

## **RTI Transpacific Fiber-Optic Cables Project**

## **Initial Study**

City of Hermosa Beach 1315 Valley Drive Hermosa Beach, CA 90254

#### **INITIAL STUDY**

1. Project Title: RTI Transpacific Fiber-Optic Cables Project

**2. Lead Agency Name** City of Hermosa Beach

and Address: Community Development Department

1315 Valley Drive

Hermosa Beach, CA 90254

**3. Contact Person** Ken Robertson, Community Development Director

**and Phone Number:** (310) 318-0242

krobertson@hermosabch.org

**4. Project Location:** The project proposes to install a cable landing site located

within either 6th Street (Option A) or 10th Street (Option B) between Hermosa Avenue and Manhattan Avenue. The Project would also utilize the existing power feed equipment (PFE) facility located in the Hermosa Pavilion at 1601 Pacific Coast Highway, Hermosa Beach. Buried cables in the public right-of-way (streets and Greenbelt) would connect the

landing site to the PFE facility. Offshore cables would extend from the cable landing site across the Pacific Ocean. (See

Figure 1.)

5. Project Sponsor's Name

and Address:

RTI Infrastructure, Inc. 268 Bush Street, #77 San Francisco, CA 94104

6. General Plan Designation:

The Project's cable landing site and terrestrial fiber-optic cables would be located within public street rights-of-way and

the Greenbelt. These streets traverse areas with the

following General Plan land use designations: Medium and High Density Residential, Light Industrial, Public Facility, Open Space, Gateway Commercial, and Community

Commercial. General Plan designations are not applicable to

the marine portions of the Project.

**7. Zoning:** OS-1 (Greenbelt), SPA-8 (power feed equipment facility),

OS (beach); otherwise the Project is located within public

street rights-of-way.

#### 8. Description of Project:

RTI Infrastructure (Applicant) proposes to install and operate up to two subsea cable systems connecting the United States to countries on the western Pacific Rim such as Singapore, Southeast Asia, China, Australia, or Japan. The Applicant has already installed terrestrial systems in Hermosa Beach to support four subsea cables as part of the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project and desires to expand these facilities by adding two additional subsea cables.

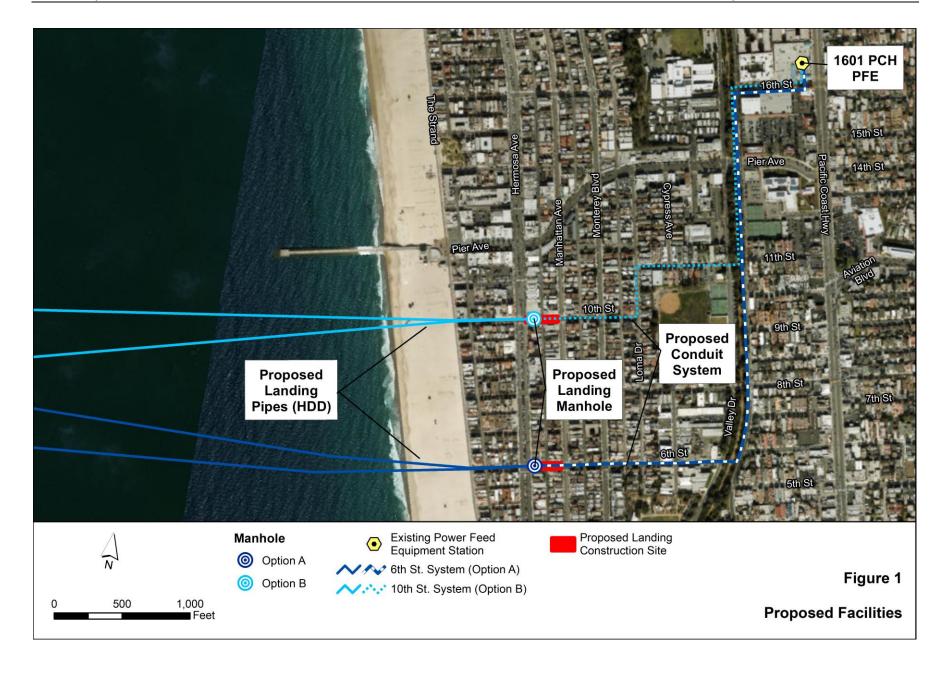
The project would be implemented in two phases consisting of one phase for each of the two subsea cable systems. Phase 1 includes construction of the terrestrial facilities shared by the two fiber-optic cable systems and the installation and operation of the subsea cable to Guam. Phase 2 includes construction of the remaining terrestrial facilities and installation and operation of the second subsea cable to the Western Pacific Rim. Each cable system would entail installing a marine fiber-optic cable on the seafloor across the Pacific Ocean, an onshore landing site either at 6th Street (Option A) or 10th Street (Option B) in Hermosa Beach, and then connecting to the Applicant's existing power feed equipment (PFE) facility located in the Hermosa Pavilion at 1601 Pacific Coast Highway, Hermosa Beach. A buried terrestrial conduit system would be installed using trenchless construction (i.e. boring) within public streets and the Greenbelt to connect landing facilities to the existing PFE facility. Figure 1 shows the proposed facilities to be installed at either 6th Street or 10th Street. The Applicant's preferred landing site is 6th Street.

The marine cable systems will generally follow the ocean corridors evaluated in the previous EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project. Figure 2 shows these corridors.

#### 8.1 Terrestrial Components

The terrestrial components of the cable systems refer to components above the mean high water (MHW) line and include the following:

- Landing pipes. The two 6-inch-diameter steel landing pipes would be installed using horizontal directional bore methods from either 6th Street landing site (Option A) or the 10th Street landing site (Option B) approximately 3,000 feet offshore. The Option A and Option B landing sites are shown Figures 3 and 4.
- Landing manholes. A landing manhole (LMH) would provide access to the directional bores
  for marine cable pulling and contain the splice where the terrestrial and subsea cables
  connect. A terrestrial conduit system would connect the LMH to the PFE facility. In addition to
  the LMH, a separate surface access vault would be placed on the landward side of the LMH.
  The surface access vault would consist of a deep concrete box with a steel lid. The surface
  access vault would allow for the subsea cable installation without additional surface
  disturbance.
- Ocean ground beds. The ocean ground bed (OGB) is an anode array consisting of metal
  rods that would be installed vertically either under the beach or under the ocean floor
  seaward of the existing HDD pipe. The direct-current (DC) electrical system that provides
  power for the subsea cables would be connected to the OGB. The OGB functions as the
  electrical ground allowing the DC circuit to be completed. The location for the OGB will be
  selected by the cable engineer at the time of construction.
- Buried terrestrial conduits and cables. The terrestrial conduit system provides the link from
  the LMH, where the subsea cable comes ashore, to the existing PFE facility. The system
  would follow public rights-of-way (streets and Greenbelt) from the LMH to the PFE facility.
  Seven conduits would accommodate two separate subsea cable systems, two necessary
  power cables, two ground cables, and one spare reserved for possible future maintenance or
  replacement.



PFE facility. The PFE facility provides power to the fiber-optic cables as they cross the
Pacific Ocean. An existing PFE facility, owned and operated by the Applicant, currently exists
in the basement of 1601 Pacific Coast Highway, Hermosa Beach. Two additional sets of PFE
equipment would be added to this existing facility to accommodate the two proposed cables.
Commercially delivered electricity would provide power in addition to emergency backup
generators in the event of power outages.

These project components would be located completely within the City of Hermosa Beach (see Figure 1).

#### **Terrestrial Cable Installation**

Terrestrial construction entails the installation of the terrestrial cables between the LMH and the PFE facility. Terrestrial construction activities would entail delivery of staging materials and equipment, surface preparation, trenching, PVC and steel conduit placement, backfilling, trenchless installation (from the LMH to the PFE facility), directional boring (from the LMH to an offshore exit point beyond the surf zone), manhole installation, innerduct and cable pulling, and surface restoration. Terrestrial activities that would require excavations or ground disturbance associated with boring, trenching, and manhole placement.

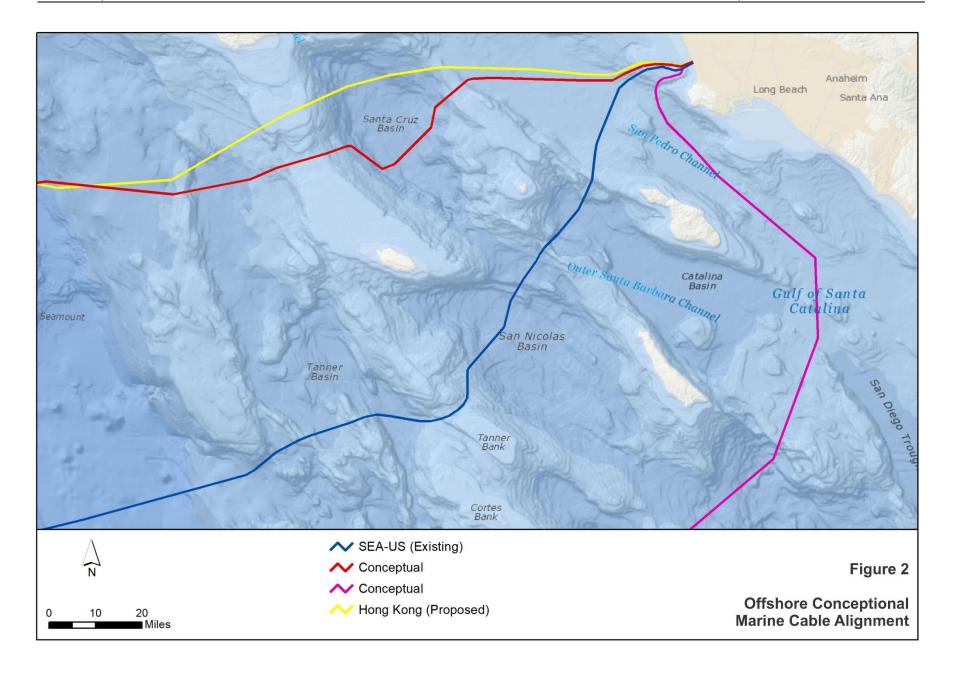
#### 8.2 Marine Components

The marine components of the cable systems refer to the marine conduits, marine cables, and cable regenerators between the MHW line and the outer limit of the continental shelf, which is where seawater depth reaches approximately 3,940 feet (1,200 meters). In the deep ocean, the cable systems would be laid on the sea floor but would not be buried. They are described below:

