Appendix G

Water Resources Technical Report







Buena Vista

1251 North Spring Street & 1030-1380 North Broadway, City of Los Angeles, CA

WATER RESOURCES TECHNICAL REPORT

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1. INTRODUCTION

1.1. PROJECT DESCRIPTION

The Buena Vista project is a mixed-use development project (Project) on an approximately 8.08-acre site (prior to anticipated street dedications) (Project Site) located in the northeasterly portion of Chinatown and south of the Elysian Park area in the City of Los Angeles (City). The Project is required to dedicate a 3-foot strip of land along the North Broadway right-of-way line, equating to a 0.21-acre dedication and resulting in a total Project Site area of 7.87 acres. The Project Site is bounded by North Broadway and commercial and residential uses to the north and west, as well as the Metro A Line and Los Angeles State Historic Park to the south and east.



The existing Project Site is partially developed, with portions of the Project Site currently used for vehicle and equipment storage and parking. The southern portion of the Project Site is partially developed with various one-story structures previously associated with Metro operations and maintenance-related activities, as well as vegetated sloped areas. Structures on the southern portion of the Project Site consist of:

1. 12,800 square-foot 1-story maintenance building
    - 6,400 square-foot garage [Building Permit Number (BPN) 59547 issued 1953]
    - 1,600 square-foot "wash rack" building [BPN 59548 issued 1953]

- 800 square-foot addition [assumed that it was built to combine the two existing structures (garage and wash rack) into one 8,800 square-foot garage (referenced in BPN 94374)]
- 2,400 square-foot addition [BPN 94374 issued 1958]
- 1,600 square foot addition [BPN 98587 issued 1958]

2. 2,132 square-foot 1 story restaurant addition
    - 2,132 square-foot to the rear of an existing off-site restaurant [BPN 89578 issued 1954] encroaches into the Project Site
3. Surface parking

    Note: For existing building exhibit and permits, see Attachment D

The Project involves subdivision of the site into the "South Parcel" and "North Parcel" master lots and airspace lots for residential and commercial purposes.

The South Parcel would include 631 dwelling units (du), approximately 15,800 sf of restaurant, and 10,000 sf of uses, located within a six-story podium connecting two buildings, Building 1, a 26-story building and Building 2, a 22-story building constructed above a partially subterranean parking garage.

The North Parcel would include 355 du, approximately 8,000 sf of restaurant, and 5,000 sf of retail uses, located within a two-story podium connecting two buildings, the North Building, a 15-story building, and the Courtyard Building, a six-story building. Additionally, the North Parcel would also include the Retail Block, a three-story building.

The Project would contain approximately 75,604 sf of total open space on the South Parcel and 50,215 sf of total open space on the North Parcel. A landscaped central greenspace and public walkway would be developed in the central portion of the site to connect the South and North Parcels and provide a new pedestrian amenity. All existing on-site structures would be removed to accommodate the Project.

1.2. SCOPE OF WORK

As part of the environmental impact report (EIR) for the Project, this report describes the existing and proposed surface water hydrology, surface water quality, and groundwater at the Project Site and immediate surrounding areas, as well as analyzing the Project's potential impacts on each of these water resources.

For the purpose of this report, the Project components (North Parcel and South Parcel) will be analyzed and considered as one project.

2. REGULATORY FRAMEWORK

2.1. SURFACE WATER HYDROLOGY

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards.[1] FEMA provides flood insurance rate maps (FIRMs) for local and regional planners to promote sound land use and development practices, by identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies referred to as flood insurance studies (FIS). Using information gathered in these studies, FEMA engineers and cartographers delineate special flood hazard areas (SFHA) on FIRMs.

The Flood Disaster Protection Act requires owners of all structures within identified SFHAs to purchase and maintain flood insurance as a condition of receiving federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program (NFIP) afforded by FEMA.

Los Angeles Municipal Code

Any proposed drainage improvements within the street right-of-way or any other property owned by, to be owned by, or under the control of the City requires approval through the B-Permit process (Section 62.105, Los Angeles Municipal Code (LAMC)). Through the B-Permit process, storm drain installation plans which include any connections to the City's storm drain system from a property line to a catch basin or storm drain pipe, are subject to review and approval by the City of Los Angeles Department of Public Works, Bureau of Engineering.

County of Los Angeles Hydrology Manual

Drainage and flood control in the City of Los Angeles (City) are subject to review and approval by the Department of Public Works, Bureau of Engineering (Bureau of Engineering). Storm drains within the City are constructed by both the City and the Los Angeles County Flood Control District (County Flood Control). The County Flood Control constructs and has jurisdiction over regional facilities, such as major storm drains and open flood control channels, while the City constructs and is responsible for local interconnecting tributary drains.

Per the City's Special Order No. 007-1299, December 3, 1999, the City has adopted the Los Angeles County Department of Public Works' Hydrology Manual as its basis of design for storm drainage facilities. The Department of Public Works' Hydrology Manual requires that a storm drain conveyance system be designed for a 25-year storm event and that the combined capacity of a storm

[1] The National Flood Insurance Act of 1968, as amended, and The Flood Disaster Protection Act of 1973, 42 U.S.C. 4001 et. Seq. www.fema.gov/sites/default/files/2020-07/national-flood-insurance-act-1968.pdf

drain and street flow system accommodate flow from a 50-year storm event. Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flow from a 50-year storm event. The County also limits the allowable discharge into existing storm drain (MS4) facilities based on the County's MS4 Permit, which is enforced on all new developments that discharge directly into the County's MS4 system.

Drainage and flood control structures and improvements within the City are subject to review and approval by the City's Department of Public Works and Department of Building and Safety. As required by the Department of Public Works, all public storm facilities must be designed in conformity with the standards set forth by Los Angeles County. The Department of Public Works reviews and approves MS4 plans prior to construction. Any proposed increases in discharge directly into County facilities, or proposed improvements of County-owned MS4 facilities, such as catch basins and drainage lines, require approval from County Flood Control to ensure compliance with the County's Municipal NPDES Permit requirements.

2.2. SURFACE WATER QUALITY

Clean Water Act

The Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act, was first introduced in 1948, with major amendments in the 1960s, 1970s, and 1980s.[2] The CWA authorizes federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. Amendments to the CWA in 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program, which prohibits discharge of pollutants into the nation's waters without procurement of a NPDES permit from the United States Environmental Protection Agency (USEPA). The purpose of the permit is to translate general requirements of the Clean Water Act into specific provisions tailored to the operations of each organization that is discharging pollutants. Although federally mandated, the NPDES permit program is generally administered at the State and regional levels.

The USEPA NPDES Program requires NPDES permits for: (1) Municipal Separate Storm Sewer Systems (MS4) generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs 5 acres or more of land. As of March 2003, Phase II of the NPDES Program extended the requirements for NPDES permits to numerous small MS4s, construction sites of 1 to 5 acres and industrial facilities owned or operated by small municipal separate storm sewer systems, which were previously exempted from permitting.

[2] U.S. Environmental Protection Agency, Clean Water Act, November 2002. www.epa.gov/sites/production/files/2017-08/documents/federal-water-pollution-control-act-508full.pdf

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of the Nation's drinking water. The SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply and its sources, including rivers, lakes, reservoirs, springs, and groundwater wells. Under SDWA, the USEPA sets standards for drinking water quality and oversees the states, localities, and water suppliers that implement those standards. The SDWA regulates contaminants of concern in domestic water supply, including the maximum contaminant levels (MCLs), and that the USEPA has delegated the California Department of Public Health the responsible agency for administering California's drinking water program. MCLs are established under California Code of Regulations (CCR) Title 22, Div. 4, Ch. 15, Article 4 (Title 22 Standards).

Federal Antidegradation Policy

The Federal Antidegradation Policy has been incorporated within the Clean Water Act and requires states to develop statewide antidegradation policies and identify methods for implementing them.[3] Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods must, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

The Flood Disaster Protection Act requires owners of all structures within identified SFHAs to purchase and maintain flood insurance as a condition of receiving federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program (NFIP) afforded by FEMA.

Porter-Cologne Water Quality Act (California Water Code)

The Porter-Cologne Water Quality Control Act established the legal and regulatory framework for California's water quality control. The California Water Code (CWC) authorizes the State Water Resources Control Board (SWRCB) to implement the provisions of the CWA, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants. In California, the NPDES stormwater permitting program is administered by the SWRCB.

Under the CWC, the State of California is divided into nine Regional Water Quality Control Boards (RWQCBs), which govern the implementation and enforcement of the CWC and the CWA. The Project Site is located within Region 4, also known as the Los Angeles RWQCB (LARWQCB). The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology.

[3] U.S. Environmental Protection Agency, Water Quality Standards Handbook, 2010, Chapter 4: Antidegradation. www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter4.pdf

Each RWQCB is required to formulate and adopt a Water Quality Control Plan or Basin Plan for its region. The Basin Plan establishes beneficial use definitions for the various types of water bodies, and serves as the basis for establishing water quality objectives, discharge conditions and prohibitions, and must adhere to the policies set forth in the CWC and established by the SWRCB. In this regard, the LARWQCB issued the Los Angeles Basin Plan on August 29, 2014, for the Coastal Watersheds of Los Angeles and Ventura Counties, with subsequent amendments. The RWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality.

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the State, not just surface waters. The policy states that, whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of the water resource.

California Toxics Rule

In 2000, the California Environmental Protection Agency (CalEPA) promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the State. CalEPA promulgated this rule based on CalEPA's determination that the numeric criteria of specific concentrations of regulated substances are necessary for the State to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries, that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

Board Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

As required by the California Water Code (CWC), the LARWQCB has adopted a plan entitled "Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties" (Basin Plan). Specifically, the Basin Plan designates beneficial uses for surface and groundwaters, sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and describes implementation programs to protect all waters in the Los Angeles Region. In addition, the Basin Plan incorporates (by reference) all applicable state and regional board plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan.

NPDES Permit Program

As indicated above, in California, the NPDES stormwater permitting program is administered by the SWRCB through its nine RWQCBs. This NPDES permit, General Permit for Stormwater Discharges from Construction Activities by the SWRCB (Construction General Permit), establishes a risk-based approach to stormwater control requirements for construction projects.

(i) Construction: Stormwater Pollution Prevention Plan

For all construction activities disturbing 1 acre of land or more, California mandates the development and implementation of Stormwater Pollution Prevention Plans (SWPPP). The SWPPP documents the selection and implementation of best management practices (BMPs) to prevent discharges of water pollutants to surface or groundwater. The SWPPP also charges owners with stormwater quality management responsibilities. The developer or contractor for a construction site subject to the Construction General Permit must prepare and implement a SWPPP that meets the requirements of the Construction General Permit. The purpose of an SWPPP is to identify potential sources and types of pollutants associated with construction activity and list BMPs that would prohibit pollutants from being discharged from the construction site into the public stormwater system. BMPs typically address stabilization of construction areas, minimization of erosion during construction, sediment control, control of pollutants from construction materials, and post construction stormwater management (e.g., the minimization of impervious surfaces or treatment of stormwater runoff). The SWPPP is also required to include a discussion of the proposed program to inspect and maintain all BMPs.

A site-specific SWPPP could include, but not be limited to the, following BMPs:

- Erosion Control BMPs—to protect the soil surface and prevent soil particles from detaching. Selection of the appropriate erosion control BMPs would be based on minimizing areas of disturbance, stabilizing disturbed areas, and protecting slopes/channels. Such BMPs may include, but would not be limited to, use of geotextiles and mats, earth dikes, drainage swales, and slope drains.

- Sediment Control BMPs—are treatment controls that trap soil particles that have been detached by water or wind. Selection of the appropriate sediment control BMPs would be based on keeping sediments on-site and controlling the site boundaries. Such BMPs may include, but would not be limited, to use of silt fences, sediment traps, and sandbag barriers, street sweeping and vacuuming, and storm drain inlet protection.

- Wind Erosion Control BMPs—consist of applying water to prevent or minimize dust nuisance.

- Tracking Control BMPs—consist of preventing or reducing the tracking of sediment off-site by vehicles leaving the construction area. These BMPs include street sweeping and vacuuming. Project sites are required to maintain a stabilized construction entrance to prevent off-site tracking of sediment and debris.

- Non-Stormwater Management BMPs—also referred to as "good housekeeping practices," involve keeping a clean, orderly construction site.

- Waste Management and Materials Pollution Control BMPs—consist of implementing procedural and structural BMPs for handling, storing, and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater runoff or discharges through the proper management of construction waste.

The SWRCB adopted a General Permit for Stormwater Discharges from Construction Activities on September 2, 2009, and amended the permit on July 17, 2012, (Order No. 2012-0006-DWQ, General NPDES Permit No. CAS000002). The Construction General Permit regulates construction activity, including clearing, grading, and excavation of areas 1 acre or more in size, and prohibits the discharge of materials other than stormwater, authorized non-stormwater discharges, and all discharges that contain a hazardous substance, unless a separate NPDES permit has been issued for those discharges.

To obtain coverage under the Construction General Permit, a developer is required to file a Notice of Intent (NOI) with the appropriate RWQCB and provide proof of the NOI prior to applying for a grading or building permit from the local jurisdiction, and must prepare a State SWPPP that incorporates the minimum BMPs required under the permit as well as appropriate project-specific BMPs. The SWPPP must be completed and certified by the developer and BMPs must be implemented prior to the commencement of construction, and may require modification during the course of construction as conditions warrant. When project construction is complete, the developer is required to file a Notice of Termination with the RWQCB certifying that all the conditions of the Construction General permit, including conditions necessary for termination, have been met.

(ii) NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering

Dewatering operations are practices that discharge non-stormwater, such as groundwater, that must be removed from a work location to proceed with construction into the drainage system. Discharges from dewatering operations can contain high levels of fine sediments, which if not properly treated, could lead to exceedance of the NPDES requirements. An NPDES Permit for dewatering discharges was adopted by the LARWQCB on September 13, 2018 (Order No. R4-2018-0125, General NPDES Permit No. CAG994004. Similar to the Construction General Permit, to be authorized to discharge under this permit, the developer must submit a NOI to discharge groundwater generated from dewatering operations during construction in accordance with the requirements of this Permit and shall continue in full force until it expires November 13, 2023. In accordance with the NOI, among other requirements and actions, the discharger must demonstrate that the discharges shall not cause or contribute to a violation of any applicable water quality objective/criteria for the receiving waters, perform reasonable potential analysis using a representative sample of groundwater or wastewater to be discharged. The discharger must obtain and analyze (using appropriate methods) a representative sample of the groundwater to be treated and discharged under the Order. The analytical method used shall be capable of achieving a detection limit at or below the minimum level. The discharger must also provide a feasibility study on conservation, reuse, and/or alternative disposal methods of the wastewater and provide a flow diagram of the influent to the discharge point.

(iii) Operation: Los Angeles County Municipal Stormwater NPDES Program

The County of Los Angeles and the City are two of the Co-Permittees under the Los Angeles County MS4 Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001). The Los Angeles County MS4 Permit has been determined by the SWRCB to be consistent with the requirements of the Clean Water Act and the Porter-Cologne Act for discharges through the public storm drains in Los Angeles County to statutorily-defined waters of the U.S. (33 United States Code [USC] §1342(p); 33 CFR Part 328.11). On September 8, 2016, the LARWQCB amended the Los Angeles County MS4 Permit to incorporate modifications consistent with the revised Ballona Creek Watershed Trash Total Maximum Daily Load (TMDL) and the revised Los Angeles River Watershed Trash TMDL, among other TMDLs incorporated into the Los Angeles County MS4 Permit and the Basin Plan for the Coastal Waters of Los Angeles and Ventura Counties.

Under the amended Los Angeles County MS4 Permit, permittees are required to implement a development planning program to address stormwater pollution. This program requires project applicants for certain types of projects to implement a Low Impact Development (LID) Plan. The purpose of the LID Plan is to reduce the discharge of pollutants in stormwater by outlining BMPs, which must be incorporated into the design of new development and redevelopment. These treatment control BMPs must be sufficiently designed and constructed to treat or retain the greater of an 85th percentile rain event or first 0.75 inch of stormwater runoff from a storm event.

The Los Angeles County MS4 Permit (Part VI.D.7.c, New Development/Redevelopment Project Performance Criteria) includes design requirements for new development and substantial redevelopment. These requirements apply to all projects that create or replace more than 5,000 square feet of impervious cover. Where redevelopment results in an alteration to more than 50 percent of impervious surfaces of a previously existing development and the existing development was not subject to post-construction stormwater quality control requirements, the entire project would be subject to post construction stormwater quality control measures.

This Enhanced Watershed Management Program for the Upper Los Angeles River (ULAR EWMP) describes a customized compliance pathway that participating agencies will follow to address the pollutant reduction requirements of the Los Angeles County MS4 Permit. By electing the optional compliance pathway in the MS4 Permit, the Upper Los Angeles River Watershed Management Group (EWMP Group) has leveraged this EWMP to facilitate a robust, comprehensive approach to stormwater planning for the Upper Los Angeles River watershed. The objective of the EWMP Plan is to determine the network of control measures (BMPs) that will achieve required pollutant reductions while also providing multiple benefits to the community and leveraging sustainable green infrastructure practices. The Permit requires the identification of Watershed Control Measures, which are strategies and BMPs that will be implemented through the EWMP, individually or collectively, at watershed-scale to address the Water Quality Priorities. The EWMP Implementation Strategy is used as a recipe for compliance for each jurisdiction to address Water Quality Priorities and comply with the provisions of the MS4 Permit. The EWMP Implementation Strategy includes individual recipes for each of the 18 jurisdictions and each watershed/assessment area—Los Angeles River above Sepulveda Basin, Los Angeles River below Sepulveda Basin, Compton Creek, Rio Hondo, Verdugo Wash, Arroyo Seco, Burbank Western Channel, Tujunga Wash, Bull Creek, Aliso Wash, Bell Creek, McCoy-Dry Canyon, and Browns Canyon Wash. Implementation of the EWMP Implementation Strategy will provide a

BMP-based compliance pathway for each jurisdiction under the MS4 Permit. The permit specifies that an adaptive management process will be revisited every two years to evaluate the EWMP and update the program. The EWMP strategy will evolve based on monitoring results by identifying updates to the EWMP Implementation Plan to increase its effectiveness.

The Los Angeles County MS4 Permit contains provisions for implementation and enforcement of the Stormwater Quality Management Program. The objective of the Stormwater Quality Management Program is to reduce pollutants in urban stormwater discharges to the "maximum extent practicable," to attain water quality objectives and protect the beneficial uses of receiving waters in Los Angeles County. Special provisions are provided in the Los Angeles County MS4 Permit to facilitate implementation of the Stormwater Quality Management Program. In addition, the Los Angeles County MS4 Permit requires that permittees implement a LID Plan, as discussed above, that designates BMPs that must be used in specified categories of development projects to infiltrate water, filter, or treat stormwater runoff; control peak flow discharge; and reduce the post-project discharge of pollutants into stormwater conveyance systems. In response to the Los Angeles County MS4 Permit requirements, the City adopted Ordinance No. 173,494 (Stormwater Ordinance), as authorized by LAMC Section 64.72.

The City supports the requirements of the Los Angeles County MS4 Permit through the City of Los Angeles' Development Best Management Practices Handbook, Low Impact Development Manual, Part B: Planning Activities (5th edition, May 2016) (LID Handbook), which provides guidance to developers to ensure the post-construction operation of newly developed and redeveloped facilities comply with the Developing Planning Program regulations of the City's Stormwater Program. The LID Handbook assists developers with the selection, design, and incorporation of stormwater source control and treatment control BMPs into project design plans, and provides an overview of the City's plan review and permitting process.

The City implements the requirement to incorporate stormwater BMPs, including LID BMPs, through the City's plan review and approval process. During the review process, project plans are reviewed for compliance with the City's General Plan, zoning ordinances, and other applicable local ordinances and codes, including stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address stormwater pollution prevention goals.

Los Angeles River Watershed Master Plan

The Los Angeles River Master Plan recognizes the river as a resource of regional importance and that those resources must be protected and enhanced. The Los Angeles River Master Plan was first adopted in 1996, and updated in 2022. The Los Angeles River Master Plan recognizes the need for resilient systems that address the most complex issues facing the Los Angeles region, such as climate change, population growth, resource scarcity, and social inequity. These resilient systems are necessary to create 51-miles of connected open space that supports clean water, native habitat, parks, recreation, multiuse trails, art, and cultural resources to improve human and ecosystem health, equity, access, mobility, and economic opportunity for the diverse communities of Los Angeles County, while managing flood risk. The Los Angeles River Master Plan seeks to make the reimagined

river a reality over the next two and a half decades, connecting people, culture, water, open space, and wildlife across and along this iconic river.

The General Permit for Construction Activities

SWRCB Order No. 2009-0009-DWQ known as the "Construction General Permit" was adopted on September 2, 2009 and was amended by Order No 2012-0006-DWQ which became effective on July 17, 2012. This NPDES permit establishes a risk-based approach to stormwater control requirements for construction projects by identifying three project risk levels. The main objectives of the General Permit are to:

- Reduce erosion
- Minimize or eliminate sediment in stormwater discharges
- Prevent materials used at a construction site from contacting stormwater
- Implement a sampling and analysis program
- Eliminate unauthorized non-stormwater discharges from construction sites
- Implement appropriate measures to reduce potential impacts on waterways both during and after construction of projects
- Establish maintenance commitments on post-construction pollution control measures

California mandates requirements for all construction activities disturbing more than one acre of land to develop and implement Stormwater Pollution Prevention Plans (SWPPPs). The SWPPP documents the selection and implementation of BMPs for a specific construction project, charging owners with stormwater quality management responsibilities. A construction site subject to the General Permit must prepare and implement a SWPPP that meets the requirements of the General Permit.

As part of the Project, preparation and implementation of a SWPPP will be required. In addition, the Project will be required to obtain a Waste Discharger Identification Number (WDID) through the state's Storm Water Multiple Application and Report Tracking System (S.M.A.R.T.S.).

Los Angeles Municipal Code Section 62.105, Construction "Class B" Permit

Proposed drainage improvements within the street rights-of-way or any other property owned by, to be owned by, or under the control of the City, require the approval of a B-permit (LAMC Section 62.105). Under the B-permit process, storm drain installation plans are subject to review and approval by the Bureau of Engineering. Additionally, connections to the MS4 system from a property line to a catch basin or a storm drain pipe require a storm drain permit from the Bureau of Engineering.

Stormwater Program—Los Angeles County MS4 Permit Citywide Implementation

The Watershed Protection Division of the Department of Public Works, Bureau of Sanitation is responsible for stormwater pollution control throughout the City in compliance with the Los Angeles

County MS4 Permit. The Watershed Protection Division administers the City's Stormwater Program, which has two major components: Pollution Abatement and Flood Control. The Watershed Protection Division publishes the two-part Development Best Management Practices Handbook that provides guidance to developers for compliance with the Los Angeles County MS4 permit through the incorporation of water quality management into development planning. The Development Best Management Practices Handbook, Part A: Construction Activities, provides specific minimum BMPs for all construction activities. The Development Best Management Practices Handbook, Low Impact Development Manual, Part B: Planning Activities (5th edition, May 2016) (LID Handbook) provides guidance to developers to ensure the post-construction operation of newly developed and redeveloped facilities comply with the Developing Planning Program regulations of the City's Stormwater Program. The LID Handbook assists developers with the selection, design, and incorporation of stormwater source control and treatment control BMPs into project design plans, and provides an overview of the City's plan review and permitting process. The LID Handbook addresses the need for frequent and/or regular inspections of infiltration facilities in order to ensure on-site compliance of BMP standards, soil quality, site vegetations, and permeable surfaces. These inspections are required to guarantee that facilities follow all proprietary operation and maintenance requirements.

During the development review process, project plans are reviewed for compliance with the City's General Plan, zoning ordinances, and other applicable local ordinances and codes, including stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address stormwater pollution prevention goals

Los Angeles Municipal Code Sections 12.40 through 12.43, Landscape Ordinance

In 1996, Ordinance No. 170,978 amended LAMC Sections 12.40 through 12.43 to establish consistent landscape land requirements for new projects within the City. LAMC Section 12.40 contains general requirements, including a point system for specific project features and techniques in order to determine compliance with the ordinance, and defines exemptions from the ordinance. LAMC Section 12.41 sets minimum standards for water delivery systems (irrigation) to landscapes. LAMC Section 12.43 defines the practices addressed by the ordinance, of which two are applicable to stormwater management. The Heat and Glare Reduction practice states among its purposes the design of vehicular use areas that reduce stormwater runoff and increase groundwater recharge. The Soil and Watershed Conservation practice is intended to encourage the restoration of native areas that are unavoidably disturbed by development; to conserve soil and accumulated organic litter and reduce erosion by utilization of a variety of methods; and to increase the "residence time of precipitation" (i.e., the time between the original evaporation and the returning of water masses to the land surface as precipitation) within a given watershed. Implementation guidelines developed for the ordinance provide specific features and techniques for incorporation into projects, and include water management guidelines addressing runoff, infiltration, and groundwater recharge. This ordinance is incorporated into the LID Ordinance discussed below.

Los Angeles Municipal Code Section 64.70, Stormwater and Urban Runoff Pollution Control Ordinance

LAMC Section 64.70, the Stormwater and Urban Runoff Pollution Control Ordinance, was added by Ordinance No. 172,176 in 1998 and prohibits the discharge of unauthorized pollutants in the City. The Watershed Protection Program (Stormwater Program) for the City is managed by the Bureau of Sanitation along with all City Flood Protection and Pollution Abatement (Water Quality) Programs, including but not limited to, regulatory compliance, implementation, operations, reporting and funding. Section 64.70 sets forth uniform requirements and prohibitions for discharges and places of discharge into the storm drain system and receiving waters necessary to adequately enforce and administer all federal and state laws, legal standards, orders and/or special orders that provide for the protection, enhancement and restoration of water quality. Through a program employing watershed-based approaches, the regulation implements the following objectives:

1. To comply with all Federal and State laws, lawful standards and orders applicable to stormwater and urban runoff pollution control;

2. To prohibit any discharge which may interfere with the operation of, or cause any damage to the storm drain system, or impair the beneficial use of the receiving waters;

3. To prohibit illicit discharges to the storm drain system;

4. To reduce stormwater runoff pollution;

5. To reduce non-stormwater discharge to the storm drain system to the maximum extent practicable; and

6. To develop and implement effective educational outreach programs designed to educate the public on issues of stormwater and urban runoff pollution.

The ordinance applies to all dischargers and places of discharge that discharge stormwater or non-stormwater into any storm drain system or receiving waters. While this practice is prohibited under the County's Municipal NPDES Permit, adoption of the ordinance allows enforcement by the Department of Public Works, as well as the levy of fines for violations. General Discharge Prohibitions require that no person shall discharge, cause, permit, or contribute to the discharge any hazardous materials and substances (liquids, solids, or gases) into to the storm drain system or receiving waters that constitute a threat and/or impediment to life and the storm drain system, singly or by interaction with other materials. A specific list of prohibited substances can be found under LAMC Section 64.70.

Under LAMC Section 64.70.02 D, Requirement to Prevent, Control, and Reduce Stormwater Pollutants, any owner of a facility engaged in activities or operations as listed in the Critical Sources Categories, Section III of the Board's Rules and Regulations shall be required to implement BMPs as promulgated in the Rules and Regulations. The owner/developer of a property under construction shall be required to implement the stormwater pollution control requirements for construction activities as depicted in the project plans approved by the Department of Building and Safety. In the event a

specified BMP proves to be ineffective or infeasible, the additional and/or alternative, site-specific BMPs or conditions deemed appropriate to achieve the objectives of this ordinance as defined in LAMC Section 64.70 B.

Los Angeles Municipal Code Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities

LAMC Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities, was added by Ordinance 173,494 (LID Ordinance) in 2000 and sets forth requirements for construction activities and facility operations of development and redevelopment projects to comply with the requirements of the NPDES permit requirements. The provisions of this section contain requirements for construction activities and facility operations of development and redevelopment projects to comply with the Land Development requirements of the Los Angeles County MS4 permit through integrating LID practices and standards for stormwater pollution mitigation, and maximize open, green and pervious space on all developments and redevelopments consistent with the City's Landscape Ordinance and other related requirements in the Development Best Management Practices Handbook.

Standard Urban Stormwater Mitigation Plan (SUSMP)

Under the current Los Angeles County Municipal NPDES Permit, permittees are required to implement a development planning program to address storm water pollution. These programs require project applicants for certain types of projects to implement Standard Urban Stormwater Mitigation Plans (SUSMPs) throughout the operational life of their projects. The purpose of SUSMPs is to reduce the discharge of pollutants in storm water by outlining BMPs which must be incorporated into the design plans of new development and redevelopment.

The Project falls within the definition of "redevelopment" under the MS4 Storm Water Permit which requires compliance with the Low Impact Development (LID) requirements and SUSMP requirements.

Low Impact Development Ordinance (No.181,899)

In 2011, the City adopted a Citywide Low Impact Development Ordinance (LID Ordinance) that amended the City's existing Stormwater Ordinance (LAMC Section Nos. 64.70 and 64.72, discussed above). The LID Ordinance, effective May 12, 2012, and updated in September 2015 (Ordinance No. 183,833), enforces the requirements of the Los Angeles County MS4 Permit. LID is a stormwater management strategy with goals to mitigate the impacts of increased runoff and stormwater pollution as close to their source as possible; and that promotes the use of natural infiltration systems, evapotranspiration, and the reuse of stormwater.

The goal of LID practices is to remove nutrients, bacteria, and metals from stormwater while also reducing the quantity and intensity of stormwater flows. Through the use of various infiltration strategies, LID is aimed at minimizing impervious surface area. Where infiltration is not feasible, the use of bioretention, rain gardens, green roofs, and rain barrels that will store, evaporate, detain, and/or treat runoff can be used.

The intent of LID standards is to:

- Require the use of LID practices in future developments and redevelopments to encourage the beneficial use of rainwater and urban runoff;
- Reduce stormwater/urban runoff while improving water quality;
- Promote rainwater harvesting;
- Reduce off-site runoff and provide increased groundwater recharge;
- Reduce erosion and hydrologic impacts downstream; and
- Enhance the recreational and aesthetic values in our communities.

