generated if a drill rig is on site or not as these impacts would be associated with the operational area lighting.

Phase 4 – General Site Lighting

Additional lighting is proposed associated with the Phase 4 production equipment and is shown in the Applicant Lighting Plan (Attachment A). Materials, textures and color choices of surfaces inside the facility can provide mitigation of the potential for reflected light from the visible interior surfaces. The material surface of the paving in Phase 4 is proposed to change from crushed aggregate base (CAB) to Portland Cement Concrete (PCC) or asphalt. PCC, depending on color and finish, has a higher potential to reflect light than CAB. As in Phase 2, the proposed gas combustor (enclosed ground flare) is designed to completely conceal the flare flame. Single shielded wall-mounted fixtures are proposed outside each entrance gate, mounted at 15-foot high.

It is stated that they would be shielded, hooded and downcast so that they would not create light spill or glare beyond the property line. The potential for sky glow or corona as a result of reflected light over the top of the wall cannot be ruled out. Some views into the facility may also occur from private residences. Although current views into the City Maintenance Yard from elevated private homes are also degraded, additional high levels of lighting would impact these views as well. This would be a significant impact.

Materials, textures and color choices of surfaces inside the 32-foot soundwall can mitigate the potential for reflected light from interior surfaces. The proposed gas combustor is an enclosed ground flare which is designed to completely conceal the flare flame. Single pole-mounted low-energy fixtures are proposed outside each entrance. These fixtures are pole-mounted at 10 feet high and it is stated that they would be shielded, hooded and downcast so that they would not create light spill or glare beyond the property line.

The site lighting proposed has the potential to be of a nature and intensity that is significantly higher than the existing lighted environment. Mitigation measures above require the installation of a permanent 32-foot wall that would significantly reduce the potential for sky glow and corona. Mitigation measures are provided below which can mitigate the site lighting impacts.

Mitigation Measures

- AE-5a Colors and finishes of surfaces within the facility, including the interior face of the soundwall, ground materials (darker or asphalt), wall paints and equipment paints to the extent feasible shall have a low reflectivity rating of 0.3 or lower to reduce the potential for glow.
- AE-5b Final sound wall material/s selection/s (including gates) shall be fully opaque. Fully opaque shall be defined as completely blocking all light from passing through its surface. The exterior finish shall be low reflectivity and not capable of producing glare.
- AE-5c All proposed site lighting, including fixtures outside the wall, shall be fully shielded. Fully shielded shall be defined as: A luminaire constructed and installed in such a manner that all light emitted by the luminaire, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane through the luminaire's lowest light-emitting part (IES/IDA, 2011).
- AE-5d The LZ-2 parameters of the Model Lighting Ordinance (IES/IDA, 2011) shall be used to demonstrate that maximum vertical illuminance for the site are not exceeded. For site lighting inside the wall, Table B allowances shall be used. Lighting outside the wall at site entrances shall not exceed that of existing street lighting, which produces a maximum of 1 footcandle. For the purposes of measuring vertical illumination, the plane of the property line shall be extended to an elevation equal to the height of the electric drilling rig.
- AE-5e All proposed site lighting fixtures shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the

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7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.

Residual Impacts

Mitigation measure AE-1b proposes the inclusion of a permanent 32-foot acoustic/visual screen wall/facade. This additional wall height would serve to reduce potential site lighting impacts during the Phase 4. Lighting effects at an existing oil and gas production site in Huntington beach is shown in Figure 4.1-46. Note that the glare and spillover effects at the Huntington Beach site are comparable to the surrounding street lights and not a substantial source of spillover or glare. Mitigation measures requiring materials selection and fully shielded lighting would reduce the operational area lighting impacts to **less than significant with mitigation (Class II)**.

Figure 4.1-46 Example Oil and Gas Processing Site Night Views



Notes: 2 second exposure at f3.5, 5/10/2014 at corner of Huntington and Toronto, Huntington Beach. Note tanks and facility illumination at the right.

Impact #	Impact Description	Phase	Residual Impact
AE.6	The Pipeline Project has the potential to create a new source of light or glare that would adversely affect views in the area.	Phase 3 - Pipelines	Class II Less Than Significant with Mitigation

Construction activities for the pipeline are restricted to daytime hours per the Project Description and municipal codes and ordinances for the Cities of Hermosa Beach, Redondo Beach and Torrance. As such, the potential for light or glare impacts are not anticipated related to pipeline construction. Lighting design plans for the metering stations and/or valve boxes have not been developed at this time. If lighting is installed that creates a substantial new source of light or glare that would adversely affect day or nighttime views in these areas, this could be a significant impact.