- Marine conduits. The two marine conduits, which would each contain a marine fiber-optic
  cable, would extend from the landing sites west into the ocean in the form of two 6-inchdiameter steel pipes. They would be installed 25 to 50 feet below the ocean floor using
  directional bores. The marine bores would be conducted from the landing site (either the
  Option A or Option B landing site, see Figure 1). A conceptual plan for the two directional
  bores is shown in Figure 5.
- Marine cables. The marine cables would be armored to provide an appropriate degree of
  protection for the cable. The core of optical fibers would be surrounded with rings of wires,
  copper sheathing, and polyethylene insulation. The cables would be less than 2 inches in
  diameter.
- Cable regenerators. Light pulses, which carry the telecommunications data through the fiber-optic cables, can be transmitted only approximately 35 miles along the cable before they need to be regenerated. This regeneration would be done by regenerator equipment attached to the cable at the appropriate intervals. The power system for the regenerators would be housed at the PFE facility. Upon detection of abnormal current flow, the DC power system would be shut down.

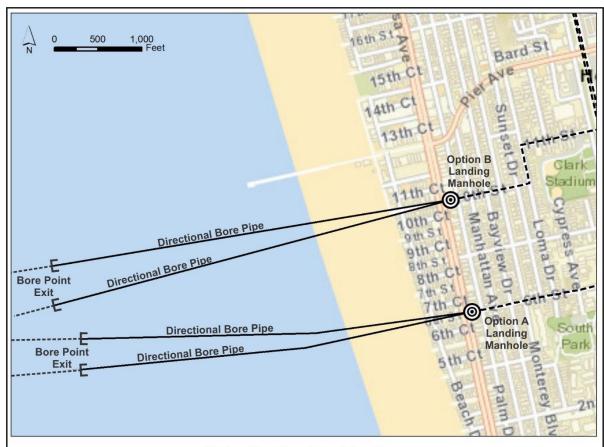
#### **Marine Cable Installation**

Two 6-inch steel pipes (conduits) would be installed from the LMH into the ocean at each of the cable landing sites. Each conduit would contain a marine fiber-optic cable. Various construction methods associated with various ranges of water depth would be employed. The Applicant has committed to compliance with the USEPA voluntary vessel speed reduction program and will limit the vessel speeds to 9 knots during the relocation and transit to the marine work stations in order to reduce vessel air pollutant emissions and reduce the potential for collisions with marine mammals. During cable-laying operations, vessel speed would be reduced further.

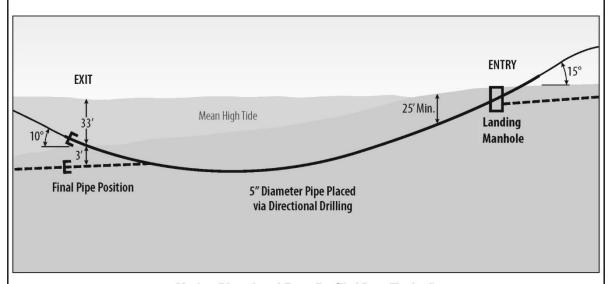








Marine Directional Bore Plan View



Marine Directional Bore Profile View (Typical)

Figure 5

Marine Directional Bore Plan

#### 8.3 Schedule

The landing pipes would be installed by marine directional boring operation at the cable landing site would take would take 5 to 6 weeks to complete, which would include:

- 1 week for site set up,
- 3 to 4 weeks for directional boring and installation of the landing pipes,
- 1 week for installation of the LMH and site cleanup.

Terrestrial conduit installation would occur in City streets and the Greenbelt and would take approximately 2 months to complete. The subsequent pulling of cable through the conduits would be take about 1 to 3 days to complete. The installation of the terrestrial facilities would occur between the hours of 8:00 a.m. and 6:00 p.m. Mondays through Fridays and between the hours of 9:00 a.m. and 5:00 p.m. on Saturdays and holidays. No work related to the installation of the terrestrial facilities would occur on Sundays.

After the landing pipes are installed from the shore, the marine cable will be pulled to the shore through the landing pipe. The pulling of the marine cable through the landing pipe typically takes one day. However, once commenced these activities cannot be stopped. Therefore, the work hours for the marine cable pulling will begin at about 8:00 a.m. on the landing day and will continue for 24 hours per day, 7 days per week until completed. This work is expected to take about 3 days for each cable, including 1 day for set up, 1 day for cable landing, and 1 day for splicing.

#### 8.4 Operations, Maintenance, and Repair

#### **Cable Operations and Maintenance**

Other than ensuring that the power feed and transmission equipment in the terminal station are in proper working order, no routine maintenance is needed for the terrestrial segments of the cable network. These cables typically operate for 25 years. Routine maintenance for the marine segments of the network is unnecessary due to the stability of the ocean-bottom environment.

#### **Emergency Cable Repair (Marine)**

If a marine cable is damaged after installation, repairs would need to be made. For a typical shallow-water repair, the repair location can usually be pinpointed using low-frequency electroding and little, if any, extra cable must be added during the repair because of the shallow depth.

#### **Buried Repair**

If the cable needing repair is buried, the grapnel used by the repair vessel would be sized to match the burial depth attained during installation. Typically, a standard flatfish grapnel can be rigged to penetrate and recover cable from burial depths up to 20 inches. If deeper burial is involved, then a de-trenching grapnel, divers, or an ROV can be used to remove the cable from the burial trench and bring it to the surface for repair before reburial near its original position.

#### **Unburied Repair**

If the damage section of cable is not buried, it might be possible to bring it to the surface without cutting. The cable can be torch-cut at the bow of the ship. Otherwise, a cutting blade can be fitted to a flatfish grapnel and the cable cut before recovery. Gifford grapnels can then be used for holding runs to recover each cut end.

After the cable is recovered, the end is prepared, the fibers tested, and the power conductor path is checked. The other end is recovered and similarly tested. The repaired cable is joined to the fault-free cable end and paid out as the vessel returns to the buoyed end. When the buoy is recovered,

the two cable ends are joined. The repaired cable then is buried by an ROV if it came from a buried section or is laid on the bottom if it came from an unburied section.

#### 8.4 Retirement, Abandonment, or Removal of the Cable Systems

The Project would have a life of approximately 25 years. Within 90 days of either taking the cable out of service or the expiration of the City lease, the Applicant would advise the City, California Coastal Commission, and any other agencies with jurisdiction over the cable of the status and proposed disposition of the inactive cable. The cable owner would also work with the City to determine if removal of facilities would be necessary. All terrestrial facilities, including the conduit and manhole system, would be left in place and available for use by other cables. The directional bores installed to facilitate the cable landings would also be left in place.

#### 9. Project Site Characteristics

The proposed Project facilities would be located in a fully developed area containing a mix of residential and commercial uses. The PFE facility is an existing facility located in the Hermosa Pavilion, which is multi-story retail commercial facility located on Pacific Coast Highway. The existing PFE facility would be expanded within the existing leased space. The two landing sites are located within public streets adjacent to residential and commercial uses. The terrestrial cable routes would be located within either public streets or the Greenbelt. See the description of existing land uses in Section 11 below.

Natural resources in the immediate Project vicinity include the Greenbelt, beach, and ocean. The Greenbelt is a linear, landscaped, open space area used primarily for recreational use, including walking, running, and dog walking. It primarily has scenic and recreational value, with minimal natural habitat value. The landing pipes would be bored under the nearshore ocean area, the beach, and the Strand adjacent to the beach. The nearshore ocean areas have recreational, scenic, and natural resource values. The nearshore ocean area directly affected the Project consists of soft, silty ocean bottom just beyond the surf zone. The Strand, near where the ocean ground bed may be installed, is an important recreational resource adjacent to the beach sand that consists of a paved pathway used by pedestrians, bicyclists, and roller bladers. The beach is a broad sandy area supporting a variety of beach- and ocean-oriented recreational activities. The beach and ocean are important recreational resources both locally and regionally, and also important scenic resources.

#### 10. Requested Approvals

Implementation of the Project requires the following discretionary actions by the City of Hermosa Beach:

- Precise Development Plan for Project development
- Planned Development Permit for development in Open Space Zone
- Fiber-Optic Cable Easement for development of landings
- Construction/excavation permits
- Encroachment permits for placement of conduit and construction activities

#### 11. Surrounding Land Uses and Setting

Hermosa Beach is a fully developed community located on Santa Monica Bay in Los Angeles County. The proposed 6th Street landing site (Option A) is located one block inland from the beach and abuts multi-family residential uses on the north and south sides of the street. The 10th Street landing site (Option B) is also located one block inland from the beach and abuts multi-family residential uses as well as commercial uses that front upon Hermosa Avenue. The terrestrial cable routes are within either public streets or the Greenbelt and traverse areas developed with

residential, light industrial, and commercial uses, as well as public facilities. The Greenbelt is a north-south public open space corridor that contains a walking path and ornamental landscaping. The PFE facility is located within an existing multi-story commercial building that fronts upon Pacific Coast Highway.