The Citywide LID strategy addresses land development planning, as well as storm drain infrastructure. Toward this end, LID is implemented through BMPs that fall into four categories: site planning BMPs, landscape BMPs, building BMPs, and street and alley BMPs. While the LID Ordinance and the BMPs contained therein comply with Los Angeles County MS4 Permit requirements for stormwater management, the MS4 requirements apply only to proposed new development and redevelopment of a certain size, primarily address stormwater pollution prevention as opposed to groundwater recharge, and vary over time as the permit is reissued every five years. The LID Ordinance provides a consistent set of BMPs that apply to existing, as well as new, development and emphasize natural drainage features and groundwater recharge in addition to pollution prevention in receiving waters. The LID Ordinance requires the capture and management of the greater of an 85th percentile rain event or the first 0.75 inch of runoff flow during storm events defined in the City's LID BMPs, through one or more of the City's preferred LID improvements in priority order: on-site infiltration, capture and reuse, or biofiltration/biotreatment BMPs, to the maximum extent feasible.

Per the City's 2016 LID Manual's Figure 3.3 and Section 4.1, the City's preferred LID improvement is on-site infiltration of stormwater, site since it allows for groundwater recharge and reduces the volume of stormwater entering municipal drains. If Project Site conditions are not suitable for infiltration, the City requires on-site retention via stormwater capture and reuse. Should capture and reuse be deemed technically infeasible, high efficiency bio-filtration/bioretention systems should be utilized. Lastly, under the LID Ordinance (LAMC Section 64.72 C.6), as interpreted in the LID Manual, if no single approach listed in the LID Manual is feasible, then a combination of approaches may be used.

The LID Ordinance applies first to a project in lieu of SUSMP. If a large project cannot meet the requirements of the LID Ordinance, then SUSMP applies instead..

Hydromodification

In addition to the LID requirements listed in the MS4 Permit, the Permit also addresses requirements for Hydromodification as pertaining to the project. Per Part VI.D.7.c.iv of the Permit:

Each Permittee shall require all New Development and Redevelopment projects located within natural drainage systems as described in Part VI.D.7.c.iv.(1)(a)(iii) to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems. The purpose of the hydrologic controls is to minimize changes in post-development hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project's pre-project stormwater runoff flow rates and durations.

However, per Part VI.D.7.c.iv.(1)(b)(iv) of the Permit, the Project is exempt from such requirements as runoff from the Project Site is discharged directly via storm drain to a receiving water that is not susceptible to hydromodification impacts. Specifically, the Project Site discharges via storm drain to the Los Angeles River, which is categorized as not susceptible to hydromodification. Therefore, the Project is not required to implement hydrologic control measures as mitigation for hydromodification impacts. In addition, as described below, implementation of the Project will result in a reduction of peak flows and volumes as compared to existing conditions, thereby satisfying hydromodification requirements in addition to the receiving water exemption.

Upper Los Angeles River Watershed Enhanced Watershed Management Program

The County of Los Angeles, the City of Los Angeles and all other cities in the Los Angeles Watershed are responsible for the implementation of watershed improvement plans or Enhanced Watershed Management Programs (EWMP) to improve water quality and assist in meeting the Total Maximum Daily Load (TMDL) milestones. A EWMP for the Upper Los Angeles River Watershed (ULAR EWMP, January 2016), prepared with the City of Los Angeles as the lead coordinating agency, was approved on March 29, 2016 by the LARWQCB. The vision of the EWMP is to utilize a multi-pollutant approach that maximizes retention and use of urban runoff as a resource for groundwater recharge and irrigation while also improving water quality and providing environmental, aesthetic, recreational, water supply and other community enhancements (ULAR EWMP, January 2016).

The EWMP identifies a toolbox of distributed and regional watershed control measures to address applicable stormwater quality regulations including the following:

- LID at the individual parcels
- Green Streets features within the public right-of-way and privately maintained streets
- Regional projects that retain and treat runoff from large upstream areas
- Institutional control measures to prevent transport of pollutants in the watershed

The Project Site, located in the Downtown Los Angeles Sub-watershed, falls within the ULAR EWMP and ultimately discharges into Reach 2 of the Los Angeles River. The ULAR EWMP does not identify any regional BMP projects in the vicinity of the Project. Therefore, LID BMP's will be implemented at the individual parcels associated with the Project to meet the local MS4 Permit requirements and remain consistent with the objectives of the ULAR EWMP.

Flood Hazard Management Ordinance

Effective April 19, 2021, Ordinance 186,952 amends the Specific Plan for the Management of Flood Hazards, established by Ordinance No. 154,405 and amended by Ordinance Nos. 163,913 and 172,081, to update it to meet current federal standards and to rename it the Flood Hazard Management Ordinance. The ordinance applies to all public and private development and provides for the establishment, management, and regulatory control of Flood Hazard areas. For properties within areas of Special Flood Hazard Areas as identified by FEMA in the FIS for the Los Angeles County dated December 2, 1980, the ordinance establishes certain polices that include development and construction standards and regulations that may require additional permitting and discretionary review. Being hazard-specific, the provisions of the ordinance deal with the unique problems of each hazard in addition to the Citywide policies and goals.

2.3. GROUNDWATER

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Managhydrology ement Act of 2014 (SGMA) requires the designation of groundwater sustainability agencies (GSAs) by one or more local agencies and the adoption of groundwater sustainability plans (GSPs) for basins designated as medium- or high-priority by the California Department of Water Resources (DWR). SGMA grants new powers to GSAs, including the power to adopt rules, regulations, ordinances, and resolutions; regulate groundwater extractions; and to impose fees and assessments. SGMA also allows the State Water Resources Control Board (SWRCB) to intervene if local agencies will not or do not meet the SGMA requirements, in addition to mandating that critically overdrafted basins be sustainable by 2040, and medium- or high-priority by 2042.

California Groundwater Sustainability Act

On Sept. 16, 2014, California Governor Jerry Brown signed into law a three-bill legislative package, known as the Sustainable Groundwater Management Act of 2014 (SGMA). The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention only if necessary to protect the resource.

The SGMA requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. The act provides substantial time – 20 years – for GSAs to implement plans and achieve long-term groundwater sustainability. It protects existing surface water and groundwater rights and does not impact current drought response measures.

The California Water Commission (CWC) requires a statewide prioritization of California's groundwater basins using the following eight criteria:

1. Overlying population;
2. Projected growth of overlying population;
3. Public supply wells;

4. Total wells;
5. Overlying irrigated acreage;
6. Reliance on groundwater as the primary source of water;
7. Impacts on the groundwater—including overdraft, subsidence, saline intrusion, and other water quality degradation;
8. Any other information determined to be relevant by the Department.

The Project Site is located within a low priority California Statewide Groundwater Elevation Monitoring groundwater basin. GSAs responsible for high-and medium-priority basins must adopt groundwater sustainability plans within five to seven years, depending on whether the basin is in critical overdraft. Agencies may adopt a single plan covering an entire basin or combine a number of plans created by multiple agencies. Preparation of groundwater sustainability plans is exempt from California Environmental Quality Act (CEQA). Plans must include a physical description of the basin, including groundwater levels, groundwater quality, subsidence, information on groundwater-surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan will affect other plans, including city and county general plans. Plans will be evaluated every five years.

Board Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

As required by the CWC, the LARWQCB has adopted a plan entitled "Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties" (Basin Plan). Specifically, the Basin Plan designates beneficial uses for surface and groundwaters, sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and describes implementation programs to protect all waters in the Los Angeles Region. In addition, the Basin Plan incorporates (by reference) all applicable state and regional board plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan.

The Basin Plan is a resource for the LARWQCB and others who use water and/or discharge wastewater in the Los Angeles Region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. Finally, the Basin Plan provides valuable information to the public about local water quality issues.

Water Replenishment District of Southern California

The City of Los Angeles (City) is included within the Coastal Plain of Los Angeles - Central Basin, which is overseen by the Water Replenishment District of Southern California (WRD) . The Central Basin is categorized as a Very Low Priority basin.[4] As discussed above, although SGMA applies to all basins in California, only high- and medium-priority basins are required

[4] Sustainable Groundwater Management Act 2019 Basin Prioritization, Department of Water Resources, May 2020.

to form a GSA and adopt a GSP or submit an alternative to a GSP. Low- and very low-priority basins may adopt these plans but are not required to.

California Water Plan

The California Water Plan (The Plan) provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The Plan, which is updated every five years, presents basic data and information on California's water resources including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the state's water needs.

The goal for the California Water Plan Update is to meet CWC requirements, to receive broad support among those participating in California's water planning, and to be a useful document for the public, water planners throughout the state, and legislators and other decision-makers.

3. ENVIRONMENTAL SETTING

3.1. SURFACE WATER HYDROLOGY

3.1.1. Regional

The Project Site is located within the Los Angeles River Watershed, which covers over 830 square miles. The watershed includes the western portion of the San Gabriel Mountains, the Santa Susana Mountains, the Verdugo Hills, and the northern slope of the Santa Monica Mountains. The Los Angeles River flows from the western San Fernando Valley, crosses the San Fernando Valley and the central portion of the Los Angeles Basin, and outlets in San Pedro Bay near Long Beach. The watershed's terrain consists of mountains, foothills, valleys, and the coastal plain.

The major tributaries or sub-watersheds of the Los Angeles River include Burbank Western Channel, Pacoima Wash, Tujunga Wash, and Verdugo Wash in the San Fernando Valley; and the Arroyo Seco, Rio Hondo, and Compton Creek in the Los Angeles Basin. The Project falls within the Downtown Los Angeles sub-watershed.

Please refer to Attachment A for a map of the Los Angeles River Watershed.

3.1.2. Local

Stormwater runoff is collected from the Project Site and conveyed through offsite storm drain facilities along North Broadway and North Spring Street. The storm drain facilities adjacent to the North Parcel along North Broadway, also known as the Solano Drain, are owned and maintained by the LACFCD. The Solano Drain flows south and turns east and discharges into the Los Angeles River Channel.

The storm drain facilities adjacent to the South Parcel along North Broadway, which are owned and maintained by the City, flow in a southwesterly direction. The storm drain main line along North Broadway connects to a 42-inch main line flowing in an easterly direction adjacent to the Project's south boundary toward North Spring Street. Additionally, stormwater runoff from the southerly portion of the Project Site adjacent to the MTA A Line flows into a series of catch basins which also connect into the 42-inch main. This 42-inch storm drain line, which is also owned and maintained by the City, then connects to an LACFCD owned and maintained storm drain line adjacent to North Spring Street. This LACFCD main line, also known as BI 9910 - Line A, ultimately discharges into the Los Angeles River Channel.

All of the stormwater runoff from the Project Site, which is within the Downtown Los Angeles sub-watershed, is discharged into the Los Angeles River (Reach 2: Downtown Los Angeles) and ultimately into the Pacific Ocean. Reach 2 is approximately 19 miles long and spans the area between Figueroa Street and Carson. It includes the Downtown Los Angeles area and the cities of South Gate, Lynwood, and Huntington Park.

Please refer to Attachment B for a graphic depiction of the local storm drain system.

3.1.3. On Site

The existing Project Site is mostly vacant, with the exception of two structures and parking areas at the southernmost portion of the Project. Stormwater runoff is collected and conveyed at the two public street adjacencies that surround the Project Site. A fraction of the northern portion of the North Parcel sheet flows northerly toward the public street gutter of North Broadway, where it flows in a southwesterly direction and into existing catch basins located along North Broadway. This runoff is partially conveyed by two catch basins connected to the Solano Drain located adjacent to the intersections of North Broadway with Solano Avenue and Casanova Street, respectively. The rest of the runoff is conveyed by one catch basin located adjacent to the North Broadway and Bishop Road intersection, which is connected to the City storm drain adjacent to the South Parcel along North Broadway.

The southern portion of the North Parcel and the entire South Parcel sheet flow southerly toward the MTA A Line into a series of existing catch basins located along the access road between the Project Site and the railroad. The catch basins then flow southwesterly into the City-owned 42-inch storm drain line that runs parallel to the southern boundary of the Project.

Please refer to Attachment C for the existing drainage pattern and existing hydrology of the Project Site.

Table 1 below provides the 25-year and 50-year storm frequency analysis for the Project Site's existing conditions. The existing imperviousness was obtained from Appendix D (Proportion Impervious Data) of the LACDPW Hydrology Manual (2006). The Hydrology Manual calls for an imperviousness of 91% for a manufacturing land use. Per topographic map, an estimated value of 36% of the Project Site was impervious. Output calculations are provided in Attachment D.

Table 1 – Existing Drainage Calculations

Drainage Area	Area (acres)	% Imperviousness	Q_{25} (cfs) (volumetric flow rate measured in cubic feet per second)	Q_{50} (cfs) (volumetric flow rate measured in cubic feet per second)
A-1	3.48	78	7.11	8.59
A-2	0.84	5	1.61	1.95
A-3	2.70	5	4.55	5.47
B-1	0.85	5	1.43	1.72
C-1	0.21	5	0.26	0.32
Total	8.08	36% (average)	14.96	18.05

Under existing conditions, most of the Project Site discharges southwesterly to North Spring Street. A small tributary area discharges northerly to North Broadway. The total amount of runoff produced from the Project Site during a 25-year storm event is 14.96 cubic feet per second (cfs). For a 50-year event, the total project runoff is 18.05 cfs. In all instances, runoffs from the Project Site are being picked up in a series of catch basins located along North Broadway and the MTA access road. There are no known storm drain deficiencies associated with the Project.

3.1.4. FEMA

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) No. 06037C1628F, dated September 26, 2008, the Project Site is located within Zone X, which depicts areas determined to be outside the 0.2% (500-year) annual chance floodplain. Therefore, the processing of a letter of map revision or conditional letter of map revision (LOMR/CLOMR) through FEMA will not be required for the Project. See Attachment E for floodplain map.

3.2. SURFACE WATER QUALITY

3.2.1. Regional

As described above, the Project is located within the Los Angeles River Watershed and located more specifically within the Downtown Los Angeles sub-watershed of the Los Angeles River. This sub-watershed drains directly into Reach 2 of the Los Angeles River. Los Angeles River Reach 2 is an

impaired portion of the Los Angeles River and primarily includes the Downtown Los Angeles area and the cities of South Gate, Lynwood, and Huntington Park. The Los Angeles River consists of a concrete channel, with the water generally restricted to a central low-flow channel.

3.2.1.1. Beneficial Uses in Los Angeles River Reach 2/Los Angeles River Watershed

Based on the Basin Plan, the beneficial uses of Los Angeles River Reach 2 are municipal and domestic water supply, industrial process water supply, ground water recharge, warm freshwater habitat, wildlife habitat, wetland habitat, water contact recreation, and non-contact water recreation.

3.2.1.2. Impairments and TMDL's in Los Angeles River Reach 2/Los Angeles River Watershed

CWA 303(d) List of Water Quality Limited Segments

Under Section 303(d) of the CWA, states are required to identify water bodies that do not meet their water quality standards. Biennially, the LARWQCB prepares a list of impaired waterbodies in the region, referred to as the 303(d) list. The 303(d) list outlines the impaired waterbody and the specific pollutant(s) for which it is impaired. All waterbodies on the 303(d) list are subject to the development of a TMDL.

According to the SWRCB, Los Angeles River Reach 2, which is located immediately east of the project site, is listed as an impaired water body. Impairments for Los Angeles River Reach 2 include the following: Ammonia, Coliform Bacteria, Copper, Lead, Nutrients (Algae), Oil, and Trash. (See Attachment F.)

The Project will potentially discharge pollutants into the City and County storm drain system. Anticipated pollutants include Sediments, Nutrients, Pesticides, Pathogens, Trash, Oil, and Metals. The Project Site shall implement capture and use design features to meet the local LID requirements discussed in Section 4.2.2. With these implemented BMPs, the additional pollutants will be treated and will not have a significant impact on the existing system.

Total Maximum Daily Loads (TMDLs)

Once a water body has been listed as impaired on the 303(d) list, a TMDL for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standard. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. In general terms, municipal, small MS4, and other dischargers within each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by the assigned deadline.

TMDLs for the Los Angeles River Reach 2 and its tributaries have been established for the following pollutants: trash, heavy metals, nutrients and ammonia.

3.2.2. Local

Within the urban environment of the Project, stormwater runoff occurs during and shortly after rain events. The volume of runoff depends on the intensity and duration of the storm event and the imperviousness of the drainage area. Typical urban pollutants associated with stormwater runoff following rain events includes sediment, trash, bacteria, metals, nutrients, and potentially organics and pesticides. The source of contaminants is wide ranging and includes all areas where rainfall occurs along with atmospheric deposition. Therefore, sources of contaminants within urban areas include roadways, building tops, parking lots, landscape areas and maintenance areas.

To reduce contaminant loads from entering the storm drain system, the City conducts routine street cleaning operations as well as periodic cleaning and maintenance of the catch basins to reduce stormwater pollution within the storm drain system. The City also installs catch basin screens to reduce trash from entering the catch basins.

3.2.3. On Site

Under existing conditions, the Project Site is mostly vacant, with the exception of two structures and parking areas at the southernmost portion of the Project Site. Based on visual inspection, water quality treatment control BMPs are not currently present at the Project Site. Stormwater that leaves the Project Site is untreated and flows into grate inlets on the south into the public right-of-way, where it ultimately gets picked up by a public storm drain system. Anticipated pollutants consistent with parking lots, building areas and landscaping include total suspended solids (TSS), oil/grease, heavy metals, nutrients, pesticides and trash.

3.3. GROUNDWATER

3.3.1. Regional

The City of Los Angeles overlies the Los Angeles Coastal Plain Groundwater Basin (Basin) which consists of four major subbasins: Hollywood, Santa Monica, Central and West Coast. Replenishment of the Basin occurs primarily through percolation of rainfall throughout the watershed via permeable surfaces, spreading grounds, and groundwater migration from adjacent basins. Injection wells are also used to pump freshwater along specific seawater barriers to prevent the intrusion of salt water. Groundwater within the Basin generally flows in a south and southwesterly direction.

3.3.2. Local

The Project Site is located within the Central Basin, which underlies the southeastern part of the Los Angeles Coastal Plain Groundwater Basin. The Central Basin is bounded on the north by a surface divide called the La Brea high, and on the northeast and east by emergent less permeable Tertiary rocks of the Elysian, Repetto, Merced and Puente Hills. The southeast boundary between Central Basin and Orange County Groundwater Basin roughly follows Coyote Creek, which is a regional drainage province boundary. The southwest boundary is formed by the Newport Inglewood fault

system and the associated folded rocks of the Newport Inglewood uplift. The Los Angeles and San Gabriel Rivers drain inland and pass across the surface of the Central Basin on their way to the Pacific Ocean. The Central Basin productive water bearing sediments are contained within Holocene alluvium and the Pleistocene Lakewood and San Pedro Formations.[5]

According to the California Department of Water Resources, the annual precipitation throughout the Central Basin ranges from 11 to 13 inches with an average of around 12 inches. The Central Basin has a surface area of 177,000 acres and a groundwater storage capacity of approximately 13,800,000 acre/feet.[6,7] Historically, groundwater flow is generated from recharge areas in the northeast segment of the Central Basin, toward the Pacific Ocean on the southwest. Recharge of the Central Basin occurs primarily by engineered recharge of stormwater, imported water, and reclaimed water along the upper reaches of the San Gabriel and Santa Ana Rivers and the Rio Hondo.[8] Additional sources of recharge include surface and subsurface flow and by direct percolation of precipitation and stream flow.

3.3.3. On Site

As noted by Geotechnologies' geotechnical report for the Project, the Seismic Hazard Report for the Los Angeles 7.5 Minute Quadrangle (California Division of Mines and Geology, 2006) indicates that the historically high groundwater level in the area is approximately 20 feet below the ground surface which is equivalent to an elevation of 272 feet. During Geotechnologies' exploration of the Project Site, groundwater was encountered (South Parcel) at depths ranging between 23 and 31 feet, which correlate to elevations between 263 and 270.5 feet. North Parcel experienced seepage of groundwater at depths of 66 and 45 feet, which correlate to elevations 282 and 300 feet. The boring locations where groundwater was encountered are all located in the Project Site.

As described in the Hazards and Hazardous Materials Technical Report For the Buena Vista Project prepared by Ramboll Americas Engineering Solutions, Inc. a Texaco gas station was previously located at the North Parcel and was demolished in 1989 and the associated USTs were removed in 1990. Subsequent subsurface investigations and remedial activities occurred, including installation and sampling of groundwater monitoring wells and vapor extraction wells at the site. Investigations and remedial activities have been conducted at the site and adjoining properties (Former Cornfield site) to the southeast that indicate soil and groundwater have been impacted by total petroleum hydrocarbons as gasoline (TPH-g); BTEX; and methyl tert-butyl ether (MTBE) beneath limited portions of the off-site portion of the Former Cornfield site and attributed to the former gas station at the site. Hydrocarbon-impacted soil was encountered during construction activities on the adjacent MTA easement resulting in the removal of 300 cubic yards of impacted soil in 2001.

[5] California's Groundwater, Bulletin 118. Department of Water Resources. February 2020.

[6] California's Groundwater, Bulletin 118. Department of Water Resources. February 2004.

[7] Los Angeles Basin Groundwater Adjudication Summary. US Bureau of Reclamation. July 2014

[8] Groundwater Quality in the Coastal Los Angeles Basin, CA. Fact Sheet 2012-3096. September 2012.

Two soil vapor extraction (SVE) systems have been operated; 1) between March 2001 and June 2002 to remove a thin layer of free-phase gasoline within the capillary fringe near the escarpment between the site and adjacent MTA easement, and 2) between October 2003 and September 2005 to remediate gasoline releases from the former gas station, with reported removal of 365 pounds of VOCs. Confirmation soil samples were collected in May 2005 with no detections of TPH-g, BTEX, or MTBE reported, and reportedly well below the USEPA's residential Preliminary Remediation Goals (PRGs) for any detected compound. On June 6, 2006, the RWQCB issued a No Further Requirement for Soils Only (NFA) letter for the former gas station, as part of the larger Former Cornfield site. A 2014 groundwater monitoring report and determined that monitoring well BMW-11, located on the site in the area of the former gas station, was decommissioned in August 2006 and that vapor extraction well VEW-2 (one of four located on site in the area of the former gas station) was last sampled in March 2003, with 340 μg/L of ethylbenzene reported as the only constituent that exceeded the California maximum contaminant level (MCL) of 300 μg/L.

Based on groundwater contamination sampling results, a request for closure for the site, including the decommissioning of monitoring wells MW-2 and MW-18, was submitted on September 25, 2013, including a request to decommission monitoring wells MW-2 and MW-18, indicating that data in MW-2 were non-detect or close to laboratory reporting limits (RLs) for volatile and extractable fuel hydrocarbons and at MW-18, VOCs and volatile and extractable fuel hydrocarbons were below laboratory reporting limits. The RWQCB is currently reviewing the request for closure of the clean up program. Based on a review of the RWQCB's online database (GeoTracker), the RWQCB has not responded to ARCADIS' closure request in the most recent groundwater monitoring report (ARCADIS 2023) and the status of this case remains open.

The Hazards and Hazardous Materials Technical Report For the Buena Vista Project states closest neighboring active monitoring well to the project site is MW-2 and MW-18; both are located within the South Parcel. MW-2, according to Arcadis report dated January 23, 2014, shows ranges of groundwater from 26.65 to 28.06 feet deep. MW-18, of the same report, shows groundwater depths from 59.92 to 62.33 feet deep.

4. METHODOLOGY

4.1. SURFACE WATER HYDROLOGY

On December 3, 1999, the City of Los Angeles issued Special Order No. 007-1299 which adopted the Los Angeles County Department of Public Works' Hydrology Manual to be used for hydrology studies within the City of Los Angeles. According to the County's Hydrology Manual, the Project is required to have drainage facilities that meet the Urban Flood level of protection, which is equivalent to runoff from a 25-year frequency design storm falling on a saturated watershed. A 25-year frequency design storm has a probability of 1/25 of being equaled or exceeded in any year.

However, the *L.A. CEQA Thresholds Guide* has determined that a 50-year storm frequency analysis is required when determining flood hazards impacts and changes in the amount or movement of surface

water. To analyze the Project's potential impacts under both thresholds, runoff for both 25- and 50-year frequency design storms was calculated for this report.

This study was prepared using HydroCalc 1.0.2 software in conformance with the County's Hydrology Manual (2006). The HydroCalc program uses the Modified Rational Method to calculate the required time of concentration and designed flowrates for 25- and 50-year storm events. The peak runoff for a drainage area is calculated using the formula Q= CIA, where

- Q= flowrate (cfs)
- C= runoff coefficient (unit less)
- I=rainfall intensity (in/hr)
- A= basin area (acres)

The HydroCalc calculator is supported by the County's online GIS system. This database is used to locate the Project Site's 50-year isohyet rainfall frequency as well as relevant soil type. The data collected is then used in the HydroCalc program to calculate peak stormwater runoff values.

4.2. SURFACE WATER QUALITY

4.2.1. Construction

Prior to the issuance of grading permits, the applicant is required by the City to provide a Notice of Intent (NOI) and WDID Number issued from the SWRCB in accordance with the requirements of the General Permit to ensure the potential for soil erosion and construction impacts are minimized. In accordance with the updated General Permit (Order No 2012-0006-DWQ), the following Permit Registration Documents (PRDs) are required to be submitted to the SWRCB prior to commencement of construction activities:

- NOI;
- Risk Assessment (Standard or Site-Specific);
- Particle Size Analysis (if site-specific risk assessment is performed);
- Site Map;
- SWPPP;
- Annual Fee & Certification.

The updated General Permit uses a risk-based approach for controlling erosion and sediment discharges from construction sites, since the rates of erosion and sedimentation can vary from site to site depending on factors such as duration of construction activities, climate, topography, soil condition, and proximity to receiving water bodies. The updated General Permit identifies three levels of risk with differing requirements, designated as Risk Levels 1, 2 and 3, with Risk Level 1 having the fewest permit requirements and Risk Level 3 having the most-stringent requirements.

The Risk Assessment incorporates two risk factors for a project site: sediment risk (general amount of sediment potentially discharged from the site) and receiving water risk (the risk sediment discharges

can pose to receiving waters). Based on the Risk Level a project falls under, different sets of regulatory requirements are applied to the site. The main difference between Risk Levels 1, 2, and 3 are the numeric effluent standards. In Risk Level 1, there are no numeric effluent standard requirements, as it is considered a Low sediment risk and Low receiving water risk. Instead, narrative effluent limits are prescribed. In Risk Level 2, Numeric Action Levels (NALs) of pH between 6.5-8.5 and turbidity below 250 NTU are prescribed in addition to the narrative effluent limitations found in Risk Level 1 requirements. Should the NAL be exceeded during a storm event, the discharger is required to immediately determine the source associated with the exceedance and to implement corrective actions if necessary to mitigate the exceedance. Risk Level 3 dischargers must comply with Risk Level 2 requirements for NALs in addition to more rigorous monitoring requirements such as receiving water monitoring and in some cases bioassessment, should NALs be exceeded.

4.2.2. Operation

The Project will comply with the City's LID Manual,[9] which requires that post-construction stormwater runoff from new developments be infiltrated, evapotranspirated, captured and reused, and/or treated through a high efficiency BMP onsite for the 85th percentile storm event or 0.75"—whichever is greater. For the Project, the 85th percentile storm event is 1.0".

The LID Manual states that BMPs shall be designed to manage and capture stormwater runoff. Infiltration systems are the first priority type of BMP improvements as they provide for percolation and infiltration of the stormwater into the ground, which not only reduces the volume of stormwater runoff entering the MS4 but also contributes to groundwater recharge in some areas. The second priority BMP is capturing and reusing stormwater onsite for either landscape irrigation or toilet flushing. Projects that cannot infiltrate or harvest/reuse the water quality volume may implement biofiltration BMPs. Biofiltration BMPs shall be sized to adequately capture 1.5 times the volume not managed through infiltration and/or capture and reuse.

Per Geotechnologies' geotechnical report, percolation testing was not performed as part of the geotechnical investigation. However, the report states that the siltstone bedrock and fills soils found at the Project Site are generally not suitable for stormwater disposal. Only the alluvial soils, found at the southern portion and the lower portion along the MTA easement, are suitable for stormwater disposal. This severely limits available areas suitable for infiltration within a 10-foot minimum clearance of building foundations and footings. In addition, the results of the liquefaction analysis identified potentially liquefiable soils at the site and a historic-high groundwater level of 20 feet below the ground surface. Therefore, based on the potentially liquefiable soils, less than 10-foot BMP clearance from structures, and the moderately shallow groundwater depth, as stated in the LID Manual (Table 4.1: Infiltration Feasibility Screening), infiltration is deemed infeasible for this project. However, when more detailed site-specific infiltration analysis and recommendations are provided by the geotechnical engineer at a later stage, the feasibility of stormwater infiltration BMPs will be revisited.

[9] Planning and Land Development Handbook for Low Impact Development, Part B Planning Activities, 5th Edition; adopted by the City of Los Angeles, Board of Public Works on May 9, 2016.

As infiltration is deemed infeasible due to site conditions and grading elevations, a Capture and Use feasibility screening was performed following Capture and Use Feasibility Screening criteria in the LID Manual. After analyzing the landscaping type and coverage (~25% pervious) and the Estimated Total Water Use (ETWU) at the Project Site, it was determined that capture and use BMPs can be designed and maintained to ensure adequate capacity to capture and utilize the stormwater design volume within the 7-month wet season period. Therefore, capture and use BMPs shall be proposed, and biofiltration BMPs shall remain an option if currently unknown circumstances arise (See Attachment K).

Capture and Use BMPs require pretreatment devices to clean stormwater before it is stored within a cistern. This stormwater is then used for drip irrigation to water plants within the 7-month wet season. This requires enough landscape with the correct planting factors to use the captured water within the 7 months. The capture and use irrigation system will be appropriately sized in conformance with the LID manual.

4.3. GROUNDWATER

The significance of the Project Site as it relates to the condition of the underlying groundwater table included a review of the following existing considerations:

- Identification of the Central Basin as the underlying groundwater basin, and description of the level, quality, direction of flow, and existing uses for the groundwater
- Description of the location, existing uses, production capacity, quality and other pertinent data for spreading grounds and potable water wells in the vicinity (typically within a one-mile radius);

The analysis of the Project's impacts on groundwater conditions included a review of the following proposed considerations:

- Description of the rate, duration, location and quantity of extraction, dewatering, spreading, injection or other activities;
- The projected reduction in groundwater resources and any existing wells in the vicinity (typically within one-mile radius); and
- The projected change in local or regional groundwater flow patterns.