Mitigation Measures

AE-6a Any proposed metering station site lighting shall be fully shielded and shall incorporate permanent features (shields, hoods, etc.) shall incorporate permanent features which prevent light spillage beyond the property line.

AE-6b Light levels and quantities of fixtures shall not exceed that which is needed for security and safety.

Residual Impacts

Following the implementation of mitigation measures, the impacts of the Proposed Project at the pipelines, metering station and valve boxes is considered **less than significant with mitigation (Class II)**.

4.1.5.7 Proposed City Maintenance Yard Project Impacts

The Proposed City Maintenance Yard Project components would create impacts to aesthetic resources. These are discussed in relation to the significance criteria below.

Impacts on Designated Scenic Vistas and Designated Scenic Resources

The City of Hermosa Beach has a designated Scenic Highways and viewpoints in their LCP. The impacts on scenic viewpoints or scenic highways would less than significant for the Proposed City Maintenance Yard Project as it would comply with applicable City height limits and would be subject to the mitigation measures under impact AE.7.

No designated State Scenic Highways occur in the Project vicinity (Cal Trans, 2013).

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Impacts On The Existing Visual Character Or Quality

Impact #	Impact Description	Phase	Residual Impact
AE.7	The Proposed City Maintenance Yard Project has the potential to cause a substantial degradation to the character and quality of the existing site and its surroundings.	Phase 1 and 3 Proposed City Maintenance Yard Project	Class II Less Than Significant with Mitigation

Proposed City Maintenance Yard Project: Temporary Facility

Construction of the temporary facility is anticipated to last 9 months. The temporary facility design proposes the demolition of the building located at 1330 Bard Street to accommodate the New Fleet Maintenance Building. This new building would be approximately 30-feet by 70 feet and 17 feet tall. Immediately to the south the Main building would be constructed with the dimensions of 150 feet by 50 feet and 17 feet tall. Obstruction of views to the east from parcels to the west would occur as a result. A retaining wall would be constructed just north of the existing self storage facility to provide the grade required to accommodate the new main building and proposed 15 parking spaces. Bard Street and 11th Place would temporarily be closed to through traffic for approximately 3.5 years. The alterations to the site would require the removal of approximately 7 mature trees. The heights of these trees range from 20 to 50 feet. Eight-foot retaining walls are proposed to define parts of the yard perimeter. These walls would have the effect of screening views of operations from most viewing locations. Private viewing locations near to the site that are from an elevated location (to the west and south) may have views into the site.

The form, scale, and massing of the proposed yard appear generally consistent with the existing visual context of the site and its surroundings. The design proposes a new significant vertical mass in the location of the existing parking lot on the west boundary of the site. It also proposes an increase in built mass at the new fleet maintenance building of approximately 4-5 feet in height. The overall volume of the built mass on the site would appear to increase since new built mass would occupy existing open areas, trees would be removed, new 8' walls would be constructed and the 11th Place and Bard would terminate into the main gates of the facility. The nature of operations at the City Maintenance Yard has the potential to lower the visual character and quality of the site and its surroundings. Mitigation measures have been proposed to limit the potential for operations-related visual impacts that degrade the character and quality of the surrounding visual environment.

Proposed City Maintenance Yard Project: Permanent Facility

The form, scale, and massing of the proposed yard appear generally consistent with the existing visual context of the site and its surroundings. The design proposes vertical masses that are approximately 8-12 feet taller than the existing self storage structure along the southern boundary and in the northwest corner. It also proposes an increase in built mass at the parking lot location of approximately 5-10 feet. The overall volume of the built mass on the site would appear to increase since the perimeter deck wall would bring built mass closer to the project boundary and would encompass the parking area which currently appears open. Public views

from Valley Drive, Pier Ave and City Hall are considered sensitive and mitigation measures have been provided to limit the potential for substantial degradation of the existing visual character or quality of the site. Obstruction of views to the east and north from private parcels to the west and south (respectively) would occur.

Materials, colors, finishes and detailing of the built elements have not been determined at this time, therefore mitigation measures have been proposed to provide guidance in developing detailed solutions which blend with the character and quality of the surrounding visual environment.

Landscape design plans have not been developed at this time, therefore mitigation measures have been proposed to provide guidance in developing detailed landscape design solutions which blend with the character and quality of the surrounding visual environment.