#### 12. Approvals Required from Other Public Agencies

Required public agency permits or approvals identified at this time include the following:

#### **Coastal Commission**

- Coastal Development Permit
- Coastal Zone Management Act Consistency Certification

#### **Regional Water Quality Control Board**

Clean Water Act, Section 401 Water Quality Certification

#### **U.S. Army Corps of Engineers**

• Clean Water Act, Section 404, Nationwide 12 Authorization

#### 13. Have Native American tribes requested consultation?

No tribes had requested consultation at the time this Initial Study was prepared.

#### 14. Documents & References

- City of Hermosa Beach. 2016. MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project Final Environmental Impact Report (SCH #2015041004). Certified April 19, 2016.
- City of Hermosa Beach. 2017. PLAN Hermosa: Integrated General Plan and Coastal Land Use Plan. Adopted August 22, 2017.
- Frost, N. 2015. California least tern breeding survey, 2014 season. California Department of Fish and Wildlife, Wildlife Branch, Nongame Wildlife Program Report, 2015-01. Sacramento, CA. 23 pp + Appendices.
- Ryan, T. P., S. Vigallon, and C. Egger. 2016. Annual Report: The Western Snowy Plover in Los Angeles and Orange Counties, California: July 2015 to June 2016. California Department of Fish and Wildlife, Wildlife Branch, Nongame Wildlife Program Report, 2016-11. Sacramento, CA. 32 pp + Appendices.
- U.S. Fish and Wildlife Service [USFWS]. 2012. Endangered and threatened wildlife and plants: revised designation of critical habitat for the Pacific coast population of the Western Snowy Plover; final rule. Fed Register 77 (118): 36728-36869

#### 15. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmenta	l factors cl	hecked belo	w would be	potentia	lly affected	by this p	roject, invo	lving at
least one impact following pages:	that is a '	'Potentially	Significant	Impact"	as indicate	d by the	checklist	on the

	Aesthetics Biological Resources Geology & Soils Hydrology & Water Quality Noise & Vibration Recreation Wildfire		Agricultural Resources Cultural Resources Greenhouse Gases Land Use & Planning Population & Housing Transportation Mandatory Findings of Significant	⊠ □ □ □ cance	Air Quality Energy Hazards & Hazardous Mats. Mineral Resources Public Services Utilities & Service Systems
16.	DETERMINATION. (To	be d	completed by lead agency) E	Based	d on this initial evaluation:
	I find that the proposed and a NEGATIVE DECL	proje .ARA	ect COULD NOT have a sign ATION will be prepared.	ifica	nt effect on the environment,
	there will not be a signifi	cant	effect in this case because r	evisi	nt effect on the environment, ons in the project have been NEGATIVE DECLARATION
X	I find that the proposed ENVIRONMENTAL IMP			ffect	on the environment, and an
	significant unless mitigated and adequately analyzed in a has been addressed by	ted" an ea mitig VIRC	impact on the environment, it arlier document pursuant to a ation measures based on th DNMENTAL IMPACT REPOI	out a applic e ear	ificant impact" or "potentially t least one effect 1) has been cable legal standards, and 2) dier analysis as described on required, but it must analyze
	because all potentially s EIR or NEGATIVE DEC avoided or mitigated pur	signif LAR rsuai	icant effects (a) have been ATION pursuant to applicat nt to that earlier EIR or NEG	analy ble st ATIV	int effect on the environment, yzed adequately in an earlier tandards, and (b) have been E DECLARATION, including posed project, nothing further
17.		itials	tudy for this project has been		(Section 9-2.201 of SJC iewed and the environmental
1	Ken Robertson, Commu	anity	Development Director	C	pate: 8 5 19

# 18. ENVIRONMENTAL CHECKLIST (Instructions)

to-day impacts. For each question, the following should be provided: analysis considers the project's short-term impacts (construction-related), and its operational or dayand answers are provided according to the analysis undertaken as part of the Initial Study. The project. For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated section analyzes the potential environmental impacts which may result from the proposed

- simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture specific screening analysis). general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a projectzone). A "No Impact" answer should be explained where it is based on project-specific factors as well as "No Impact" answer is adequately supported if the referenced information sources show that the impact supported by the information sources a lead agency cites in the parentheses following each question. A A brief explanation is required for all answers except "No Impact" answers that are adequately
- 2 All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational
- $\omega$ must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required. Once the City has determined that a particular physical impact may occur, then the checklist answers
- 4 "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier "Negative Declaration: Less Than Significant With Mitigation Incorporated applies where the Analyses," as described in (5) below, may be cross-referenced). incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a
- 5 effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an In this case, a brief discussion should identify the following:
- ၂ ဆ Earlier Analysis Used. Identify and state where they are available for review.
- and state whether such effects were addressed by mitigation measures based on the earlier scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, Impacts Adequately Addressed. Identify which effects from the above checklist were within the
- C Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures earlier document and the extent to which they address site-specific conditions for the project. Incorporated," describe the mitigation measures which were incorporated or refined from the
- <u>ල</u> Incorporate into the checklist references to information sources for potential impacts (e.g., general appropriate, include a reference to the page or pages where the statement is substantiated plans, zoning ordinances). Reference to a previously prepared or outside document should, where
- 7) Include a source list and list of individuals contacted or consulted
- 00 Studies performed on projects within the city must use this format. This form is consistent with the California Environmental Quality Act (CEQA) Guidelines and all Initial
- 9 than significance. evaluate each question; and b) the mitigation measure identified, if any, to reduce the impact to less The explanation of each issue should identify, a) the significance criteria or threshold, if any, used to

Some of the responses to the environmental checklist questions that follow reference information and analysis contained in the EIR prepared for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project (SCH #2015041004), which was certified in 2016. The MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project had very similar components to the proposed project and used identical installation methods. Therefore, the information and analysis in that EIR is very relevant to the proposed project and has been utilized in answering some of the checklist questions below. Note that the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project involves the installation of four transpacific fiber-optic cables whereas the proposed project involves the installation of only two such cables. The Final EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project is available for review on the City's website:

http://www.hermosabch.org/index.aspx?page=962

A hard copy of the Final EIR is also available for review at the City's Community Development Department.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.1 AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	$\boxtimes$			
<ul> <li>Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building along a State-designated scenic highway?</li> </ul>				$\boxtimes$
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? Would the project conflict with applicable zoning and other regulations governing scenic quality?	$\boxtimes$			
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

#### (a) Would the project have a substantial adverse effect on a scenic vista?

Potentially Significant Impact. The Project proposes installing a cable landing location at either 6<sup>th</sup> Street (Option A) or 10<sup>th</sup> Street (Option B). During construction, security fencing would be erected around the landing site. This would temporarily affect views from adjacent properties. Activities to install fiber-optic cable in public streets and the Greenbelt would also be locally visible, as would the vessels involved in nearshore cable-laying. Views of the cable-laying vessel off shore would be visible for several days from the beach, Strand, and other nearby locations with nearshore ocean views. These visual impacts would only be associated with the construction process and, therefore, would be temporary in nature; however, they may present a substantial change from existing conditions. The EIR will evaluate potential impacts of the proposed Project on views and scenic vistas.

## (b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** The only State Highway within the incorporated limits of Hermosa Beach is Pacific Coast Highway, State Route 1. According to the California Department of Transportation, State

Route 1 is not designated a State Scenic highway through the City of Hermosa Beach. Therefore, views from State scenic highways would not be affected by the proposed Project. No trees would need to be removed for the proposed Project and the Project would have no effect on rock outcroppings because none exist in the immediate project vicinity. Note that the EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project (SCH #2015041004), which is substantially similar to the proposed Project, analyzed impacts on such scenic resources (pgs. 3.1-16 – 3.1-17) and determined that no impact would occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

# (c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? Would the project conflict with applicable zoning and other regulations governing scenic quality?

**Potentially Significant Impact.** During construction, temporary fencing would be erected around the landing site. This fencing and the portions of the boring equipment would be visible from surrounding areas and may adversely affect the visual character or quality of the site and its surroundings, especially from adjacent residences, sidewalks, and streets. Activities to install fiberoptic cable in public streets would also be locally visible, as would vessels involved in near-shore cable-laying. The EIR will evaluate this and other potentially adverse effects on visual character and quality.

## (d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

**Potentially Significant Impact.** As described in the EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project (pgs. 3.1-15 – 3.1-16), it is possible that some cable-pulling activities may occur at night. Circulation of the marine directional bore pump may also be required for 30 minutes at night to prevent the bore pipe from seizing. For these situations, lighting would be required at the landing site at night. The EIR will evaluate the potential impact associated with this nighttime lighting.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.2 AGRICULTURAL RESOURCES. Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance as depicted on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the CA. Resources Agency?				$\boxtimes$
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				$\boxtimes$
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				$\boxtimes$

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

**No impact.** The locations associated with Project activities are not within Prime Agricultural Land as defined by Government Code Section 51201(c) and 56064, or Agricultural Land as defined by

Government Code Section 56016. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

### (b) Would the project Conflict with existing zoning for agricultural use, or a Williamson Act contract?

**No impact.** The sites associated with Project activities are located in an urbanized area. No agricultural operations exist in the vicinity and the area is not zoned for agricultural use. Proposed work would occur either within public rights-of-way, on public land, or at developed commercial property. No Williamson Act contracts exist at any of the locations where Project activities would occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

## (c) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

**No Impact.** The proposed Project would not generate changes that might directly or indirectly result in conversion of Farmland to non-agricultural use. The Project would have no effect on agricultural resources. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.3 AIR QUALITY. Would the project:	_			
a. Conflict with or obstruct implementation of the applicable air quality plan?	$\boxtimes$			
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under the applicable federal or state ambient air quality standard)?	$\boxtimes$			
c. Expose sensitive receptors to substantial pollutant concentrations?	$\boxtimes$			
<ul> <li>Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</li> </ul>			$\boxtimes$	

#### Would the project:

#### (a) Conflict with or obstruct implementation of the applicable air quality plan?

**Potentially Significant Impact.** The proposed Project site is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Project construction would result in an increase in air emissions from on-shore and offshore borings, cable-laying activities, development of the landing, power feed equipment facility installation/construction, construction equipment, trucks, fugitive dust, and worker trips. Project operation would also result in an increase in air emissions generated by inspection and maintenance activities, from emergency backup generator use, and indirect emissions from electricity use. The EIR will evaluate potential impacts of the proposed Project for consistency with the SCAQMD's adopted Air Quality Management Plan.

(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard)?

**Potentially Significant Impact.** Construction and/or operation emissions could result in the violation of air quality standards or the exceedance of air quality thresholds of significance, which may result in a cumulatively considerable net increase to an existing or projected air quality violation The EIR will evaluate potential cumulative impacts of the proposed Project.

#### (c) Expose sensitive receptors to substantial pollutant concentrations?

**Potentially Significant Impact.** Emissions generated from construction activities, especially particulate matter emissions, could potentially expose nearby sensitive receptors (such as schools, churches, hospitals, and nursing homes) to substantial pollutant concentrations. Project operation activities could also expose nearby sensitive receptors to increased levels of air pollution. The comparison of Project emissions against SCAQMD toxic air contaminant thresholds could identify a potential for adverse localized impacts. The EIR will evaluate potential adverse effects of the proposed Project on sensitive receptors.

## (d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

**Less than Significant Impact.** The Project would not involve the construction of a facility normally associated with odor complaints, such as landfills, agricultural uses, food processing plants, chemical plants, dairies, etc. The Project's normal operation and maintenance activities are limited to on-road vehicle and emergency engine emissions sources which would not create substantial odors.

The Project's construction would include subsurface boring and marine activities that could create offensive odors. The subsurface boring could generate boring wastes with organic materials that have the potential to generate objectionable odors, but these materials would be immediately vacuumed into a truck for export so the potential exposure to this odor source would be limited and brief. Offshore odors from vessel operation and cable-laying activities would occur far enough away from shore that any marine-related offensive odor sources would disperse before reaching onshore populations. Additionally, Project construction would include other mildly objectionable odors sources, such as asphalt paving repair work, painting, and diesel exhaust. None of these other odor sources are particularly offensive or unusual in the Project's urban setting. The Project would also be required to comply with SCAQMD Rule 402 - Nuisance during construction and operation. This rule prohibits discharge of air contaminants or other materials that would cause injury, nuisance, or annoyance to any considerable number of people. Therefore, due to the small size of the active construction area, the measures that will be used to limit boring waste odors, the distance from the marine activity odor sources to shore, and the types and intensity of the other odor sources, the Project's other emissions including odors would not be objectionable or affect a substantial number of people. Impacts resulting from Project-generated objectionable odors are not expected to be significant. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

Note that the EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project, which is substantially similar to the proposed Project, evaluated odor impacts (Impact AQ-7, pg. 3.2-19) and determined that those impacts would not be significant.

		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18	.4 BIOLOGICAL RESOURCES. Would the project:				
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish & Wildlife Service (USFWS)?	$\boxtimes$			
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	$\boxtimes$			
C.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	$\boxtimes$			
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	$\boxtimes$			
e.	Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?	$\boxtimes$			
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				$\boxtimes$

#### Would the project:

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

**Potentially Significant Impact.** The terrestrial portion of the proposed Project would be constructed on open sandy beach, city streets, bikeways, residential communities, and commercial properties. Habitat along the proposed fiber-optic line consists of developed areas and landscaping. With the exception of the Western snowy plover, discussed below, sensitive plants or wildlife are expected to have a low potential to occur in these areas.

Western snowy plover (*Charadrius alexandrinus nivosus*) and the California least tern (*Sternula antillarum browni*) are known to inhabit the region. Western snowy plover is federally threatened and a California species of special concern. Designated Critical Habitat (Subunit CA 45D) for this species is located along Hermosa Beach between 11<sup>th</sup> Street and 1<sup>st</sup> Street (USFWS 2012). Any Project activities occurring on the beach would be within designated critical habitat. California least tern is a State and federally endangered species. Neither of these species is known to nest within five miles of the cable landing areas (Frost 2015, Ryan et al. 2016). Based on the level of existing activity on the beach, including routine grooming, recreation, and patrolling, these species are expected to have a low potential to nest in the Project area.

During winter, western snowy plovers are known to roost on Hermosa Beach and are regularly observed adjacent to 19th to 22nd Streets and from 26th to 28th Streets (Ryan et al. 2016). Other

sensitive species are not expected to routinely occur at or near the terrestrial sites. However, due to the proximity to the ocean, it is possible that marine mammals or other sensitive species may be present in the intertidal zone. Implementation of the proposed Project has the potential to result in direct and indirect impacts on a variety of marine resources. These include a broad array of sensitive marine mammals, sea turtles, fish, birds, and unique invertebrates. Similarly, the alignment is expected to cross soft and hard bottom benthic communities that may support cold water corals and other important invertebrates. Marine mammals, including harbor seals (*Phoca vitulina*), sea lions (*Zalophus californianus*), gray whales (*Eschrichtius robustus*), and many other cetaceans and pinnipeds are common in the Santa Monica Bay and Channel Islands. These species may be adversely affected from collisions with vessels, noise, or other disturbance during cable-laying activities.

The proposed Project may adversely affect sensitive wildlife species and natural communities as identified by the California Department of Fish and Wildlife, National Marine Fisheries Service, and U.S. Fish and Wildlife Service. The EIR will evaluate effects of the proposed Project on marine and terrestrial biological resources.

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

**Potentially Significant Impact.** Cable-laying activities would be conducted in Essential Fish Habitat and would be required to comply with the Magnuson-Stevens Fishery Conservation and Management Act. The proposed Project would require a federal permit from the U.S. Army Corps of Engineers and a certification pursuant to Section 307 (c)(3)(A) of the Coastal Zone Management Act. The EIR will evaluate any direct or indirect effects of the proposed Project on any protected or sensitive natural community.

(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**Potentially Significant Impact.** The marine portion of the Project would be located in State and federal waters which would require a permit from the U.S. Army Corps of Engineers. Construction of the proposed Project is not expected to result in impacts to wetland waters as defined by the U.S. Army Corps of Engineers. The EIR will evaluate effects of the proposed Project on State and federal jurisdictional waters.

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

**Potentially Significant Impact.** Coastal regions of California are known to support important migratory pathways for a variety of species including marine mammals, fish, and sea turtles. Portions of the proposed Project would be constructed in designated Essential Fish Habitat<sup>1</sup>. The EIR will evaluate effects of the proposed Project on the movement of native resident or migratory species.

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

<sup>&</sup>lt;sup>1</sup> Essential Fish Habitat (EFH) was defined in the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." NOAA Fisheries works with regional fishery management councils to designate EFH areas and minimize impacts on fisheries.

**Potentially Significant Impact.** The PLAN Hermosa Parks and Open Space Element, Goal 9 (Coastal and marine habitat resources and wildlife are protected) includes policies to protect critical habitats, beach and coastal habitats, and trees. The EIR will evaluate the consistency between the proposed Project and the applicable local policies or ordinances for protecting biological resources.

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

**No impact.** Neither the site nor its surroundings are governed by a Habitat Conservation Plan, Natural Community Conservation Plan, or any other habitat conservation plan. Note that the EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project, which is substantially similar to the proposed Project, analyzed the potential for conflicts with such plans (pg. 3.3-54) and determined that there would be no impact. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.5 CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of CEQA?				
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of CEQA?				
<ul> <li>c. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</li> <li>(1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</li> <li>(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?</li> </ul>				
d. Disturb any human remains, including those interred outside of formal cemeteries?				

#### Would the project:

## (a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

**Potentially Significant Impact.** The proposed cable routes may affect previously undiscovered historical resources, including sunken ships and aircraft. Mitigation may be necessary if impacts cannot be avoided through Project design, establishment of exclusion zones, or other means. A cultural resources records search will be conducted for the EIR and the EIR will evaluate the potential for adverse effects on historic resources.

## (b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

**Potentially Significant Impact.** Unknown and potentially significant buried resources could be inadvertently unearthed during ground-disturbing activities associated with Project construction. Similarly, unknown buried or submerged resources could be encountered on the ocean floor along the marine cable routes. The EIR will evaluate potential effects on buried resources that may be inadvertently disturbed during either onshore construction activities or during offshore activities associated with laying the marine cables.

- (c) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
- (1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

**Potentially Significant Impact.** Tribal coordination is currently underway. The EIR will evaluate the potential adverse effects of the proposed Project on tribal cultural resources.

(d) Disturb any human remains, including those interred outside of formal cemeteries?