In addition, short-term groundwater quality impacts could potentially occur during construction of the Project as a result of soil or shallow groundwater being exposed to construction activities, materials, wastes and spilled materials. These potential impacts were qualitatively assessed.

5. PROJECT CONCLUSIONS AND RECOMMENDATIONS

5.1. CONSTRUCTION

5.1.1. Surface Water Hydrology and Quality

Implementation of the Project would result in construction activities that includes demolition of the existing buildings and parking areas on-site and over-excavation of existing soils. It is anticipated that the Project would result in the excavation of approximately 267,000 cubic yards of soil, of which approximately 29,000 cubic yards will be used for on-site fill and approximately 238,000 cubic yards will be exported. The remaining excavated materials will be hauled via the nearby 10 Freeway with the ultimate destination at the Azusa Land Reclamation in the City of Azusa.

Construction activities have the potential to temporarily alter the existing drainage patterns of the Project Site and also increase the permeability of the site based on increased pervious surface coverage during construction. Exposed pervious surfaces also have the potential for erosion, scour, and increased sediment and associated pollutants discharging from the Project Site during construction activities. The main pollutant of concern during construction is typically sediment and soil particles that discharge off-site due to wind, rain, and construction patterns. In the event exceedances of receiving water quality objectives are observed, measures must be taken and documented within the SWPPP to improve discharge water quality and runoff effluent. This may include but not be limited to increasing the size of existing BMPs, adding more BMPs to the drainage area, additional filtering, and/or a reduction in active grading area.

Construction Best Management Practices (BMPs)

Prior to commencement of construction activities, the General Permit requires the Project SWPPP to be prepared in accordance with the site-specific information including grading limits, BMP's for each phase, schedule and sediment risk analyses. In accordance with the General Permit, the construction SWPPP must be made available for review upon request, shall describe construction BMPs that address pollutant source reduction, and provide measures/controls necessary to mitigate potential pollutant sources. These measures/controls include, but are not limited to: erosion controls, sediment controls, tracking controls, non-storm water management, materials & waste management, and good housekeeping practices including the following:

- Erosion control BMPs, such as hydraulic mulch, soil binders, and geotextiles and mats, protect the soil surface by covering and/or binding the soil particles. Temporary earth dikes or drainage swales may also be employed to divert runoff away from exposed areas and into more suitable locations. If implemented correctly, erosion controls can effectively reduce the sediment loads entrained in storm water runoff from construction sites.

- Sediment controls are designed to intercept and filter out soil particles that have been detached and transported by the force of water. Storm drain inlets on the Project Site

or within the project vicinity (i.e., along streets immediately adjacent to the project boundary) should be adequately protected with an impoundment (i.e., gravel bags) around the inlet and equipped with a sediment filter (i.e., fiber roll). Bags should also be placed around areas of soil disturbing activities, such as grading or clearing.

- Stabilize construction entrance/exit points to reduce the tracking of sediments onto adjacent streets. Wind erosion controls should be employed in conjunction with tracking controls.

- Non-storm water management BMPs prohibit the discharge of materials other than storm water, as well as reduce the potential for pollutants from discharging at their source. Examples include avoiding paving and grinding operations during the rainy season (i.e., October 1 through April 30 each year) where feasible, and performing any vehicle equipment cleaning, fueling and maintenance in designated areas that are adequately protected and contained.

- Waste management consists of implementing procedural and structural BMPs for collecting, handling, storing and disposing of wastes generated by a construction project to prevent the release of waste materials into storm water discharges.

The phases of construction will define the maximum amount of soil disturbed, the appropriate sized sediment basins, and other control measures to accommodate all active soil disturbance areas and the appropriate monitoring and sampling plans.

Potential Surface Water Hydrology and Quality Impacts

Through compliance with the General Permit including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of the Project would not cause flooding, substantially increase or decrease the amount of surface water in a water body, or result in a permanent, adverse change to flow direction. The construction of the Project would also not result in discharges that would cause: (1) pollution that would impact the quality of waters of the state to a degree which negatively impacts beneficial uses of the waters; (2) contamination of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of diseases; or (3) nuisance that would be injurious to health, affect an entire community or neighborhood or any considerable number of persons, and occurs during or as a result of the treatment or disposal of wastes. Lastly, construction of the Project would not result in discharges that would cause regulatory impacts within the Los Angeles River.

5.1.2. Groundwater Hydrology

Construction of the Project is not anticipated to impact any water supply wells, as no water supply wells are located at or within one mile of the Project and the Project will not include the construction of any water supply wells. Construction of the Project will include excavation depths of up to 51 feet bgs. Based on Geotechnologies' Geotechnical Report, the historical high groundwater level in the

area is 20 feet bgs which is equivalent to an elevation of 272 feet. Since most of the structure will be above a finished floor elevation of 285 feet, it is not expected that groundwater would be encountered during construction that would require temporary or permanent dewatering operations. In the event perched groundwater is encountered, the Project would be required to obtain a temporary dewatering permit from the City of Los Angeles. Accordingly, construction of the Project would not adversely impact the rate or direction of flow of groundwater.

5.1.3. Groundwater Quality

As previously noted above, construction of the Project will include mass excavation of up to 51 feet bgs. The Project will also result in a net export of existing soil material. While the RWQCB has issued a No Further Action (NFA) designation for soil as it relates to contamination for the former Texaco gas station in the North Parcel, it is possible that impacted soils could be encountered during Project construction activities around any present or former USTs, either those associated with the former Texaco on the North Parcel, or those associated with rail activities on the South Parcel. Excavation, transport, or disposal of Project site soils could expose workers or the general public to hazardous materials. There is not a high potential for groundwater to be encountered. However, if contaminated soils are found within the excavation limits, contaminated soils would be collected within the excavated material, removed from the Project Site, and disposed of in accordance with all applicable regulatory requirements. Further, Project Site earthwork activities are required to be performed under a site-specific hazardous materials contingency plan (HMCP), which will outline procedures to address any previously unidentified USTs or other historical industrial contamination that may be discovered.

Refer to the Hazards and Hazardous Materials Technical Report For the Buena Vista Project prepared by Ramboll Americas Engineering Solutions, Inc. for recommendations.

During on-site grading and building activities, minimal amounts of hazardous materials such as fuels, paints, solvents, and concrete additives could be used, and the presence of such materials provides an opportunity for hazardous materials to be released into groundwater. To protect groundwater resources, the Project will comply with applicable federal, state and local requirements related to the handling, storage, application and disposal of hazardous waste which will reduce the potential for construction activities of the Project to release contaminants into groundwater that could affect existing contamination, mobilize or increase the level of groundwater contamination, or cause a violation of regulatory water quality standards at an existing production well. Therefore, construction of the Project would not result in a significant increase in groundwater contamination through hazardous materials releases. Refer to the site-specific HMCP and the Hazards and Hazardous Materials Technical Report For the Buena Vista Project.

5.2. OPERATION

5.2.1. Surface Water Hydrology

Development of the Project would result in a decrease in pervious areas throughout the Project Site and would increase the amount of impervious surfaces from 36 percent to 75 percent, while

simultaneously decreasing the slope of the flow. This decrease in the slopes of the Project surfaces would result in a slight reduction in stormwater runoff. Table 2 below provides an analysis of a 25-year and 50-year frequency design storm events following construction of the Project. Attachment G provides the Proposed Hydrology Map and output calculations are provided in Attachment H.

Table 2 – Proposed Drainage Calculations

Drainage Area	Area (acres)	% Imperviousness	Q_{25} (cfs)	Q_{50}(cfs)
A-1	3.51	91	6.70	7.98
A-2	1.14	10	2.00	2.53
A-3	3.22	81	5.53	7.04
Total	7.87	75% (average)	14.23	17.55

Table 3 provides a comparison of the existing and proposed peak flows for the 25-year and 50-year storm events. These values provide the basis for the LID peak flow values and pipe sizing design.

Table 3 – Comparison Existing vs. Proposed Hydrology

Condition	Area (acres)	Q_{25} (cfs)	Q_{50} (cfs)
Existing (Pre-Dedication)	8.08	14.96	18.05
Proposed	7.87	14.23	17.55
Difference	0.21	0.73	0.5
% Decrease	-2.60%	-4.88%	-2.77%

The above analysis does not include the assumption that a 3-foot wide strip along the property frontage on North Broadway would be dedicated (see Drainage Area C-1 on Attachment C), thereby not decreasing the size of the Project Site. As shown in Table 3, the decrease in permeable surfaces on the Project Site will be offset by the simultaneous decrease in flow slopes and would result in a reduction of flows under both the 25-year and 50-year storm events for the Project.

Based on the above, operation of the Project would not result in flooding, impact the capacity of the existing storm drain system, or worsen an existing flood condition. In addition, the Project would not substantially reduce or increase the amount of surface water in the local water body or result in a

permanent adverse change in the drainage pattern that would result in an incremental effect on the capacity of the existing storm drain system.

5.2.2. Surface Water Quality

Stormwater runoff from the Project has the potential to discharge pollutants into the City and County storm drain system. Anticipated pollutants and typical source of the pollutants include the following:

- Sediment (coarse and fine) – parking lots, driveways, building rooftops, landscape areas, roads
- Nutrients (dissolved and particulates) – landscape areas, lawns
- Pesticides – landscape areas, lawns
- Pathogens – landscape areas, lawns, building rooftops, food serving areas
- Trash/debris – parking lots, driveways, roadways, parks
- Oil/Grease – parking lots, driveways, roadways, food serving areas
- Metals (dissolved and particulate) – parking lots, driveways, roadways

To meet the local MS4 Permit and LID requirements consistent with the City's LID Ordinance and LID Manual (May 2016), stormwater management strategies will be implemented throughout the Project Site. Capture and Use design features will be implemented to meet the local LID requirements.

Table 4 shows the water quality volumes (V_m), as well as water quality flow rates (Q_{pm}), that are required to be detained and treated for each drainage area based on an 85th percentile storm event of 1.0".

Please refer to Attachment I for LA County 85th Percentile exhibit and Attachment J for the HydroCalc LID Results for the Proposed Site.

Table 4 – Low Impact Development – Water Quality Calculations

Drainage Area	Area (acres)	Q_{pm} (cfs)	V_m (cf)
A-1	3.51	0.65	10,463
A-2	1.14	0.04	775
A-3	3.22	0.53	8,729
Proposed Total	7.87	1.22	19,967

For comparison, the stormwater capture volume was also calculated using the City of Los Angeles LID Manual method, see Attachment K. A minimum capture volume was determined to be 19,439 cubic

feet. The larger of the two stormwater capture volumes, HydroCalc's 19,967 cubic feet and LID Manual's 19,439 cubic feet, shall be implemented onward for the BMP calculations.

As mentioned above, in Section 5.2.2, infiltration BMPs have been deemed infeasible to satisfy water quality requirements at the Project Site due to poor soil conditions. Therefore, the Project will include the implementation of capture and use BMPs. This will include cisterns that will be sized to hold the design capture volume. CDS units will be installed to provide pretreatment of the low impact development flow rate, as well as adequate overflow piping for peak flows mentioned in Table 3. The water quality volume for each drainage sub-area was calculated by utilizing HydroCalc software as shown in Attachment J. An average impervious value of 75% was utilized for BMP sizing to be consistent with the hydrology analysis.

The capture and use planter areas will be required to utilize the water quality volume within the 7-month wet season period. The footprints were determined by using the estimated water usage for the city of Los Angeles within the 7-month period, which equates to a factor of 21.7. The planting factor for the type of plans is also considered within this calculation, and for plants with moderate water usage, the planting factor was determined to be 0.40. Irrigation efficiency was also considered with a drip irrigation efficiency of 81%. With these values, it was determined how much water the current planting scheme would require during the 7-month wet period. Additional details on the capture and use calculations and locations are provided in Attachment K.

Table 5 – Capture and Use BMP Summary

Drainage Area	Area (Acres)	Water Quality Volume (CF)	Eto	Planting Factor	Irrigation Efficiency	Footprint Required (SF)
Total	7.87	19,967	21.7	0.4	0.81	22,439

As shown above in Table 5, the Project will be required to provide a minimum 22,439 sf of planting area with an average planting factor of 0.4 to utilize the volume associated with the 85th percentile storm event at the Project site. Once the water quality volume is met, the "higher flows" will enter overflow pipes within the CDS unit. These overflow pipes will then discharge excess stormwater to the local storm drain systems. The CDS units will treat the stormwater before it is stored for irrigation.

The existing Project Site does not have any structural or LID BMPs to treat or infiltrate stormwater. Therefore, implementation of the LID features proposed as part of the Project would result in a significant improvement in surface water quality runoff as compared to existing conditions. Implementation of the proposed BMP system will result in the treatment of the entire required volume for the Project Site and the elimination of pollutant runoff up to the 85th percentile storm event.

Based on the proposed LID plan, operation of the Project would not result in discharges that would cause: (1) an incremental increase in pollution which would alter the quality of the waters of the state (Los Angeles River) to a degree which unreasonably affects beneficial uses of the waters; (2) an

incremental increase of contamination of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of diseases; or (3) an incremental increase in the nuisance that would be injurious to health; affect an entire community or neighborhood, or any considerable numbers of persons; and occurs during or as a result of the treatment or disposal of wastes. Lastly, operation of the Project would not result in discharges that would cause regulatory standards to be violated in the Los Angeles River.

5.2.3. Groundwater Hydrology

Under the proposed conditions, regional and local potable water levels and adjacent wells or well fields will not be impacted by the Project. The Project does not include any groundwater pumping and relies on the LADWP for water. In addition, the Project is not anticipated to adversely change the rate of direction of flow of groundwater. Since the Project's LID BMP design is for capture and use, treated runoff is stored for irrigation and only excessive stormwater is discharged into the storm drain system, away from the structures and groundwater table.

5.2.4. Groundwater Quality

As previously summarized, a Texaco gas station was previously located at the North Parcel and was demolished in 1989 and the associated USTs were removed in 1990. Subsequent subsurface investigations and remedial activities occurred, including installation and sampling of groundwater monitoring wells and vapor extraction wells at the Project Site. As discussed above, earthwork activities conducted as part of the Project Site redevelopment activities are recommended to be conducted under a HMCP. If residual contamination is identified or encountered as part of the earthwork activities, such contamination will be addressed under the HMCP. Additionally, the proposed LID BMP systems are designed to safely convey stormwater runoff into the vegetated soil/landscape areas and municipal storm drain system without the threat of contaminant mobilization. The Project design includes a capture and use system, which is anticipated to capture, treat, and discharge runoff into the storm drain system. For existing groundwater contamination, refer to the Hazards and Hazardous Materials Technical Report For the Buena Vista Project.

5.3. CUMULATIVE IMPACTS

5.3.1. Surface Water Hydrology

The context for the cumulative impact analysis on surface water hydrology is the Downtown Los Angeles sub-watershed, which ultimately discharges into the Los Angeles River. The Project in conjunction with forecasted growth in the Downtown Los Angeles sub-watershed could cumulatively increase stormwater runoff flows. However, as demonstrated above, the Project does not have an adverse impact on stormwater flows. Also, in accordance with City requirements, related projects and other future development projects would be required to implement BMPs to manage stormwater in accordance with LID guidelines. Furthermore, the City of Los Angeles Department of Public Works would review each future development project on a case-by-case basis to ensure sufficient local and regional infrastructure is available to accommodate stormwater runoff.

5.3.2. Surface Water Quality

Future growth in the Downtown Los Angeles sub-watershed would be subject to NPDES requirements regarding water quality for both construction and operation. All future redevelopment and infill projects similar to the Project would also be subject to SWPPP, LID and other implementation measures to comply with regional TMDL requirements which will generally result in water quality improvements over existing conditions. In addition, implementation of regional BMPs to improve water quality within the Downtown Los Angeles sub-watershed would improve regional water quality over time.

5.3.3. Groundwater Hydrology

Cumulative groundwater hydrology impacts could result from an increased use of the groundwater basins located in the proximity of the Project and other related projects. As previously noted, implementation of the Project would not result in the temporary or permanent extraction of groundwater from the Project or otherwise utilize the groundwater.

Implementation of the Project would result in a slight increase in impervious conditions, but the project podiums will also create a much flatter surface condition. Redevelopment projects within the Downtown Los Angeles sub-watershed will also change existing pervious and impervious conditions for each project, but with the high built-out condition of the watershed, cumulative increases in impervious conditions are not as likely as increases in pervious conditions due to existing LID requirements for redevelopment projects. Lastly, as infiltration systems become more frequent throughout the sub-watershed, infiltration of stormwater as a means of stormwater treatment and management will enhance existing groundwater hydrology.

5.3.4. Groundwater Quality

Compliance with applicable regulations would prevent the Project from negatively impacting or expanding any potential areas affected by contamination, increasing the level of contamination, or causing regulatory water quality standards at an existing production well to be violated as defined in the CCR, Title 22, Division 4, Chapter 15 and SDWA. Additionally, related and future projects would be unlikely to cause or increase groundwater contamination because compliance with existing regulations would similarly prevent these projects from affecting or expanding any potential areas of contamination, increasing the level of contamination, or causing regulatory water quality standards at an existing production well to be violated.

ATTACHMENT A

LOS ANGELES RIVER WATERSHED MAP

COUNTY OF LOS ANGELES

LOS ANGELES RIVER WATERSHED

Los Angeles River Watershed

PACIFIC OCEAN

PROJECT SITE

MILES
0 1 2 4

LEGEND

- LOS ANGELES RIVER WATERSHED
- UNINCORPORATED AREA
- DAM / LAKE / RESERVOIR
- MAJOR RIVER
- MAJOR CHANNEL

Data contained in this map is produced in whole or part from the Los Angeles County Department of Public Works' digital database.

REF: \\pwgis02\mpmgis$\MPMGIS\projects\mpm\gismaps\wk_2627\lariver_wtrsheds.mxd DATE: 08/22/07

Mapping & Property Management Division, Mapping & GIS Services Section

ATTACHMENT B

LOCAL STORM DRAIN SYSTEM EXHIBIT



Aerial Date: 06/18/2016

APN: 5414-016-002

City of Los Angeles

FUSCOE ENGINEERING
full circle thinking

Exhibit 1

12/20/2024

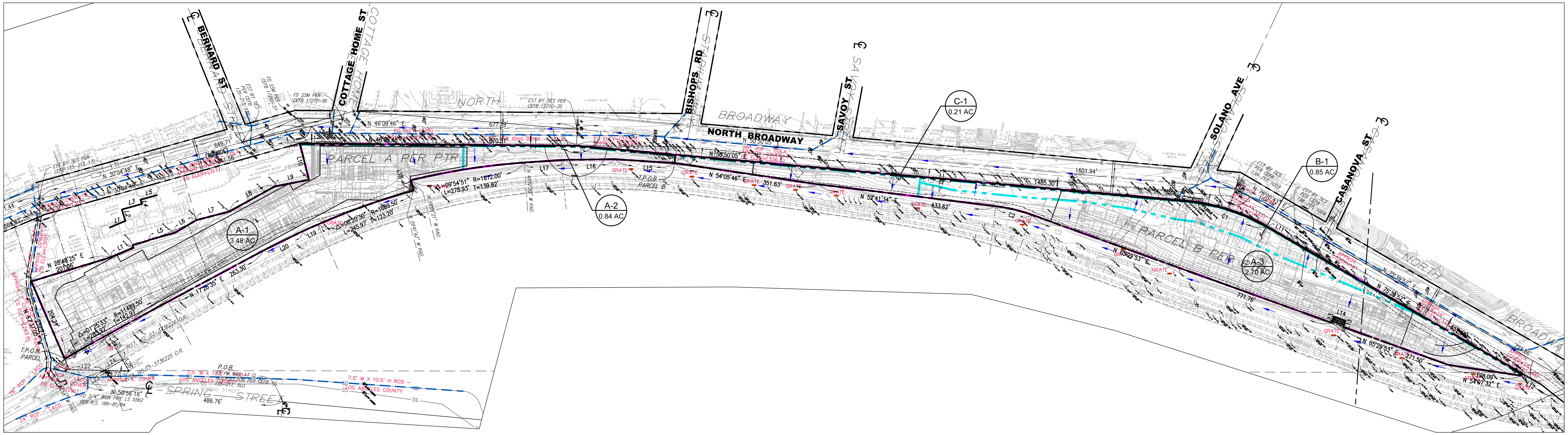
BUENA VISTA - AERIAL MAP

0 300 600 Feet

X:\Projects\1380\01\MXD\Broadway_160714.mxd

ATTACHMENT C

EXISTING ON-SITE HYDROLOGY MAP



LEGEND

EXISTING STORM DRAIN

X-X / 8.08 — AREA DESIGNATION / ACRES

SITE HYDROLOGIC BOUNDARY

HYDROLOGY SUB-AREA

DIRECTION OF FLOW

EXISTING GRATE INLET

EXISTING CONDITION STORM EVENTS

DRAINAGE AREA	AREA (ACRES)	% IMPERVIOUSNESS	Q_{25} (cfs)	Q_{50} (cfs)
A-1	3.48	78	7.11	8.59
A-2	0.84	5	1.61	1.95
A-3	2.70	5	4.55	5.47
B-1	0.85	5	1.43	1.72
C-1	0.21	5	0.26	0.32
TOTAL	8.08	62% (AVERAGE)	14.96	18.05

N

100' 0' 50' 100'

SCALE: 1" = 100'

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Exhibit Date: 12/20/2024

EXISTING CONDITION HYDROLOGY

BUENA VISTA
LOS ANGELES, CA

ATTACHMENT D

HydroCalc Results for Existing Site

Peak Flow Hydrologic Analysis

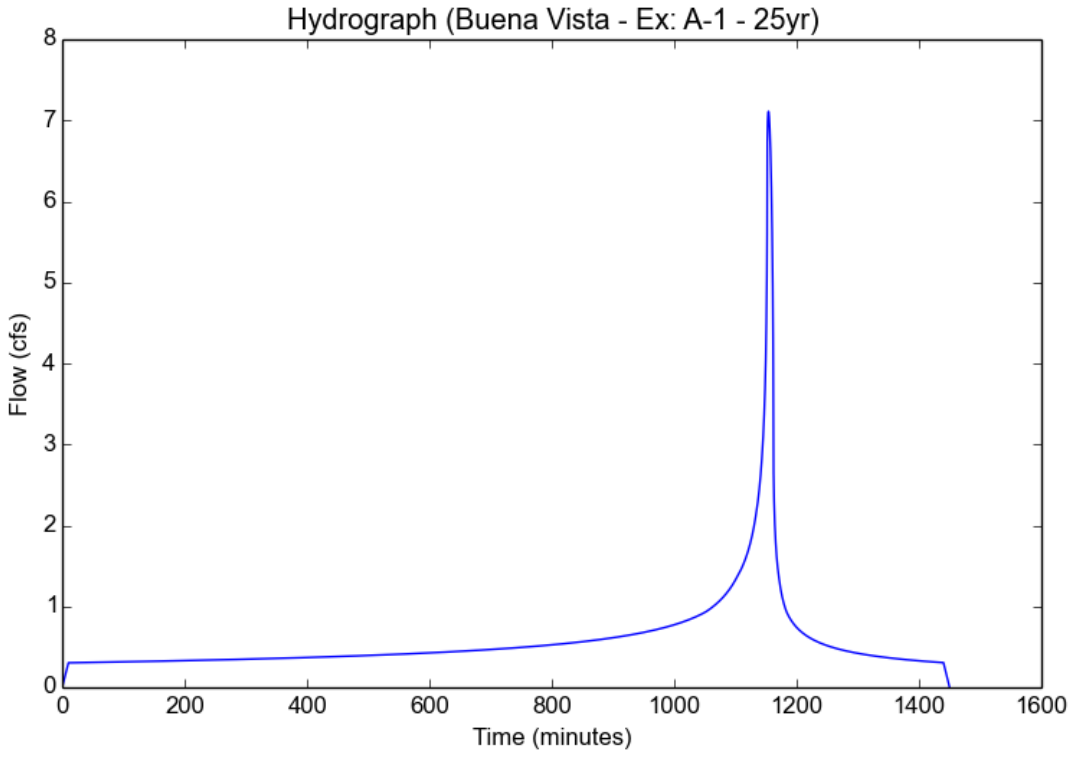
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - A-1 - 25yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	A-1 - 25yr
Area (ac)	3.48
Flow Path Length (ft)	1100.0
Flow Path Slope (vft/hft)	0.035
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.78
Soil Type	6
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	2.3448
Undeveloped Runoff Coefficient (Cu)	0.7701
Developed Runoff Coefficient (Cd)	0.8714
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	7.1108
Burned Peak Flow Rate (cfs)	7.1108
24-Hr Clear Runoff Volume (ac-ft)	1.1689
24-Hr Clear Runoff Volume (cu-ft)	50917.1633



Peak Flow Hydrologic Analysis

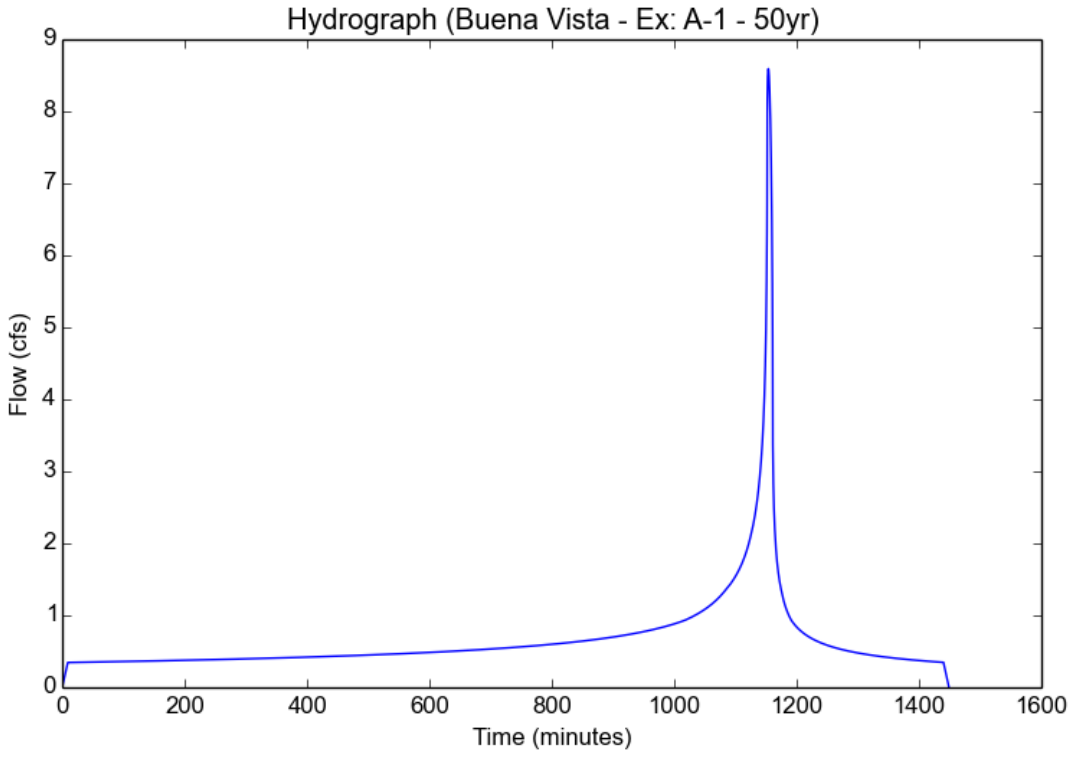
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - A-1 - 50yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	A-1 - 50yr
Area (ac)	3.48
Flow Path Length (ft)	1100.0
Flow Path Slope (vft/hft)	0.035
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.78
Soil Type	6
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.8062
Undeveloped Runoff Coefficient (Cu)	0.8087
Developed Runoff Coefficient (Cd)	0.8799
Time of Concentration (min)	9.0
Clear Peak Flow Rate (cfs)	8.5928
Burned Peak Flow Rate (cfs)	8.5928
24-Hr Clear Runoff Volume (ac-ft)	1.3381
24-Hr Clear Runoff Volume (cu-ft)	58286.7447



Peak Flow Hydrologic Analysis

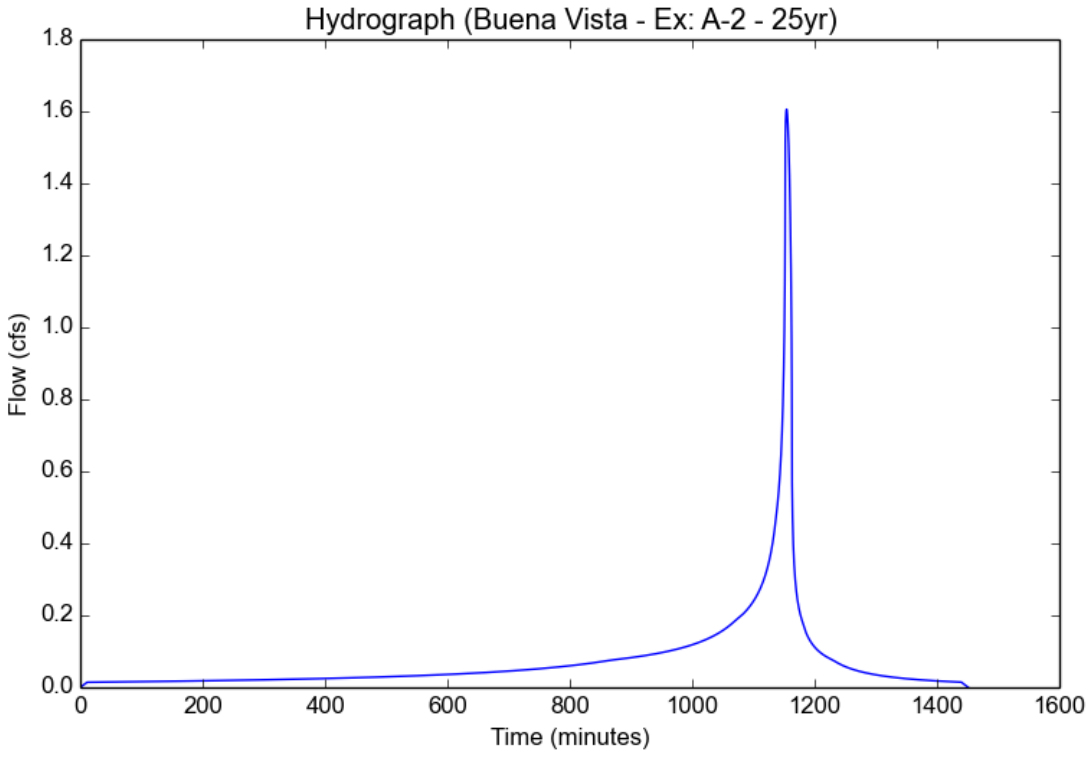
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - A-2 - 25yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	A-2 - 25yr
Area (ac)	0.84
Flow Path Length (ft)	1200.0
Flow Path Slope (vft/hft)	0.025
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	2.2421
Undeveloped Runoff Coefficient (Cu)	0.8502
Developed Runoff Coefficient (Cd)	0.8526
Time of Concentration (min)	11.0
Clear Peak Flow Rate (cfs)	1.6058
Burned Peak Flow Rate (cfs)	1.6058
24-Hr Clear Runoff Volume (ac-ft)	0.1526
24-Hr Clear Runoff Volume (cu-ft)	6647.1778



Peak Flow Hydrologic Analysis

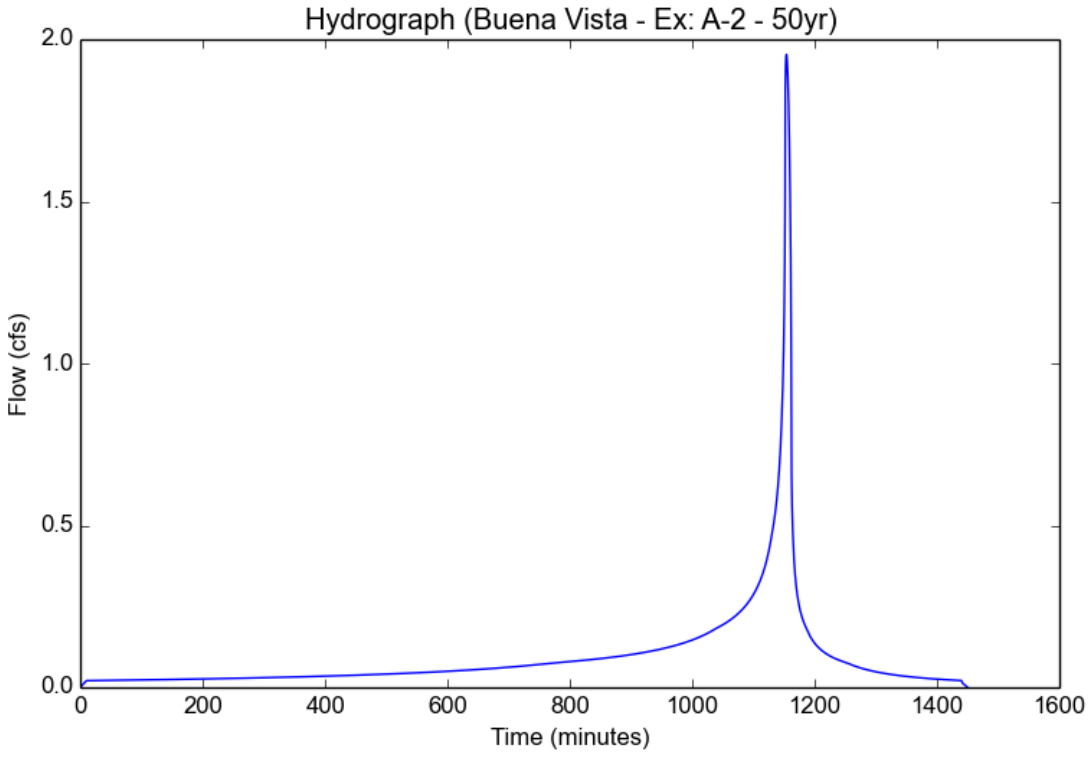
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - A-2 - 50yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	A-2 - 50yr
Area (ac)	0.84
Flow Path Length (ft)	1200.0
Flow Path Slope (vft/hft)	0.025
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.6706
Undeveloped Runoff Coefficient (Cu)	0.8691
Developed Runoff Coefficient (Cd)	0.8706
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	1.9531
Burned Peak Flow Rate (cfs)	1.9531
24-Hr Clear Runoff Volume (ac-ft)	0.1905
24-Hr Clear Runoff Volume (cu-ft)	8299.6739



Peak Flow Hydrologic Analysis

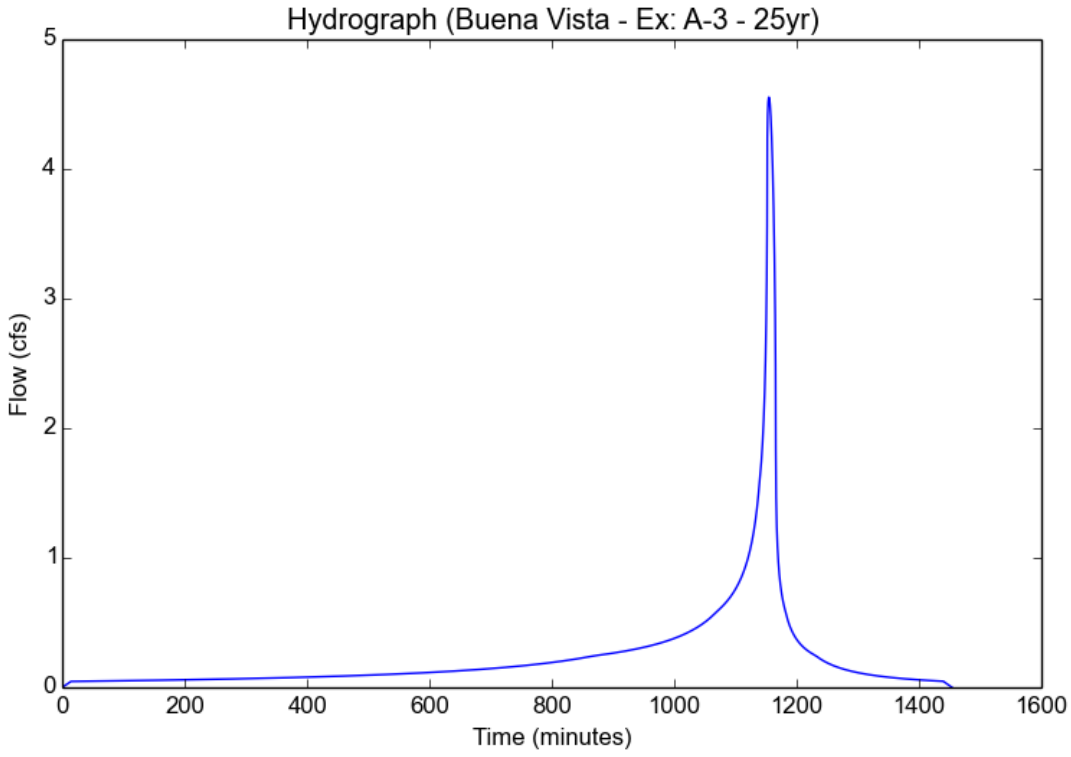
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - A-3 - 25yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	A-3 - 25yr
Area (ac)	2.7
Flow Path Length (ft)	1500.0
Flow Path Slope (vft/hft)	0.015
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	2.0018
Undeveloped Runoff Coefficient (Cu)	0.8395
Developed Runoff Coefficient (Cd)	0.8426
Time of Concentration (min)	14.0
Clear Peak Flow Rate (cfs)	4.5539
Burned Peak Flow Rate (cfs)	4.5539
24-Hr Clear Runoff Volume (ac-ft)	0.4903
24-Hr Clear Runoff Volume (cu-ft)	21356.672



Peak Flow Hydrologic Analysis

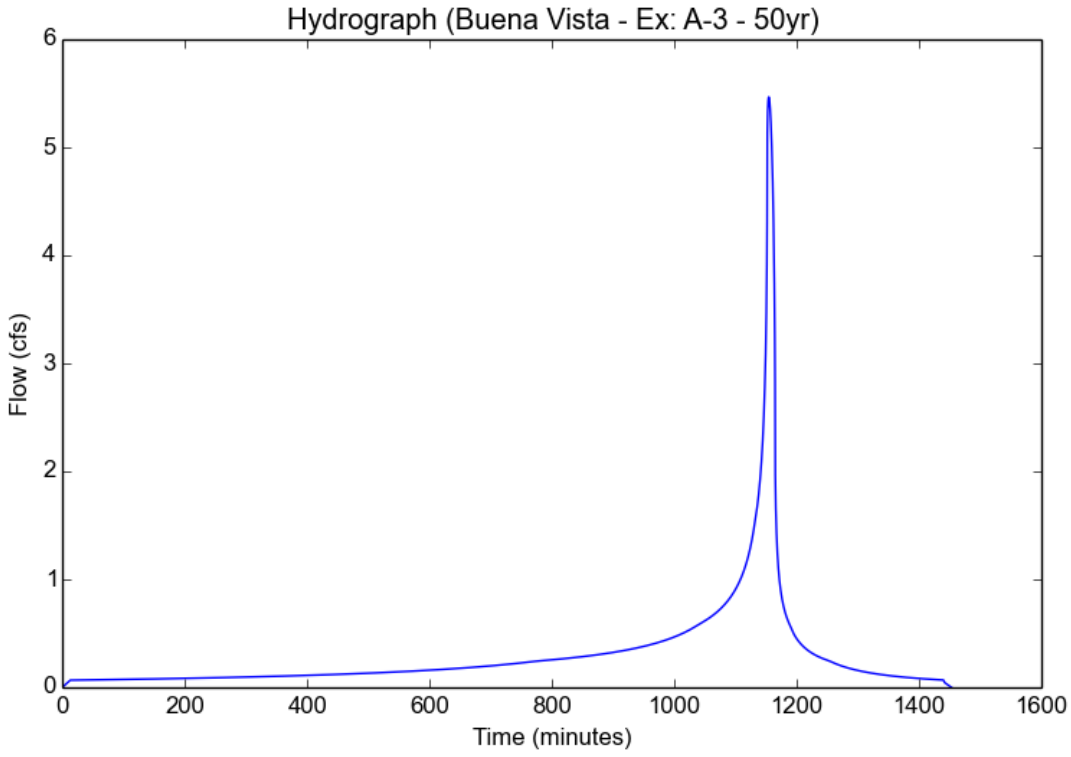
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - A-3 - 50yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	A-3 - 50yr
Area (ac)	2.7
Flow Path Length (ft)	1500.0
Flow Path Slope (vft/hft)	0.015
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.3608
Undeveloped Runoff Coefficient (Cu)	0.8554
Developed Runoff Coefficient (Cd)	0.8576
Time of Concentration (min)	13.0
Clear Peak Flow Rate (cfs)	5.4667
Burned Peak Flow Rate (cfs)	5.4667
24-Hr Clear Runoff Volume (ac-ft)	0.6122
24-Hr Clear Runoff Volume (cu-ft)	26666.3419



Peak Flow Hydrologic Analysis

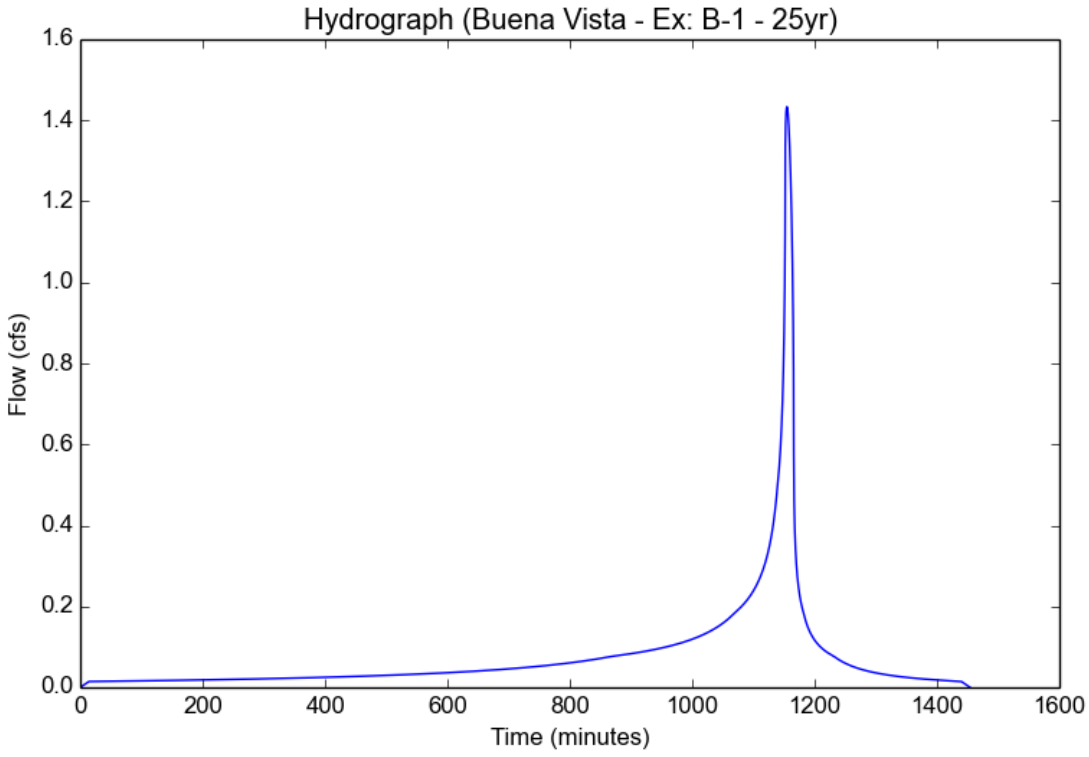
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - B-1 - 25yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	B-1 - 25yr
Area (ac)	0.85
Flow Path Length (ft)	1300.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	2.0018
Undeveloped Runoff Coefficient (Cu)	0.8395
Developed Runoff Coefficient (Cd)	0.8426
Time of Concentration (min)	14.0
Clear Peak Flow Rate (cfs)	1.4336
Burned Peak Flow Rate (cfs)	1.4336
24-Hr Clear Runoff Volume (ac-ft)	0.1543
24-Hr Clear Runoff Volume (cu-ft)	6723.3967



Peak Flow Hydrologic Analysis

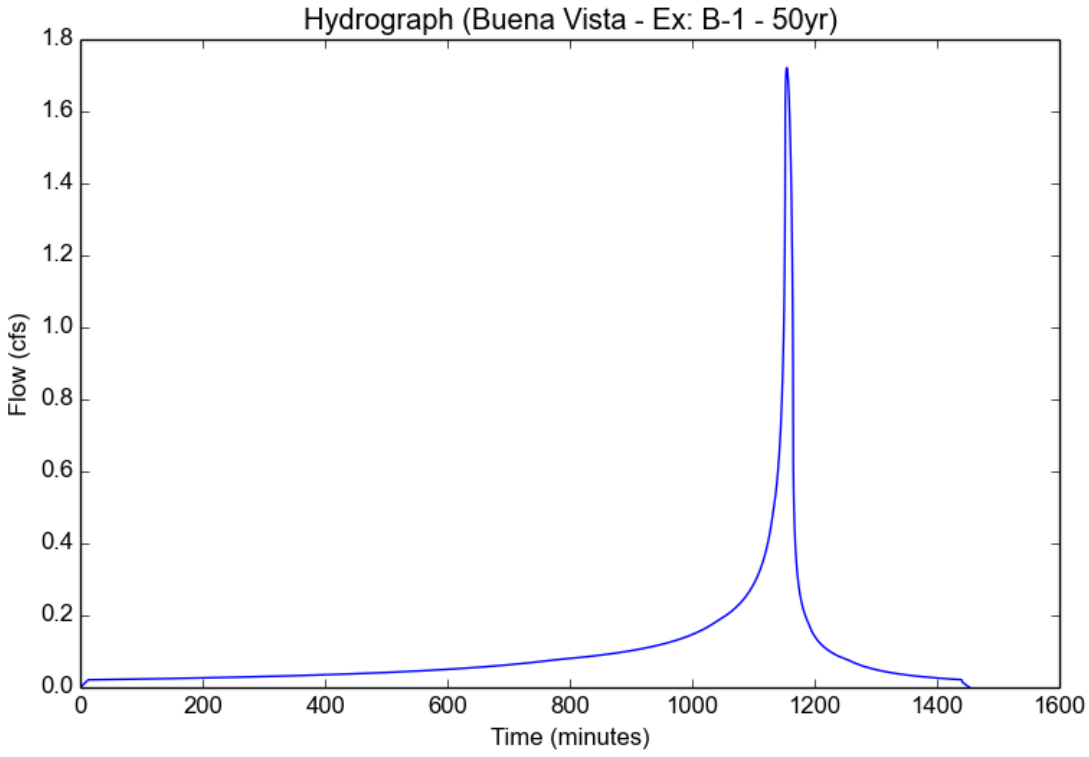
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - B-1 - 50yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	B-1 - 50yr
Area (ac)	0.85
Flow Path Length (ft)	1300.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.3608
Undeveloped Runoff Coefficient (Cu)	0.8554
Developed Runoff Coefficient (Cd)	0.8576
Time of Concentration (min)	13.0
Clear Peak Flow Rate (cfs)	1.721
Burned Peak Flow Rate (cfs)	1.721
24-Hr Clear Runoff Volume (ac-ft)	0.1927
24-Hr Clear Runoff Volume (cu-ft)	8394.9595



Peak Flow Hydrologic Analysis

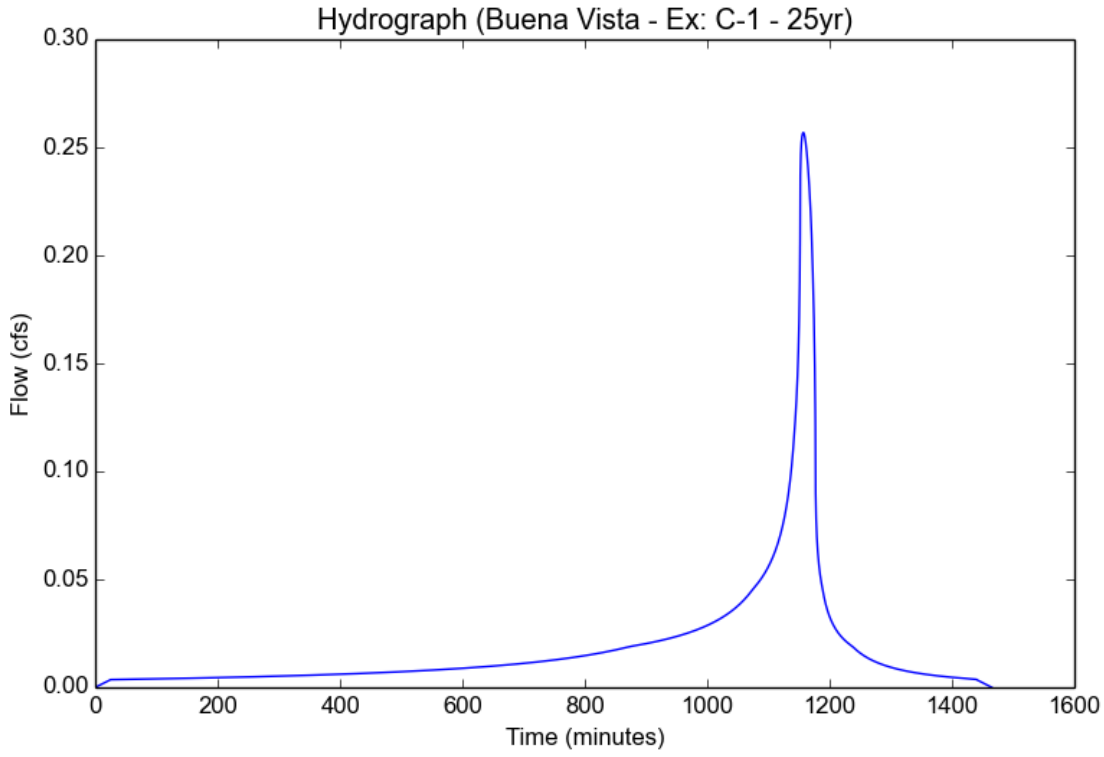
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - C-1 - 25yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	C-1 - 25yr
Area (ac)	0.21
Flow Path Length (ft)	3000.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	1.5243
Undeveloped Runoff Coefficient (Cu)	0.7973
Developed Runoff Coefficient (Cd)	0.8024
Time of Concentration (min)	25.0
Clear Peak Flow Rate (cfs)	0.2569
Burned Peak Flow Rate (cfs)	0.2569
24-Hr Clear Runoff Volume (ac-ft)	0.038
24-Hr Clear Runoff Volume (cu-ft)	1657.3501



Peak Flow Hydrologic Analysis

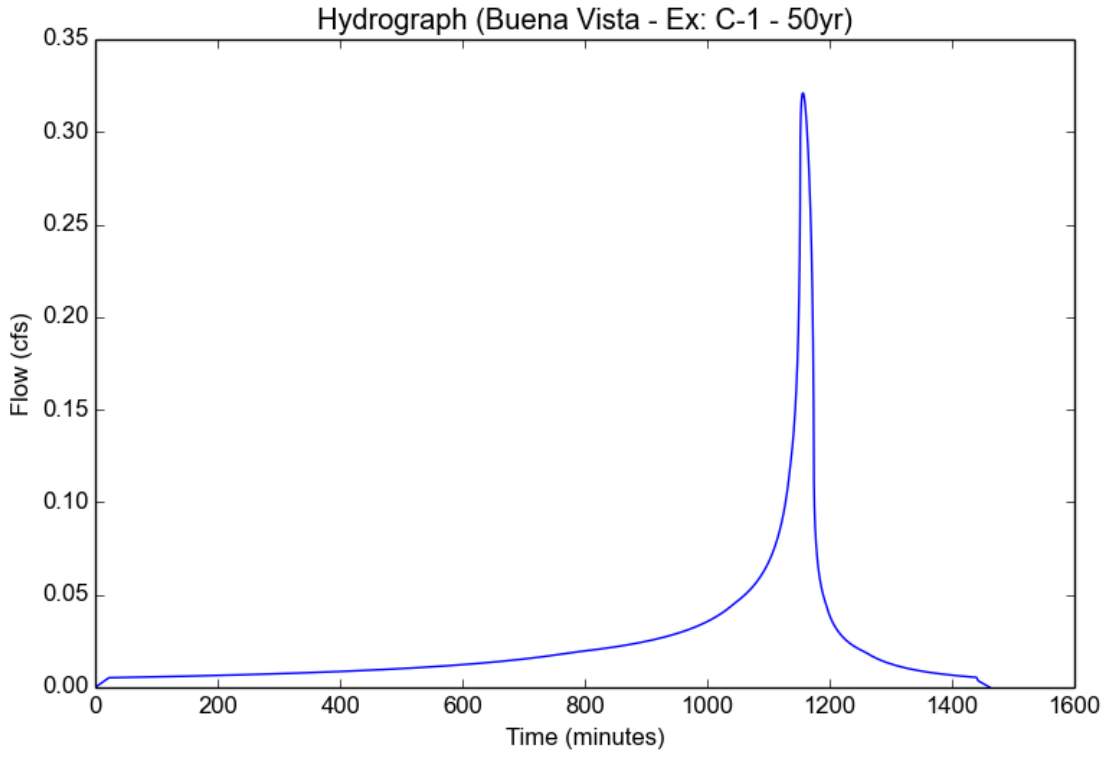
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - Ex - C-1 - 50yr.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista - Ex
Subarea ID	C-1 - 50yr
Area (ac)	0.21
Flow Path Length (ft)	3000.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.05
Soil Type	2
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	1.8436
Undeveloped Runoff Coefficient (Cu)	0.8256
Developed Runoff Coefficient (Cd)	0.8293
Time of Concentration (min)	22.0
Clear Peak Flow Rate (cfs)	0.3211
Burned Peak Flow Rate (cfs)	0.3211
24-Hr Clear Runoff Volume (ac-ft)	0.0475
24-Hr Clear Runoff Volume (cu-ft)	2070.8007



ATTACHMENT E

FEMA FLOODPLAIN MAP

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC 3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1994 or later and from National Geospatial Intelligence Agency imagery produced at a scale of 1:4,000 from photography dated 2003 or later.

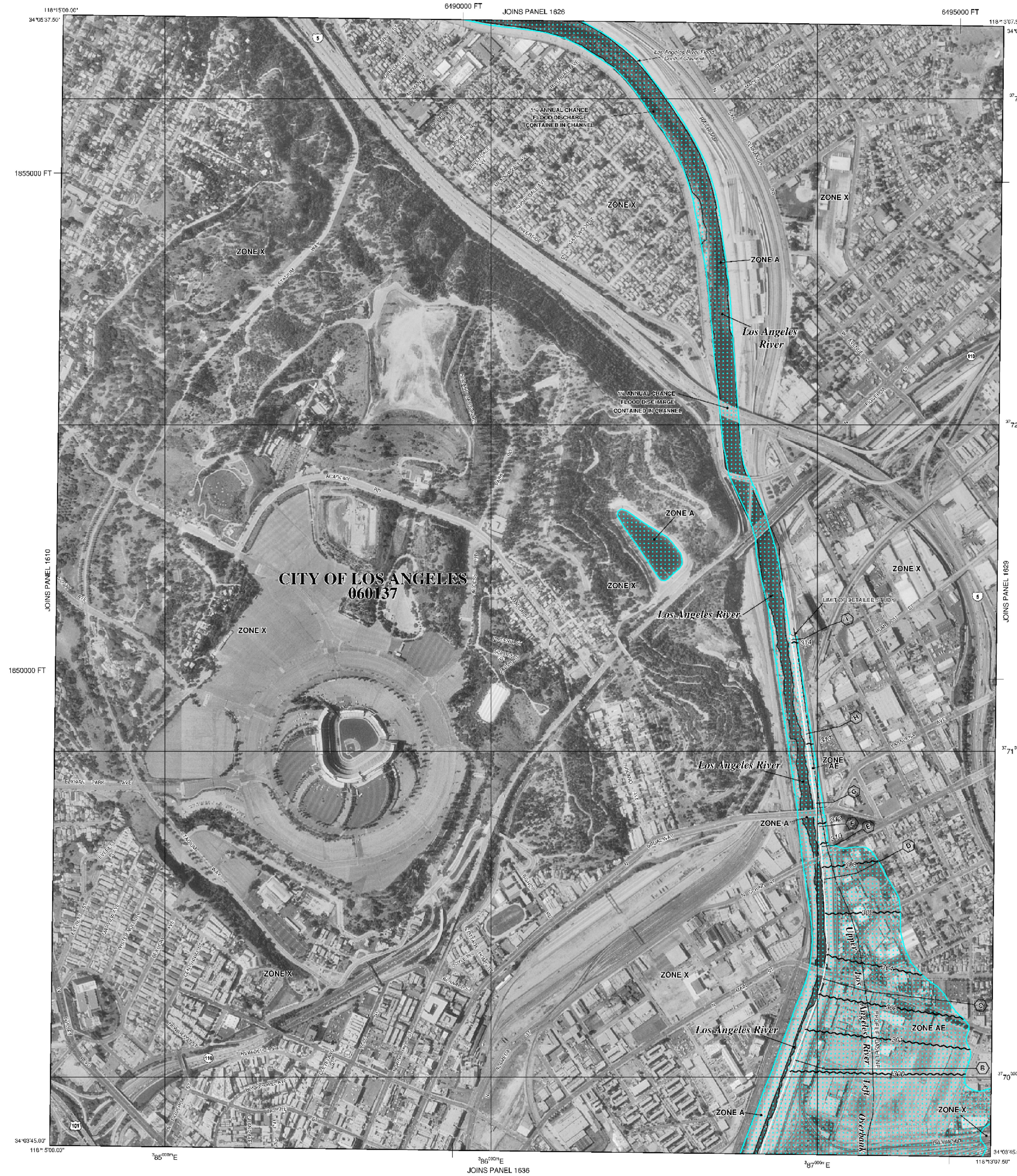
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, *a Flood Insurance Study report,* and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-**877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
~~ 513 ~~~~	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

(A)——(A)	Cross section line
(23)- - - -(23)	Transect line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4275000m N	1000-meter Universal Transverse Mercator grid values, zone 11
6000000 FT	5000-foot grid ticks: California State Plane coordinate system, V zone (FIPSZONE 0405), Lambert Conformal Conic
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP

PANEL 1628F

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
LOS ANGELES COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1628 OF 2350
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LOS ANGELES, CITY OF	060137	1628	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06037C1628F

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

ATTACHMENT F

2014-16 303(D) LIST

REGION	WATER BODY NAME	WATER TYPE	WATERSHED* CALWATER / USGS HUC	POLLUTANT POTENTIAL SOURCES *Relevant Notes*
				• Cadmium ◦ Source Unknown • Cyanide ◦ Source Unknown • Indicator Bacteria ◦ Source Unknown • Lead ◦ Nonpoint Source ◦ Point Source • Nutrients (Algae) ◦ Nonpoint Source ◦ Point Source • Trash ◦ Nonpoint Source ◦ Surface Runoff ◦ Urban Runoff/Storm Sewers • pH ◦ Nonpoint Source ◦ Point Source
4	Los Angeles River Reach 2 (Carson to Figueroa Street)	River & Stream	40515010 / 18070104	• Ammonia ◦ Nonpoint Source ◦ Point Source • Copper ◦ Source Unknown • Indicator Bacteria ◦ Source Unknown • Lead ◦ Nonpoint Source ◦ Point Source • Nutrients (Algae) ◦ Nonpoint Source ◦ Point Source • Oil ◦ Natural Sources

REGION	WATER BODY NAME	WATER TYPE	WATERSHED* CALWATER / USGS HUC	• POLLUTANT ◦ POTENTIAL SOURCES *Relevant Notes*
				• **Trash** ◦ **Nonpoint Source** ◦ **Surface Runoff** ◦ **Urban Runoff/Storm Sewers**
4	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	River & Stream	40521000 / 18070104	• Ammonia ◦ Nonpoint Source ◦ Point Source • Copper ◦ Source Unknown • Indicator Bacteria ◦ Source Unknown • Nutrients (Algae) ◦ Nonpoint Source ◦ Point Source • Toxicity ◦ Source Unknown • Trash ◦ Nonpoint Source ◦ Surface Runoff ◦ Urban Runoff/Storm Sewers
4	Los Angeles River Reach 4 (Sepulveda Dr. to Sepulveda Dam)	River & Stream	40521000 / 18070105	• Indicator Bacteria ◦ Source Unknown • Nutrients (Algae) ◦ Nonpoint Source ◦ Point Source • Toxicity ◦ Source Unknown • Trash ◦ Nonpoint Source ◦ Surface Runoff ◦ Urban Runoff/Storm Sewers
4	Los Angeles River Reach 5 (within Sepulveda Basin)	River & Stream	40521000 / 18070105	• Ammonia ◦ Source Unknown

2014 and 2016 CALIFORNIA 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS*

Category 5 criteria: 1) A water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment.