As required by City Municipal Code Chapter 17.30, the building height would be below 25 feet and landscaping would be included as per preliminary plans. However, lot coverage may exceed the allowed 10% coverage in the zoned open space areas. This would most likely require the issuance of a waiver under the planned development permit under municipal code 17.030.090.

The nature of operations at the Proposed City Maintenance Yard Project has the potential to lower the visual character and quality of the site and its surroundings. The majority of public viewing positions identified are either inferior (lower) than the operations area, are screened by vegetation on the greenbelt, or are screened by existing built forms (See KOPs 1 through 5). Private viewing locations to the west and south would be directly affected by the structure, but would not impede sensitive views of the ocean or surrounding. A 6-foot tall perimeter wall is proposed on the maintenance level, which from inferior (lower) view angles would screen nearly all operations from view in public rights of way, the Greenbelt, and public spaces outside City Hall. Private views from nearby residences would allow views into portions of the City Maintenance Yard. Mitigation measures have been proposed to limit the potential for operations-related visual impacts that substantially degrade the character and quality of the surrounding visual environment. Figures 4.1-4a – 4.1-8b show photo simulated views from the same Key Observation Points established for each permanent option of the Proposed City Maintenance Yard Project.

Proposed City Maintenance Yard Project: Permanent Facility No Added Parking Option

The impacts for this option are generally similar to the Parking Option (above). In this design, some materials storage uses are moved to an offsite area and the remaining maintenance yard uses and parking areas are accommodated on a single level. This allows for the accommodation of required number of parking stalls at-grade. The overall massing does not change substantially from the Parking Option design since the deck is still elevated (though 2-feet lower). The 20' tall mass along the west boundary is filled out to span the property length which is an increased mass along this boundary. As a result, there is an increased potential for obstruction of views to the east from parcels immediately to the west under this option. Along the southern boundary, a 5' tall strip of massing (above the 15' tall main mass) is eliminated which is a decreased mass and overall height along that boundary (as compared to the Parking Option). As a result, there is a slightly reduced potential for obstruction of views to the north from parcels immediately to the south under this option. The north and east edges of the maintenance yard are pulled in to

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accommodate the surface parking and the buffer landscaping area is retained. The design would require the relocation of some street lights and/or the undergrounding of overhead utilities. The same mitigation measures and impact levels would apply to this alternative as the Proposed City Maintenance Yard Project Parking Option and Temporary Facility.

Mitigation Measures

- AE-7a The materials, colors and finishes at the Proposed City Maintenance Yard Project shall be of comparable quality, character and level of architectural detail to those of adjacent structures.
- AE-7b The landscape design at the Proposed City Maintenance Yard Project shall be of comparable quality and character to that of the surrounding visual environment. Incorporation of evergreen trees, shrubs, groundcovers and vines are recommended for their ability to provide additional screening capacity of operations areas.
- AE-7c The operations yard area of the proposed City Maintenance Yard Project shall be required to have a 6-foot minimum screen wall around its perimeter (where building masses do not otherwise define the perimeter). Additional vertical screening at Asset Disposal and Washdown/Dump areas shall be employed through either increased screen wall height and/or landscape design.

Residual Impacts

Following the implementation of mitigation measures, the impacts of the Proposed Project at the Proposed City Maintenance Yard Site is considered **less than significant with mitigation (Class II)**.

New Sources of Light or Glare

Impact #	Impact Description	Phase	Residual Impact
AE.8	The Proposed Maintenance Yard Project has the potential to create a new source of light or glare that would adversely affect views in the area.	Phase 1 and 3 Proposed City Maintenance Yard Project	Class II Less Than Significant with Mitigation

During construction, the same City Codes that limit the construction to daytime hours for the other portions of the project would apply to this location. Lighting design plans for the Proposed City Maintenance Yard Project have not been developed at this time, therefore measures have been proposed to provide guidance in developing site lighting design solutions which mitigate the potential for the facility to create a new source of substantial light or glare. The hours of operation and light levels at the Proposed City Maintenance Yard Project (both temporary and permanent) are assumed to be comparable to those at the existing City maintenance yard (basic security lighting, no nighttime operations). These light levels are of the same character and intensity as those on and around the existing site. The locations of light sources are anticipated to be more evenly distributed across the site, rather than concentrated on the east end (parking lot) and north edge. However, if inappropriate lighting results in direct glare, it could cause a significant impact.

Mitigation Measures

- AE-8a All proposed site lighting shall be fully shielded and shall incorporate permanent features which prevent light spillage beyond the property line.
- AE-8b Light levels and quantities of fixtures at the Proposed City Maintenance Yard Project shall not exceed that which is needed for security.
- AE-8c All proposed site lighting fixtures shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.