**Potentially Significant Impact.** No human remains are known to be located within the Project area. However, there is a possibility that unmarked burials could be inadvertently unearthed during excavation activities, which could result in damage to these human remains. The EIR will evaluate this potential effect and identify measures to be implemented if any remains are discovered during excavation activities associated with the Project.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.6 ENERGY. Would the project:				
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			$\boxtimes$	
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				$\boxtimes$

#### Would the project:

## (a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. The proposed Project would consume energy in the form of vehicle and equipment fuel during construction and operation, and electrical power (including use of a diesel-fueled backup generator) at the PFE facility during operation. The sources of energy consumption for the proposed Project would be the same as those of the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project. However, only about half as much energy would be consumed for the proposed Project compared to the MC GLOBAL MP4 project because only two cables would be installed rather than four. The EIR for the MC GLOBAL MP4 project determined that the project would not increase energy inefficiencies nor result in unnecessary or wasteful consumption of energy (see Section 5.5 of that EIR, pg. 5-8). Because the proposed Project is substantially similar to the MC GLOBAL MP4 project, although smaller, this same conclusion regarding wasteful, inefficient, or unnecessary consumption of energy can be applied to the proposed Project. This is because project installation would utilize standard construction techniques involving the use of vehicles and equipment that meet federal and state standards for fuel efficiency. While the marine vessels used for cable laying would require substantial quantities of fuel, their fuel consumption would be typical of their vessel class and not wasteful or inefficient by comparison. The cables will consume electrical energy at rates typical for such cables and will obtain that power from conventional commercial sources. Backup power generators would also be typical of their class, licensed by the SCAQMD, and would only be operated during power outages and testing. Therefore, significant impacts are not expected from implementation of the proposed Project. This topic will not be carried forward for analysis in the EIR for the proposed Project.

#### (b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed Project would not obstruct the use of renewable energy in that in presents no barrier to the use or development of renewable energy resources. It also would not displace any renewable energy facilities and would draw power from commercial power provided by Southern California Edison (SCE), which is partially generated from renewable sources. The expansion of the PFE facilities would need to comply with the energy efficiency standards, such as Title 24 energy efficiency requirements as described in PLAN Hermosa and incorporated into the Building Code. The power feed equipment that would be added (two 500-kilowatt backup diesel generators and one 800-gallon diesel tank) would only be used if a power outage occurs and as well as for monthly testing. Because it would not be generating power for regular operations, the equipment would not waste fuel inefficiently and instead would rely on commercial power from SCE. In addition, since the cables would connect to a shared space in the already-existing PFE facility, no new building is needed, eliminating the need for additional energy to power a separate building. Vehicles and equipment used during construction and operation would need to conform to applicable federal and State fuel efficiency requirements and would not consume energy in an inefficient or wasteful manner. Therefore, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This topic will not be carried forward for analysis in the EIR for the proposed Project.

		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18	.7 GEOLOGY AND SOILS. Would the project:				
a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist, or based on other substantial evidence of a known fault (Refer to DM&G Pub. 42)?; or, (ii) strong seismic ground shaking?; or, (iii) seismic-related ground failure, including liquefaction?; or, (iv) landslides?	$\boxtimes$			
b.	Result in substantial soil erosion or the loss of topsoil?				
C.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	$\boxtimes$			
d.	Be located on expansive soil, as defined in Table 18- 1-B of the 1994 UBC, creating substantial direct or indirect risks to life or property?	$\boxtimes$			
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				$\boxtimes$
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

#### Would the project:

(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist, or based on other substantial evidence of a known fault (Refer to DM&G Pub. 42)?; or, (ii) strong seismic ground shaking?; or, (iii) seismic-related ground failure, including liquefaction?; or, (iv) landslides?

**Potentially Significant Impact.** The proposed Project is located in a seismically active area and may be subject to hazards associated with seismic activity. However, according to the Department of Conservation, the proposed Project is not located in an Alquist-Priolo fault zone. The EIR will evaluate potential effects related to strong seismic ground shaking and seismic-related ground failure.

According to the California Geologic Survey Seismic Hazard Zone Landslide and/or Liquefaction maps (USGS, 1999a; USGS, 1999b), the onshore portion of the proposed Project is subject to liquefaction hazards but is not located in an area at risk for earthquake-induced landslides. However, the submarine cable route may encounter areas subject to landslides on the sea floor. The EIR will evaluate the potential for hazards associated with liquefaction and the potential for landslides along the submarine cable route.

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

**Potentially Significant Impact.** The Project primarily proposes to utilize underground directional boring for cable installation, which would minimize ground-disturbing activities for the terrestrial

portion of the Project. Industry standard best management practices (BMPs) will be applied where the boring or trenching activities would occur. Because the onshore portion of the Project will primarily be located within public streets and developed areas, the potential for soil erosion and loss of topsoil is low. However, the EIR will evaluate potential impacts related to soil erosion in greater detail.

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

**Potentially Significant Impact.** The onshore portion of the Project will be located in developed areas that are generally not prone to landslide. The nature of the Project makes it unlikely to trigger unstable geologic or soil conditions, although some potential may exist. The offshore portion of the Project may traverse areas of the sea floor with potential instability, although such areas would be avoided to the degree possible. The EIR will evaluate these and other potential adverse effects associated with unstable geologic or soils conditions that may exist in the Project area, including potentially unstable conditions along the submarine cable route. The EIR will also evaluate the potential impacts of corrosive soils located within the proposed Project area.

(d) Be located on expansive soil, as defined in Table 18-1-B of the 1994 UBC, creating substantial direct or indirect risks to life or property?

**Potentially Significant Impact.** The terrestrial portion of the proposed Project is generally underlain with soils consisting of sandy substrate, which typically have low expansion potential. However, the EIR will evaluate the potential for adverse effects resulting related to expansive soil.

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

**No Impact.** The City is served by a sanitary sewer system. The Project does not require installation or expansion of any local wastewater disposal facilities or systems. No impact would occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**Potentially Significant Impact.** The proposed Project area generally is located on sandy substrate and is not expected to disturb fossil-bearing rock. The EIR will evaluate potential for effects on important paleontological resources during boring and excavation activities associated with the Project.

	Potentially Significant Impact	Less Than significant w/ Mitigation	Less than Significant Impact	No Impact
18.8 GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

#### Would the project:

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

Less than Significant Impact. The EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project, which is substantially similar to the proposed Project, analyzed greenhouse gas (GHG) emissions (Impact GHG-1, pgs. 3.6-11 – 3.6-12) and determined that the project's GHG emissions would not exceed the South Coast Air Quality Management District's (SCAQMD's) applicable thresholds for GHG emissions and, therefore, would not be significant. The MC GLOBAL MP4 EIR determined that the worst-case, non-routine maintenance event would be marine cable repair. Such an event, which is not anticipated but that could occur, has estimated GHG emissions of approximately 100 metric tons of CO2e. Even if this unanticipated worst-case event were to happen annually it would not increase GHG emissions above the SCAQMD emissions significance threshold or otherwise affect the GHG emissions impact determination. For the MC GLOBAL MP4 project, Table 3.6-2 of the EIR shows that annual greenhouse gas emissions would be well below the SCAQMD significance thresholds.

The emissions of the proposed Project would be approximately half those of the MC GLOBAL MP4 project as two cables are proposed to be installed rather than four. The SCAQMD's applicable thresholds for GHG emissions have not changed since preparation of the EIR for the MC GLOBAL MP4 project. Therefore, the proposed Project would not have a significant impact related to GHG emissions. This topic will not be carried forward for analysis in the EIR for the proposed Project.

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

Less than Significant Impact. The EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project, which is substantially similar to the proposed Project, although smaller, analyzed the project's compliance with relevant greenhouse gas (GHG) plans, policies, and regulations (pg. 3.6-12). The EIR for MC GLOBAL MP4 project identified local, state, and federal plans, policies, and regulations related to GHG and determined that the project would comply with all relevant policies and requirements. State and federal GHG policies and requirements remain substantially unchanged since that time and, therefore, the proposed Project would also comply with those policies and requirements. However, since completion of the MC GLOBAL MP4 EIR, the City of Hermosa Beach adopted a new general plan called PLAN Hermosa, which contains goals and policies related to GHG reduction.

Goals 1 and 2 of the Sustainability and Conservation section of PLAN Hermosa specifically address GHG reduction. Goal 1 addresses City actions and operations for reduction of GHG, including consideration of actions that reduce costs to the City and promote economic benefits. Goal 2 expresses support for achievement of State targets for GHG reductions, investments in transportation choices for GHG reduction, evaluation of emerging technologies, and mitigation of GHG emissions. Most of the policies associated with these goals are only applicable to City actions, although mitigation of GHG emissions is potentially applicable to the proposed project. However, as indicated in the response to (a) above, the proposed project's GHG emissions would not exceed the applicable thresholds and, therefore, would not require mitigation. The proposed Project helps implement Policy 1.9, Equipment Sharing, by utilizing the same PFE facility as the MC GLOBAL MP4 project and installing a terrestrial ductbank that can be utilized by both phases of the Project. Therefore, the proposed Project would conflict with any applicable plans, policies, or regulations related to GHG reduction. This topic will not be carried forward for analysis in the EIR for the proposed Project.

					$\overline{}$
		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18	.9 HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b.	Create a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment?				
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				$\boxtimes$
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in safety hazard or excessive noise for people residing or working in the project area?				$\boxtimes$
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	$\boxtimes$			
g.	Expose people or structures either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				$\boxtimes$

#### Would the project:

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

**Potentially Significant Impact.** During construction of the proposed Project, routine transport and use of hazardous materials, including fuels such as gasoline or diesel, may be necessary to support construction activities. Implementation of industry standard BMPs will reduce the potential for a hazard resulting from the use of these materials. The EIR will evaluate the potential adverse effects associated with routine hazardous material transport, use, and disposal.

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

**Potentially Significant Impact.** The proposed Project will utilize multiple engines in various capacities during construction. There is a potential for a release of gasoline or diesel fuel as a result of a refueling activities. The proposed Project also includes a fuel tank at each power feed equipment site. The EIR will evaluate the potential for a release of hazardous materials into the environment.

(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?

**Potentially Significant Impact.** Portions of the Project would pass within one-quarter mile of Valley View School. Installation of the fiber-optic cable would emit toxic air contaminants primarily in the form of diesel particulate matter. However, the toxic air emissions would occur over a limited

construction timeframe and would not persist over the life of the Project. The EIR will evaluate potential effects related to toxic air emissions during cable installation.

Because the fiber-optic cables will be electrically powered in order to transmit and amplify telecommunication signals, they will generate electric and magnetic fields. The size of these fields will be disclosed in the EIR and effects of exposure will also be discussed.

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

**No Impact.** According to the Department of Toxic Substances Control ENVIROSTOR Hazardous Waste and Substances Site List, there are no listed sites located within the incorporated limits of Hermosa Beach. Therefore, proposed Project would not be located on a listed site and no impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

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

**No Impact.** The nearest airports to the proposed Project are Los Angeles International Airport, Hawthorne Municipal Airport, and Torrance Airport; which all are located more than six miles from the Project. Because the Project is not located within an airport land use plan or within two miles of an airport, it would not result in an aviation-related safety hazard for people residing or working in the Project area. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

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

**Potentially Significant Impact.** The City of Hermosa Beach Emergency Operations Plan was developed in 2011 by a committee to integrate the State's Standardized Emergency Management System and meet the requirements of Federal Emergency Management Agency's planning guidance as well as the National Incident Management System. This document addressed the planned response by the City of Hermosa Beach to emergency situations but does not address normal day-to-day operations or well-established and routine procedures. The City of Hermosa Beach does not have an emergency evacuation plan developed and no evacuation routes have been identified.

The most likely potential for the proposed Project to interfere with emergency response would be during construction, when lanes of travel on either 6<sup>th</sup> Street or 10<sup>th</sup> Street would be temporarily blocked. The EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project, which is substantially similar to the proposed Project, analyzed the potential for that project to restrict the movement of emergency during construction (pg. 3.12-19) and determined that this impact had the potential to be significant and recommended mitigation to reduce the impact. This impact will be addressed in the EIR for the proposed Project.

There are no emergency response plans or emergency evacuation plans utilizing ocean areas of Santa Monica Bay that have been identified. It is likely that all emergency response and evacuation plans would be terrestrial; therefore, marine construction activity on or below the water would not interfere with any emergency response or evacuation plans. Once installed, the cables would be buried 3 to 4 feet (1 to 1.2 meters) beneath the seafloor up to a water depth of 3,037 feet (1,200 meters). Cables would be less than 2 inches (5 centimeters) in diameter, unburied cable occurring either temporarily during construction and maintenance or in water depths greater than 3,037 feet (1,200 meters) would not interfere with any potential emergency response or evacuation uses of Santa Monica Bay.

## (g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**No Impact.** The components of the proposed Project are located in either an urbanized environment or off shore. The Project is not located in close proximity to any wildlands. Therefore, the Project would not elevate wildland fire risk in the area and would not result in exposure of people or structures to wildland fire risks. This topic will not be carried forward for analysis in the EIR for the proposed Project.

		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18	.10 HYDROLOGY AND WATER QUALITY. Would the project:				
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	$\boxtimes$			
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off- site?			$\boxtimes$	
d.	Substantially increase the rate of amount of surface runoff in a manner which would result in flooding on or off site?				
e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f.	Impede or redirect flood flows?				$\boxtimes$
g.	In flood hazard, tsunami, or seiche zones, result in release of pollutants due to project inundation?				
h.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

#### Would the project:

## (a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Potentially Significant Impact. There is a possibility that Project-related construction or maintenance activities could result in the violation of applicable water quality or waste discharge standards. Such violations could occur through an accidental release of potentially hazardous materials (fuel, lubricants, cleaning fluids, etc.), either terrestrially or in the marine environment. Similarly, there is potential for accidental release of hazardous substances into the marine environment from the cable-laying vessel and other vessels associated with the Project. Cable installation on the sea floor will also temporarily increase turbidity in the water and could potentially disturb contaminated sediments that may exist along the cable routes. The proposed Project includes features to avoid water quality degradation; however, potential impacts will be evaluated in the EIR, including the potential for water quality degradation to result in the violation of a water quality standard or waste discharge requirement.

# (b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. During construction, the proposed Project would require a water supply, primarily to create the drilling mud used as part of the boring process. A small amount of water would also be used for dust control and other incidental purposes, and is anticipated to be provided by an existing water purveyor through municipal fire hydrant(s) in the City of Hermosa Beach. This water consumption would be temporary and would not affect long-term supplies. The Project would not use local groundwater or contribute to the lowering of the local groundwater table. In addition, the terrestrial portion of the Project is located in an existing urbanized area and the Project would not introduce substantial new impermeable surfaces that would affect groundwater recharge. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

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

Less Than Significant Impact. There are no streams or rivers within the Project area. When construction is completed, disturbed areas will be returned to conditions either identical or near identical to existing conditions. The proposed Project is not anticipated to alter the drainage pattern of the Project area in any substantial way. The terrestrial portion of the Project is located in an urbanized area served by a municipal stormwater drainage system. The Project primarily consists of underground infrastructure that would not affect that drainage system or change existing drainage patterns. Terrestrial construction activities may result in highly localized alterations to surface drainage patterns, such as through the presence of equipment, machinery, and ground disturbance. Best management practices typically used to avoid adverse effects associated with such features of Project construction include the protection of disturbed areas and the placement of straw wattles to avoid erosion and siltation, among other BMPs that may be employed depending on site-specific conditions at the time of construction (such as the timing of most recent or anticipated precipitation event). Due to the very localized nature of potential drainage patterns associated with the Project, and the use of standard erosion control BMPs, implementation of the Project is not anticipated to result in substantial erosion or siltation on or off site. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

## (d) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

Less Than Significant Impact. The terrestrial portion of the Project is located in an urbanized area served by a municipal stormwater drainage system. The Project primarily consists of underground infrastructure that would not affect that drainage system or change existing drainage patterns. As described above in response to (b), the Project would require a water supply to create the drilling mud used as part of the boring process, and possibly also for dust control purposes and other incidental uses associated with the construction process. Water used for dust control would only be applied to the ground surface in quantities necessary to achieve dust abatement goals and would not be applied in quantities capable of resulting in flooding. During construction of the Project, any waste materials generated would be appropriately contained, collected, and/or disposed of, including as related to the drilling mud used during the boring process; the Project would not discharge water to the ground surface. The Project also would not introduce substantial new impervious areas that could cause existing surface runoff to increase in velocity or quantity. As described above in response to (c), potential drainage pattern alterations that could be introduced during construction are expected to be highly localized, and would be treated with standard BMPs to avoid potentially adverse effects. Therefore, the Project is not anticipated to result in flooding on or off site. This topic will not be carried forward for analysis in the EIR for the proposed Project.

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

Less Than Significant Impact. As described above, the Project would not discharge water to the ground surface, and the Project would require a temporary water supply primarily to create the drilling mud used as part of the boring process. Any waste material generated would be appropriately contained, collected, and/or disposed of, including wastes related to the drilling mud used during the boring process. Also as noted above, the Project would not introduce new impervious areas that could cause existing surface runoff to increase in velocity or quantity. The terrestrial portion of the Project is located in an urbanized area served by an existing municipal stormwater drainage system. The Project primarily consists of underground infrastructure that would not affect that drainage system or change existing drainage patterns.

During Project construction there is potential that an accidental release of hazardous substances could occur, and this issue will be evaluated in the EIR for the potential to result in water quality degradation. As described, the Project would not create or contribute a new source of runoff in the area and would not discharge water to the ground surface. Therefore, in order for an accidental spill of hazardous materials to result in water quality degradation, surface water runoff typical of the Project area and not related to Project activities would need to occur after the accidental spill but before response and clean-up has been complete. The Project would not provide substantial additional sources of polluted runoff.

This topic will not be carried forward for analysis in the EIR for the proposed Project, although water quality impacts to existing runoff could occur and will be evaluated in the EIR in response to question (a) above.

#### (f) Impede or redirect flood flows?

**No Impact.** The Project facilities would be installed underground, on the ocean floor, and within an existing building. No Project features would impede or redirect flood flows, and no impact would occur. The EIR for the MC GLOBAL MP4 Transpacific Fiber-Optic Cables Project, which is substantially similar to the proposed Project, analyzed the potential for that project to expose people or structures to flooding (pg. 3.8-32) and also determined that the project would not cause any impacts of this nature. MC GLOBAL MP4 EIR concluded that this type of project would not expose people or structures to a risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. Similar to that project, the proposed Project would not involve introduction of people or habitable structures into a flood zone, and Project components would not contribute flooding on or off site. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

## (g) In flood hazard, tsunami, or seiche zones, result in release of pollutants due to project inundation?

Less Than Significant Impact. The proposed Project facilities are located either near the shore of the Pacific Ocean and along the ocean bottom. These areas have historically been subject to inundation by seiche or mudflow. The onshore portions of the Project are located in a fully urbanized area. There are no large bodies of fresh water within a 5-mile radius of the proposed Project location, and there is no significant topography within the City of Hermosa Beach which could potentially support a mudflow. Therefore, the proposed Project would not cause inundation by seiche or mudflow. The proposed Project area is subject to tsunami hazards, where tsunamis are a series of large ocean waves caused by the displacement of a large volume of water. Tsunamis can be triggered by earthquakes, volcanic eruptions, or other underwater events. Although the proposed Project area may be subject to future tsunami events, once constructed, the Project would not include any pollutants that could be released due to inundation. No impact would occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

## (h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**Potentially Significant Impact.** The City is located in the South Coast Hydrologic Region (HR) and is subject to the objectives and limits of the Water Quality Control Plan for the Los Angeles Region (Basin Plan) under the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWCB). The EIR will analyze the Project's compliance with the Basin Plan. As described above, the Project would not require a supply of local groundwater that would contribute to the lowering of the local groundwater table. In addition, the terrestrial portion of the Project is located in an existing urbanized area and the Project would not introduce new impermeable surfaces that would affect groundwater recharge.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.11 LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?				$\boxtimes$
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	$\boxtimes$			

#### Would the project:

#### (a) Physically divide an established community?

**No Impact.** Onshore construction activities would be contained within designated locations, which are currently used for transportation (city streets), recreation (beach), and commerce (power feed equipment facility). Once installed, the fiber-optic cable would be buried and out of sight and would not present any physical barrier. It, therefore, would not physically divide any part of the community. No impact would occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

## (b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Potentially Significant Impact.** No conflicts with plans, policies, or regulations intended to avoid or minimize environmental effects have been identified at this time. However, the EIR will provide a more thorough evaluation of the Project's consistency with applicable plans and policies, including the PLAN Hermosa, the City's Integrated General Plan and Coastal Land Use Plan.

The recreational uses of the beach, Strand, and Greenbelt will experience some disruptions during Project construction, primarily from additional noise and the visibility of work activities. Some areas of the beach and Greenbelt will be precluded from public use during short periods during construction. The EIR will evaluate Project effects related to the disruption of recreational uses and the possibility for increased use of recreational facilities during construction, as well as any long-term diminishment of recreational facilities and/or activities at the beach.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.12 MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				$\boxtimes$
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

#### Would the project:

## (a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**No Impact.** According to the U.S. Geological Survey's (USGS) Mineral Resource Data System, there are no known mineral resources located within the City of Hermosa Beach or along the proposed offshore cable alignments. As mapped by the State Mining and Geology Board, most of Hermosa Beach lies within the San Fernando Valley Production-Consumption Region in Los Angeles County. A small portion of Hermosa Beach south of 2<sup>nd</sup> Street lies in the San Gabriel Valley Production-Consumption Region. A review of the *Generalized Mineral Land Classification Map of Los Angeles County - South Half* (DOC 1994) shows that all of the planning area is designated as MRZ-3 land. The MRZ-3 classification indicates areas of undetermined mineral resource significance. There are also no mineral resource recovery sites within the City.

The Project facilities are located near but outside the boundaries of the Torrance oil and gas field. There are no active oil or gas wells with the City of Hermosa Beach (DOGGR 2019) although oil/gas wells have existed in the City and nearby communities in the past. The proposed Project would not affect the ability to access oil/gas resources within the City due to the small footprint of the Project facilities and limited geographic area they would occupy, and due to the existence of modern oil/gas extraction technologies, such as slant drilling, that enable access to subterranean oil/gas resources from a wide area, even when much of the land surface is unavailable for drilling and extraction operations.

For the reasons cited above, construction and operation of the proposed Project would not result in the loss of availability of mineral resources. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

## (b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

**No Impact.** As described in PLAN Hermosa, the entirety of Hermosa Beach is classified as Mineral Resource Zone 3 (MRZ-3) under the California Mineral Land Classification System. In MRZ-3 areas, mineral resources may be present; however, they are not considered locally important. The City's General Plan does not designate any mining sites, nor do the City's Zoning Designations or any other locally adopted land use plan. There are no active mining operations near the Project (or anywhere within Hermosa Beach). Most of Hermosa Beach, including the Project site, is underlain by Holocene-age dune sands. Although "sand, gravel and crushed stone" are identified among construction aggregate resources important to the region, sand deposits underlying Hermosa Beach are not identified as an aggregate deposit of prime importance to meet the region's future need for construction quality aggregates. The urbanized conditions that exist throughout the City reflect a long-standing land use commitment that effectively precludes mineral extraction at a significant

scale either on the Project site or within City limits. Moreover, construction and operation of the proposed Project would not prevent access to any locally important mineral resource recovery site. No impact would occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.	13 NOISE. Would the project result in:				
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b.	Generation of excessive groundborne vibration or groundborne noise levels?	$\boxtimes$			
C.	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

#### Would the project result in:

(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**Potentially Significant Impact.** Construction of the Project will generate noise associated with the operation of boring and trenching equipment, as well as the use of vehicles to transport equipment and materials to work sites. These noise effects will be temporary and will cease after all Project components have constructed or installed. The Project will be implemented in phases; therefore, construction noise will re-occur with the construction of each Project phase. Project operation is not expected to generate substantial noise unless repairs are required in the future. One potential source of noise during operation is the Project's power feed equipment. Because this equipment will be located within buildings, noise generated by the operation of the power feed equipment is not expected to exceed applicable noise standards. The impacts associated with both construction and operational noise will be assessed in the EIR.

The PLAN Hermosa Public Safety Element identifies goals and policies related to the ambient noise environment within the City. The EIR will evaluate the potential for construction and operational noise to conflict with the standards identified within all applicable ordinances, standards, and policies.

The Project's long-term operational noise sources would be limited to periodic maintenance activities and necessary use of emergency backup generators. The EIR will evaluate potential impacts of these operational noise sources.

#### (b) Generation of excessive groundborne vibration or groundborne noise levels?

**Potentially Significant Impact.** Construction would involve directional boring, the use of other construction equipment, and operation of large delivery haul trucks that would create temporary vibration-generating activities in close proximity to residential and other structures. The EIR will evaluate the potential impacts of groundborne vibration on affected receptors and structures.

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

**No Impact.** There are no private airstrips in the vicinity of the proposed Project. The closest airport is Los Angeles International Airport, located approximately 6 miles north of the Project area. Because the Project facilities would either be buried, under water, or located within existing buildings, the Project would not result in a safety impact for people residing or working in the Project area due to potential impacts on airports. No impact will occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.14 POPULATION & HOUSING. Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses or indirectly (for example, through extension of roads or other infrastructure)?				$\boxtimes$
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				$\boxtimes$

#### Would the project:

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

**No Impact.** The Project does not propose housing and would not induce the need for housing. Because construction would be a temporary activity and onshore construction would be small in scale, only a relatively small number of construction workers would be required at any time and most construction personnel are expected to be drawn from the greater Los Angeles area. As such, the proposed Project would not generate a permanent increase in population levels or a decrease in available housing, and no impacts to existing or future population growth levels would occur as a result of construction of the proposed Project.

During the operation period, maintenance activities include regular inspections of facilities. The proposed Project would not result in the creation of a substantial number of new permanent jobs that would not be a need for new housing. Therefore, operation of the proposed Project would not directly or indirectly contribute to an increase in the permanent population of the area. No impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

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

**No Impact.** Onshore installation of the fiber-optic cable would primarily occur within city streets, and the landing sites would be installed in city streets. The marine portion of the Project would have no effect on housing. Therefore, implementation of the proposed Project would not result in the displacement of people or housing, nor would it necessitate the construction of replacement housing. No impacts would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.15 PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?			$\boxtimes$	
Police Protection?			$\boxtimes$	
Schools?				$\boxtimes$
Parks?				$\boxtimes$
Other public facilities?				$\boxtimes$

#### 1) Fire protection?

Less Than Significant Impact. The City of Hermosa Beach Fire Department provides fire suppression and emergency medical services to the Project area. The primary fire station that would serve the Project area is Hermosa Beach Fire Department Station, located at 540 Pier Avenue. The proposed Project includes a fuel tank installed in the power feed equipment facility location, which will need to comply with fire and building code regulations for storage of fuel at this location. No new or substantially altered fire facilities will be required to serve the Project. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

Construction of the proposed Project may necessitate traffic control in certain locations, which could temporarily affect routes used by the Fire Department to respond to emergencies. The EIR will provide further evaluation of effects on emergency access under Transportation.

#### 2) Police protection?

**Less Than Significant Impact.** Police protection services in the proposed Project area are provided by the City of Hermosa Beach Police Department. The City of Hermosa Beach Police Station, located at 540 Pier Avenue, would be the primary station to service the proposed Project area. No new or substantially altered police facilities will be required to serve the Project. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

Construction activities could result in temporary traffic congestion along some local streets, which could temporarily affect routes used by the Police Department for patrol and to respond to emergencies. The EIR will provide further evaluation of effects on emergency access under Transportation.

#### 3) Schools?

**No Impact.** A relatively small number of construction workers would be required to construct the Project. It is expected that most of these workers would commute to Project work sites from the surrounding region on a daily basis. As a result, substantial temporary increases in population that

would contribute to local school populations are not expected. Operation and maintenance activities would not generate a permanent increase in population that would affect school populations. Therefore, no new or substantially altered school facilities will be required to serve the Project. No impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

#### 4) Parks?

**No Impact.** It is possible the Project workers may occasionally utilize local park facilities during the construction phases of the Project. This would be a temporary condition and is not expected to result in additional demand for park facilities. Operation and maintenance activities would not generate a permanent increase in population that would affect park facilities or conditions. Therefore, no new or substantially altered park facilities will be required to serve the Project. No impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

#### 5) Other public facilities?

**No Impact.** Any population increases experienced during the construction phases would be temporary and no additional population would be required for operation and maintenance. Consequently, the Project's effect on other types of public facilities is expected to be minimal and will neither substantially affect public facilities nor create the need for any new or altered public facilities. No impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

	Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.16 RECREATION. Would the project:				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?				
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				$\boxtimes$

# (a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. No direct population increases are associated with the proposed Project. During construction, workers would commute to work sites within the City, but these workers may utilize nearby parks or recreational facilities to a small degree, such as during lunch breaks or after shifts. No substantial increase in the use of existing parks or recreational is anticipated that would substantially contribute to the deterioration of such facilities. Operation and maintenance activities would not generate a permanent increase in population that might have a long-term effect on park facilities or conditions. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

**No Impact.** The proposed Project does not include recreational facilities nor require the construction or expansion of recreational facilities. No impact would occur. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

		Potentially Significant Impact	Less Than significant w/Mitigation Included	Less than Significant Impact	No Impact
18.	17 TRANSPORTATION/TRAFFIC. Would the project:				
a.	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	$\boxtimes$			
b.	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	$\boxtimes$			
C.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	$\boxtimes$			
d.	Result in inadequate emergency access?	$\boxtimes$			

#### Would the project:

(a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Potentially Significant Impact.** Construction workers traveling to the work sites as well as deliveries of equipment and materials would generate vehicle trips to the area. Construction-related trips and temporary lane closures may affect the local circulation system. The EIR will evaluate any potential conflicts with applicable plans, ordinance, or policies related to these potential impacts.