* USGS HUC = US Geological Survey Hydrologic Unit Code. Calwater = State Water Resources Control Board hydrological subunit area or even smaller planning watershed.

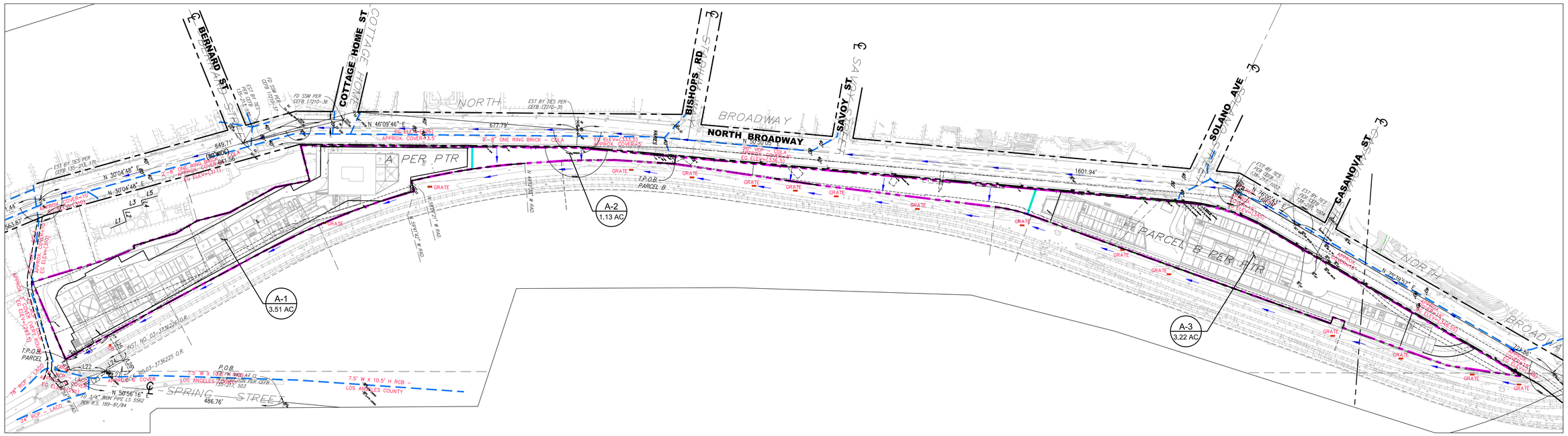
** TMDL requirement status definitions for listed pollutants are: A= TMDL still required, B= being addressed by USEPA approved TMDL, C= being addressed by action other than a TMDL, ALT= being addressed by USEPA approved TMDL alternative

*** Dates relate to the TMDL requirement status, so a date for A= TMDL scheduled completion date, B= Date USEPA approved TMDL, and C= Completion date for action other than a TMDL

REGION	WATER BODY NAME	WATER TYPE	WATERSHED* CALWATER / USGS HUC	POLLUTANT ○ POTENTIAL SOURCES *Relevant Notes*
1	Big River Beach at Mendocino Bay	Coastal & Bay Shoreline	1113.300405 / 18010108	• Indicator Bacteria ○ Source Unknown
1	Bodega HU, Bodega Harbor HA	Bay & Harbor	11522000 / 18010111	• Invasive Species ○ Source Unknown
1	Bodega HU, Estero Americano HA, Americano Creek	River & Stream	11530000 / 18010111	• Nutrients ○ Source Unknown
1	Bodega HU, Estero Americano HA, estuary	Estuary	11530012 / 18010111	• Nutrients ○ Source Unknown • Sedimentation/Siltation ○ Source Unknown
1	Bodega HU, Estero de San Antonio HA, Stemple Creek/Estero de San Antonio	River & Stream	1115.400001,1115.400002,1115.400003 / 18010111	• Nutrients ○ Source Unknown • Sediment ○ Source Unknown
1	Campbell Cove	Coastal & Bay Shoreline	1115.210000,1115.220000 / 18010111	• Indicator Bacteria ○ Source Unknown
1	Caspar Headlands State Beach	Coastal & Bay Shoreline	1113.300404,1113.300405 / 18010108	• Indicator Bacteria ○ Source Unknown

ATTACHMENT G

PROPOSED ON-SITE HYDROLOGY MAP



LEGEND

- EXISTING STORM DRAIN
- 1A / 9.68 — AREA DESIGNATION / ACRES
- SITE HYDROLOGIC BOUNDARY
- HYDROLOGY SUB-AREA
- DIRECTION OF FLOW
- EXISTING GRATE INLET

PROPOSED CONDITION STORM EVENTS

DRAINAGE AREA	AREA (ACRES)	% IMPERVIOUSNESS	Q_{25} (cfs)	Q_{50} (cfs)	LID WATER QUALITY Q_{pm} (cfs)	LID WATER QUALITY V_m (cf)
A-1	3.51	91	6.70	7.98	0.65	10,463
A-2	1.14	10	2.00	2.53	0.04	775
A-3	3.22	81	5.73	7.04	0.53	8,729
TOTAL	7.87	75% (AVERAGE)	14.43	17.55	1.22	19,967

N

100' 0' 50' 100'

SCALE: 1" = 100'

FUSCOE ENGINEERING
full circle thinking
600 Wilshire Blvd., Ste. 1470, Los Angeles, California 90017
tel 213.988.8802 ◦ fax 213.988.8803 www.fuscoe.com

Exhibit Date: 12/20/2024

PROPOSED CONDITION HYDROLOGY

BUENA VISTA
LOS ANGELES, CA

ATTACHMENT H

HydroCalc Hydrology Results for Proposed Site

Peak Flow Hydrologic Analysis

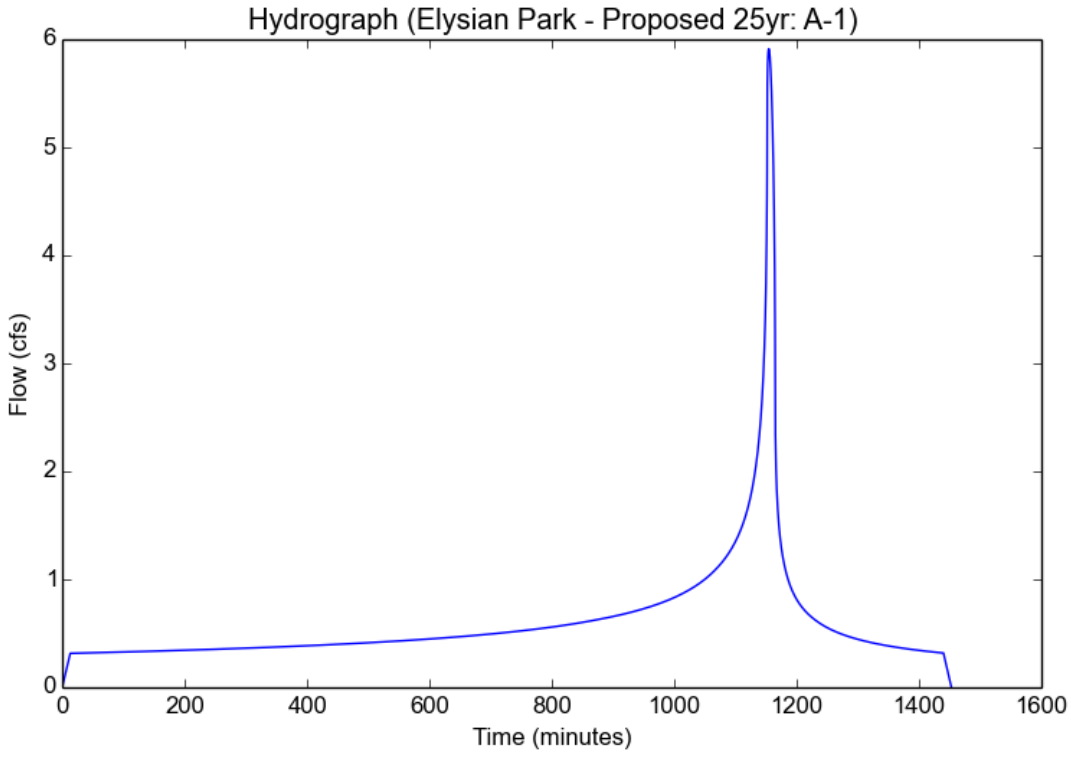
File location: F:/Projects/1380/001/_Support Files/Reports/Hydrology/HydroCalc/Elysian Park - Proposed Report.pdf
Version: HydroCalc 1.0.2

Input Parameters

Project Name	Elysian Park - Proposed 25yr
Subarea ID	A-1
Area (ac)	3.19
Flow Path Length (ft)	1200.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.9
Soil Type	2
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	2.0728
Undeveloped Runoff Coefficient (Cu)	0.8427
Developed Runoff Coefficient (Cd)	0.8943
Time of Concentration (min)	13.0
Clear Peak Flow Rate (cfs)	5.913
Burned Peak Flow Rate (cfs)	5.913
24-Hr Clear Runoff Volume (ac-ft)	1.2166
24-Hr Clear Runoff Volume (cu-ft)	52997.1699



Peak Flow Hydrologic Analysis

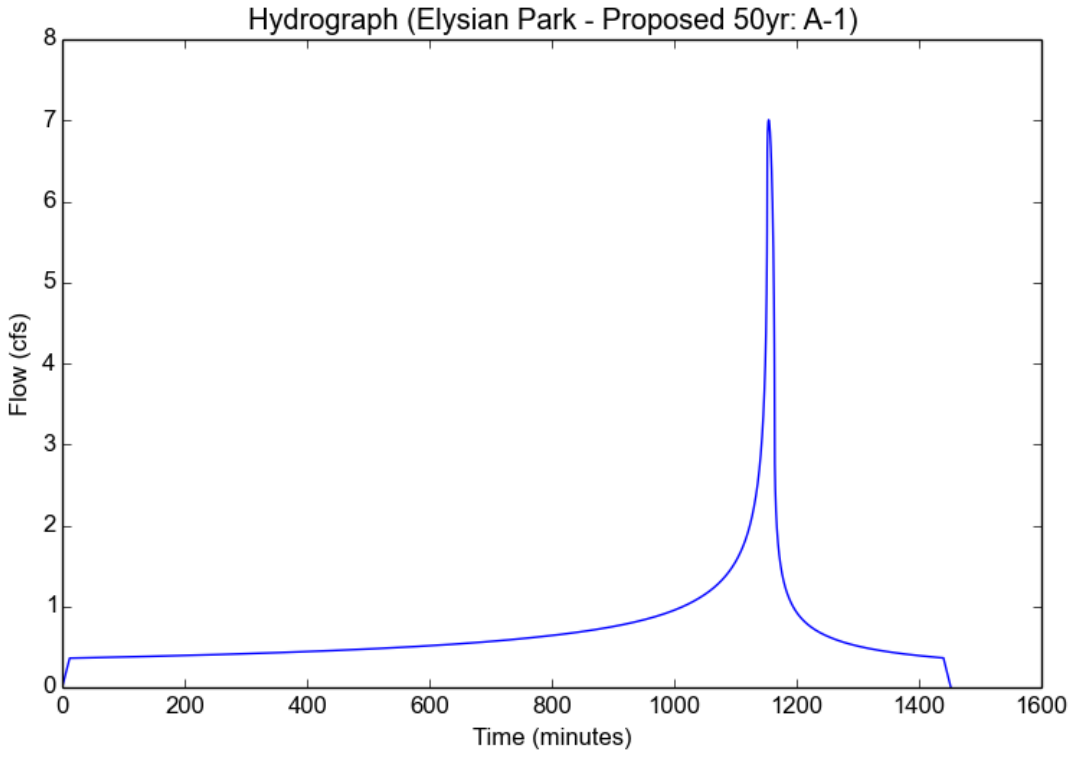
File location: F:/Projects/1380/001/_Support Files/Reports/Hydrology/HydroCalc/Elysian Park - Proposed Report.pdf
Version: HydroCalc 1.0.2

Input Parameters

Project Name	Elysian Park - Proposed 50yr
Subarea ID	A-1
Area (ac)	3.19
Flow Path Length (ft)	1200.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.9
Soil Type	2
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.4513
Undeveloped Runoff Coefficient (Cu)	0.8594
Developed Runoff Coefficient (Cd)	0.8959
Time of Concentration (min)	12.0
Clear Peak Flow Rate (cfs)	7.0059
Burned Peak Flow Rate (cfs)	7.0059
24-Hr Clear Runoff Volume (ac-ft)	1.3924
24-Hr Clear Runoff Volume (cu-ft)	60652.2616



Peak Flow Hydrologic Analysis

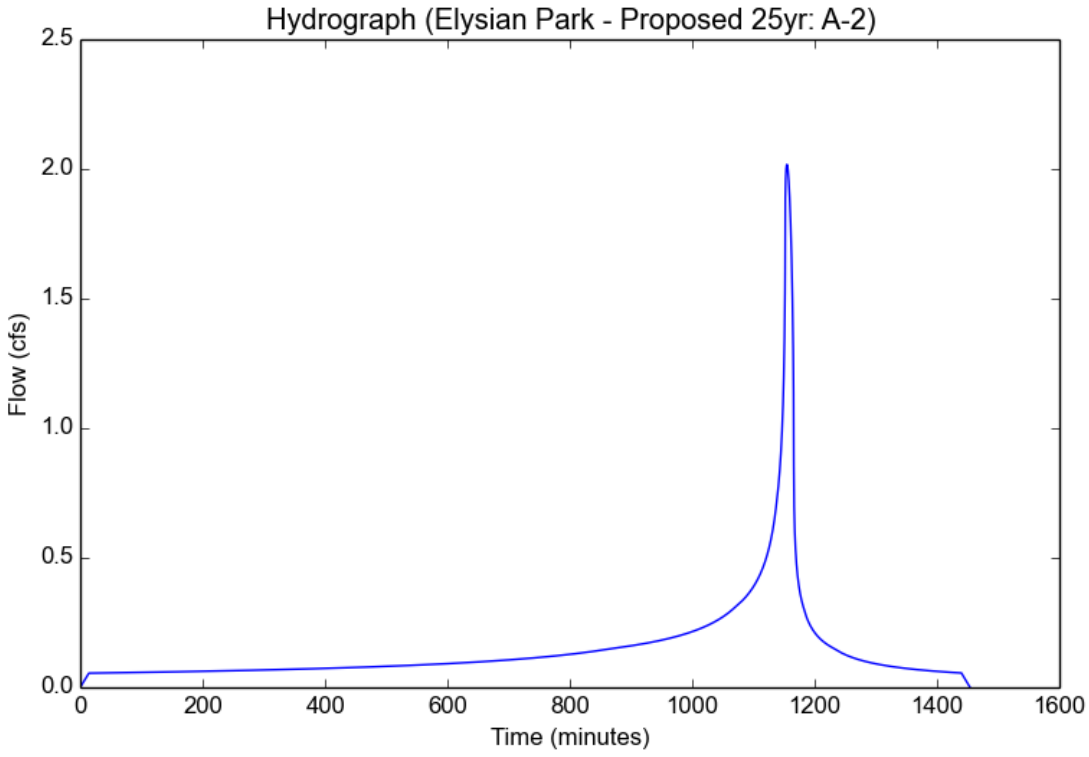
File location: F:/Projects/1380/001/_Support Files/Reports/Hydrology/HydroCalc/Elysian Park - Proposed Report.pdf
Version: HydroCalc 1.0.2

Input Parameters

Project Name	Elysian Park - Proposed 25yr
Subarea ID	A-2
Area (ac)	1.17
Flow Path Length (ft)	1350.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.36
Soil Type	2
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	2.0018
Undeveloped Runoff Coefficient (Cu)	0.8395
Developed Runoff Coefficient (Cd)	0.8613
Time of Concentration (min)	14.0
Clear Peak Flow Rate (cfs)	2.0173
Burned Peak Flow Rate (cfs)	2.0173
24-Hr Clear Runoff Volume (ac-ft)	0.2977
24-Hr Clear Runoff Volume (cu-ft)	12968.3879



Peak Flow Hydrologic Analysis

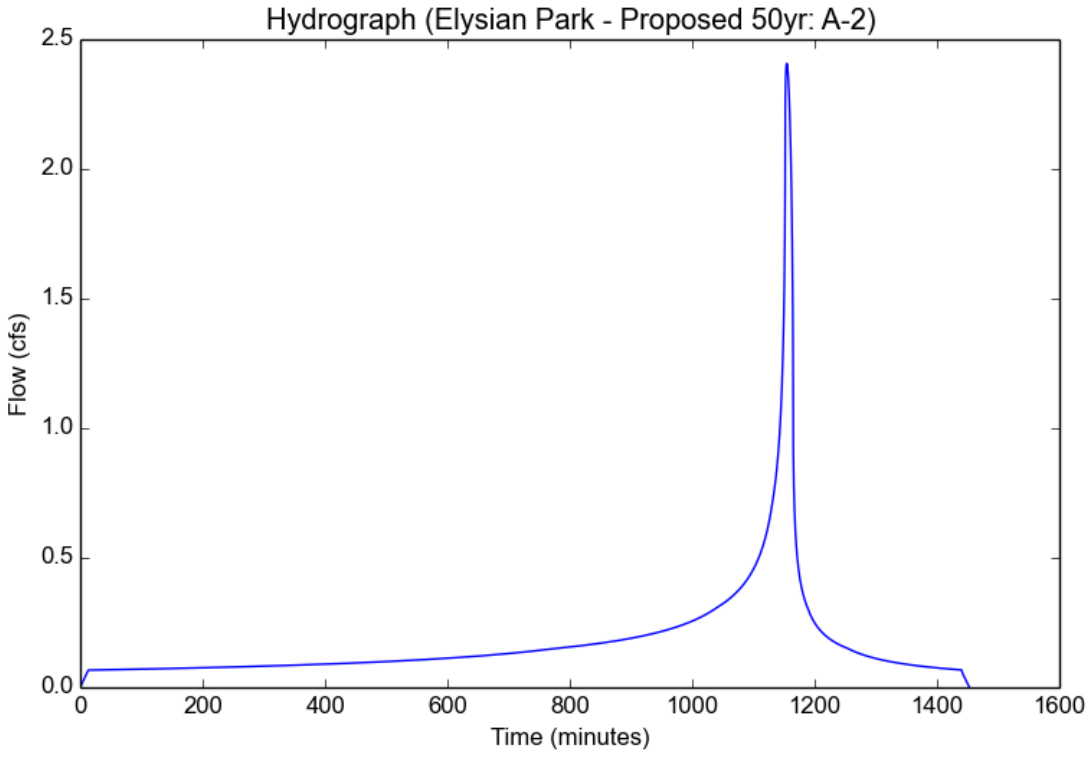
File location: F:/Projects/1380/001/_Support Files/Reports/Hydrology/HydroCalc/Elysian Park - Proposed Report.pdf
Version: HydroCalc 1.0.2

Input Parameters

Project Name	Elysian Park - Proposed 50yr
Subarea ID	A-2
Area (ac)	1.17
Flow Path Length (ft)	1350.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.36
Soil Type	2
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.3608
Undeveloped Runoff Coefficient (Cu)	0.8554
Developed Runoff Coefficient (Cd)	0.8715
Time of Concentration (min)	13.0
Clear Peak Flow Rate (cfs)	2.4071
Burned Peak Flow Rate (cfs)	2.4071
24-Hr Clear Runoff Volume (ac-ft)	0.3548
24-Hr Clear Runoff Volume (cu-ft)	15454.1038



Peak Flow Hydrologic Analysis

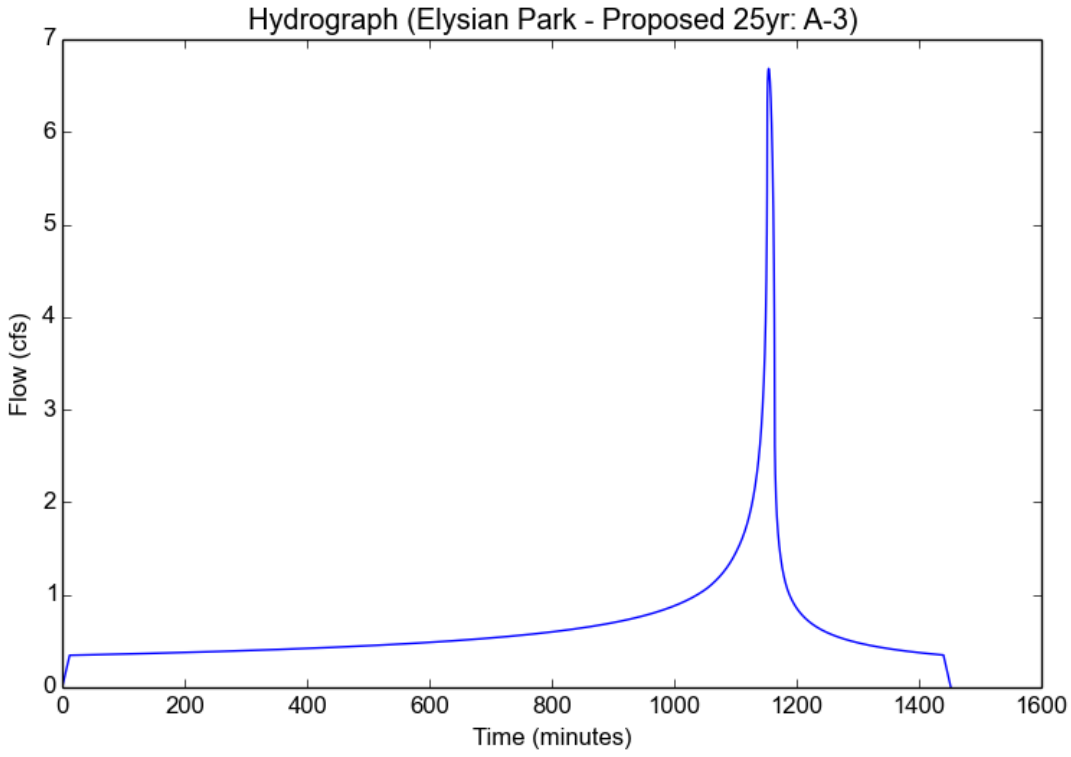
File location: F:/Projects/1380/001/_Support Files/Reports/Hydrology/HydroCalc/Elysian Park - Proposed Report.pdf
Version: HydroCalc 1.0.2

Input Parameters

Project Name	Elysian Park - Proposed 25yr
Subarea ID	A-3
Area (ac)	3.51
Flow Path Length (ft)	1100.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.9
Soil Type	6
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.4436
Peak Intensity (in/hr)	2.1522
Undeveloped Runoff Coefficient (Cu)	0.749
Developed Runoff Coefficient (Cd)	0.8849
Time of Concentration (min)	12.0
Clear Peak Flow Rate (cfs)	6.6848
Burned Peak Flow Rate (cfs)	6.6848
24-Hr Clear Runoff Volume (ac-ft)	1.311
24-Hr Clear Runoff Volume (cu-ft)	57107.8363



Peak Flow Hydrologic Analysis

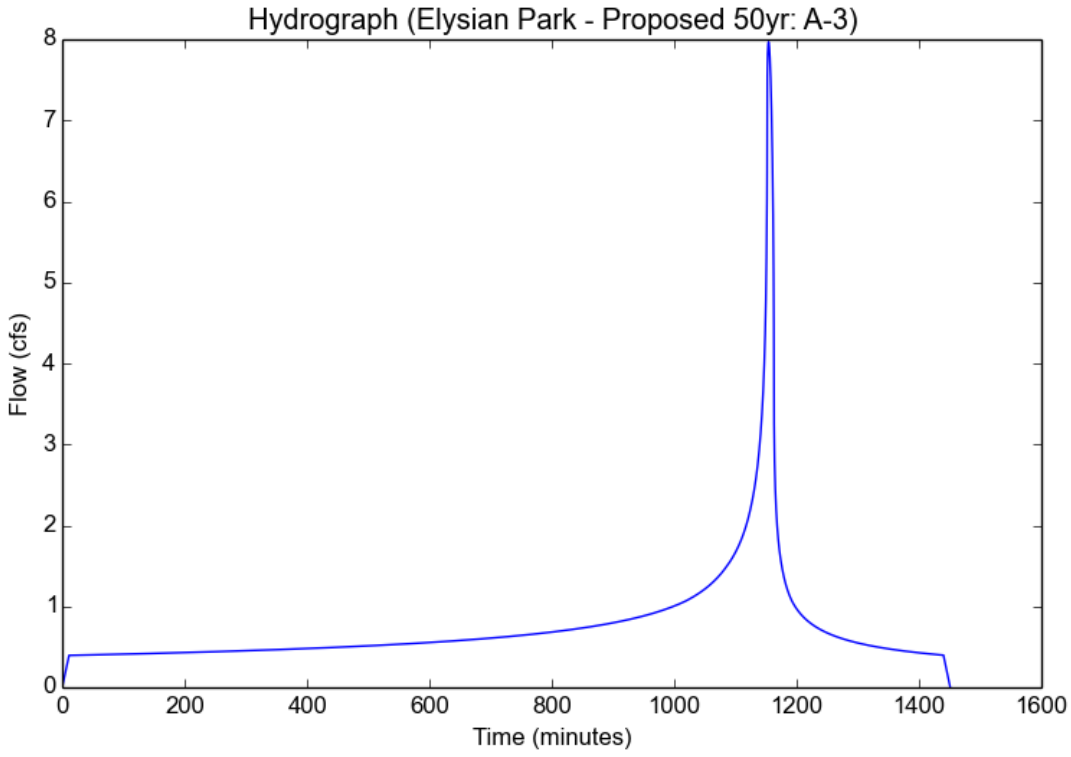
File location: F:/Projects/1380/001/_Support Files/Reports/Hydrology/HydroCalc/Elysian Park - Proposed Report.pdf
Version: HydroCalc 1.0.2

Input Parameters

Project Name	Elysian Park - Proposed 50yr
Subarea ID	A-3
Area (ac)	3.51
Flow Path Length (ft)	1100.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.9
Soil Type	6
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.5536
Undeveloped Runoff Coefficient (Cu)	0.7909
Developed Runoff Coefficient (Cd)	0.8891
Time of Concentration (min)	11.0
Clear Peak Flow Rate (cfs)	7.9691
Burned Peak Flow Rate (cfs)	7.9691
24-Hr Clear Runoff Volume (ac-ft)	1.4963
24-Hr Clear Runoff Volume (cu-ft)	65178.6237



ATTACHMENT I

LA COUNTY GIS 85TH PERCENTILE MAP

Department of Public Works
dpw.lacounty.gov

search our site..

Hydrology Map

A GIS viewer application to view the data for the hydrology manual.

LAYERS

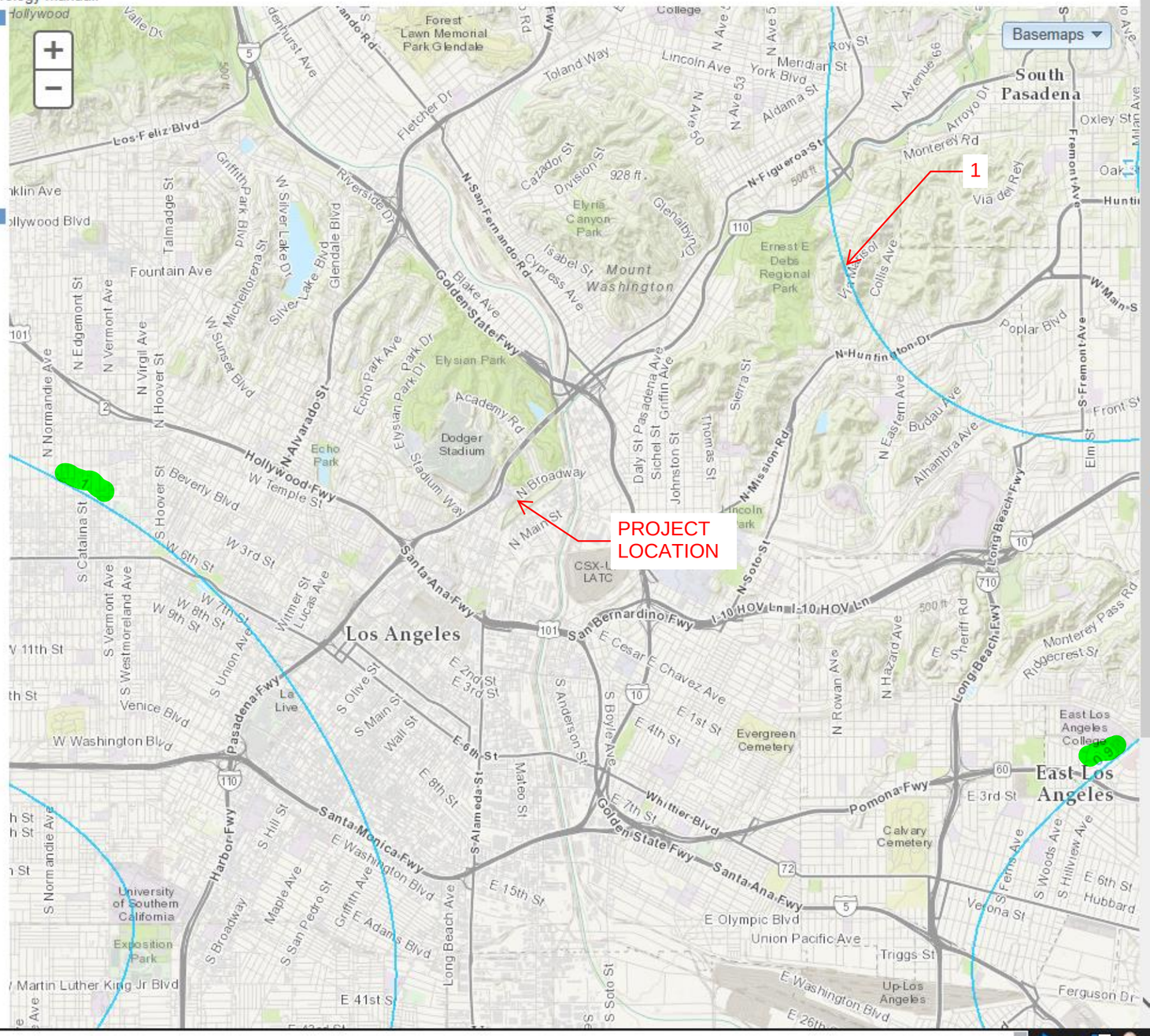
- [ ] 50yr Two Tenths (Rainfall)
- [ ] DPA Zones
- [ ] Soils 2004
- [ ] TG Page
- [x] Final 85th Percentile, 24-hr Rainfall
- [ ] Final 95th Percentile, 24-hr Rainfall
- [ ] 1-year, 1-hour Rainfall Intensity

SEARCH

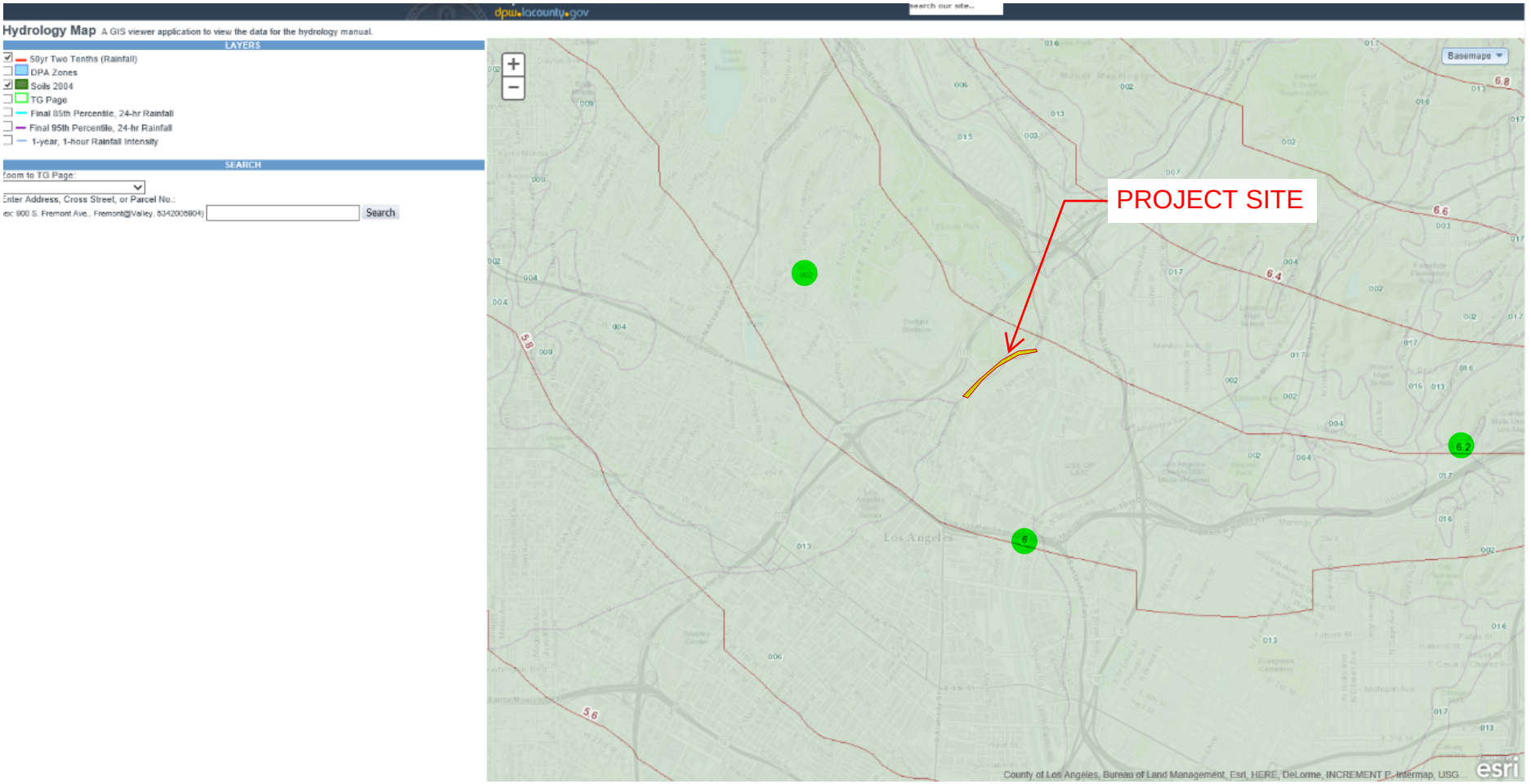
Zoom to TG Page:

Enter Address, Cross Street, or Parcel No.:
(ex: 900 S. Fremont Ave., Fremont@Valley, 5342005904)

Search



http://dpw.lacounty.gov/wrd/hydrologyqis/


dpw.lacounty.gov
Hydrology Map
A GIS viewer application to view the data for the hydrology manual.
LAYERS
50yr Two Tenths (Rainfall)
DPA Zones
Soils 2004
TG Page
Final 85th Percentile, 24-hr Rainfall
Final 95th Percentile, 24-hr Rainfall
1-year, 1-hour Rainfall Intensity
SEARCH
Zoom to TG Page:
Enter Address, Cross Street, or Parcel No.:
ex: 900 S. Fremont Ave., Fremont Valley, 5342006804)
Search
PROJECT SITE
Basemaps
Los Angeles
County of Los Angeles, Bureau of Land Management, Esri, HERE, DeLorme, INCREMENT P, Intermap, USG...
esri

ATTACHMENT J

LID CALCULATIONS

Peak Flow Hydrologic Analysis

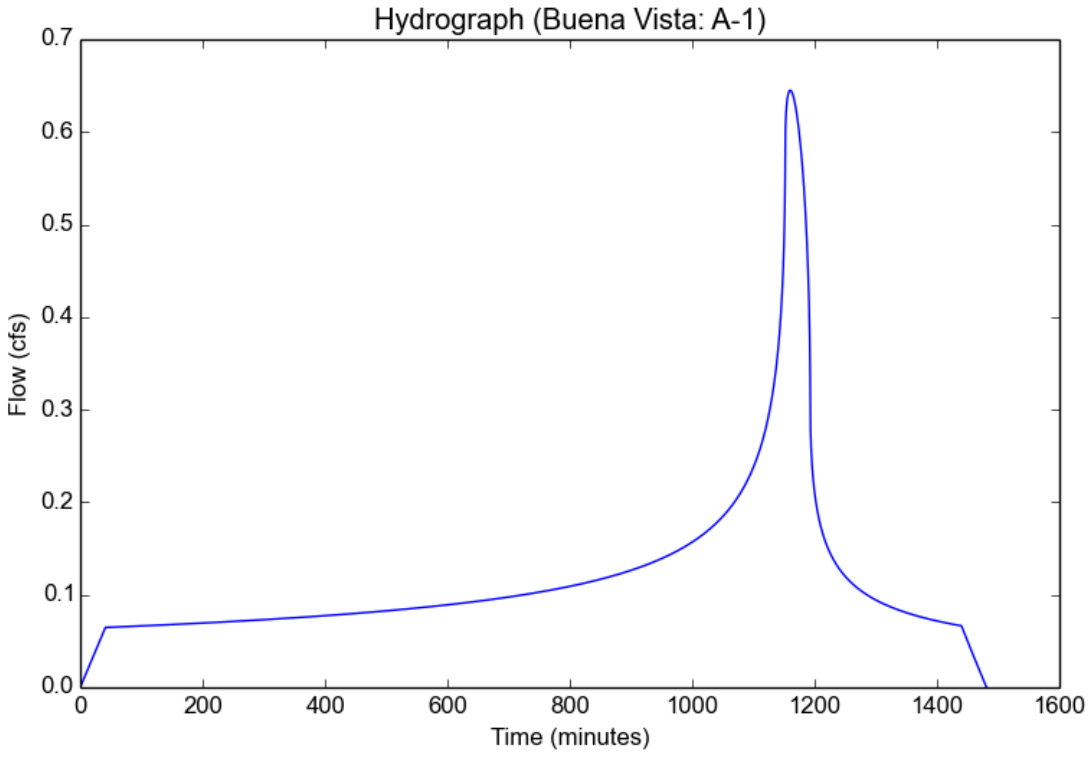
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - A-1.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista
Subarea ID	A-1
Area (ac)	3.51
Flow Path Length (ft)	1100.0
Flow Path Slope (vft/hft)	0.01
85th Percentile Rainfall Depth (in)	1.0
Percent Impervious	0.91
Soil Type	6
Design Storm Frequency	85th percentile storm
Fire Factor	0
LID	True

Output Results

Modeled (85th percentile storm) Rainfall Depth (in)	1.0
Peak Intensity (in/hr)	0.2219
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.828
Time of Concentration (min)	41.0
Clear Peak Flow Rate (cfs)	0.645
Burned Peak Flow Rate (cfs)	0.645
24-Hr Clear Runoff Volume (ac-ft)	0.2402
24-Hr Clear Runoff Volume (cu-ft)	10462.834



Peak Flow Hydrologic Analysis

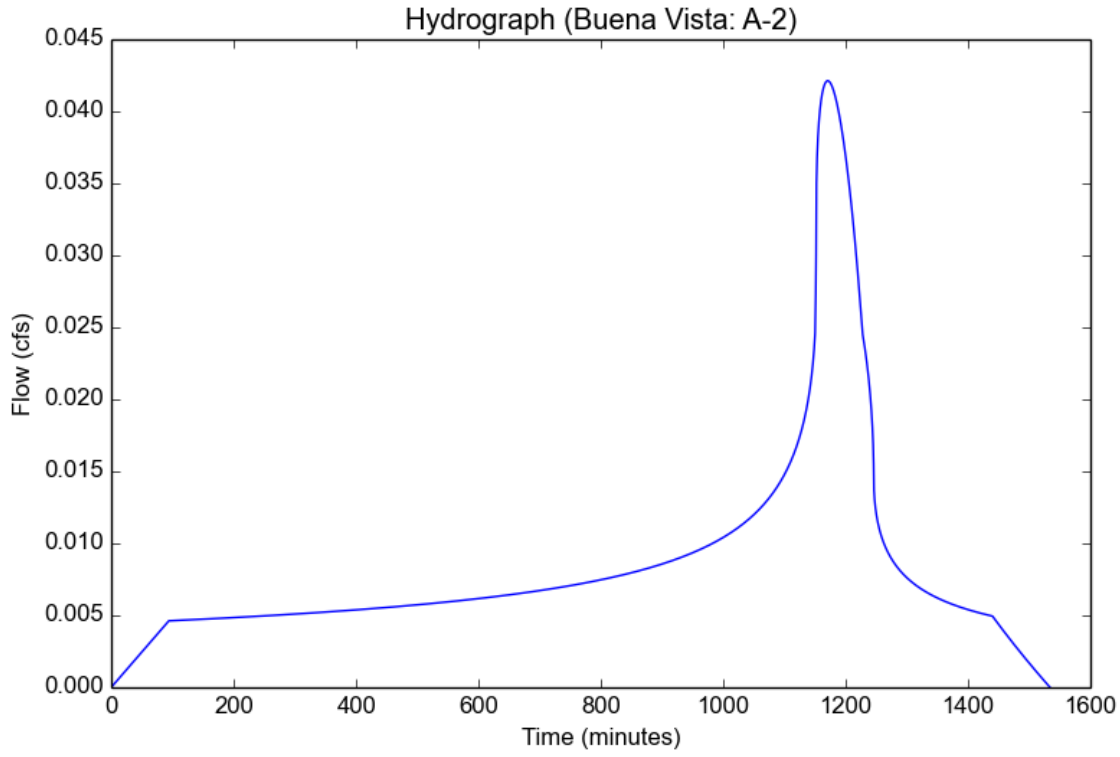
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - A-2.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista
Subarea ID	A-2
Area (ac)	1.14
Flow Path Length (ft)	1100.0
Flow Path Slope (vft/hft)	0.01
85th Percentile Rainfall Depth (in)	1.0
Percent Impervious	0.1
Soil Type	2
Design Storm Frequency	85th percentile storm
Fire Factor	0
LID	True

Output Results

Modeled (85th percentile storm) Rainfall Depth (in)	1.0
Peak Intensity (in/hr)	0.1503
Undeveloped Runoff Coefficient (Cu)	0.1732
Developed Runoff Coefficient (Cd)	0.2459
Time of Concentration (min)	94.0
Clear Peak Flow Rate (cfs)	0.0421
Burned Peak Flow Rate (cfs)	0.0421
24-Hr Clear Runoff Volume (ac-ft)	0.0178
24-Hr Clear Runoff Volume (cu-ft)	774.8977



Peak Flow Hydrologic Analysis

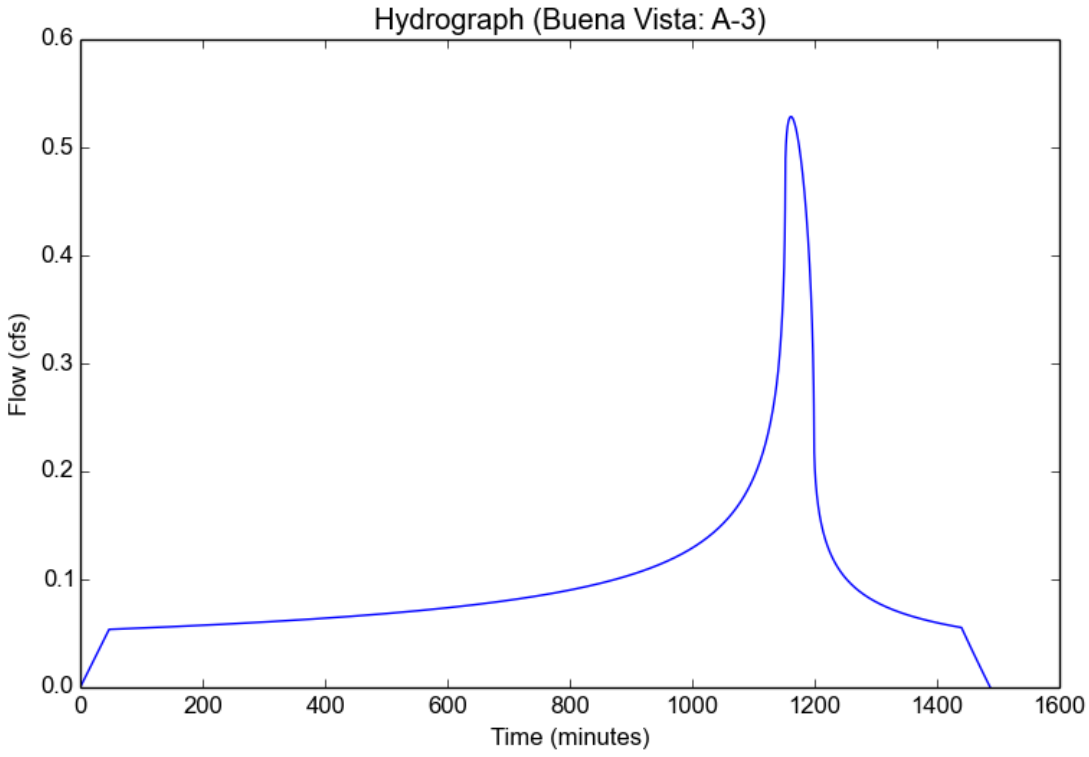
File location: F:/Projects/1380/002/_Support Files/Reports/Hydrology/Buena Vista - A-3.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Buena Vista
Subarea ID	A-3
Area (ac)	3.22
Flow Path Length (ft)	1300.0
Flow Path Slope (vft/hft)	0.01
85th Percentile Rainfall Depth (in)	1.0
Percent Impervious	0.81
Soil Type	2
Design Storm Frequency	85th percentile storm
Fire Factor	0
LID	True

Output Results

Modeled (85th percentile storm) Rainfall Depth (in)	1.0
Peak Intensity (in/hr)	0.2081
Undeveloped Runoff Coefficient (Cu)	0.3133
Developed Runoff Coefficient (Cd)	0.7885
Time of Concentration (min)	47.0
Clear Peak Flow Rate (cfs)	0.5285
Burned Peak Flow Rate (cfs)	0.5285
24-Hr Clear Runoff Volume (ac-ft)	0.2004
24-Hr Clear Runoff Volume (cu-ft)	8728.5037



ATTACHMENT K

LID SIZING METHODOLOGY AND MAP

FLOW RATE AND VOLUME CALCULATION EXAMPLE

Volume must be calculated for each tributary area to size each BMP.

PROJECT NAME: Commercial Site (Intersection of Western Ave & Washington Blvd)

Provide proposed project characteristics

A_{Total}	**1.15 Acres**
Type of Development	**Commercial**
Flow Path Length	**200 ft**
Flow Path Slope	**.01 (1%)**
% of Project Impervious	**87 %**
Predominate Soil Type #	**13**
Design Storm*	**85th percentile**

Projects are required to use the larger of the Stormwater Quality Design Storm.

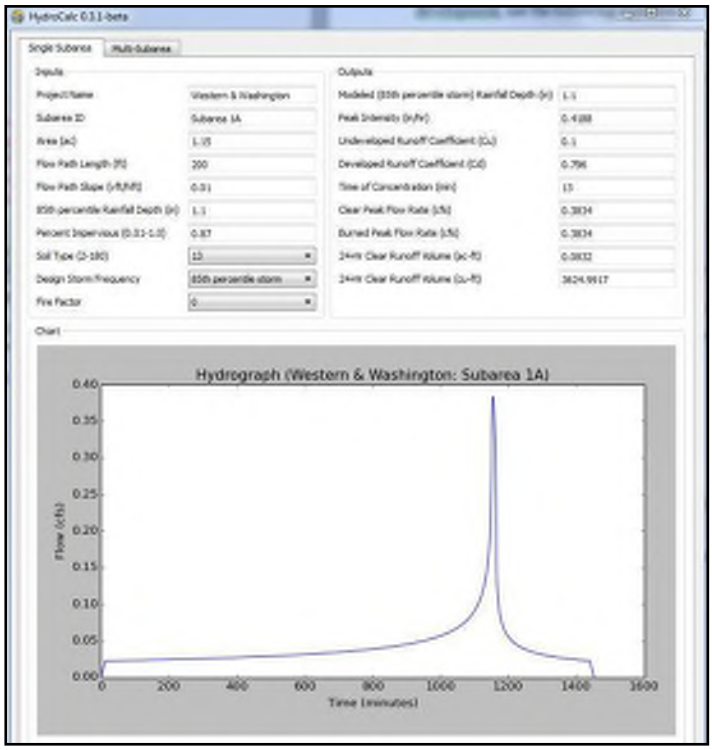
- *The volume of runoff produced from a 0.75 inch (or 0.0625 ft) storm event, or*
- *The 85th percentile, 24-hr runoff event at this location = 1.1 inch (or 0.91 ft)*

Refer to LA County Hydrology GIS Map
http://dpw.lacounty.gov/wrd/hydrologygis/

DETERMINING THE PEAK MITIGATED FLOW RATE (Q_{PM}):

Download HydroCalc Calculator (save onto your desktop). The HydroCalc Calculator allows the site designer/engineer to calculate runoff rates and volumes from the water quality storm.

http://dpw.lacounty.gov/wmd/dsp_LowImpactDevelopment.cfm



DETERMINING THE VOLUME (V_M)

In order to determine the volume (V_M) of stormwater runoff to be mitigated from the new development, use the larger storm volume from the following equation(s):

0.75 in Design Storm: $V_M\ (ft^3) = (\ 0.625\ Ft\ ) \bullet$ Catchment Area $_{(Sq.\ Ft)}$

85th Percentile Design Storm: $V_M\ (ft^3) =$ ***(Storm Depth $_{(Ft)}$)*** $\bullet$ Catchment Area $_{(Sq.\ Ft)}$

Refer to LA County Hydrology GIS Map
http://dpw.lacounty.gov/wrd/hydrologygis/
and
http://ladpw.org/wrd/publication/engineering/Final_Report-Probability_Analysis_of_85th_Percentile_24-hr_Rainfall1.pdf

From Example, 1.1 inch > 0.75 inch, use
1.1 inch (0.91)Design Storm:

A_I = 1.0 acres

A_P = 0.15 acres

$V_M\ (ft^3) = (\ 0.091\ ft\ ) \bullet$ Catchment Area $_{(in\ ft^2)}$

$$Catchment\ area\ (ft^2) = (impervious\ area \bullet 0.9) + [(pervious\ area + undeveloped\ area) \bullet 0.1]$$

$$Catchment\ area\ (ft^2) = 43{,}560\ ft^2 \bullet [(1\ ac \bullet 0.9) + [(0.15\ ac) \bullet 0.1] = 39{,}857.4\ ft^2]$$

$V_M\ (ft^3) = (\ 0.091\ ft\ ) \bullet 39{,}857.4\ ft^2$

V_M = 3,627 ft^3 (verify results with Hydrocalc results)

BMP TYPE AND SIZE

10. List the BMP Type(s) to be used in managing the calculated V_m, and size it per the design criteria listen in Section 4.

    The following examples have been provided as a reference:

    Infiltration BMPs:
    - Infiltration Trench
    - Dry Well
    - Infiltration Basin

    Capture and Use
    - Rain Tanks
    - Above / Below Grade Cisterns

    Biofiltration
    - Vegetated Swale
    - Planter Box
    - Biofiltration with underdrain

Buena Vista (85th Percentile)
Water Quality Treatment Calculation

TOTAL Area (A)	342,678	ft^2
Impervious Area (A_I)	248,746	ft^2
Undeveloped Area (A_U)	0	ft^2
Pervious Area (A_p)	93,932	ft^2
Impervious Area (%)	73	%
85th Percentile or 0.75 inch (P)	1.00	in
V_m = (P/12 ft) x [(A_I)(0.9)+(A_p+A_u)(0.1)] =	**19,439**	**ft^3**

V_{DESIGN} = V_m	**19,439**	**ft^3**
$V_{BIOFILTRATION\ DESIGN}$ = 1.5 x V_m	**29,159**	**ft^3**

Project: Buena Vista (Capture and Use)

Harvest and Reuse Calculations (as it relates to Water Quality volume holding and drawdown time)

Legend:	Designer Inputs	

Site Charateristics:

Total Site Area	7.87	acres
% Impervious	0.73	
Impervious Area	5.72	acres
Pervious Area	2.15	acres
Total Site Irrigated Area	93,932	SF

Min REQUIRED	21,768 SF
% Covered	432 %

Refer to LA Irrigation Guidelines:

Eto Wet Season (Oct-April)	21.7	Eto(wet)	<--Los Angeles (See COLA doc Appendix F)
Average Eto Wet Season	3.1	Eto(wet-avg)	
*Planting Factor	0.4	for moderate water use plants (check ranges in guidelines)	
Irrigation Efficiency	0.81	(IE) Min. value to be used	low = 0.0 to 0.3
			high = 0.7 to 1.0

Step 1: Calculate Water quality volume(SWQDv)- Use LID Hydrocalc

SWQDv =	19,439	CF
SWQDv =	145,402	Gallons

Step 2: Determine Planter Factor (PF)

PF = Planting Factor x Irrigated Area

PF =	37,573	SF

Step 3: Determine 7 month (Oct 1-April 30) Wet Season Estimated Total Water Use (ETWUwet)

ETWUwet= Eto(wet) x 1ft/ 12in x 7.48 gal/cf x PF / IE

ETWUwet=	627,435	gallons

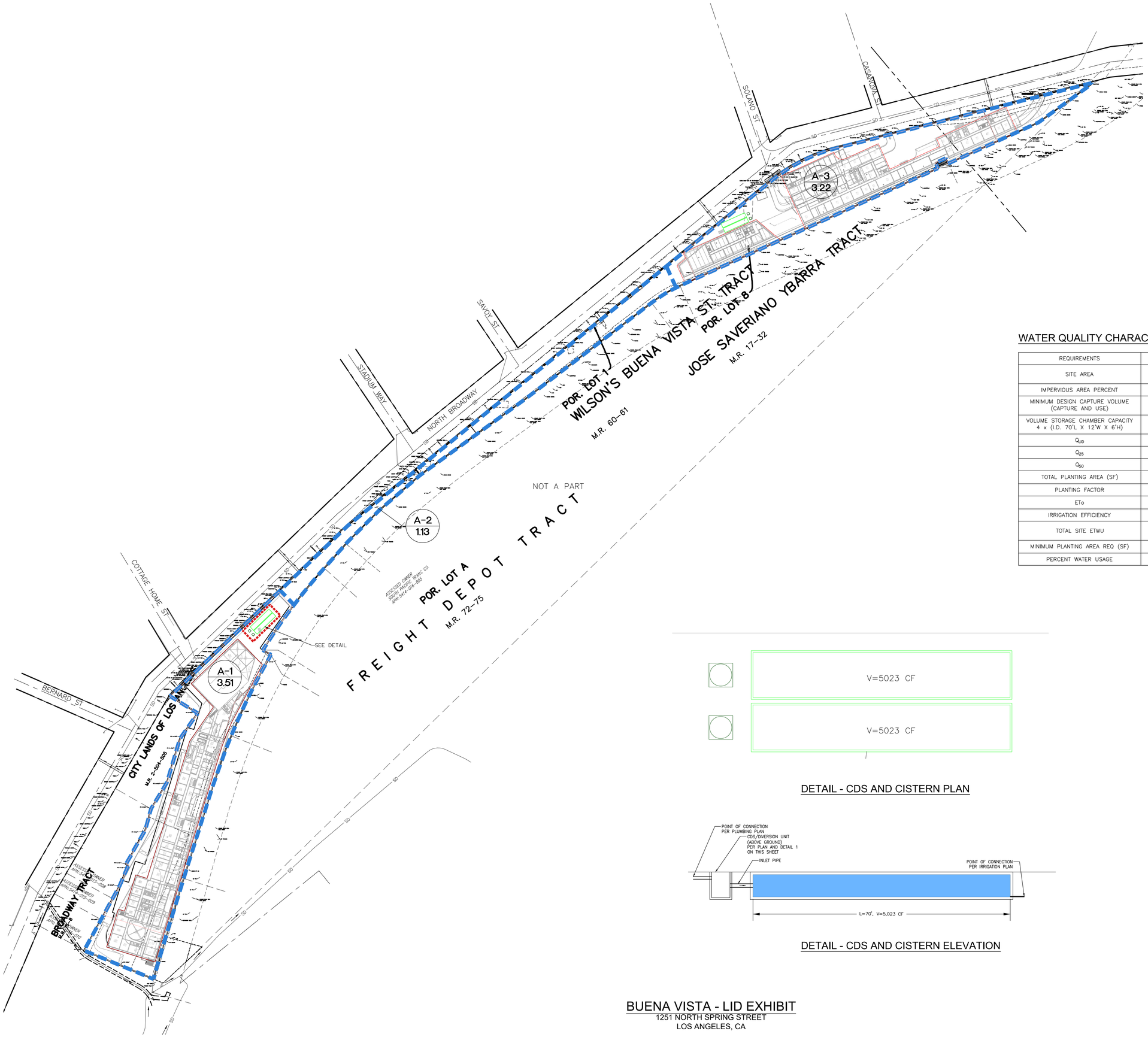
Step 4: Determine if Captured Volume is Equal of Less then Irrigation Demand (ETWUwet)

Is SWQDv < or = ETWUwet

SWQDv =	145,402	Gallons
ETWUwet=	627,435	Gallons
	ETWUwet > SWQDv	

LEGEND:

LID BOUNDARY LINE



WATER QUALITY CHARACTERISTICS

REQUIREMENTS	A-1	A-2	A-3	TOTAL
SITE AREA	3.51	1.13	3.22	7.866 AC
IMPERVIOUS AREA PERCENT	91	5	81	75
MINIMUM DESIGN CAPTURE VOLUME (CAPTURE AND USE)	19,967 C.F. (149,364 GAL)			
VOLUME STORAGE CHAMBER CAPACITY 4 x (I.D. 70'L X 12'W X 6'H)	20,090 C.F. (150,273 GAL)			
Q_{LID}	0.65	0.03	0.53	1.21
Q_{25}	6.70	1.98	5.53	14.21
Q_{50}	7.98	2.50	7.04	17.52
TOTAL PLANTING AREA (SF)	13,139	46,762	26,689	86,590
PLANTING FACTOR	0.4			
ETo	21.7			
IRRIGATION EFFICIENCY	0.81			
TOTAL SITE ETWU	77,326 C.F. (578,393 GAL)			
MINIMUM PLANTING AREA REQ (SF)	22,439			
PERCENT WATER USAGE	388			

DETAIL - CDS AND CISTERN PLAN

DETAIL - CDS AND CISTERN ELEVATION

N

100' 0' 50' 100' 200'

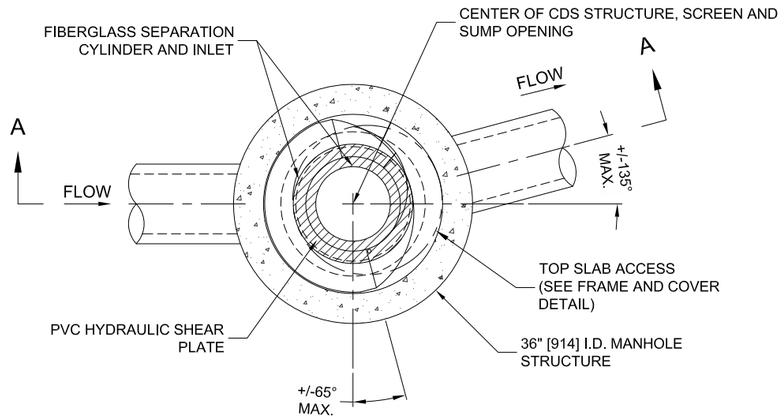
SCALE: 1" = 100'

BUENA VISTA - LID EXHIBIT

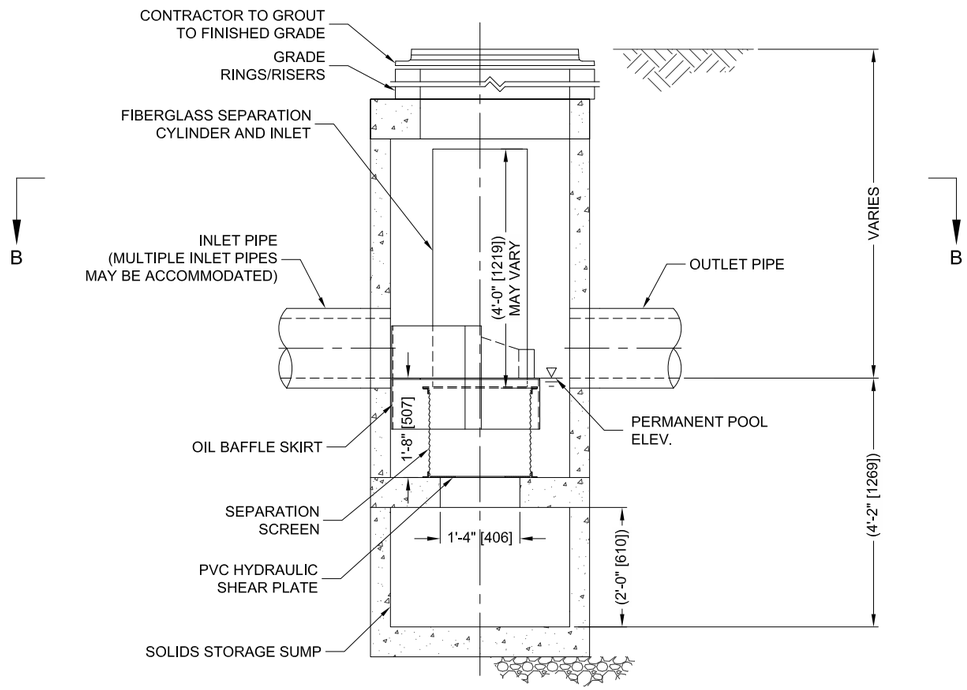
1251 NORTH SPRING STREET
LOS ANGELES, CA

FUSCOE ENGINEERING
full circle thinking
600 WILSHIRE BLVD., STE. 1470, LOS ANGELES, CA 90017
PHONE: 213.988.8802 FAX: 213.988.8803

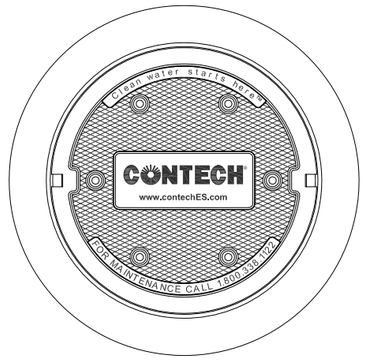
C:\PROJECTS\1360\DOCS\EXHIBITS\1360-002-P001.mxh - LID.DWG [12-20-24 4:12:58PM] Plotted By: Skewjone



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

CDS1515-3-C DESIGN NOTES

CDS1515-3-C RATED TREATMENT CAPACITY IS 0.50 [14.16 L/s] CFS, OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 6.0 [170 L/s] CFS. IF THE SITE CONDITIONS EXCEED 6.0 [170 L/s] CFS, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO..
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,798,848;6,641,720;6,511,595 &581,793; RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS1515-3-C ONLINE CDS STANDARD DETAIL

I:\COMMON\CAD\TREATMENT\22 CDS\40 STANDARD DRAWINGS\ONLINE (CDS-C)\DWG\CDS1515-3-C-DTL.DWG 2/27/2017 11:46 AM

divert, and convey offsite drainage through or around a site to prevent flooding or erosion that might otherwise occur.