Residual Impacts

Following the implementation of mitigation measures, the potential impacts at the Proposed City Maintenance Yard Project Site are considered **less than significant with mitigation (Class II)**.

4.1.6 Comparison to Applicant Studies

Photo simulations of the Proposed Oil Project (KOPs 6 through 20) were produced by the E&B consultant Focus 360. The photo simulations in the Planning Application were updated at the request of the EIR consultant from a 28mm lens to use a 50mm lens, show the rig in a ‘worst-case scenario’ drilling location for each view and adjust landscape size depictions per the supplemental landscape information provided after the original simulations were produced. These revised simulations are believed to more accurately depict the perceived distance, scale and magnitude of the project because the 50mm lens most accurately depicts the way the human eye sees the world. See further discussion of the process for preparing these simulations in the Methodology section of this issue area.

4.1.7 Other Issue Area Mitigation Measure Impacts

Some mitigation measures during construction related to noise soundwalls, such as NV-7a and NV-9a, would temporarily increase aesthetic impacts and degrade the visual environment for some private views during the construction phase. However, these soundwalls would be equal to or lower than buildings in the immediate vicinity and would not be substantially out of character with the existing environment and would therefore be less than significant.

Mitigation measure NV-2a would increase the height of the soundwall used during drilling to 35 feet. As per mitigation measure AE-1b, this wall would become permanent at 35 feet (instead of the proposed Project 32 feet). The increase in the wall height by 3 feet would not produce significant impacts.

Mitigation measures in Section 4.6, Fire Protection and Emergency Response, might require the installation of thermal barriers or the increase of the flare stack height "during drilling". During drilling, there would be 32-foot high sound barriers. The modified flare stack height would not exceed the height of the soundwall (as required by the CUP); therefore, the modified flare stack would not be visible above the soundwall. Thermal shields would also not be visible above the

soundwall. There would be no additional aesthetic impacts from insulating a tank. Therefore, these measures would not produce additional aesthetic impacts.

4.1.8 Cumulative Impacts and Mitigation Measures

No other cumulative projects would be constructed within the same viewsheds as the Proposed Project. The AES Project, to remove large portions of the AES Power Generating Station in Redondo Beach, could provide some increase in visual quality to the area by removing the large stacks and industrial equipment located next to King Harbor. There would be no other potential cumulative significant impacts.

