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Project name:  
Metro Red/Purple Line Core Capacity  
Improvements Project

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# Technical Memorandum

Subject: Draft Hazardous Materials Technical Memorandum for the Metro Red/Purple Line Core Capacity Improvements Project

## 1 OVERVIEW

The Los Angeles County Metropolitan Transportation Authority (Metro) is proposing to widen the portal for the Metro Red/Purple Line Core Capacity Improvements Project (Project). The Project is located in the Metro Red/Purple Line Maintenance Yard (Division 20 or Santa Fe Yard) near the Los Angeles River. This memo evaluates the potential hazardous materials impacts due to construction and operations of the Project and is based on: (a) publically available environmental data and reports; and (b) a Draft Phase I Environmental Site Assessment prepared by Kleinfelder, dated December 2, 2016.

This technical memo documents that with mitigation, the Project will have no significant adverse impacts related to hazardous materials.

## 2 PROJECT LOCATION

The Project is located in an area used for light industrial and railroad purposes within the City of Los Angeles, California. The Project area includes multiple privately-owned parcels that are generally bound by Commercial Street to the north, Center and Santa Fe Streets to the west, railroad right-of-way to the east, and portions of the existing Metro Division 20 Rail Yard to the south. Exhibit 1 shows an aerial view of the site map.

The Division 20 rail yard, also identified as the Metro Red Line/Santa Fe Yards, is an approximately forty-five (45) acre site and is home to the Metro Red/Purple Line train storage and maintenance facilities. It is located primarily between the 1st and 6th Street bridges, running parallel to the channelized Los Angeles River and east of Santa Fe Avenue.

The Metro Red/Purple Line portal (Division 20 Portal) is adjacent to the Division 20 Rail Yard and is situated between Commercial Street to the north; Ducommun Street to the south; Center Street to the west; and the Los Angeles River Channel to the east.

The Project will acquire parcels 5173-020-010 and 5173-020-910 (tow service storage yard) as well as a partial section of parcel 5173-022-005 ("U"). These parcels are zoned for heavy industrial use (M3-1-RIO). "U" denotes unassigned address as indicated by NavigateLA which provides online access to the

public information the City maintains on the properties and physical facilities within the City of Los Angeles.

There are no educational centers, institutional facilities, or public open spaces in the immediate area. One Santa Fe is the closest residential development and it is adjacent to and west of the Division 20 Rail Yard. The closest school is East LA High School, approximately 0.27 miles south-southeast from the Project. The nearest hospital is White Memorial Medical Center, approximately 0.75 miles east from the Project.

Within the Draft Phase I Environmental Site Assessment (Kleinfelder, 2016) prepared for the project, the preparer reviewed the National Pipeline Mapping System (Pipeline and Hazardous Materials Safety Administration, 2016) to evaluate the presence or absence of natural gas transmission pipelines and hazardous liquid pipelines located within the Project footprint. According to the Draft Phase I Environmental Site Assessment, "there are no mapped natural gas transmission pipelines or hazardous liquid pipelines located with the Project footprint" (Kleinfelder, 2016). The Project is located within the City of Los Angeles and within a methane zone/ methane buffer zone (County of Los Angeles, 2004). The Project is therefore subject to the City's methane code (County of Los Angeles, 2016).