4.3 CAPTURE AND USE FEASIBILITY SCREENING

Capture and use, commonly referred to as rainwater harvesting, collects and stores stormwater for later use, thereby offsetting potable water demand and reducing pollutant loading to the storm drain system, therefore sufficient landscaped area with appropriate water demand is needed for the captured runoff to be directed to. Partial capture and use can also be achieved as part of a treatment train by directing the overflow to a bioretention system to provide additional volume reduction and water quality treatment in instances where the quantity of runoff from a storm event exceeds the volume of the collection tank.

In the City of Los Angeles, the use of collected stormwater will primarily be limited to irrigation of landscaped surfaces. However, as new guidelines and guidance becomes available the potential for other uses of collected stormwater will be considered. Capture and use BMPs that are designed with the intent to use captured stormwater for indoor or consumptive purposes will be reviewed on a case-by-case basis to ensure that all treatment, plumbing, and Building and Safety codes are met.

Assessing Site Capture and Use Feasibility

As with infiltration BMPs, assessing a site's potential for implementation of capture and use BMPs requires both the review of existing information and the collection of site-specific measurements. Available information regarding the site's landscaped area should be reviewed as discussed below. In addition, human health concerns should be prioritized, particularly with regards to vector control issues arising from the addition of standing water on site.

Landscaped Area Assessment

To determine a site's feasibility for capture and use BMPs, the Estimated Total Water Usage (ETWU) for irrigation from October 1 – April 30 must be greater than or equal to the volume of water produced by the stormwater quality design storm event (i.e. $ETWU_{7\text{ - month}} \geq Vm$).

Los Angeles County Department of Public Health Requirements

Projects that are implementing rainfall or urban runoff capture and distribution systems must obtain approval from the County of Los Angeles, Department of Public Health. See Appendix J for the Policy and Operation Manual.

Vector Control Considerations

A vector is any insect, arthropod, rodent, or other animal that is capable of harboring or transmitting a causative agent of human disease. In the City of Los Angeles, the most significant vector population related to stormwater is mosquitoes.

Vector sources occur where conditions provide habitat suitable for breeding, particularly any source of standing water. This means that stormwater BMPs, especially those of the capture and use type, can be breeding grounds for mosquitoes and other vectors resulting in adverse public health effects related to vectors and disease transmission. Because of this, efforts shall be made to design capture and use BMPs that do not facilitate the breeding of vectors. Vectors should be considered during the preparation of stormwater management and maintenance plans and during preconstruction planning to avoid creating possible public health hazards.

Oversized capture and use BMPs designed to hold captured stormwater for longer than 72 hour periods will require additional treatment such as filtration or disinfection to protect the collection tanks from fouling, to prevent the breeding of vectors, and/or to improve the quality of water for reuse applications. These BMPs must have appropriate vector control measures incorporated into the design of the system to exclude vector access and breeding (i.e., observation access for vector inspection and treatment). They should be approved by the County of Los Angeles Department of Public Health. These scenarios will be reviewed on a case-by-case basis.

If vector breeding is taking place at a site as a result of contained stormwater or inadequately maintained BMPs, the Greater Los Angeles County Vector Control District has the ability to fine site owners for violating the California Health and Safety Code (Section 2060 – 2067).

	Category 1 Screening (Feasible)	**Category 2 Screening (Potentially Feasible)**	**Category 3 Screening (Infeasible)**
Description	1. Underlying Groundwater ☐ Depth of bottom of infiltration facility to observed groundwater is > 10 ft 2. Site Soils ☐ Infiltration rate (K_{sat}) is > 0.5 in/hr ☐ Geotechnical hazards are not a potential near the site 3. Site Surroundings ☐ Buildings or structures are at least 25 ft away from the potential infiltration BMP ☐ Site is not located within the designated hillside grading area. ☐ No continuous presence of dry weather flows	1. Underlying Groundwater ☐ Depth from bottom of infiltration facility to observed groundwater is ≤ 10 ft ☐ Unconfined aquifer is present with beneficial uses that may be impaired by infiltration. Full treatment required if this is the case ☐ Groundwater is known to be polluted. Infiltration must be determined to be beneficial 2. Site Soils ☐ Infiltration rate is ≤ 0.5 in/hr but potential connectivity to higher K_{sat} soils is feasible ☐ Geotechnical hazards such as liquefaction are a potential near the site 3. Site Surroundings ☐ Buildings or structures are within 10 to 25 ft of the potential infiltration BMP ☐ High-risk areas such as service/gas stations, truck stops, and heavy industrial sites. Full treatment is required if this is the case, or high-risk areas must be separate from stormwater runoff mingling	1. Underlying Groundwater ☐ Depth from bottom of infiltration facility to observed groundwater is ≤ 5 ft ☐ Sites with soil and/or groundwater contamination** 2. Site Soils ☐ Infiltration rate is ≤ 0.3 in/hr and connectivity to higher K_{sat} soils is infeasible ☐ Building sites designated "Landslide" or "Hillside Grading" areas as specified by the Department of City Planning's Zone Information and Map Access System (ZIMAS) ☐ Geotechnical hazards such as liquefaction, collapsible soils, or expansive soils exist 3. Site Surroundings ☐ Site is located on a fill site ☐ Site is located on or within 50 feet upgradient of a steep slope (20% or greater) and has not been approved by a professional geotechnical engineer or geologist
Instructions	If all of the above boxes are checked, they shall be confirmed by a site-specific geotechnical investigation report and/or hydrologic analysis conducted and certified by a State of California registered professional geotechnical engineer or geologist, verifying that infiltration BMPs are feasible at the site*. Otherwise, proceed to Category 2 screening.	If all of the above boxes are checked, or if corresponding boxes in Category 1 are checked in combination with the above boxes, a site-specific geotechnical investigation report and/or hydrologic analysis conducted and certified by a State of California registered professional geotechnical engineer or geologist shall be carried out to approve infiltration measures*. Otherwise, proceed to Category 3 screening.	If any of the above boxes are checked, a site-specific geotechnical investigation report and/or hydrologic analysis conducted and certified by a State of California registered professional geotechnical engineer or geologist shall be submitted to prove infiltration practices are not feasible. *

Table 4.1: Infiltration Feasibility Screening

* Geotechnical Reports shall be approved by LADBS Grading Division. See Geotechnical Report Requirements herein.

** The presence of soil and/or groundwater contamination and/or the presence of existing or removed underground storage tanks shall be documented by CEQA or NEPA environmental reports, approved geotechnical reports, permits on file with the City, or a review of the State of California's Geotracker website.

Design for: Capture & Use

Givens:

- V_{Design} = 3,627 ft^3 *(from previous step)*
- 0.15 acres of pervious area
- Medium Planting Type → Planting Factor = 0.4

i. Determine the design volume in gallons:

$$V_{Design}(gal) = 3{,}627\ ft^3 \bullet 7.48\ {gal}/{ft^3} = 27{,}130\ gal$$

ii. Determine planting area (ft^2) within project limits:

$$Planting\ \ Area\ \ (ft^2) = 0.15\ \ ac\ \bullet\ 43{,}560\ {ft^2}/{ac} = \ 6{,}534\ \ ft^2$$

iii. Determine Planter Factor, PF, (ft^2):
(Planting factor may vary based on landscape design and plant types. Coordinate with Landscape Architect.)

$$Planter\ \ Factor\ \ (ft^2) = 0.4\ \bullet\ 6{,}534\ \ ft^2 = \ 2{,}614\ \ ft^2$$

iv. Determine the 7- month (Oct 1 – April 30) Estimated Total Water Use (ETWU):

$$ETWU_{(7-month)} = ET_7\ \bullet\ 0.62 \bullet\ PF$$

$$ETWU_{(7-month)} = 21.7\ \bullet\ 0.62 \bullet\ 2{,}614\ \ ft^2 = 35{,}163\ \ gal$$

v. Verify ETWU $_{(7\text{-month})}$ is greater than or equal to the $V_{Designed}$:

$$ETWU_{(7-month))}\ = 35{,}163\ \ gal\ \ \geq\ \ V_{Design}\ \ (gal) = 3{,}627\ \ gal$$

∴ CAPTURE & USE IS FEASIABLE

Appendix B

Example Calculations

The example calculations below are hypothetical to demonstrate proper use of the equations and do not represent an existing and/or planned landscape project.

The ETo values used in these calculations are from the Reference Evapotranspiration Table in Appendix C, for planning purposes only. For actual irrigation scheduling, automatic irrigation controllers are required and shall use current reference evapotranspiration data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

Example MAWA calculation

A hypothetical landscape project in Fresno, CA with an irrigated landscape area of 50,000 square feet without any Special Landscape Area (SLA= 0, no edible plants, recreational areas, or use of recycled water). To calculate MAWA, the annual reference evapotranspiration value for Fresno is 51.1 inches as listed in the Reference Evapotranspiration Table in Appendix C.

MAWA = (ETo) (0.62) [(0.7 x LA) + (0.3 x SLA)]
MAWA = Maximum Applied Water Allowance (gallons per year)
ETo = Reference Evapotranspiration (inches per year)
0.62 = Conversion Factor (to gallons)
0.7 = ET Adjustment Factor (ETAF)
LA = Landscape Area including SLA (square feet)
0.3 = Additional Water Allowance for SLA
SLA = Special Landscape Area (square feet)

MAWA = (51.1 inches) (0.62) [(0.7 x 50,000 square feet) + (0.3 x 0)]
= 1,108,870 gallons per year
To convert from gallons per year to hundred-cubic-feet per year:
= 1,108,870/748 = 1,482 hundred-cubic-feet per year
(100 cubic feet = 748 gallons)

(2) In this next hypothetical example, the landscape project in Fresno, CA has the same ETo value of 51.1 inches and a total landscape area of 50,000 square feet. Within the 50,000 square foot project, there is now a 2,000 square foot area planted with edible plants. This 2,000 square foot area is considered to be a Special Landscape Area.
MAWA = (ETo) (0.62) [(0.7 x LA) + (0.3 x SLA)]
MAWA = (51.1 inches) (0.62) [(0.7 x 50,000 square feet) + (0.3 x 2,000 square feet)]
= 31.68 x [35,000 + 600] gallons per year
= 31.68 x 35,600 gallons per year
=1,127,808 gallons per year or 1,508 hundred-cubic-feet per year

Example ETWU calculation

Landscape area is 50,000 square feet; plant water use type, plant factor, and hydrozone area are shown in the table below. The ETo value is 51.1 inches per year. There are no Special Landscape Areas (recreational area, area permanently and solely dedicated to edible plants, and area irrigated with recycled water) in this example.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	7,000	5,600
2	High	0.7	10,000	7,000
3	Medium	0.5	16,000	8,000
4	Low	0.3	7,000	2,100
5	Low	0.2	10,000	2,000
			Sum	24,700

*Plant Factor from WUCOLS

$$ETWU = (51.1)(0.62)\left(\frac{24{,}700}{0.71} + 0\right)$$

= 1,102,116 gallons per year
Compare ETWU with MAWA: For this example MAWA = (51.1) (0.62) [(0.7 x 50,000) + (0.3 x 0)]
= 1,108,870 gallons per year. The ETWU (1,102,116 gallons per year) is less than MAWA (1,108,870 gallons per year). In this example, the water budget complies with the MAWA.

(2) Example ETWU calculation: total landscape area is 50,000 square feet, 2,000 square feet of which is planted with edible plants. The edible plant area is considered a Special Landscape Area (SLA). The reference evapotranspiration value is 51.1 inches per year. The plant type, plant factor, and hydrozone area are shown in the table below.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	7,000	5,600
2	High	0.7	9,000	6,300
3	Medium	0.5	15,000	7,500
4	Low	0.3	7,000	2,100
5	Low	0.2	10,000	2,000
			Sum	23,500
6	SLA	1.0	2,000	2,000

*Plant Factor from WUCOLS

$$ETWU = (51.1)(0.62)\left(\frac{23{,}500}{0.71} + 2{,}000\right)$$

= (31.68) (33,099 + 2,000)
= 1,111,936 gallons per year

Compare ETWU with MAWA. For this example:
MAWA = (51.1) (0.62) [(0.7 x 50,000) + (0.3 x 2,000)]
= 31.68 x [35,000 + 600]
= 31.68 x 35,600
=1,127,808 gallons per year

The ETWU (1,111,936 gallons per year) is less than MAWA (1,127,808 gallons per year). For this example, the water budget complies with the MAWA.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

Appendix C

Reference Evapotranspiration (ETo) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
LOS ANGELES													
Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0	2.6	2.0	51.7
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0	2.7	2.1	51.3
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2	2.2	1.7	46.3
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3	2.2	1.8	43.7
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2	2.6	2.0	53.1
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6	2.4	1.1	52.4
Hollywood Hills	2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2	3.7	2.8	2.1	52.8
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6	2.8	1.7	71.1
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8	1.8	1.5	39.7
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	1.9	50.1
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0	50.2
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2	2.6	2.0	52.3
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0	2.6	1.6	59.9
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8	2.4	2.0	42.6
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9	2.6	2.0	52.0
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4	2.4	2.2	44.2

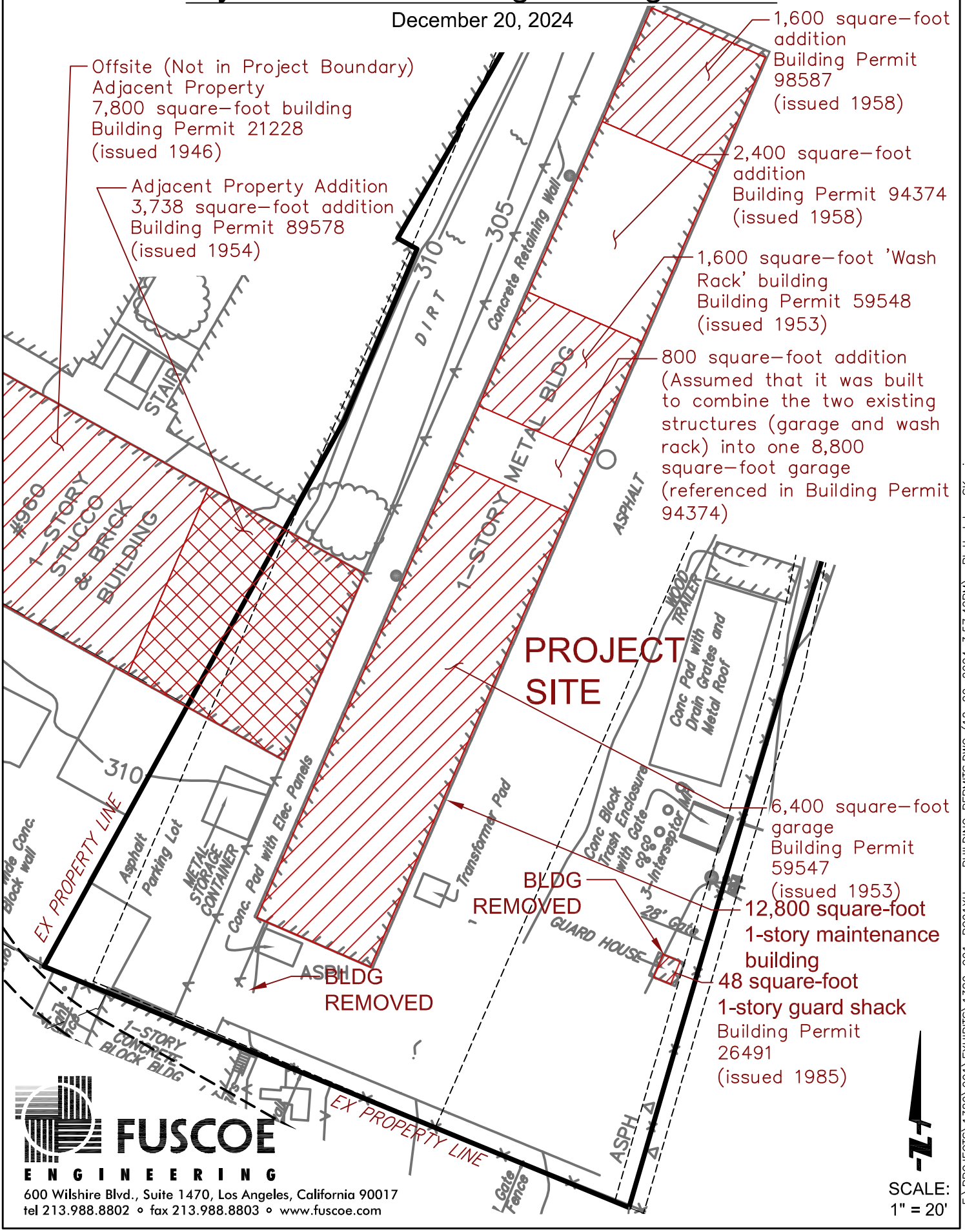
* The values in this table were derived from:
1) California Irrigation Management Information System (CIMIS);
2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and
3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources
(1987) Bulletin 1922, 4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426

ATTACHMENT L

EXISTING BUILDING EXHIBIT AND PERMITS

Elysian Park - Existing Building Exhibit

December 20, 2024



FUSCOE ENGINEERING
600 Wilshire Blvd., Suite 1470, Los Angeles, California 90017
tel 213.988.8802 ∘ fax 213.988.8803 ∘ www.fuscoe.com

SCALE: 1" = 20'

F:\PROJECTS\1380\001\EXHIBITS\1380-001-PG01XH - BUILDING PERMITS.DWG (12-20-2024 3:57:42PM) Plotted by: SKawjaree

1

ELECT. DIV.	
Plns. not req'd.	
Appr. not req'd. before bldg. permit	
Plns. filed	

APPLICATION TO ERECT A NEW BUILDING AND FOR A Certificate of Occupancy

Form B-1
CITY OF LOS ANGELES
DEPARTMENT OF
BUILDING AND SAFETY
BUILDING DIVISION

Lot No. "A"

Tract FREIGHT DEPOT TRACT MR 72-75

Location of Building 1251 NORTH SPRING STREET (House Number and Street)

Between what cross streets? LLEWELLYN & COLLEGE

Approved by City Engineer _____ Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building GARAGE (Store, Dwelling, Apartment House, Hotel or other purpose) Families 0 Rooms 5
2. Owner SOUTHERN PACIFIC RAILROAD COMPANY (Print Name) Phone STA. 2619 MICH 6161
3. Owner's Address 610 So. MAIN ST. P. O. LOS ANGELES 14
4. Certificated Architect W.F. MEANEY State License No. C-909 Phone
5. Licensed Engineeer NORMAN W. RIMMER State License No. 7398 Phone
6. Contractor OWNER State License No. Phone
7. Contractor's Address SAME Engr.
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 23,760 00
9. State how many buildings NOW on lot and give use of each. SEVERAL OFFICE AND SHOP BUILDINGS (Store, Dwelling, Apartment House, Hotel or other purpose)
10. Size of new building 160 x 40 No. Stories 1 Height to highest point 21' Size lot ACREAGE x

11. Material Exterior Walls STEEL Type of Roofing STEEL

12. For Accessory Buildings and similar structures
   (a) Footing: Width 2'8" Depth in Ground 21" Width of Wall 13"
   (b) Size of Studs RIGID FRAME Material of Floor CONCRETE
   (c) Size of Floor Joists CONCRETE Size of Rafters RIGID FRAME STEEL PURLINS

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Southern Pacific Railroad Company (Owner or Authorized Agent)

By W.R. Strang

DISTRICT OFFICE

10K

FOR DEPARTMENT USE ONLY

PLAN CHECKING

Valuation $ 23,760 — 40 — $

Fee $ $

Investigation Fee $
Bldg. Permit Fee $ 71 00
Total $

TYPE	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Ft. rear alley / Ft. side alley	Clerk
IV	64					
GROUP	Plans and Specifications checked	Zone	Fire District No.	District Map No.		
F-1		A-1	2	125-213		
Fee Plans Fee	Corrections Verified	Bldg. Line Ft.	Street Widening Ft.	Application checked and approved		
Filed with	Plans, Specifications and Application rechecked and approved.	Continuous Inspection	SPRINKLER Specified—Required Valuation Included Yes— No	Inspector		

GRADING

DO NOT WRITE BELOW THIS LINE

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	APR 28				
Supplemental Plan Checking					
Building Permit			[redacted]		

NORTH SPRING STREET

SHED "A" SOU. PAC. FREIGHT SHED

HOUSE

B & B YARDS

PROP ROADS

160' PROP GARAGE

PROP WASH RACK

CAPITOL MILLING CO.

DIV N

DRAWING

SHEET

— LEGEND —

—— RED - PROPOSED NEW WORK

—— YELLOW - REMOVE OR RELOCATE

[RT] TINT - PROPOSED ROADWAY

—— - - —— SOUTHERN PACIFIC LINES

SOUTHERN PACIFIC COMPANY

PACIFIC LINES

LOS ANGELES

(RIVER STATION)

LOCATION OF PROPOSED

M. OF W. BUILDING

SCALE 100 FEET WAYBILL TO

DRAWER

1

APPLICATION TO ERECT A NEW BUILDING AND FOR A Certificate of Occupancy

Form B-1

CITY OF LOS ANGELES
DEPARTMENT
OF
BUILDING AND SAFETY

BUILDING DIVISION

Lot No. "A"

Tract FREIGHT DEPOT TRACT MR 72-75

Location of Building 1251 NORTH SPRING STREET
(House Number and Street)

Between what cross streets? LLEWELLYN & COLLEGE STREETS

Approved by City Engineer

Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building WASH RACK (Store, Dwelling, Apartment House, Hotel or other purpose) Families Rooms
2. Owner SOUTHERN PACIFIC RAILROAD COMPANY (Print Name) Phone STA. 2619 MICH. 6161
3. Owner's Address 610 So. MAIN STREET P. O. LOS ANGELES 14
4. Certificated Architect W. F. MEANEY State License No. C-909 Phone
5. Licensed Engineeer NORMAN W. RIHMER State License No. 7398 Phone
6. Contractor OWNER State License No. Phone
7. Contractor's Address SAME Engr'g
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 4800.00
9. State how many buildings NOW on lot and give use of each. SEVERAL OFFICE AND SHED BUILDINGS (Store, Dwelling, Apartment House, Hotel or other purpose)
10. Size of new building 40' x 40' No. Stories 1 Height to highest point 21 Size lot ACREAGE x
11. Material Exterior Walls STEEL Type of Roofing STEEL

12. For Accessory Buildings and similar structures
(a) Footing: Width 2'8" Depth in Ground 21" Width of Wall 13"
(b) Size of Studs RIGID FRAME Material of Floor CONCRETE
(c) Size of Floor Joists CONCRETE Size of Rafters RIGID FRAME STEEL PURLINS

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Southern Pacific Railroad Company
(Owner or Authorized Agent)

By W B Herring

DISTRICT OFFICE

FOR DEPARTMENT USE ONLY

PLAN CHECKING

Valuation $ 28560 — 40 —	$				Investigation Fee $	
Fee $	$				Bldg. Permit Fee $ 17.40	
					Total $	
TYPE V	Maximum No. Occupants 16	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size very nar.	Ft. rear alley / Ft. side alley	Clerk Ward
GROUP 6-1	Plans and Specifications checked	Zone M-3	Fire District No. 2	District Map No. 135-213		
For Plans Fee —	Corrections Verified	Bldg. Line — Ft.	Street Widening / Ft.	Application checked and approved 53 Clerk		
Filed with —	Plans, Specifications and Application rechecked and approved.	Continuous Inspection	SPRINKLER Specified Required Valuation Included Yes No	Inspector Downo l		

DO NOT WRITE BELOW THIS LINE

GRADING

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	APR 28		LA31580		
Supplemental Plan Checking					✓
Building Permit	JUN 2		LA60548		

NORTH SPRING STREET

SHED "A" SOU. PAC. FREIGHT SHED

CAPITOL MILLING CO.

PROP. GARAGE 160

PROP WASH RACK 40

DRAWING

SHEET

— LEGEND —

YELLOW - REMOVE FOR RELOCATION

TINT - PROPOSED ROADWAY

SOUTHERN PACIFIC COMPANY
PACIFIC LINES
LOS ANGELES
(RIVER STATION
...ON OF PROPOSED
M. of W BUILDING
...OF MAY ... TO
...

DRAWER

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

1. LEGAL LOT	BLK. A	TRACT Freight Depot Tr. M.R.72-75	DIST MAP 135-213
2. BUILDING ADDRESS 1251 N. Spring St.		APPROVED	ZONE M-3-2
3. BETWEEN CROSS STREETS Cullen St. AND Rondout St.			FIRE DIST II - 80'
4. PRESENT USE OF BUILDING Car Repair Shop	NEW USE OF BUILDING Same		INSIDE KEY Thru Lot
5. OWNER SouthernPacific Co.	PHONE MI 6161 Ext. 222778		COR. LOT REV. COR.
6. OWNER'S ADDRESS 610 S. Main St.	P O. L. A.	ZONE 14	LOT SIZE Acreage
7. CERT ARCH	STATE LICENSE	PHONE	
8. LIC. ENGR. Thomas Mullen	STATE LICENSE C. E6547	PHONE MI 6161 Ext. 22778	REAR ALLEY SIDE ALLEY
9. CONTRACTOR Owner	STATE LICENSE	PHONE	BLDG. LINE
10. CONTRACTOR'S ADDRESS	P O.	ZONE	AFFIDAVITS

11. SIZE OF EXISTING BLDG.	STORIES	HEIGHT	NO. OF EXISTING BUILDINGS ON LOT AND USE	BLDG. AREA
220 x 40	1	15		2400 / 11209

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ STUCCO ☒ METAL ☐ BRICK ☐ CONC. BLOCK ☐ CONCRETE
ROOF CONST. ☐ WOOD ☐ CONC. ☒ STEEL ☐ OTHER
ROOFING Steel
SPRINKLERS REQ'D. SPECIFIED

3 1251 ~~S.~~ Spring St.

DISTRICT OFFICE L.A.

13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 14900-			DWELL. UNITS
14. SIZE OF ADDITION 50 40 X 60	STORIES 1	HEIGHT 20'5 3/4"	VALUATION APPROVED Rose
15. NEW WORK: EXT. WALLS steel	ROOFING galv.		APPLICATION CHECKED Raymond A
C. OF O. ISSUED mc			PLANS CHECKED Rose
			CORRECTIONS VERIFIED
			PLANS APPROVED Rose
			APPLICATION APPROVED Rose

PARKING SPACES
GUEST ROOMS
FILE WITH
CONT. INSP Lic. Fab.
Grading-No Plan
INSPECTOR

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

SIGNED W R Mullen

This Form When Properly Validated is a Permit to Do the Work Described.

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	B.M.	I.F.	O.S.	C/O
IV	F-1	24 Addl	$25.00		47 70			

VALIDATION

CASHIER'S USE ONLY

FEB-14-58	10332	A — 2 CK	25.00
LA94374			
FEB-28-58	13514	A — 1 CK	47.70

Form B-3 N-1925 **INSTRUCTIONS:** 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

Oversize Bldg. 11408

LEGAL DESCRIPTION

LOT 'A' FREIGHT DEPOT TRACT

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

LOT 'A' DEPOT TRACT
-75-
FREIGHT

N

W

B. & B.

PARKING AREA

PROVIDE PARKING FOR 30 CARS

40' — 60'

220'

30

NEW WORK

EXISTING MOTOR CAR REPAIR SHOP

CAPITOL MILLING Co.

SOME RETAINING WALL

FUTURE 40' EXTENSION

LOCATION PLAN
SCALE · 1" = 100'

BROADWAY

NEW WORK

S.P PROPERTY LINES

R Tint 40' YARDS

3

APPLICATION TO ALTER - REPAIR - DEMOLISH
AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

1. LEGAL LOT: Frac. A	BLK.	TRACT: Freight Depoft Tract	DIST MAP: 135-213
2. BUILDING ADDRESS: 1251 N. Spring St. By Form B 57		APPROVED: BS	ZONE: M-3-2
3. BETWEEN CROSS STREETS: Rondout St. AND College St.			FIRE DIST: II 125/8
4. PRESENT USE OF BUILDING: Auto Repair	NEW USE OF BUILDING: Same		INSIDE X thru KEY
5. OWNER: Southern Pacific Co.	PHONE: MI 6161 Ext 22633		COR. LOT / REV. COR.
6. OWNER'S ADDRESS: 65 Market St.	P O. San Francisco	ZONE	LOT SIZE: Acreage 18.69 Ac.
7. CERT ARCH	STATE LICENSE	PHONE	
8. LIC. ENGR: T. F. Fullen	STATE LICENSE: CE 6547	PHONE: MI 6161 Ext 22633	REAR ALLEY / SIDE ALLEY
9. CONTRACTOR: Owner	STATE LICENSE	PHONE	BLDG. LINE
10. CONTRACTOR'S ADDRESS	P. O.	ZONE	OSB 11408 OSB 11484

11. SIZE OF EXISTING BLDG.: 40'x280'	STORIES: 1	HEIGHT: 14'	NO. OF EXISTING BUILDINGS ON LOT AND USE: 25 -		BLDG. AREA: 1600 11200
12. MATERIAL EXT. WALLS: ☐ WOOD ☐ STUCCO ☒ METAL ☐ BRICK ☐ CONC. BLOCK ☐ CONCRETE	ROOF CONST. ☐ WOOD ☐ CONC. ☒ STEEL ☐ OTHER	ROOFING	SPRINKLERS REQ'D. SPECIFIED		
3 1251 ~~1261~~ N. Spring St. By FORM B 57			DISTRICT OFFICE: L.A. 1		
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 7400					DWELL UNITS
14. SIZE OF ADDITION: 40' x 40'	STORIES: 1	HEIGHT: 14'	VALUATION APPROVED		PARKING SPACES 13
15. NEW WORK: EXT. WALLS: steel	ROOFING: steel		APPLICATION CHECKED: Nelso *		GUEST ROOMS X
C. OF O. ISSUED: extending garage			PLANS CHECKED		FILE WITH
I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance. SIGNED: T. F. Fullen			CORRECTIONS VERIFIED		CONT. INSP
This Form When Properly Validated is a Permit to Do the Work Described.			PLANS APPROVED		
			APPLICATION APPROVED		INSPECTOR: Fulen

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	B.P.	I.F.	O.S.	C/O
IV	E-1	16 26	$15.00		25 22			

VALIDATION: LA98587

CASHIER'S USE ONLY

MAR-25-70	18583	A — 2 CK	15.00
APR-22-70	25039	C — 1 CK	25.20

Form B-3a 11-2389 INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

3

APPLICATION TO ALTER - REPAIR - DEMOLISH
AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

1. LEGAL LOT: Frac. A	BLK.	TRACT: Freight Deport Tract	DIST MAP: 135-213
2. BUILDING ADDRESS: 1251 N. Spring St.		APPROVED: BS	ZONE: M-3-2
3. BETWEEN CROSS STREETS: Rondout St. AND College St.			FIRE DIST: II 125/80
4. PRESENT USE OF BUILDING: Auto Repair	NEW USE OF BUILDING: Same		INSIDE X thru / KEY
5. OWNER: Southern Pacific Co.	PHONE: MI 6161 Ext 22633		COR. LOT / REV. COR.
6. OWNER'S ADDRESS: 65 Market St.	P O. San Francisco	ZONE	LOT SIZE: Acreage 48.69 Ac.
7. CERT ARCH	STATE LICENSE	PHONE	
8. LIC. ENGR: T. F. Mullen	STATE LICENSE: CE 6547	PHONE: MI 5761 Ext 22633	REAR ALLEY / SIDE ALLEY
9. CONTRACTOR: Owner	STATE LICENSE	PHONE	BLDG. LINE
10. CONTRACTOR'S ADDRESS	P. O.	ZONE	DATE: OSB 11408 OSB 11484

11. SIZE OF EXISTING BLDG.	STORIES	HEIGHT	NO. OF EXISTING BUILDINGS ON LOT AND USE	BLDG. AREA
40'x280'	1	14'	2 S —	1600 / 12800

12. MATERIAL: ☐ WOOD ☐ STUCCO ☒ METAL ☐ BRICK ☐ CONC. BLOCK ☐ CONCRETE — ROOF CONST.: ☐ WOOD ☒ STEEL ☐ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. / SPECIFIED

3 1251 N. Spring St. — DISTRICT OFFICE: L.A.

13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 7400 —

14. SIZE OF ADDITION: 40' x 40' — STORIES: 1 — HEIGHT: 14' — VALUATION APPROVED: [signature] — DWELL UNITS: X — PARKING SPACES: 13 Total

15. NEW WORK: EXT. WALLS: steel — ROOFING: steel — APPLICATION CHECKED: Nakao * — GUEST ROOMS: X

C. OF O. ISSUED: extending garage — PLANS CHECKED: [signature] — FILE WITH

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance. — CORRECTIONS VERIFIED: [redacted] — CONT. INSP

SIGNED [signature] — PLANS APPROVED: [signature]

This Form When Properly Validated is a Permit to Do the Work Described. — APPLICATION APPROVED: [signature] — INSPECTOR

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	B.P.	I.F.	O.S.	C/O
IV	F-1	10 28	$15.00		25 20			

VALIDATION: LA98587

CASHIER'S USE ONLY

MAR-25-58	18583	A — 2 CK	15.00
APR-22-58	25039	C — 1 CK	25.20

Form B-3a IV-2389 INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

LOT A FREIGHT DEPOT TRACT

ON LOT PLAN SHOWN ALL BUILDINGS ON LOT AND U. S. C. & G.

Form B-88—5M—Rev. 2-55

CITY OF LOS ANGELES
Department of Building and Safety

REQUEST FOR CHANGE OF ADDRESS

Date Apr. 29, 1958

To: G. E. MORRIS
Superintendent of Building

I hereby request the change of address on:

Building Permit Number LA 28587 Issued Apr. 22, 1958

From 128 N SPRING ST

To 125 N SPRING ST

( ) Change from one street to another street for corner lot.
(X) Change because of error on part of some city department.
( ) Change because of error on part of applicant (must be approved by Board of Building and Safety Commissioners).

W. R. Gollen
Owner, Contractor or Authorized Agent

610 S. Main St. Los Angeles
Address

CITY USE ONLY

LOT	BLOCK	TRACT
FRAC 4		FREIGHT DEPOT TRACT

BUREAU OF ENGINEERING APPROVAL
D. E. Backus
SR. OFF. ENGR. AIDE
DATE 4-29-58

APPLICATION CHECKED BY:
DATE 5-8-58

APPROVED:
DATE 5/9/58

N.S.

E

N

W

A DEPOT TRACT

T DEPOT TRACT

B-12-15

LOT

DEPOT

FREIGHT

TRACT

B. & B.

PARKING AREA

320'

40'

40'

PARKING AREA

EXISTING MOTOR CAR REPAIR SHOP

RETAINING WALL

PROPOSED 40' EXTENTION

BROADWAY

LOCATION PLAN
SCALE · 1" = 100'

NEW WORK

S.P. PROPERTY LINES

TINT 40' YARDS for OSB

WARD ST.

1251 N Spring St

Permit #: **08010 - 10000 - 03052**
Plan Check #: B08LA12403 Printed: 03/27/09 10:23 AM
Event Code:

Bldg-New
Commercial
Regular Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 03/25/2009

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
WILSON'S BUENA VISTA S		1		M R 60-61	136-5A217 160	5414 - 016 - 002

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 1
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.10
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Near Source Zone Distance - 0
Near Source Zone Distance - 5.4
Thomas Brothers Map Grid - 634-G2
Thomas Brothers Map Grid - 634-H1
Thomas Brothers Map Grid - 634-H2

ZONE(S): MR2-1 /

4. DOCUMENTS

ZI - ZI-1084 Chinatown Redevelopment
ZI - ZI-1117 MTA Project
ZI - ZI-2129 East Los Angeles State Ent
ZA - ZA-18552
ZA - ZA-1999-633-YV
ORD - ORD-164855-SA170
CRA - ZI 1084 CHINATOWN
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-1999-371-SPP
CPC - CPC-2000-1061-SPR
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-East Los Angeles State En
AFF - AF-00-0081163
AFF - OB-11408

5. CHECKLIST ITEMS

Special Inspect - Structural Observation

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s):
S R Partners — 737 Lamar St — LOS ANGELES CA 90031

Tenant:

Applicant: (Relationship: Agent for Owner)
Frank Martinez - — 750 E Green St — PASADENA, CA 91101 — (626) 449-7778

7.EXISTING USE

PROPOSED USE
(13) Office

8. DESCRIPTION OF WORK

NEW MODULAR office BUILDING, state approve coach. new accessible ramp and new foundation system for the state approved office . 72' x ' 60' and 12' x 60'. B occupancy type VB construction

LA Department of Building and Safety
LA 05 10 246273 03/27/09 10:27AM

9. # Bldgs on Site & Use:

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Eric Cabrera
OK for Cashier: Eric Cabrera
Signature:
DAS PC By: Ronald Allen
Coord. OK:
Date: 3/27/08

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $65,000
PC Valuation:

FINAL TOTAL Bldg-New	2,925.19	School District Commercial Area	2,030.40
Permit Fee Subtotal Bldg-New	676.81	Green Building Fee	3.00
Energy Surcharge		Permit Issuing Fee	0.00
Handicapped Access			
Plan Check Subtotal Bldg-New	49.73		
Off-hour Plan Check	24.87		
Plan Maintenance	13.54		
Fire Hydrant Refuse-To-Pay			
E.Q. Instrumentation	13.65		
O.S. Surcharge	15.57		
Sys. Surcharge	46.72		
Planning Surcharge	45.90		
Planning Surcharge Misc Fee	5.00		

Sewer Cap ID:
Total Bond(s) Due:

12. ATTACHMENTS

Plot Plan

For inspection requests, call toll-free (888) LA4BUILD (524-2845).
Outside LA County, call (213) 482-0000 for request inspections via www.ladbs.org. Or speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Within LA County, call (213) 473-3231.

For Cashier's Use Only W/O #: **81003052**

BUILDING PLAN CHECK	$676.81
BUILDING PLAN CHECK	$49.73
BUILDING PLAN CHECK	$24.87
MAINTENANCE	$13.54
EJ COMMERCIAL	$13.65
ONE STOP SURCH	$15.57
SYSTEMS DEVT FEE	$46.72
CITY PLANNING SURCH	$45.90
MISCELLANEOUS	$5.00
SCHOOL D-COMM	$2,030.40
GREEN BUILDING FEE	$3.00
BUILDING PLAN CHECK	$0.00

P08010100000030052FN

Total Due: $2,925.19
Check: $2,925.19

2009LA35847

* P 0 8 0 1 0 1 0 0 0 0 0 3 0 5 2 F N *

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

08010 - 10000 - 03052

(P) Floor Area (ZC): +4920 Sqft / 4920 Sqft
(P) Height (BC): +16 Feet / 16 Feet
(P) Height (ZC): +16 Feet / 16 Feet
(P) Length: +60 Feet / 60 Feet
(P) Length: +60 Feet / 60 Feet
(P) Stories: +1 Stories / 1 Stories
(P) Width: +72 Feet / 72 Feet
(P) Width: +12 Feet / 12 Feet
(P) B Occ. Group: +4920 Sqft / 4920 Sqft
(P) Provided Disabled for Bldg: +1 Stalls / 1 Stalls
(P) Provided Standard for Bldg: +9 Stalls / 9 Stalls
(P) Parking Req'd for Site (Auto+Bicycle): +33 Stalls / 3
(P) Provided Compact for Site: +6 Stalls / 6 Stalls
(P) Provided Disabled for Site: +2 Stalls / 2 Stalls
(P) Provided Standard for Site: +25 Stalls / 25 Stalls
(P) Total Provided Parking for Site: +33 Stalls / 33 Stalls
(P) Type V-B Construction
(P) Floor Construction - Raised Wood
(P) Roof Construction - Wood Frame/Sheathing
(P) Wall Construction - Wood Stud

14. APPLICATION COMMENTS

** Approved Seismic Gas Shut-Off Valve may be required. **

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(C) Modular Space Corporation	1200 Swedesford Road, Ms 362-05	Berwyn, PA 19312	B	763309	
(E) Dahmen, David Allen	2150 Bell Ave Ste 145,	Sacramento, CA 95838		C17918	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: **B** Lic. No: **763309** Contractor: **MODULAR SPACE CORPORATION**

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

(__) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(__) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **Ins. Co. of the State of PA** Policy Number: **1929246**

(__) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is avaiable at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead.

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).
Lender's name (if any):_____ Lender's address:_____

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Douglas Egge Sign: _____ Date: 3/27/09 ☒ Contractor ☐ Authorized Agent

1251 N Spring St

Permit Application #: **08010 - 10000 - 03052**

Bldg-New
Commercial
Plan Check

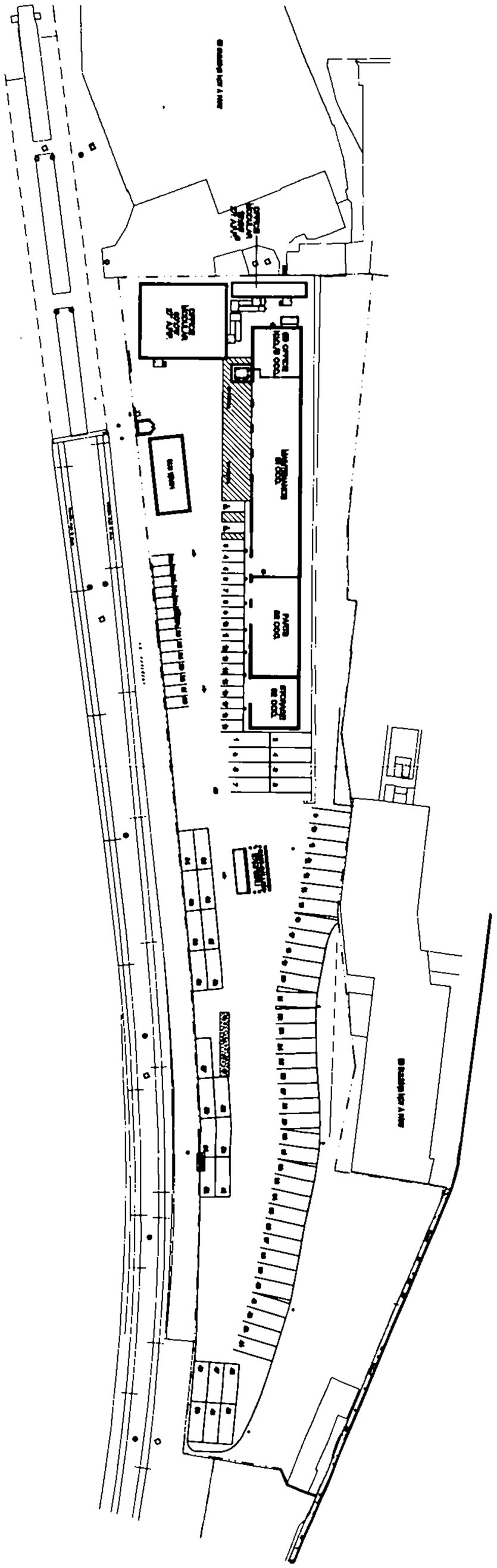
City of Los Angeles - Department of Building and Safety

Plan Check #: B08LA12403FO
Initiating Office: METRO

PLOT PLAN ATTACHMENT

Printed on: 03/25/09 13:26:18

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



COUNCIL DISTRICT: 1 INSPECTION DISTRICT: BIMSM1

PLOT PLAN ATTACHMENT

1 APPLICATION FOR INSPECTION

CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY

1 0 3 0 0 6 0 0 3 6 0

OF NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR.	LOT: Frac A	BLOCK:	TRACT: Freight Depot Tr	COUNCIL DISTRICT NO.: 9	DIST. MAP: 135-217 / CENSUS TRACT: 2061
2. PURPOSE OF BUILDING: 23) TEMPORARY GUARD SHACK					ZONE: M3-2
3. JOB ADDRESS: 1251 N. Spring Street					FIRE DIST.: TWO
4. BETWEEN CROSS STREETS: Rondout St		AND: Baker St			LOT TYPE: INT
5. OWNER'S NAME: SouthernPacific Trans Co.			PHONE		LOT SIZE: IRREG
6. OWNER'S ADDRESS: 610 S. Main St., L.A.		CITY	ZIP: 90014		
7. ENGINEER	BUS. LIC. NO.	ACTIVE STATE LIC. NO.	PHONE		ALLEY
8. ARCHITECT OR DESIGNER: George W. Fabrin	BUS. LIC. NO.	ACTIVE STATE LIC. NO.: C3301	PHONE		BLDG. LINE
9. ARCHITECT OR ENGINEER'S ADDRESS: one market St., San Francisco		CITY	ZIP		AFFIDAVITS: ZI145-82, OB11523,24, OB11408, OB 11484
10. CONTRACTOR: OWNER / Builder	BUS. LIC. NO.	ACTIVE STATE LIC. NO.	PHONE		
11. SIZE OF NEW BLDG. WIDTH 6 LENGTH 8	STORIES: 1	HEIGHT: 8	NO. OF EXISTING BUILDINGS ON LOT AND USE: 4-Industrial		
12. MATERIAL OF CONSTRUCTION →	EXT. WALLS: alum/mtl	ROOF: alum	FLOOR: metal		P.C. REQ'D
1 13. JOB ADDRESS: 1251 N. Spring St			STREET GUIDE		DISTRICT OFFICE: LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ 4800.00				SEISMIC STUDY ZONE
					GRADING / FLOOD
					HWY. DED. / CONS.

PURPOSE OF BUILDING: GUARD SHAK			STORIES	HEIGHT
TYPE: V-N	GROUP OCC.: B-2	FLOOR AREA: 48	PLANS CHECKED: Bill Statman	ZONED BY: B. STUTSMAN
DWELL UNITS: 0	MAX. OCC.	TOTAL	APPLICATION APPROVED: Bill Statman	FILE WITH
GUEST ROOMS: 0	PARKING REQ'D.: 0	PARKING PROVIDED: STD. 5 COMP.	INSPECTION ACTIVITY: COMB. / GEN. / MAJ. S. / CONS.	TYPIST: GC
				INSPECTOR

P.C.: 36.38	G.P.I.	CONT. INSP.	
S.P.C.	P.M.		
B.P.: 42.80	E.I.: .60	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.	
I.F.: 1.59	O.S.S.:		
O/S	S.O.S.S.		
DIST. OFFICE	C/O	SPRINKLERS	
P.C. NO.: 809388	F.H.	ENERGY: NV	

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

C 36.38 B-BC
C 42.80 BASE
C .60 EQ
C 1.59 OSS
264.92 SUBT
06128 4 12/09/85 81:27 CHTO

B & S B-1 (R 6.85)

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

15. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 12-6-85 Lic. Class C-10 Lic. No. 160617 Contractor's Signature _____

Contractor's Mailing Address 610 S. MAIN ST. L.A. CAL 90014

OWNER-BUILDER DECLARATION

16. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason _____

Date 12-3-85 Owner's Signature E.P. Abbe

WORKERS' COMPENSATION DECLARATION

17. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. _____ Insurance Company _____

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 12-6-85 Applicant's Signature E.P. Abbe

Applicant's Mailing Address 610 S. MAIN ST. L.A. CAL 90014

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

18. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 12-3-85 Applicant's Signature E.P. Abbe

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

19. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name _____

Lender's Address _____

20. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed E.P. Abbe ASST ENGR 12-6-85

(Owner or agent having property owner's consent) Position Date

1 1 3 0 0 6 0 0 3 6 1

1 APPLICATION TO ERECT A NEW BUILDING

Form B-1

CITY OF LOS ANGELES
DEPARTMENT
OF
BUILDING AND SAFETY

BUILDING DIVISION

Lot No. Portion of Lot 10

Tract Broadway Tract

Location of Building 960 North Broadway Los Angeles
(House Number and Street)

Approved by City Engineer

Between what cross streets College and Barnard

Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building Garage Automobile & Truck showroom Families Rooms
(Store, Dwelling, Apartment House, Hotel or other purpose)

2. Owner Gilbert Quan Phone NI 0971
(Print Name)

3. Owner's address 959 Yale Street, P.O. Los Angeles

4. Certificated Architect State License No. Phone

5. Licensed Engineer Robert H Gwynn State License No. 5515 Phone MU 7428

6. Contractor John Alexander State License No. 74898 Phone LA 7040

7. Contractor's address 2620 Zoe Avenue, Huntington Park, Cal.

8. VALUATION OF PROPOSED WORK — Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon. $ 35,000.00

9. State how many buildings NOW on lot and give use of each. None
(Store, Dwelling, Apartment House, Hotel, or other purpose)

10. Size of new building 65' x 120' No. Stories 1 Height to highest point 21' Size lot 145' x 160'

11. Material Exterior Walls concrete Type of Roofing composition

For Accessory Buildings and similar structures 12.

(a) Footing: Width 1'5" Depth in Ground 12" Width of Wall 8"

(b) Size of Studs Material of Floor concrete

(c) Size of Floor Joists x Size of Rafters 2 x 10

I hereby certify that to the best of my knowledge and belief the above application is correct and that the building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Gilbert Quan
(Owner or Authorized Agent)

Plans, Specifications and other data must be filed.

By

FOR DEPARTMENT USE ONLY

(1) PLAN CHECKING

Receipt No.

Valuation $ 35000

Fee Paid $ 70.00

(2) REINFORCED CONCRETE

Bbls. Cement

Tons of Reinforcing Steel

(3) The building referred to in this Application will be more than 100 feet from the Street

Sign here
(Owner or Authorized Agent)

TYPE	GROUP	Map No.	Double Lot	Key Lot	Lot Size	Ft. rear alley	Chkd.
3B	F1		Corner Lot	Corner Lot Keyed	145 x 160	Ft. side alley	

PERMIT No. 21228

PLANS

Plans and Specifications checked

Corrections Verified

Plans, Specifications and Application rechecked and approved.

E. H. Pierce

Zone 5

Fire District No. 2

Bldg. Line Ft. Street Widening Ft.

Application checked and approved JUL 3 - 1946

Clerk

Zoning Investigation

Inspection

District Map No.

Fee

Initial here when Permit is issued

JUL 3 1946

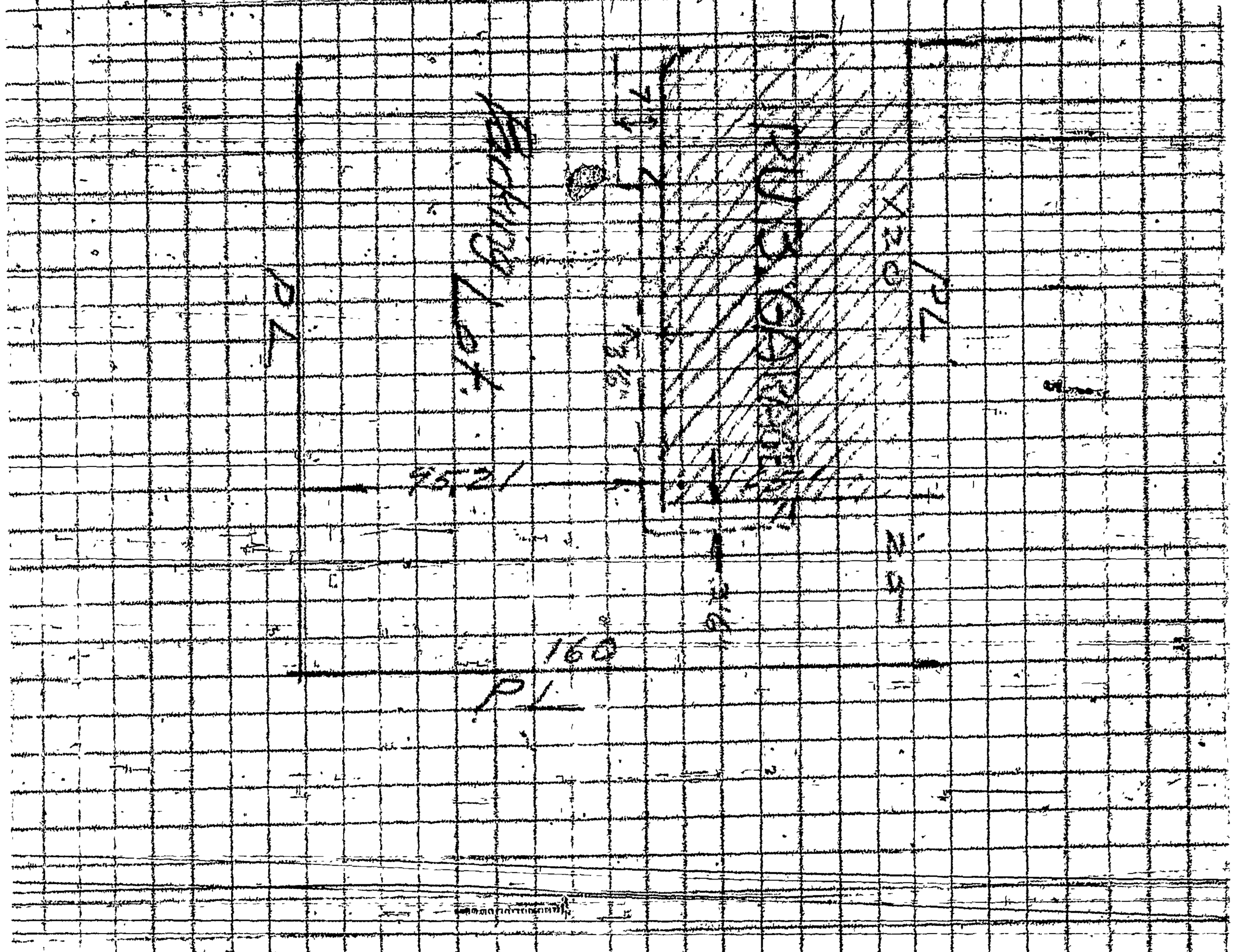
Inspector

6201

Not sufficient driveway information. See Engr. 3-31-4C
Room 555, City Hall

APPROVED FOR DRIVEWAYS

No Sidewalk



3

APPLICATION TO ALTER, REPAIR, or DEMOLISH AND FOR A Certificate of Occupancy

Form B-3

CITY OF LOS ANGELES
DEPARTMENT
OF
BUILDING AND SAFETY

BUILDING DIVISION

Lot No. .....

Tract .....

Location of Building 960 N. Broadway (House Number and Street) } Approved by City Engineer

Between what cross streets? College & Bair Island } ..... Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Dupl. Dwellings & Garages Fly Shop Families — Rooms —
(Store, Dwelling, Apartment House, Hotel or other purpose)
2. State how long building has been used for present occupancy New
3. Use of building AFTER alteration or moving Same Families — Rooms —
4. Owner Advance Neon Sign Co. (Print Name) Phone MA 6-6824
5. Owner's Address 960 N. Broadway P. O. Last
6. Certificated Architect None State License No. — Phone —
7. Licensed Engineer Paul Bateman State License No. 4787 Phone LU-1-2864
8. Contractor Owners State License No. Phone
9. Contractor's Address Same
10. VALUATION OF PROPOSED WORK { Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon. } $ 1000.00
11. State how many buildings NOW on lot and give use of each. } 1 - Flop
(Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 65 x 120 Number of stories high 1 Height to highest point 20'-0"
13. Material Exterior Walls Masonry (Wood, Steel or Masonry) Exterior framework (Wood or Steel)
14. Describe briefly all proposed construction and work:
Foundation Alterations - Per K-85603/54

NEW CONSTRUCTION

15. Size of Addition 57 1/2 Irr x 65 Size of Lot x Number of Stories when complete 1
16. Footing: Width Varies Depth in Ground 1'+ Width of Wall 8" Size of Floor Joists x
17. Size of Studs 2 x 4 Material of Floor Conc. Size of Rafters Varies x Type of Roofing Composition

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Advance Neon Sign Co.
(Owner or Authorized Agent)
By Paul Bateman

DISTRICT OFFICE .....

TYPE OF RECEIPT: Certificate of Occupancy; Occupancy Survey
DATE ISSUED:
TRACER NO. (M):
RECEIPT NO.:
CODE:
FEE PAID:

FOR DEPARTMENT USE ONLY

PLAN CHECKING	OCCUPANCY SURVEY	
Valuation $ #1000	Area of Bldg. ..... Sq. Ft.	Investigation Fee $ —
Fee $ 2.00	Fee $	Cert. of Occupancy Fee $ —
		Bldg. Permit Fee $ 6.—
		Total $ 6.—

TYPE V	Maximum No. Occupants N.C.	Inside Lot No. Corner Lot	Key Lot Corner Lot Keyed	Lot Size 173 160 x 183	Ft. rear alley Ft. side alley / Clerk
GROUP G-1 E-1	Plans and Specifications checked RR Hoffman	Zone M-3	Fire District No. 2 80		District Map No. 135-213
For Plans See 85603-54	Correction Verified RR Hoffman	Bldg. Line — Ft.	Street Widening — Ft.		Application checked and approved JUN 17 1954 Clerk
Filed with 85603-54	Plans, Specifications and Application rechecked and approved.	Continuous Inspection NONE	SPRINKLER Specified — Required Valuation Included Yes — No		Inspector

DO NOT WRITE BELOW THIS LINE

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	JUN 17 1954		LA50660		
Supplemental Plan Checking					
Building Permit	JUN 17 1954		LA89578		