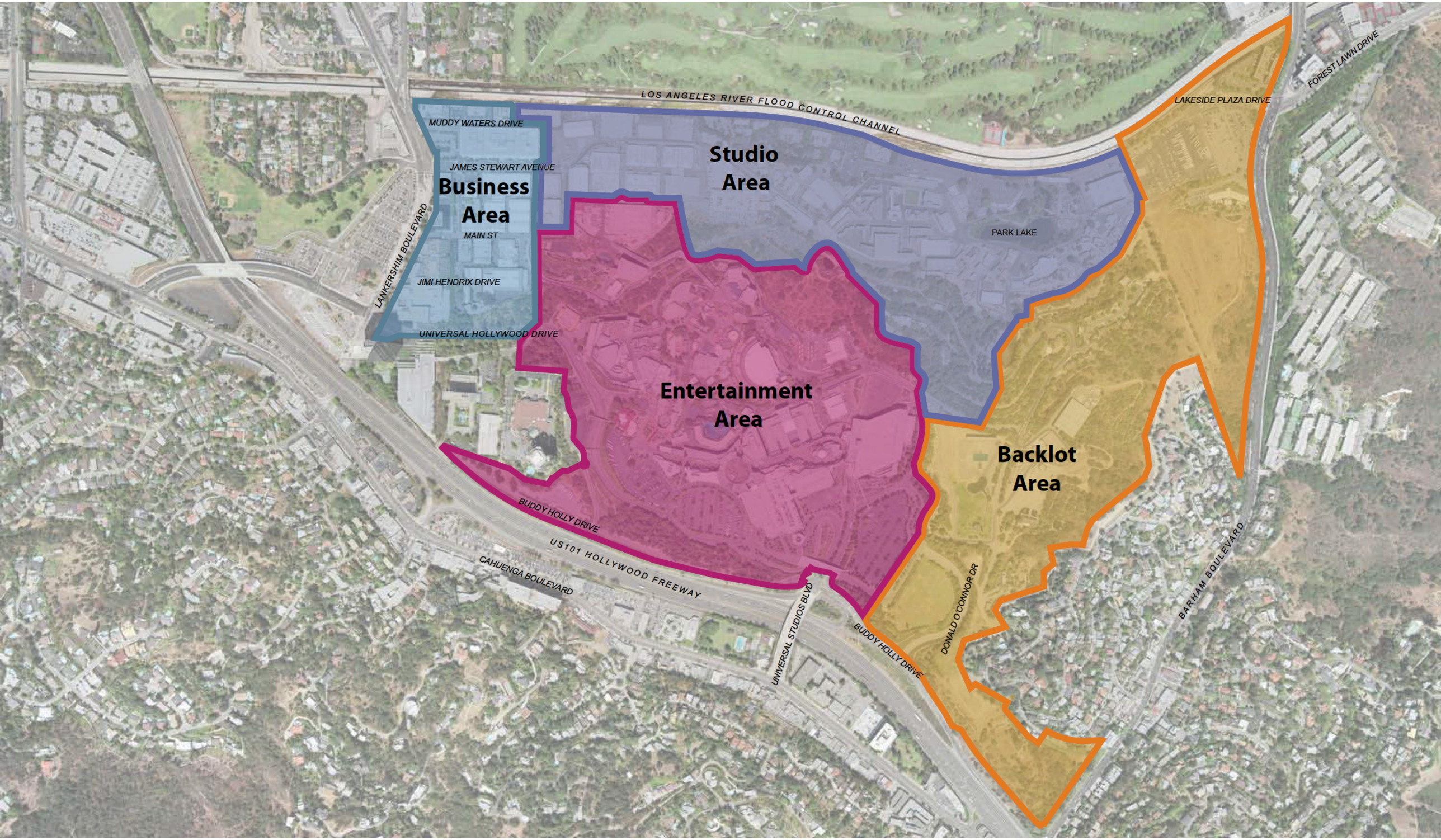


ATTACHMENT A - PROJECT DEVELOPMENT AREAS

AUGUST 15, 2012

ATTACHMENT B

FORM GEN 160A (Rev 1/82)

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DOT Case No. CEN 10-5270
NBC Universal Evolution Plan

Date: August 13, 2012

To: Jon Foreman, Senior City Planner
Department of City Planning

From: Tomas Carranza, Senior Transportation Engineer
Department of Transportation

Subject: TRAFFIC ASSESSMENT OF ALTERNATIVE 10 OF THE NBC UNIVERSAL EVOLUTION PLAN PROJECT (EIR NO. ENV 2007-07-1036)

On April 2, 2010, the Department of Transportation (DOT) issued a traffic assessment report to the Department of City Planning on the proposed NBC Universal Evolution Plan project located within the 391-acre Universal City property. However, in response to public comments submitted on the project's Draft Environmental Impact Report, the applicant has presented a new "no residential" alternative that is of reduced density and considered environmentally superior as it is estimated to result in 35% fewer afternoon peak hour vehicle trips compared to the project that was the subject of DOT's original report. The applicant has submitted a new traffic study to reflect the changes resulting from the new scenario (Alternative 10). Therefore, DOT submits this traffic impact assessment report for Alternative 10.

DOT has reviewed the traffic analysis dated August 2012, prepared by the applicant's traffic engineering consultant team of Gibson Transportation Consulting, Inc. and Raju Associates, Inc., for Alternative 10 of the NBC Universal Evolution Plan project. The project, located within the 391-acre Universal City property, proposes additions to the existing studio, theme park, retail and entertainment uses, and the addition of new hotel uses. Alternative 10 represents a substantial reduction in the overall density of the proposed project that was the subject of a traffic impact study dated March 2010. Alternative 10 would eliminate the proposed 2,937 residential units and 180,000 square feet of neighborhood retail, while increasing the area for studio office, entertainment space and hotels. The Alternative 10 project involves the net increase of approximately 2.68 million square-feet of new commercial development, including additional retail space within Universal CityWalk, expansion of the Universal Studios Theme Park, two 500-room hotels and additional studio and office space. This includes approximately 3.25 million square-feet of new development and the demolition of approximately 585,000 square-feet of existing uses. A detailed breakdown of the project components is listed in **Attachment A**.

The project site, which is illustrated in **Attachment B**, is divided into the following three development subareas for planning purposes:

- Studio/Business Areas West - *includes the offices and related structures located on the western portion of the project site fronting Lankershim Boulevard*
- Studio/Business Areas East and Back Lot Area - *includes the studio offices and production facilities for movie, television and commercial production located along part of the northern portion of the project site adjacent to the Los Angeles River Flood Control Channel*

- Entertainment Area - *includes the Universal Studios Hollywood theme park, Universal CityWalk and related uses located in the center and southern portion of the project site*

The project is expected to be built over various phases, with the project buildout completed by year 2030. The following report summarizes the assumptions used to prepare the traffic impact analysis, the anticipated significant project traffic impacts, and the recommended transportation mitigation plan to offset the impacts. This report represents DOT's revised assessment of the project's traffic impacts as reflected in Alternative 10. Revisions or amendments to this letter may follow as the project proceeds through the environmental review and certification process, or if any further revisions to the project are proposed.

I. TRAFFIC IMPACT ANALYSIS

The transportation analysis adequately addresses the traffic impacts of the project. The study describes a comprehensive set of transportation mitigation measures deemed necessary to fully or partially mitigate the project's significant traffic impacts.

A. Study Area

In preparing the traffic impact analysis, 164 intersections were identified for detailed analysis. Of these intersections studied, 96 are entirely within the City of Los Angeles, 28 are within the City of Burbank, and four are within the City of West Hollywood. There are 36 intersections that are under the shared jurisdiction of the City of Los Angeles and another agency, including the freeway ramp intersections that are under the joint jurisdiction with Caltrans. The study intersections are generally located within the area bounded by Buena Vista Street in the City of Burbank to the east, Burbank Boulevard to the north, Sepulveda Boulevard to the west, and Santa Monica Boulevard to the south. The study area is illustrated in **Attachment C** and was examined to ensure that all potential project impacts are appropriately evaluated. **Attachment D** lists all of the 164 study intersections and identifies the agency with jurisdiction over each intersection. Of these intersections, 148 are signalized intersections under future conditions that were evaluated for potential project impacts. The remaining 16 unsignalized intersections were individually analyzed solely to evaluate if a new traffic signal is warranted.

B. Trip Generation

The Alternative 10 project is estimated to generate a net increase of approximately 2,241 trips during the a.m. peak hour, 2,197 trips during the p.m. peak hour, and 23,601 trips on a typical weekday (see **Attachment E**). As shown in Attachment E, the trip generation estimates for Alternative 10 are significantly lower than the trip generation for the project alternative evaluated in the traffic study dated March 2010. It should be noted that the trip generation figures are conservative estimates that do not include any trip reductions that are typical of mixed-use developments and of projects within close proximity of a Metro transit station. DOT's traffic study guidelines allow projects to reduce their total trip generation to account for likely transit usage to and from the site, and for the internal-trip making opportunities that

are afforded by mixed-use projects. Since the project is located across the street from a Metro Red Line station and bus transfer facility, a trip reduction of the project's total trip generation rate to account for the use of transit to and from the site is acceptable.

The source of the trip generation rates used for the office, retail, and hotel land uses is the Institute of Transportation Engineers (ITE) "Trip Generation Handbook, 7th Edition." However, since the proposed studio-related and theme park uses are unique and are not characterized in the ITE handbook, empirical data from the project site and from other similar studio uses were evaluated. Traffic surveys of the studio-related uses in the existing NBC/Universal campus were used to validate these special use trip generation rates.

C. Travel Demand Simulation Model

A traffic forecasting model was developed to forecast future traffic volumes and to estimate the expected distribution of the project's traffic. The model for the traffic impact analysis was developed using the 2004 Regional Transportation Plan travel demand model prepared by the Southern California Association of Governments (SCAG) as the base. Enhancements and refinements to the SCAG model were necessary to add the detail needed in preparing an intersection-level traffic impact analysis for this project. The enhancements included expanding the SCAG roadway network to include additional nodes (intersections), links (roadways), and traffic analysis zones (TAZ). Also, the SCAG network was updated to reflect the current number of lanes, link capacities and link speeds. The traffic model for the project was calibrated consistent with DOT guidelines, which require the model results for link volumes in the existing conditions scenario to be reasonably comparable to actual observed roadway counts. Then, using SCAG socioeconomic forecasts, and the estimated traffic and travel patterns of the 256 related projects in the area (including the previously proposed Metro Universal project), the model was used to simulate future traffic demands for year 2030.

D. Traffic Impacts

In order to evaluate the effects of the project traffic on the available transportation infrastructure, the significance of the project's traffic impacts is measured in terms of change to the volume-to-capacity (V/C) ratio between the "future no project" and the "future with project" scenarios. This change in the V/C ratio is compared to DOT's established threshold standards to assess the project-related traffic impacts. DOT has determined that, before accounting for the trip reduction benefits afforded to projects adjacent to Metro Line stations, of the 148 signalized intersections studied, the project would result in significant traffic impacts at 60 intersections with TDM before mitigation. The proposed transportation mitigation program (discussed in the next section) is expected to fully or partially mitigate these project impacts. However, the remaining impact at four intersections would be considered significant and unmitigated after implementation of the proposed mitigation program. The intersections expected to experience unmitigated impacts during one or both of the peak commute hours are:

1. US-101 Northbound Ramps / Campo de Cahuenga Way (p.m. peak hour)
2. Cahuenga Boulevard / Moorpark Street (both peak hours)
3. Lankershim Boulevard / Main Street (p.m. peak hour)
4. Lankershim Boulevard / Campo de Cahuenga Way / Universal Hollywood Drive (a.m. peak hour)

Of these four intersections, two are expected to operate at a level-of-service (LOS) of C or better after build-out of the project, and two are adjacent to the project site. **Attachment F1** summarizes the morning and afternoon peak hour LOS calculated for the 148 signalized study intersections for the different scenarios and indicates the extent of the project-related traffic impacts. Similarly, **Attachment F2** summarizes the LOS for the 16 stop-controlled intersections. To address project impacts, a comprehensive set of transportation improvements is necessary to fully or partially mitigate these anticipated impacts. The results of the proposed transportation mitigation measures are also shown on Attachment F1, which summarizes the benefit of the improvements in terms of V/C ratio at the study intersections.

F. Shared Mitigation

Consistent with DOT policies, the cost of traffic mitigation measures can be shared between two or more development projects, provided that the mitigation can fully or partially mitigate the combined impact of these projects. This would be applicable in those cases where there are other proposed developments in the vicinity that may also contribute toward the cost of the improvement.

II. PROJECT TRANSPORTATION MITIGATION PROGRAM

Sustainability, smart growth and the reduction of greenhouse gas emissions have become prime concerns for the City in addition to traditional mobility considerations. Therefore, under the direction of DOT, the mitigation program was designed to first focus on providing project employees and visitors with usable and accessible transit options, and on developing an aggressive trip reduction program. A clear goal of the project's transportation mitigation plan is to implement enhancements and strategies that reduce the number of project-generated vehicle trips and that make the use of transit a convenient, reliable and cost-effective option for project visitors. However, freeway, street and intersection improvements to enhance mobility and remove bottlenecks were also evaluated and, if feasible, are included in the mitigation program. A comprehensive mitigation program has been developed for the Alternative 10 project that includes the following major elements: trip reduction program, transit system enhancements, freeway improvements, traffic signal system upgrades, intersection upgrades and improvements, and neighborhood traffic management measures.

Several physical traffic mitigation improvement options at the impacted intersections were evaluated in an attempt to fully mitigate the impacts; however, in some cases, no feasible mitigations were identified due to the constraints of the existing physical conditions. Also, for other locations, street widening was not an option due to right-of-way constraints or it was not considered practical nor desirable to widen the street at the expense of reduced

sidewalk widths. In other cases, traffic flow improvements that required the removal of on-street parking along a roadway with a high demand for parking were not recommended. The recommended traffic mitigation program includes the following improvements to be implemented in accordance with the Transportation Improvement Phasing Plan:

A. Transportation Demand Management (TDM) Program

The purpose of implementing a TDM program is to reduce the use of single occupant vehicles (SOV) by increasing the number of trips by walking, bicycle, carpool, vanpool, bus, or rail. To minimize external trips, the project should be designed to provide patrons with viable and convenient options that include high quality and convenient transit service. Through thoughtful building design and orientation, the project should provide a pedestrian-friendly environment, promote non-automobile travel and implement an aggressive trip-reduction program. Also, given the amount of transit services provided in the area and that the project is proposed across the street from an existing Metro Red Line station and bus terminal facility, there is an inherent incentive for project employees and visitors to search for alternative commute options other than driving. Additionally, developing a mixed-use project can aid in the effort of minimizing off-site traffic impacts and encouraging more internal trips by providing project tenants, employees and visitors with the necessary resources for shopping, entertainment, day care, and employment within a single community. The design of the development should contribute to minimizing traffic impacts by emphasizing non-auto modes of transportation. Also, to substantially reduce SOV trips to the project, a transit-friendly project with safe and walkable sidewalks should be included in the overall design of this mixed-use project.

A preliminary TDM program shall be prepared and provided for DOT review prior to the issuance of the first building permit for this project and a final TDM program approved by DOT is required prior to the issuance of the first certificate of occupancy for the project. The TDM program should include, but not be limited to, the following strategies:

- flexible & alternative work schedules and telecommuting programs
- internal mobility and support for first and last mile connections (see shuttle system program discussed below)
- bicycle and pedestrian-friendly environment
- bicycle amenities like racks and showers for employees
- convenient and secure pedestrian, shuttle and/or bicycle connections linking the Project Area to transit via walkways, paths, or paseos
- education and information on alternative transportation modes
- transportation information center
- join or create a Transportation Management Association (TMA) or Transportation Management Organization (TMO)
- on-site shared (“flex”) cars
- pursuant to Internal Revenue Code Section 132(f), information should be provided to employees regarding pre-tax dollar transit commute expense accounts to provide transportation fringe benefits to eligible employees
- a guaranteed ride home program

- discounted monthly or annual transit passes provided to all eligible project employees
- contribute a one-time fixed-fee of **$500,000** to be deposited into the City's Bicycle Plan Trust Fund that is currently being established (CF 10-2385-S5). These funds would be used by DOT to implement bicycle improvements within the project vicinity.

The TMA or TMO for this project would promote non-traditional travel alternatives and would educate project employees and patrons of the available trip-reduction services provided in the TDM plan. Specific components of the TMA may include, but not be limited to, the following:

- rideshare matching
- administrative support for formation of carpools/vanpools
- bike and walk to work promotions
- emergency rides home
- preferential loading/unloading for ridesharers
- transportation information center, which would provide a centrally-located commuter information center that allows employees to obtain information on ridesharing, telecommuting, transit schedules, bicycle plans, flex cars, etc.
- monitoring and reporting on the effectiveness of different TDM measures

B. Transit Enhancements

A major component of the transportation mitigation program is to enhance and expand the area's transit system by augmenting existing regional transit service, and by providing a new demand-responsive, fixed-route shuttle system. The following enhancements are proposed:

1. Transit System Upgrades

The traffic analysis included a review of the existing and future transit system serving the project study area. Passenger boarding and alighting information was collected for the transit lines currently servicing the project vicinity to determine where the need for additional buses or enhanced service exists. Metro Local 150/240 and Metro Rapid 750 travel along Ventura Boulevard and serve the project site. Based on a review of the boarding information, Metro Rapid 750 currently exceeds the seated capacity in the peak direction during most of the peak commute period. Given the number of project trips expected along Ventura Boulevard, the current ridership demands and capacity deficiency on the Metro lines along this corridor, the applicant proposes to provide one additional articulated bus, to be operated by Metro, to supplement the Metro Rapid Line 750 service along Ventura Boulevard.

This proposal is acceptable to DOT; however, the applicant shall contribute towards net operations and maintenance (O&M) costs for the new bus during peak commute hours (7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m.) for the first three years. To ensure continued operations, the project shall compensate for the unsubsidized portion of these costs for an

additional seven years. Farebox revenues and state/ federal transit subsidies shall be credited against O&M costs. The applicant shall work with Metro to ensure that this enhanced service is provided in a timely manner consistent with the traffic mitigation phasing plan. The applicant shall record a covenant and agreement, to the satisfaction of DOT, to guarantee the provisions of this transit improvement.

2. **Shuttle System**

The traffic study proposes to provide a demand-responsive shuttle system that provides viable and convenient transit options for Project visitors, employees, and the surrounding community. This system will focus on providing connections to key destinations such as the Universal City Metro Red Line station, downtown Burbank, Burbank Media District, CityWalk, and other nearby destinations. Connections to regional transit service shall be provided at the Universal City Metro Red Line station and the Downtown Burbank Metrolink station. The shuttle system is expected to provide approximately 15 minute headways during the morning and afternoon peak hours and 30 minute headways during off-peak daytime and early evening hours. This shuttle system will consist of the following key features:

a. Business Area East Shuttle

This shuttle would travel from the Universal City Metro Red Line station to Lakeside Plaza Drive area providing the employees in the Business Area East with a connection to the Universal City Metro Red Line station. From the Metro Red Line station, the shuttle is expected to travel along Lankershim Boulevard, Cahuenga Boulevard West, and Barham Boulevard to reach Lakeside Plaza Drive, then the shuttle would travel along Pass Avenue to connect with the Burbank Shuttle.

b. Downtown Burbank Shuttle

This shuttle from the Universal City Metro Red Line Station to the city of Burbank would provide a connection from the project site to the Downtown Burbank Metrolink station and to the Burbank Media District. The shuttle is expected to travel along Lankershim Boulevard, Riverside Drive and Olive Avenue. The final configuration of this shuttle would also be subject to review and approval by the City of Burbank.

c. Specially Equipped Shuttles

The shuttles, which will be low or zero emission vehicles, shall be equipped with GPS (global positioning system) or other vehicle tracking system devices and communications systems in order to be able to provide “Next Bus” locational and status information.

d. Real-Time Information

Information on shuttle location and status shall be available over the Internet and at bus shelters using “next bus” technologies.

e. Bus Call Capability
Patrons at bus stops outside of the project site along the routes shall have the ability to call for the shuttle from a designated shuttle stop. Upon doing so, information on the status of the bus and the anticipated wait time would then be given to the patron.

f. Bus Shelters
All stops for the shuttle system within or adjacent to the Project Area should include shelters, benches, shaded sidewalks, street lighting, ADA accessibility and pedestrian amenities.

The proposed Shuttle System program is acceptable to DOT; however, the program should be guaranteed for 20 years. The applicant shall work with DOT, Metro and neighboring cities when developing the final shuttle routes and stop locations prior to implementation of the shuttle program. Also, to maximize the benefits of the shuttle program, the routes, stops, headways and hours of operation should be revisited periodically after deployment of the shuttle program to determine if the program can be improved consistent with the financial commitment guaranteed by the Applicant for 20 years. The applicant shall work with DOT to ensure that this enhanced service is provided in a timely manner consistent with the traffic mitigation phasing plan. The applicant shall record a covenant and agreement, to the satisfaction of DOT, to guarantee the provisions of the Shuttle System. Together with the TDM program, the provision of the Shuttle System program can effectively reduce the number of SOV trips related to both the Project and neighboring communities by providing other viable and convenient travel options.