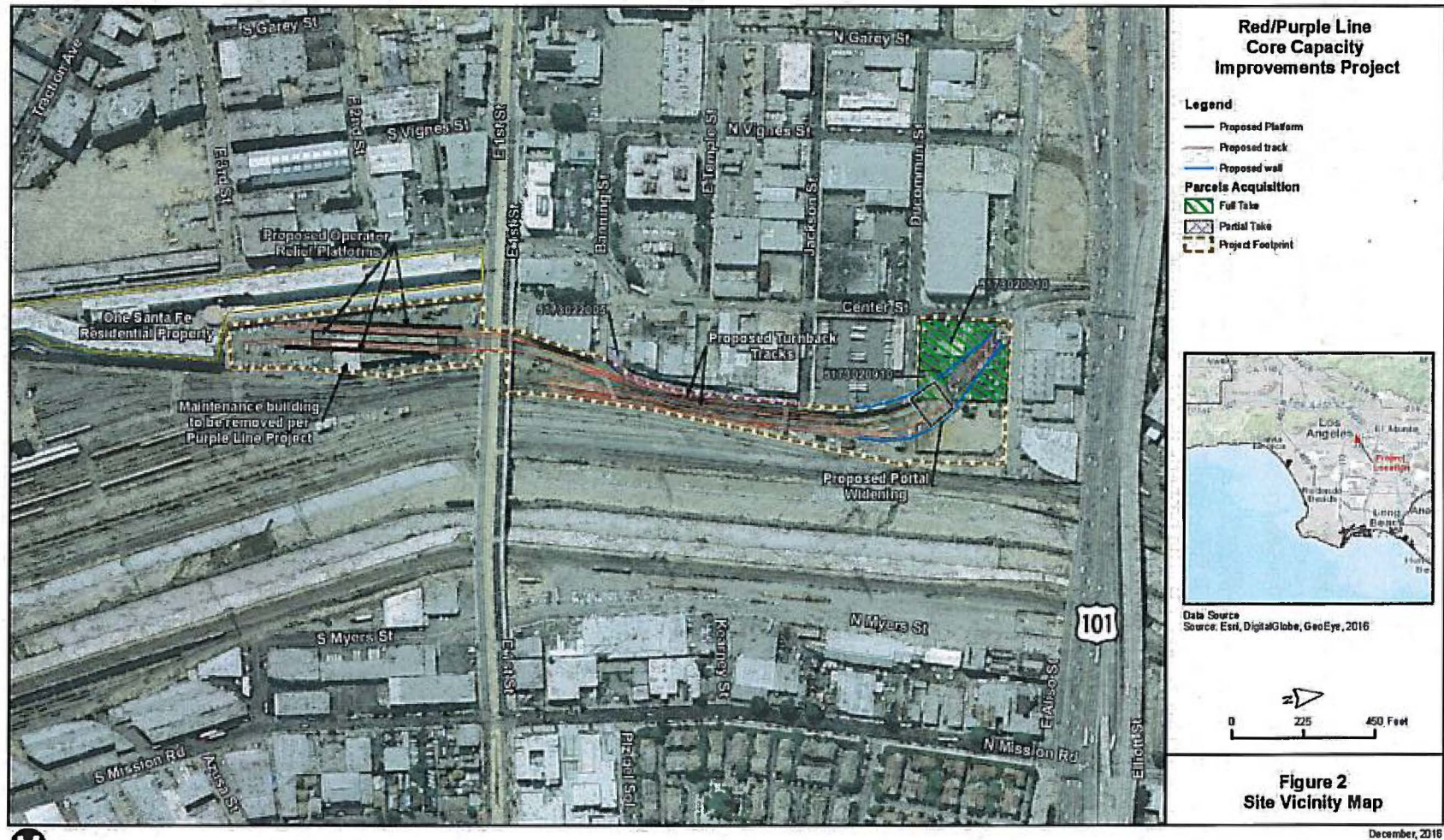
### 3 HISTORICAL BACKGROUND

Southern California Gas Company (SoCal Gas) owned and operated a manufactured gas plant (MGP) on an area of Aliso Street (known as the Aliso Street MGP) beginning in 1887. The plant ceased operations in the early 1930's. The former structures on the property included a large aboveground gasholder (approximately 6 million cubic feet capacity) and water cooling towers. During World War II and beginning in 1942, under a contract to the U.S. Defense Plant Corporation, SoCal Gas converted much of its Aliso Street MGP facilities to the production of butadiene, a raw material used in the manufacture of synthetic rubber. This plant was operated by SoCal Gas from 1943 to 1947. Most of the butadiene plant facilities were demolished in 1952, except for the large gasholders including the one on the property that was removed in 1973 (DTSC, 2016).

The Division 20 Portal (County of Los Angeles Assessor Parcel Number 5173-020-010) is located within the former Aliso Street MGP footprint (SoCal Gas/Aliso Sector C, Block K) and currently contains an existing small one-story office building which is occupied by Viertel's Towing Company used for towing and parking cars. The building is surrounded by asphalt pavement with parking on the north, east, south and west sides. Beneath the site, Metro operates the Division 20 Portal that extends beneath the site from the northwest corner of the property and exits out the southeast edge of the property (DTSC, 2007). The surrounding properties are used for various industrial purposes, including the Division 20 Rail Yard.

The Division 20 Rail Yard is east and adjacent to the former Aliso Street MGP Sector C site. Railroad tracks and railroad spurs have been present on the property since at least 1888 (DTSC, 2002). The Division 20 Rail Yard currently consists of a maintenance and storage yard for the heavy rail train cars that run underground in the Metro Red Line subway. The collection of two-story buildings contains a train wash, non-revenue vehicle shop, and storage building.