4.1.9 Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AE-1a	Material choice of electrical drill rig acoustical shroud shall be of neutral sky color which is selected for its ability to reduce visual impact, in coordination with and approval by the City Community Development Director.	Approval of Construction Documents and Specifications and field-demonstration	Prior to issuance of permits	City of Hermosa Beach
AE-1b	The sound attenuation wall shall be replaced by a permanent wall with design features installed at the end of Phase 3. The intent is to provide stability of views and opportunities for positive visual elements that partially mitigate the visual presence of the walls from the Hermosa Greenbelt and other sensitive views in the immediate Project vicinity. The permanent wall shall be allowed to be provided in lieu of the 16-foot block wall. Landscape design shall be allowed to be adjusted to respond to façade articulations, though quantities and densities shall be maintained. The permanent wall shall be designed with architectural features in coordination with and approval of the City Community Development Director.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-2a	Design of the sound attenuation wall exterior façade shall be required to include design articulations that are complementary to the character, scale, and quality of the surrounding environment. The intent is to mitigate the visual impact of the wall from the Hermosa Greenbelt and other sensitive views in the immediate project vicinity. The following measures of success shall be met: 1) Articulations of façade decrease scale and proportion of mass into smaller increments that more closely resemble those of adjacent buildings; and	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	2) Colors, detailing and material use are varied to a level consistent with existing visual environment.			
AE-2b	Planting area growth medium shall be capable of supporting the long term health and growth of the landscape design. Requirements shall be: 1) Demonstrated free of debris and construction waste (asphalt, concrete, etc) to a minimum depth of 3 feet within all planted areas. Wall footings shall be designed to limit encroachment into planted areas; 2) Soils analysis report shall be conducted by a certified soil scientist. Report shall include recommendations to meet the intent of this mitigation measure; and 3) If soils are determined to be unsuitable to support plant growth, they shall be amended or removed/replaced to meet requirements of soils analysis for plant palette selected.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-2c	Vine plantings where used shall meet the following conditions: 1) be self-attaching or structure supported; 2) have demonstrated success in the City; 3) be planted at a density to achieve full coverage at maturity; 4) be planted at a minimum 5 gallon size; and 5) be required on the visible portion of the west wall at the temporary parking facility.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-2d	All trees shall be required to be a minimum of 20' in height at installation and meet the American Standard for Nursery Stock (ANSI Z60.1-2004). If a tree species alternate is proposed, it shall be required to be an equal to the species proposed in the Project Application in the following characteristics: 1) Dense evergreen with similar form and habit; 2) Probability of achieving a minimum of 35-40 feet at maturity; and 3) Comply with Municipal Code Chapter 8.60 and 8.56.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AE-3a	Pipeline alignments and valve box locations shall be designed to avoid the removal or modification of trees, hedgerows, and/or large shrubs to the extent feasible.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	Cities of Hermosa Beach, Redondo Beach and Torrance
AE-3b	If landscaped areas, streetscapes, plazas and/or parklands are required to be temporarily disturbed, they shall be restored to their previous condition following completion of construction. Avoidance of disturbance shall be the preferred option, especially where landscape elements act to screen views (hedges, large shrubs, etc) or where they act as community gateways (Redondo Beach at Hwy-1).	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	Cities of Hermosa Beach, Redondo Beach and Torrance
AE-3c	Block color/s selection and pattern (if applicable) shall be complementary to adjacent buildings. A buffer of shrubs and vines shall be planted to match the existing character and quality of the adjacent properties.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-4a	Final acoustical cover material selection shall be required to be fully opaque. Fully opaque shall be defined as completely blocking all light from passing through its surface. The exterior finish shall be low reflectivity and not capable of producing glare.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-4b	Colors and finishes of equipment and surfaces within the soundwall (including the interior face of the soundwall, the interior face of the drill rig acoustical cover, and the physical structure of the drill rig within the acoustical shield) shall have a reflectivity rating of 0.3 or lower.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AE-4c	All proposed site lighting fixtures associated with the drilling activities shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5a	Colors and finishes of surfaces within the facility, including the interior face of the soundwall, ground materials (darker or asphalt), wall paints and equipment paints to the extent feasible shall have a low reflectivity rating of 0.3 or lower to reduce the potential for glow.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5b	Final sound wall material/s selection/s (including gates) shall be fully opaque. Fully opaque shall be defined as completely blocking all light from passing through its surface. The exterior finish shall be low reflectivity and not capable of producing glare.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5c	All proposed site lighting, including fixtures outside the wall, shall be fully shielded. Fully shielded shall be defined as: A luminaire constructed and installed in such a manner that all light emitted by the luminaire, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane through the luminaire's lowest light-emitting part (IES/IDA, 2011)	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5d	The LZ-2 parameters of the Model Lighting Ordinance (IES/IDA, 2011) shall be used to demonstrate that maximum vertical illuminance for the site are not exceeded. For site lighting inside the wall, Table B allowances shall be used. Lighting outside the wall at site entrances shall not exceed that of existing street lighting, which produces a maximum of 1 footcandle.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	For the purposes of measuring vertical illumination, the plane of the property line shall be extended to an elevation equal to the height of the electric drilling rig.			
AE-5e	All proposed site lighting fixtures shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-6a	Any proposed metering station site lighting shall be fully shielded and shall incorporate permanent features (shields, hoods, etc.) shall incorporate permanent features which prevent light spillage beyond the property line.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Redondo Beach
AE-6b	Light levels and quantities of fixtures shall not exceed that which is needed for security and safety.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	Cities of Redondo Beach and Torrance

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AE-7a	The materials, colors and finishes at the Proposed City Maintenance Yard Project shall be of comparable quality, character and level of architectural detail to those of adjacent structures.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

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Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AE-7b	The landscape design at the Proposed City Maintenance Yard Project shall be of comparable quality and character to that of the surrounding visual environment. Incorporation of evergreen trees, shrubs, groundcovers and vines are recommended for their ability to provide additional screening capacity of operations areas.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-7c	The operations yard area of the proposed City Maintenance Yard Project shall be required to have a 6-foot minimum screen wall around its perimeter (where building masses do not otherwise define the perimeter). Additional vertical screening at Asset Disposal and Washdown/Dump areas shall be employed through either increased screen wall height and/or landscape design.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-8a	All proposed site lighting shall be fully shielded and shall incorporate permanent features which prevent light spillage beyond the property line.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-8b	Light levels and quantities of fixtures at the Proposed City Maintenance Yard Project shall not exceed that which is needed for security.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-8c	All proposed site lighting fixtures shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach