

Project Title & Contact Information

Project title:	Sanitary Sewer Condition Assessment Repairs – Package 1
Lead agency name and address:	City of Santa Clara Public Works Department 1500 Warburton Avenue Santa Clara, CA 95050
Project proponent name and address:	<i>Same as above</i>
Contact person and phone number:	Vincent Luchessi, PE Senior Civil Engineer 408.615.3012

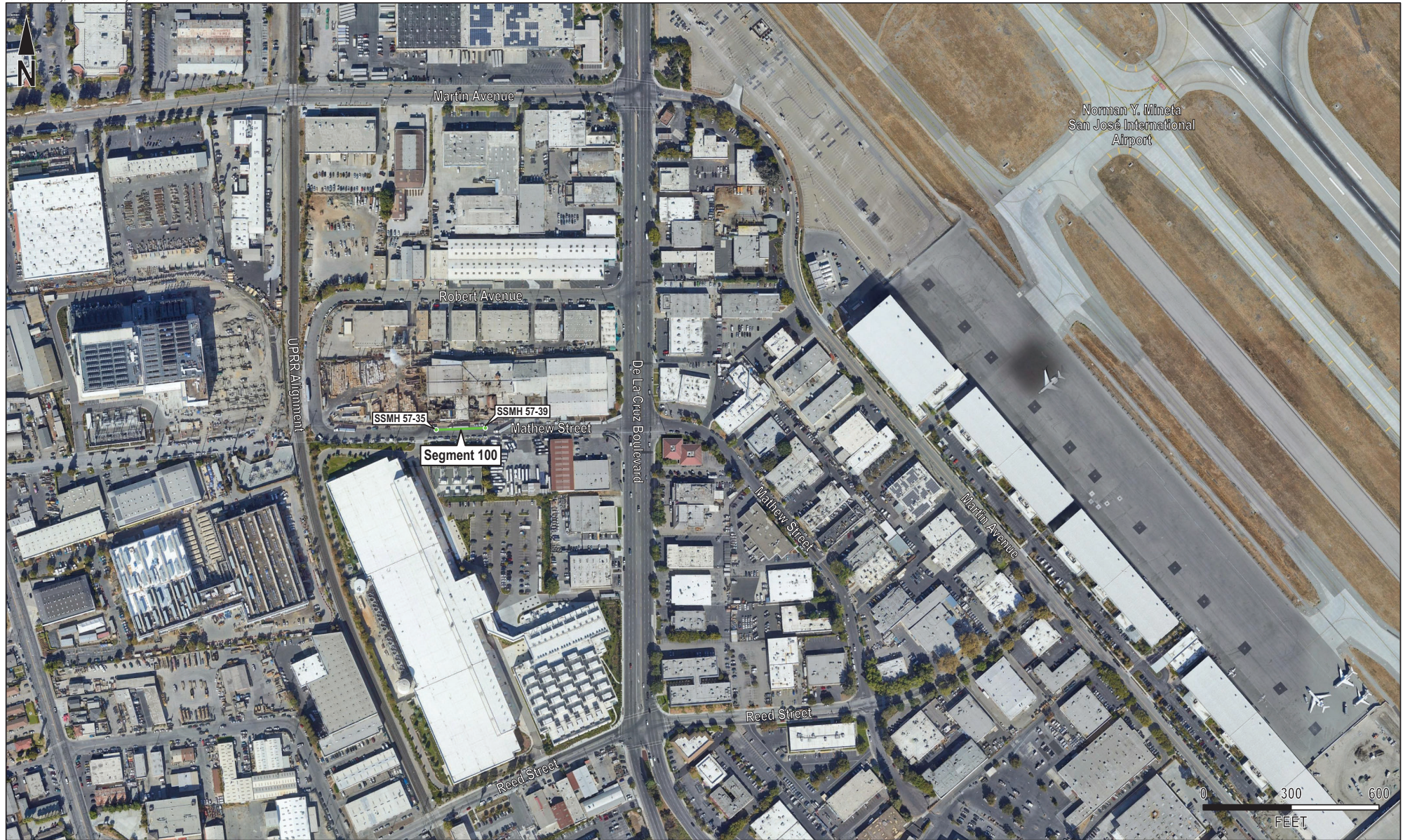
Project Location & Description

The attached Initial Study analyzes the environmental effects of five projects under the current phase of the City’s annual sanitary sewer repairs program, as follows:

- **Segment 100**, located in Mathew Street west of De La Cruz Boulevard: remove 166 linear feet (lf) of existing 18-inch-diameter VCP sewer line and replace it with 18-inch-diameter polyvinyl chloride (PVC) sewer line; remove and replace sanitary sewer manhole (SSMH) 57-35 at west terminus of Segment
- **Segment 231**, located in a utility easement that crosses Lafayette Street just south of Highway 237: install 278 lf of cured-in-place-pipe (CIPP) lining in existing 42-inch-diameter reinforced concrete pipe (RCP) sewer line; replace cones of SSMH 114-14 and SSMH 114-23 at termini of Segment
- **Segments 232 and 233**, located within Lafayette Street immediately to the south of Segment 231: at **Segment 232**, install 437 lf of CIPP lining in existing 42-inch-diameter RCP sewer line, replace cone of SSMH 104-9 at south terminus of Segment; at **Segment 233**, install 491 lf of CIPP lining in existing 42-inch-diameter RCP sewer line; replace cone of SSMH 104-15 at south terminus of Segment
- **Segment 242**, located within Lafayette Street north of Tasman Drive: install 430 lf of CIPP lining in existing 42-inch-diameter RCP sewer line; replace cones of SSMH 104-17 and SSMH 104-22 at termini of Segment

Figures 1 and 2 show the locations of the projects.

Aerial Photograph Source: GoogleEarth (imagery date: 09/04/2020, downloaded: 03/07/2022)
For illustration only; locations not surveyed





<p>Avoidance & Minimization Measures:</p>	<p>The City has committed to the following Avoidance and Minimization Measures (AMMs) to reduce the environmental effects of the repairs. Incorporation of these AMMs was considered in evaluating the projects' environmental impacts.</p> <p><u>Dust Control</u></p> <p>To reduce dust generation, the following measures will be required during excavation and ground disturbance. These measures reflect the requirements of the Bay Area Air Quality Management District's (BAAQMD's) Best Management Practices (BMPs) for fugitive dust control (Bay Area Air Quality Management District 2017).</p> <ul style="list-style-type: none">• All exposed surfaces (potentially including contractor parking areas, staging areas, areas subject to excavation or other ground disturbance, and unpaved access roads/routes) and soil stockpiles will be watered 2 times per day• All haul trucks transporting soil, sand, or other loose material offsite will be covered• All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. Use of dry power sweeping will be prohibited• All vehicle speeds in unpaved areas will be limited to 15 miles per hour• If pavement is removed, it will be replaced as soon as possible.• Vegetated areas disturbed during construction will be replanted/reseeded as soon as possible• Project signage will include the name and telephone number of City staff to contact regarding dust complaints. City staff will respond and take corrective action within 48 hours. Project signage will also include the BAAQMD's phone number to ensure compliance with applicable regulations <p><u>Emissions Control</u></p> <ul style="list-style-type: none">• Idling times will be minimized, either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes. Clear notification will be provided to all equipment operators regarding limitation on idling times• All construction equipment will be maintained and properly tuned in accordance with manufacturer specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation <p><u>Reference Cited</u></p> <p>Bay Area Air Quality Management District. 2017. California Environmental Quality Act Air Quality Guidelines. (May.) Available: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Downloaded: December 2017.</p>
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Mitigation Measures:	<p>Based on analysis in the attached Initial Study, the proposed repair projects will incorporate the following mitigation measures to avoid, reduce, or compensate for potentially significant environmental impacts.</p> <p>Air Quality</p> <p><u>Mitigation Measure AIR-1. Toxic Air Contaminant and Odor Control</u></p> <p>If feasible, the City will avoid the use of styrene resins for CIPP lining.</p> <p>If the use of styrene resins cannot feasibly be avoided, the City will require the following measures to reduce the potential for exposure to toxic air contaminants during CIPP lining.</p> <ul style="list-style-type: none">• All use of styrene resins will be required to adhere to the standard best practices in NASSCO’s Guideline for the Safe Use and Handling of Styrene-Based Resins in Cured-in-Place Pipe (National Association of Sewer Service Companies 2020 or most current)• Sewer main reaches to be rehabilitated via CIPP will be plugged at both ends prior to lining, and a vent will be provided at each end of the reach to provide better dispersal of vapors• If steam curing is used, the steam exhaust will be located at least 250 feet from commercial/business park entry areas and all heating, ventilation, and air conditioning system air intakes. If this is not feasible, an alternative curing method will be used• Adjacent facilities will be notified in writing at least 1 week prior to the start of work. Notification will include the following information.<ul style="list-style-type: none">– Anticipated work dates– An overview of the repair process, including the substances proposed for use– Instructions to leave the premises, move farther away from the work area if possible, and contact the Santa Clara Fire Department if vapors or odors have entered the building, along with the appropriate Fire Department contact information– An advisory to seek medical attention promptly if exposure is suspected– A request to report any odor or health concerns to the City– The name, phone number, and email address of the City staff member who will be responsible for answering questions and receiving and responding to reports of odors or health concerns <p>Additionally, to enable further assessment of potential concerns, the City will document any calls received regarding odors or health symptoms, and if health symptoms are reported will conduct indoor air monitoring following a standard protocol appropriate to the type of resin and curing method(s) being used. Results of monitoring will be documented in City files for consideration in planning future projects. If monitoring indicates levels of any CIPP-related</p>
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emissions of any toxic air contaminant above applicable health thresholds, the City will take appropriate action to reduce the potential for exposure.

Biological Resources

Mitigation Measure BIO-1. Protection of Nesting Birds (General), All Segments

If feasible, all project-related activity within 300 feet of the proposed repair Segments will be scheduled between September 1 and January 31, outside the February 1 – August 31 nesting period.

If project-related activity at any Segment occurs during the nesting period, the City will retain a qualified biologist to conduct a preconstruction nesting bird survey covering the Segment footprint and a 300-foot-wide surrounding buffer. The survey will be conducted within 2 weeks of the start of construction-related activity at the Segment. If active nest(s) of any protected species are identified within the 300-foot-wide survey area, a no-activity buffer will be established around the nest for the duration of the nesting season, or until a biologist determines the young have fledged and left the nest, or that the nest has been abandoned. No entry into the no-activity buffer will be permitted. The no-activity buffer will be delineated in the field by or under the supervision of the biologist, using temporary construction fencing or another suitable low-impact medium. The width of the buffer will be determined by the biologist, based on the species involved, the amount of vegetative and other screening between the nest and areas where construction activity will take place, and, if appropriate, other site-specific factors. If special-status species are involved, the biologist will consult with the appropriate resource agency(ies) (California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service) in determining the width of the buffer.

Mitigation Measure BIO-2. Protection of Nesting Burrowing Owl, Segments 231 and 232

If repair work at Segment 231 or Segment 232 occurs during the Western Burrowing Owl nesting season (February 1 – August 31), the City will retain a qualified biologist to conduct preconstruction surveys covering all areas of suitable habitat within 250 feet of the Segment. The survey will last a minimum of 3 hours, and will either begin 1 hour before sunrise and continue until 2 hours after sunrise or begin 2 hours before sunset and continue until 1 hour after sunset. If no owls are detected during a first survey, a second survey will be conducted. If owls are detected during the first survey, a second survey is not needed. All owls observed will be counted and their locations will be mapped.

If evidence of nesting Western Burrowing Owls is found, a 250-foot-wide no-disturbance buffer zone will be established around each occupied nest and will be delineated in the field by the biologist, using a suitable low-impact medium. Construction may proceed outside the no-disturbance buffer zones.

Cultural Resources

Mitigation Measure CUL-1. Notice of Potential for Buried Cultural Resources in Construction Documents

The potential to encounter buried cultural resources, including Native American burials, will be noted in the project construction documents.

Mitigation Measure CUL-2. Retention of On-Call Archaeologist

Prior to construction, the City will retain a qualified professional archaeologist (City's Archaeologist) with experience in northern and central California archaeology on an on-call basis for the duration of all ground-disturbing activities. The City's Archaeologist will be responsible for reviewing, identifying, and evaluating cultural resources (if any) exposed during construction, for determining whether they qualify as *unique archaeological resource(s)* under CEQA, and, if needed, recommending and implementing appropriate follow-up treatment.

Mitigation Measure CUL-3. Worker Awareness Training for Archaeological Resources

Prior to groundbreaking at each of the Segments, the City's Archaeologist (defined in Mitigation Measure CUL-2) will develop and present in-person, hands-on worker awareness training for archaeological resources. Training will include information on the possibility of encountering resources during construction; the types of resources that may be seen and how to recognize them; and proper procedures in the event resources are encountered. All field management and supervisory personnel and construction workers involved with ground-disturbing activities will be required to take this training prior to beginning work on the project. Upon completion of the training, workers will be required to sign a form stating that they attended the training, understand, and will comply with the information presented.

Mitigation Measure CUL-4. Evaluation and Treatment of Unanticipated Archaeological Discoveries

If known or suspected archaeological resources are discovered during construction, work in the immediate area of the find will cease and the contractor will be required to notify the City before the end of the work day. The find will be protected in place until the City's Archaeologist has evaluated it and identified appropriate follow-up measures, if any. If the City's Archaeologist determines that the resource qualifies as a *unique archaeological resource* under CEQA, they will notify the City and other appropriate parties and recommend follow-up measures to reduce impacts, in accordance with Section 15064.5 of the *CEQA Guidelines*. Depending on the nature of the find, follow-up measures may include avoidance, preservation in place, recordation, monitoring during ongoing work, additional archaeological testing, and data recovery, among other options. The City's Archaeologist may recommend completion of a formal Archaeological Monitoring Plan (AMP) and/or Archaeological Treatment Plan (ATP), potentially including data recovery, if significant archaeological deposits are exposed during ground-disturbing activities. The City will be responsible for proper implementation of the AMP and ATP. If archaeological evaluation, monitoring, or treatment is required, the City's Archaeologist will prepare and file a Monitoring Closure Report with the City, documenting the nature of the find(s), evaluation methods, and outcomes.

Mitigation Measure CUL-5. Procedures for Discovery of Human Remains

The treatment of human remains and funerary objects discovered during any project related ground-disturbing activity will comply with all applicable state laws. If known or potential human remains are encountered during project-related activities, work within 50 feet of the discovery and in any nearby areas reasonably suspected to overlie adjacent remains will cease, the find will be protected in place, and the contractor will be required to notify the City before the end of the work day. The City will promptly notify the Santa Clara County Coroner, who will be responsible for determining whether the remains are Native American. If the Coroner determines that the remains are Native American and are not subject to their authority, they will notify the Native American Heritage Commission, which is responsible for identifying and notifying descendant(s) of the deceased so they can make recommendations regarding the treatment of the remains. The City will be responsible for facilitating the disposition of remains recommended by the Most Likely Descendant(s). If no satisfactory agreement can be reached as to the disposition of the remains pursuant to state law, the City will respectfully reinter the human remains and items associated with the burial on City property in a location not subject to further subsurface disturbance. A final report detailing the find, follow-up activities, and disposition of remains will be prepared by the City's Archaeologist or other qualified staff, and will be submitted to the City's Director of Community Development promptly following disposition of the remains. The report will be subject to review and approval by the City's Director of Community Development.

Geology & Soils

Mitigation Measure GEO-1. Worker Awareness Training for Paleontological Resources

Prior to groundbreaking, the City will retain qualified staff to develop and present in-person, hands-on worker awareness training for paleontological resources. As used here, *qualified staff* refers to an individual who satisfies one or both of the following criteria.

- A Principal Paleontologist as defined by the Society of Vertebrate Paleontology (Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee 2010), who is experienced in delivering training to nonspecialists
- A California-licensed professional geologist (PG) who has expertise in South San Francisco Bay Area stratigraphy and paleontology and is experienced in delivering training to nonspecialists

Training will be concise and substantive. It will include information on the possibility of encountering fossils during construction; the types of fossils that may be seen and how to recognize them; and proper procedures in the event fossils are encountered. All field management and supervisory personnel and construction workers involved with ground-disturbing activities will be required to take this training prior to beginning work on the project. Upon completion of the training, workers will be required to sign a form stating that they attended the training, understand, and will comply with the information presented.

Mitigation Measure GEO-2. Stop-Work, Evaluation, and Treatment in the Event of a Paleontological Find

If vertebrate remains or other potentially significant fossil resources are discovered during project-related activities, all work in the immediate vicinity of the discovery will cease, the find

will be protected in place, and the contractor will be required to notify the City before the end of the work day. The City will detail qualified staff—i.e., staff meeting the criteria for a Qualified Professional Paleontologist as defined by the Society of Vertebrate Paleontology (Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee 2010)—to evaluate the find and recommend appropriate follow-up treatment. Work may continue on other parts of the alignment while evaluation (and, if needed, treatment) takes place, as long as the find can be adequately protected in the judgment of the qualified staff. The City will be responsible for ensuring that the recommendations of the qualified staff regarding treatment and reporting are implemented.

Hazards & Hazardous Materials

Mitigation Measure HAZ-1. Contaminated Groundwater, Soil, and Soil Vapor Protection

The contractor will be required to prepare and submit a Health and Safety Plan (HASP) for worker and public safety during all phases of sewer and manhole repair work. The HASP will be tailored to the contaminants potentially present, the media potentially affected/involved (soil, groundwater, soil vapor), and the activities planned. The HASP will be subject to review and approval by a Certified Industrial Hygienist and the City, and at a minimum will include the following requirements.

- Contractor staff will be required to wear appropriate Personal Protective Equipment (PPEs) and the contractor will be required to employ Best Management Practices (BMPs) to minimize and monitor human exposure to potential contaminants, consistent with applicable federal and state requirements, including Title 29 of the Code of Federal Regulations and California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) guidelines (California Code of Regulations, Title 8). Construction BMPs described in the HASP will include, but will not necessarily be limited to, the following
- Public access to the active work site will be prohibited using appropriate safety barriers and signage
- If contaminated soil, groundwater, or other materials encountered during construction activities qualify as hazardous waste (per California Code of Regulations, Title 22), all contractor employees (and subcontractors, if any) handling the hazardous waste will be certified in OSHA's 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training
- If dewatering is required, groundwater removed from excavations will be stored in a settling tank and tested onsite for contamination prior to discharge in accordance with applicable permit requirements. If contaminant levels are detected in excess of the applicable discharge limits per the contractor's discharge permit, the groundwater will either be treated onsite using appropriate technology (e.g., sediment filter, activated carbon filter, or other appropriate alternative methods) prior to discharge to the sanitary sewer, or will be removed from the site for appropriate offsite disposal. Groundwater treatment and offsite disposal options will be described in the HASP

- Contractor will stockpile excavated materials prior to onsite reuse as backfill or offsite disposal at an appropriately permitted landfill. Contractor will water/mist soil as it is being excavated. Stockpiled soil will be placed in areas shielded to the extent feasible from prevailing winds and will be covered with plastic sheeting to prevent fugitive dust and vapor emissions and to shield the stockpile from potential rain. Stockpiles will be placed away from drainage courses, gutters, and stormdrain inlets to prevent contact with stormwater runoff. Public access to the stockpile area(s) will be prohibited using appropriate barriers and signage. Soil exhibiting signs of potential contamination (such as staining, odors, or the presence of debris) will be placed in a separate stockpile
- Soil that does not exhibit signs of potential contamination may be reused as backfill in the excavation from which it was removed
- Excavated materials that exhibit signs of potential contamination, and excavated materials that are planned for offsite disposal at a landfill (if any), will be tested for contaminants in accordance with the receiving landfill's requirements and the U.S. Environmental Protection Agency's (EPA's) SW-846 guidelines (available: <https://www.epa.gov/hw-sw846>)
- If testing of excavated materials indicates any contaminant levels in excess of hazardous waste thresholds (per California Code of Regulations, Title 22), excavated materials will be handled and disposed of by a licensed hazardous waste disposal contractor and transported by a licensed hazardous waste hauler to an appropriately licensed and permitted disposal facility, in accordance with local, state, and federal requirements. Contractor will water/mist soil as it is being loaded onto haul trucks to prevent fugitive dust generation, and haul trucks will be covered and the truck wheels and body brushed clean to control trackout, fugitive dust, and vapor emissions during transport
- If import fill materials (e.g., soil, sand, aggregate base) are used, they will be sourced and tested in accordance with guidance from the California Department of Toxic Substances Control's Information Advisory *Clean Imported Fill Material* (available: <https://dtsc.ca.gov/information-advisory-clean-imported-fill-material-fact-sheet/>). Fill material testing results will be provided to the City for review and approval prior to importing the fill materials to the project site. No fill material will be imported for use at any of the repair Segments if it contains any contaminant at a level exceeding hazardous waste thresholds (per California Code of Regulations, Title 22) or the applicable Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) for commercial/industrial land use, with the exception of arsenic for which the naturally occurring background level of 11 milligrams per kilogram (mg/kg) (per Duvergé 2011) will apply as a limiting threshold
- The contractor will monitor ambient air in the trench and around the perimeter of the active work area for fugitive vapor emissions, including volatile organic compounds (VOCs), methane, and other sewer/landfill gases, using appropriate field screening instrumentation. If any contaminant level in excess of applicable Cal/OSHA Permissible Exposure Levels is detected, worker PPEs will be required to include inhalation protection meeting Cal/OSHA standards, and/or work will be suspended

until airborne concentrations decrease below the action threshold, as verified by ambient air monitoring. If air monitoring indicates the presence of flammable vapors in excess of their lower explosive limits (LELs) or other hazardous atmosphere conditions (e.g., oxygen-deficient atmosphere) work will be suspended until the hazardous atmosphere conditions have been mitigated as verified by air monitoring. Vapor control measures (e.g., spraying water or vapor suppressants, covering exposed soil with plastic sheeting, and ventilation of excavations and manholes) will be performed as necessary based on air monitoring results, to maintain vapor concentrations below PELs and LELs and ensure that safe oxygen levels (20.8% – 21%) are present in the trench and surrounding work area

The project Contract Documents will stipulate contractor responsibilities in implementing these requirements.

References Cited

Duvergé, D. 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region, December. Available: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/2011_Arsenic_Background_Duverge.pdf. Accessed: May – June 2022.

National Association of Sewer Service Companies. 2020. Guideline for the Safe Use and Handling of Styrene-Based Resins in Cured-in-Place Pipe. (October.) Available: https://www.nassco.org/wp-content/uploads/2021/02/Safe-Handling-and-Use-of-Styrene_Specification-Guideline-_2020-2.pdf. Downloaded: October 2022.

Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Available: http://vertpaleo.org/Membership/Member-Resources/SVP_Impact_Mitigation_Guidelines.aspx. Downloaded: July 2018.

Determination

In accordance with local procedures for compliance with the California Environmental Quality Act (CEQA), the Public Works Department has completed the attached Initial Study to evaluate the potential for the proposed sanitary sewer repairs to result in significant adverse effect(s) on the environment, and on the basis of analysis in the Initial Study recommends the following determination.

- Although the projects have the potential to result in significant effects on the environment, there would not be a significant effect in this case because revisions in the project (in the form of mitigation measures) have been agreed to by the City as project proponent
- A Mitigated Negative Declaration should be prepared
- An Environmental Impact Report (EIR) is not required

Findings

Based on the analysis and findings presented in the project Initial Study (attached), implementation of the proposed sanitary sewer repairs will not have a significant effect on the environment, for the following reasons.

- As discussed in Section 3 of the Initial Study, with the identified Avoidance and Minimization Measures and mitigation measures incorporated, potential short- and long-term environmental impacts would be avoided or reduced to Less than Significant levels
- The proposed repair projects would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop 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 the major periods of California history or prehistory
- The proposed repair projects would not make Cumulatively Considerable contributions to existing Significant cumulative impacts, nor would they individually or collectively create new Significant cumulative impacts over time. Thus, they would not have impacts that are individually limited, but Cumulatively Considerable
- The proposed repair projects would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly

This determination reflects the independent judgment of the City.

Vincent Luchessi, PE
Senior Civil Engineer

Date