Exhibit 1: Project Site Map



## 4 HISTORICAL ENVIRONMENTAL ACTIVITY

Due to the long-term, historical industrial use of the Project area and the use of hazardous materials and petroleum products, the potential for soil, soil vapor and groundwater impacts beneath the Project area exist. The Project has structures that may contain asbestos-containing materials (ACMs), lead-based paint (LBP), and other building materials that require special handling during renovation or demolition.

Per California Government Code Section 65962.5, the Division 20 Portal was identified on the Department of Toxic Substances Control (DTSC) EnviroStor database as SoCal Gas/Aliso Sector C, Block K (EnviroStor site ID No. 60000171). The property is located on the northeast corner of Ducommun and Center Streets. The DTSC has overseen the investigation and cleanup of this property under the Voluntary Cleanup Agreements with The Gas Company.

Tetra Tech, Inc. prepared a *Removal Action Completion Report* (August 2009), which summarizes the historical environmental assessments and investigations prepared for the subject property. Site-specific investigations summarized in the *Removal Action Completion Report* included:

- Field Investigations by GeoTransit, 1993 and 1994
- Preliminary Endangerment Assessment (PEA) by Earth Technology Corporation (ETC), 1998
- Remedial Investigation, Tetra Tech/ TRC, 2002 to 2003

The above reports indicated the presence of polycyclic aromatic hydrocarbons (PAHs), benzene, lead, TPH-diesel, TPH-gas, 1,3-butadiene, styrene, toluene, xylenes, and zinc as Contaminants of Potential Concern (COPC).

Tetra Tech performed a remedial investigation (RI) between April 2002 and January 2003 to further determine the nature and extent of contamination at Sector C Block K. Tetra Tech prepared a Master Workplan, and TRC performed field activities and data collection. A total of 27 borings and 7 monitoring wells were installed on the site. The RI concluded that limited contamination (PAHs, TPH-gasoline, TPH-diesel, petroleum-related VOCs, solvents, and metals) was found in only two discreet areas of the site. The contamination in the two discrete areas was above the cleanup goal for benzo(a)pyrene equivalents, but not for benzene.

Tetra Tech recommended a limited soil removal action. The removal action was intended to achieve the industrial/commercial worker cleanup goal for carcinogenic PAHs, benzo(a)pyrene equivalents and benzene, and also achieve the groundwater cleanup goals for benzene. The removal action was implemented and the *Removal Action Completion Report* was completed in August 2009.

DTSC issued a letter in response to the *Removal Action Completion Report* dated November 24, 2009 stating, "The report describes in detail all the remedial actions for soil undertaken at the Site and meets all the conditions and requirements specified in the Removal Action Workplan. Based on the Removal Action Completion Report, DTSC concludes that Southern California Gas Company has successfully implemented the Site Removal Action Workplan dated September 2005, allowing unrestricted commercial or industrial use of the Site and that no further action is required concerning the Site soils. However the groundwater beneath the Site is contaminated with petroleum hydrocarbons and is stated -to be cleaned up under the groundwater operational unit and therefore was not part of this *Removal Action Completion Report*."

The DTSC and SoCal Gas entered into a Land Use Covenant Master Agreement (LUC) dated June 12, 2013 (Docket Number HAS-O&MEA 13/14-078), which provides that SoCal Gas will conduct necessary inspections, reporting activities, and pay the Department's costs associated with the Covenant (DTSC, 2016). The LUC does include prohibited uses such as: a residence, hospital for humans, public or private school for persons under 21 years of age, day care center, any other sensitive uses resulting in the indoor habitation of humans for greater than 12 hours per day (DTSC, 2016).

Specifically, the LUC lists the following prohibited requirements:

- No soil disturbing activities below 25 feet without written approval of a soils management plan by DTSC.
- No extraction of groundwater except as approved by DTSC in a Groundwater Management Plan.
- No drilling for any water, oil, or gas without prior notice to SoCal Gas and written approval by SoCal Gas and DTSC.
- Non-interference with groundwater monitoring well network and groundwater remediation treatment, if any.
- Any contaminated soils brought to the surface by grading, excavation; trenching or backfilling shall be managed in accordance with applicable provisions of state and federal law.
- 14 days written notice to DTSC and SoCal Gas prior to any building, filling, grading, or excavating at the Property.

The Division 20 Rail Yard was searched on publically available databases (EnviroStor and Geotracker) and no specific records were identified within either database. Potential soil contamination associated with historical railroad use may be present within the railroad right-of-way areas, and along the railroad spurs.

## 5 PROPOSED PROJECT

For the Project, Metro is proposing to widen the portal for the Metro Red/Purple Line in and adjacent to the Metro Red/Purple Line Maintenance Yard (Division 20 or Santa Fe Yard) near the Los Angeles River.