The Project may result in temporary roadway lane closures that could disrupt bicycle and pedestrian traffic in the City of Hermosa Beach. The EIR will evaluate any potential impacts to any transit, bicycle, or pedestrian facilities as well as any conflicts with applicable goals and policies pertaining to such facilities.

(b) Would the project conflict or be inconsistent with CEQA Guidelines 15064.3, subdivision (b)?

**Potentially Significant Impact.** CEQA Guidelines 15064.3, subdivision (b) provides direction on determining the significance of transportation impacts. The EIR will provide a detailed analysis of transportation impacts utilizing the criteria identified in subdivision (b).

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

**Potentially Significant Impact.** The Project would generate construction trips and may require temporary roadway and pedestrian/bicycle lane closures, which could temporarily disrupt typical daily movement and conditions at affected locations. Construction vehicles traveling slowly on these roadways, accessing work sites, and temporary lane closures could create temporary traffic hazards. Furthermore, temporary detours of pedestrians/bicycles will require an evaluation for safety. The potential for construction-related traffic and temporary lane closures to result in safety hazards will be evaluated in the EIR.

(d) Result in inadequate emergency access?

**Potentially Significant Impact.** The Project would generate construction trips and may require temporary roadway lane closures and impede beach access that could impact the movement and access of emergency service providers. This potential impact will be evaluated in the EIR.

		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.	18 UTILITIES AND SERVICE SYSTEMS. Would the project:				
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				$\boxtimes$
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				
C.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				$\boxtimes$
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			$\boxtimes$	
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

#### Would the project:

(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**No Impact.** The Project would not require the relocation or construction of new or expanded water, wastewater, or storm water drainage or nature gas facilities. The proposed Project consists of new telecommunications facilities that would utilize the existing commercial electric power source. Backup power generators would be used during electrical power outages. The project would utilize an existing PFE facility and, therefore, would utilize the facility's existing water supply during project operation and not increase wastewater generation. Existing storm water drainage systems would not be affected by the project and existing land surfaces would be returned to the pre-project condition after construction. No natural gas is proposed for use during project construction or operation. During construction, a temporary water supply would be required as described in response to (b) below. No significant impacts are anticipated.

(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

**Less Than Significant Impact.** The Project would utilize water to produce the drilling mud necessary for the operation of the directional boring rig and may also utilize small quantities of water for dust abatement and possibly other incidental purposes. Based on the water consumption

estimates for the MC GLOBAL MP4 project, construction of the proposed Project would require approximately 235,000 gallons of water. These water supply requirements are detailed below.

- 200,000 gallons the four marine directional bores (approximately 100,000 gallons for each marine directional bore).
- 20,000 gallons (rounded) to construct the terrestrial conduit system (approximately four gallons per linear foot of terrestrial conduit). This assumes the use of the Option A landing site.
- 15,000 gallons incidental purposes and dust control.

This water supply would be provided by California Water Service Company via the City of Hermosa Beach municipal water system and would be obtained through metered fire hydrant(s) in the Project area. The Project's temporary construction-related water supply requirements are not expected to adversely affect water supply availability or supply reliability. A long-term supply of water is not needed during Project operation. Therefore, sufficient water supply is available from existing sources without the need for new entitlements. This topic will not be carried forward for analysis in the EIR for the proposed Project.

(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**No Impact.** The Project does not require installation or expansion of any local wastewater disposal facilities or systems. Relatively small amounts of wastewater would be generated by workers during installation of the onshore Project facilities. Portable toilet facilities would be provided for construction workers and associated waste would be serviced by a commercial company and hauled off site for disposal and treatment in accordance with the permits of the service company. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

(d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

**Less Than Significant Impact.** A small amount of waste will be generated by Project construction. The Project will not be an ongoing source of solid waste and, therefore, will not make a significant contribution to depletion of the capacity of landfills that serve the area. This topic will not be carried forward for analysis in the EIR for the proposed Project.

(e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**No Impact.** The Project is not expected to result in any violations of applicable regulations related to solid waste. As described above, the Project will not be an ongoing source of solid waste, with solid waste only expected during the construction phase of the Project. Therefore, this topic will not be carried forward for analysis in the EIR for the proposed Project.

		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18	.19 WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?				$\boxtimes$
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				$\boxtimes$
C.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				$\boxtimes$
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				$\boxtimes$

#### Would the project:

## (a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

**No Impact.** No areas of Hermosa Beach are located within or near state responsibility areas or the wildfire hazard severity zones established by the State of California. Therefore, this checklist question is not applicable to the proposed Project and no impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

(b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**No Impact.** No areas of Hermosa Beach are located within or near state responsibility areas or the wildfire hazard severity zones established by the State of California. Therefore, this checklist question is not applicable to the proposed Project and not impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**No Impact.** No areas of Hermosa Beach are located within or near state responsibility areas or the wildfire hazard severity zones established by the State of California. Therefore, this checklist question is not applicable to the proposed Project and not impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

(d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

**No Impact.** No areas of Hermosa Beach are located within or near state responsibility areas or the wildfire hazard severity zones established by the State of California. Therefore, this checklist question is not applicable to the proposed Project and not impact would occur. This topic will not be carried forward for analysis in the EIR for the proposed Project.

		Potentially Significant Impact	Less Than significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
18.	.20 MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to decrease below self- sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory?	$\boxtimes$			
b.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?				
C.	Does the project have impacts which are individually limited, but cumulatively considerable ("Cumulatively considerable" means the project's incremental effects are considerable when compared to the past, present, and future effects of other projects)?	$\boxtimes$			
d.	Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly?	$\boxtimes$			

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to decrease below self- sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory?

**Potentially Significant Impact.** As described in the Biological Resources section, the proposed Project could result in impacts to habitats that support sensitive species, primarily coastal and marine habitats. The Cultural Resources section describes that the proposed cable route may affect previously undiscovered cultural or historical resources, including sunken ships and aircraft. Therefore, there may be significant biological and cultural resource impacts associated with the proposed Project and, therefore, the EIR will evaluate potential impacts to these resources.

b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?

Less Than Significant Impact. The Project is designed to minimize impacts on the environment, and the potential for impacts would primarily occur during construction. Once operational, the Project would not contribute additional environmental impacts beyond minor routine inspections and maintenance as needed, and electricity needs that would be served by the local grid. It does not have the potential to conflict with long-term environmental goals in the City. Therefore, this topic will not be analyzed in the EIR for the proposed Project.

c) Does the project have impacts which are individually limited, but cumulatively considerable ("Cumulatively considerable" means the project's incremental effects are considerable when compared to the past, present, and future effects of other projects)?

**Potentially Significant Impact.** CEQA defines a cumulative impact as an effect that is created as a result of the combination of the proposed project together with other projects (past, present, or future) causing related impacts. Cumulative impacts of a project need to be evaluated when the project's incremental effect is cumulatively considerable and, therefore, potentially significant.

As discussed in preceding sections many of the potential impacts of the proposed Project would occur during construction, with few lasting operational effects. Because the construction-related impacts of the proposed Project would largely be temporary and localized, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in close proximity. Construction impacts caused by the proposed Project (primarily related to aesthetics, air quality, biological resources, recreation, noise, and traffic) could combine with similar effects of other projects being built in the area. The Project's contribution to potentially significant cumulative impacts will be evaluated in the EIR.

d) Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly?

**Potentially Significant Impact.** The preceding sections of this Initial Study discuss various types of impacts that could have adverse effects on human beings, including:

- Construction activity affecting views from adjacent properties (see Aesthetics);
- Air pollutants emitted during construction activities (see Air Quality);
- Exposure to potential geological hazards (see Geology and Soils);
- Exposure to potential hazards and hazardous emissions (see Hazards and Hazardous Materials):
- Degradation of water quality (see Hydrology and Water Quality);
- Potential inconsistency with applicable plans and policies for avoiding or mitigating an environmental effect (see Land Use & Planning)
- Noise and/or vibration generated by project construction or operation (see Noise);
- Interference with recreation at the beach and within the Greenbelt (see Recreation); and
- Construction-related traffic (see Transportation and Traffic).

These are primarily temporary impacts associated with Project construction activities. Each type of impact with the potential to cause substantial adverse effects on human beings has been evaluated, and this Initial Study concludes that these impacts may be significant. Therefore, these potentially significant impacts associated with the proposed Project will be evaluated in the EIR.

- 18. **PREPARATION.** This initial study was prepared by the following individuals:
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  - Jennifer Lancaster, Aspen Environmental Group
  - Stephanie Tang, Aspen Environmental Group