The Project will acquire and demolish the tow yard buildings near the Division 20 Portal property. The Project proposes to install on the Division 20 Portal two new No. 8 turnouts and new westerly and easterly walls along the tracks at the existing portal.

The Project proposes the following new tracks, switches, and fixtures to the Division 20 Rail Yard, all within the existing Metro right-of-way: four turnback tracks, three operator relief platforms, two No. 8 turnouts, No. 10 double crossover, No. 8 double crossover, yard lead tracks, and westerly and easterly walls.

## 6 IMPACTS

The following actions are planned to ensure the surrounding community is protected from anticipated hazardous materials and hazardous conditions during construction and operation of the Project.

### 6.1 Construction

Metro will make the appropriate notifications to each property owner. The Project extends over several parcels, as discussed above, and the Project will include demolition and construction activities. These activities will include soil disturbance such as asphalt and concrete removal, excavation, grading, trenching and other site development activities. Notifications will vary depending on Project activities and LUC or other restrictions placed on each property. For example, a LUC for the Division 20 Portal parcel requires notification to DTSC and SoCal Gas whenever ground disturbing activities occur. In this example, Metro would notify both DTSC and SoCal Gas prior to ground disturbing activities. In addition to notifications, Metro will satisfy the requirements of LUCs or other restrictions associated with each parcel.

The hazardous materials to be used during project demolition and construction include gasoline, diesel fuel, oil, and lubricants as well as minimal amounts of cleaners, solvents, adhesives, and paint materials. No acutely hazardous materials would be used or stored onsite during construction.

Asbestos containing materials (ACM) and or lead based paint (LBP) may be present in the existing buildings identified for demolition. If ACM or LBP are present, these materials will be removed, segregated and disposed by licensed contractors in accordance with local, State, and federal requirements.

Small quantities of spilled fuel oil and grease drippings from construction equipment may occur during construction. Such materials generally have a low relative risk to human health and the environment. If there is a large spill, the spill area will be bermed or controlled as quickly as is practical to minimize the footprint of the spill. Contaminated soil and materials produced during cleanup of a spill will be placed into drums for offsite disposal in accordance with local, State, and federal requirements. If a spill or leak into the environment involves hazardous materials equal to or greater than the specific reportable quantity, Metro will notify the appropriate federal, State, and local reporting requirements.

Most of the hazardous waste generated during construction, such as treated wood railroad ties, unused or off specification paint and primer, paint thinner, solvents, and vehicle and equipment maintenance-related materials, can be recycled. Empty containers (i.e., drums and totes) will be returned to vendors, if possible. The quantities of hazardous waste (e.g., ACM and LBP) that cannot be recycled are not expected to significantly impact the capacity of the Class I landfills located in California.

Solid waste generated from construction activities may include track segments, switches, scrap lumber, plastic, metal, glass, asphalt and concrete, and empty non-hazardous material containers. Typical management practices for this material include recycling when possible, proper storage of waste to prevent wind dispersion, and routine pick-up and disposal of waste to approved local Class III landfills. Solid wastes from construction are not expected to significantly impact the capacity of the Class III landfills in the County of Los Angeles.

Wastewater generated at the construction site will include sanitary wastes, dust suppression drainage, and equipment wash water. Construction-related sanitary wastes, collected in portable self-contained chemical toilets, will be pumped periodically. Potentially contaminated equipment wash water will be contained at designated wash areas and transported to a wastewater treatment facility via a licensed hauler. Temporary construction impacts will be isolated to the project site.

Best management practices (BMPs) will be implemented and consistent with hazardous materials and hazardous waste storage, handling, emergency spill response, and reporting. As a result of the implementation of the above procedures and coordination with DTSC, impacts associated with the proposed project during construction would not be significant. Additionally, Metro has a Green Construction Policy and Recycling and Reuse Policy to reduce the air quality emissions and waste generation from this site.

## 6.2 Operations

As the Project transitions from construction to operations, Metro will continue to implement and adhere to the requirements of LUCs or other restrictions associated with each parcel. For example, in the event maintenance activities on the Division 20 Portal parcel require soil disturbance, Metro will notify, per the LUC, the DTSC and SoCal Gas of the planned maintenance activities and the planned soil disturbance. With the exception of subsurface tunnel maintenance activities, direct contact with soil (i.e., soil ingestion and dermal contact) is unlikely to occur once the Project is operational. Also, Metro would be required under the LUC for the Division 20 Portal parcel to update, as necessary, and submit to DTSC a Soils Management Plan and Site Health and Safety Plan before the start of maintenance activities.

Hazardous wastes and unused hazardous materials are not expected during normal operations, rather maintenance activities by contractors may require the periodic use of hazardous materials. Metro has rigorous procedures for supplier performance in all contract documents which includes contractor-generated hazardous waste requirements. For this project, contractors will remove wastes generated and unused hazardous materials as part of their work; therefore, hazardous waste and unused hazardous materials will not be stored on site. Universal wastes (e.g., florescent lamps and batteries) and unusable materials will be handled, stored and managed per California Universal Waste Requirements.

Metro contract documents also require all contractors to develop a Waste Management Plan for the handling and disposal of non-hazardous waste. Non-hazardous solid wastes generated during operation of the proposed project will include solid waste from routine maintenance (e.g., used air filters), and domestic wastes. Maintenance-derived wastes will be recycled to the extent practical. Those maintenance-derived wastes that cannot be recycled will be transported for disposal at a Class III landfill. Domestic wastes will be recycled to the extent practical. The remaining solid wastes will be removed on a regular basis for disposal at a Class III landfill.

Best management practices (BMPs) will be implemented and consistent with hazardous materials and hazardous waste storage, handling, emergency spill response, and reporting. As a result of the implementation of the above procedures, impacts associated with the proposed project during the operation phase would not be significant.

## 7 Proposed Mitigation Measures

The Project will comply with all applicable laws, regulations, and City of Los Angeles ordinances. The following proposed mitigation measures are based on: (a) the known or suspected project area conditions; (b) construction and operational impacts identified; and (c) review of prior Metro project documents where similar conditions existed and mitigation measures were imposed on those projects.

**HM-1:** Once detailed engineering plans are prepared, a Contaminated Soil/Groundwater Management Plan shall be prepared and implemented during construction to establish procedures to follow if contamination is encountered. This will minimize associated risks and assure that applicable statutory and regulatory standards and requirements are satisfied. The plan shall include procedures for the implementation of mitigation measures HAZ-2 through HAZ-6. The Contaminated Soil/Groundwater Management Plan shall abide by the Land Use Covenants for each parcel, as applicable.

**HM-2:** Appropriate regulatory agencies, identified in the Contaminated Soil/Groundwater Management Plan, shall be contacted if contaminated soil or groundwater is encountered.

**HM-3:** Sampling and analysis of soil and/or groundwater known or suspected to be impacted by hazardous materials shall be conducted in accordance with the procedures detailed in the Contaminated Soil/Groundwater Management Plan.

**HM-4:** Procedures for the legal and proper handling, storage, treatment, transport, and disposal of contaminated soil and/or groundwater shall be delineated and conducted in consultation with regulatory agencies and in accordance with established statutory and regulatory requirements as explained in the Contaminated Soil/Groundwater Management Plan.

**HM-5:** Dust control measures such as soil wetting, wind screens, etc. shall be implemented for contaminated soil.

**HM-6:** Worker Health and Safety Plan shall be implemented prior to the start of construction activities. All workers shall be required to review the plan, receive training if necessary, and sign the plan prior to starting work. The plan shall identify properties of concern, the nature and extent of contaminants that could be encountered during excavation activities, appropriate health and environmental protection

procedures and equipment, and emergency response procedures including the most direct route to a hospital, and contact information for the Site Safety Officer.

**HM-7:** The project shall be consistent with the City's Methane Mitigation Standards, which include provisions to protect workers and the public.

**HM-8:** Prior to building demolition, surveys for asbestos containing materials and lead-based paint shall be conducted. If necessary, destructive sampling shall be used. All asbestos containing materials and lead-based paint would be removed or otherwise abated prior to demolition.

## 8 References

County of Los Angeles, Department of Public Works, Methane and Methane Buffer Zones, 2004, reviewed November 30, 2016, <https://www.partneresi.com/sites/default/files/methane-zone-map-los-angeles.pdf>

County of Los Angeles, Department of Public Works, Solid Waste Information Management System, 2016, accessed 11/30/16, <https://dpw.lacounty.gov/epd/swims/OnlineServices/search-methane-hazards-esri.aspx>

Department of Toxic Substances Control, Former Aliso Street Manufactured Gas Plant Site, Fact Sheet #3, January 2002, [https://dtsc.ca.gov/SiteCleanup/Projects/upload/FormerAlisoMGP\\_FS\\_SiteInvestigation.pdf](https://dtsc.ca.gov/SiteCleanup/Projects/upload/FormerAlisoMGP_FS_SiteInvestigation.pdf)

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