C. Freeway Interchange Improvements
The applicant has met and consulted with staff from DOT and Caltrans' District 7 regarding the design and feasibility of freeway system improvements. The project would construct a new on-ramp from Universal Studios Boulevard to the southbound US-101 freeway, and would modify the interchange at the US-101 freeway at Universal Terrace Parkway (Campo de Cahuenga Way). In accordance with the traffic mitigation plan for Alternative 10, the applicant should enter into a Highway Improvement Agreement with Caltrans that ensures the applicant's involvement in the design, funding and timely completion of these improvements.

Also, in the event these proposed freeway improvements become infeasible or are not approved by Caltrans, substitute mitigation measures shall be provided subject to approval by DOT or Caltrans, upon demonstration that the substitute measure is equivalent or superior to the original measure in mitigating the project's significant impact. DOT recommends that the applicant be required to construct the following freeway improvements:

1. **US-101 Southbound On-Ramp at Universal Studios Boulevard**
The Project proposes to build a new southbound on-ramp to the US-101 Freeway from Universal Studios Boulevard. Direct access to this ramp would be provided from the Entertainment Area via the intersection of Buddy Holly Drive and Universal Studio Boulevard. Providing this connection is expected to relieve congestion on Cahuenga Boulevard West and at the US-101 southbound ramps from Cahuenga Boulevard. This proposed improvement is illustrated in Figure 49 of the original traffic study dated March 2010.

2. **US-101 Freeway / Universal Terrace Parkway (Campo de Cahuenga Way) Interchange**
The Project proposes to improve the operation of the US-101 Freeway interchange at Universal Terrace Parkway by constructing new southbound ramps and redesigning the existing northbound off-ramp. This improvement would provide direct access to the Project Site and the Universal City area. The enhanced interchange is expected to reduce traffic congestion on Ventura Boulevard, Lankershim Boulevard, Cahuenga Boulevard, and the US-101 southbound ramps at Regal Place by allowing southbound traffic to use the US-101 interchange at Universal Terrace Parkway. The major components of this interchange improvement are illustrated in Figure 50 of the original traffic study dated March 2010.

The applicant has met and consulted with staff from Caltrans' District 7 regarding the design and feasibility of this interchange improvement. A Project Study Report (PSR) required by Caltrans that evaluates the feasibility and cost of this improvement and other interchange alternatives was completed and approved by Caltrans in March 2009. While DOT supports this interchange improvement as currently proposed, it should be noted that during the Project Report process led by Caltrans, additional alternatives will be evaluated. DOT would be supportive of another alternative if it is demonstrated that it provides similar or enhanced benefit and if it is environmentally equal or superior to the current proposal.

D. Freeway Mainline Improvements
According to the traffic study, which includes a freeway impact analysis, Alternative 10 is expected to result in significant traffic impacts on the freeway system. The applicant has worked with Caltrans' District 7 staff to identify a set of potential freeway mainline improvements to off-set these impacts and to address existing deficient traffic conditions. To mitigate impacts on the freeway system, Caltrans typically requires a fair-share contribution toward specific mainline improvements. Caltrans staff will lead this effort and will determine the required freeway mitigations or fair-share financial requirements for this Project. It is expected that the applicant will continue to work with Caltrans to explore alternatives, to evaluate the feasibility of each proposal, to prepare design plans and to prepare any necessary environmental documents.

To be conservative and since alternatives are still being evaluated, the traffic impact analysis did not include any mitigation credit that would result from freeway mainline improvements. The applicant should continue to work with Caltrans to develop meaningful freeway enhancements that can serve to alleviate commuter congestion. Consideration of improvements to the US-101 freeway adjacent to the Project site should also include the improvement of the Barham Boulevard bridge over the freeway. This is a chronic bottleneck location and should be included in any regional improvement program for this area.

E. Roadway Improvements

The Project proposes key roadway improvements needed to address the expected traffic demands resulting from the Project. For these proposed improvements, the final determination on the feasibility of street widenings and of narrowing of sidewalk widths shall be made by the Department of Public Works, Bureau of Engineering. The following roadway improvements are proposed:

1. **Barham Boulevard Corridor Improvements**

Barham Boulevard currently carries two lanes in each direction from Forest Lawn Drive/Lakeside Plaza Drive to Buddy Holly Drive/Cahuenga Boulevard East. The project proposes to dedicate right-of-way along the west side of Barham Boulevard, and widen the roadway to accommodate three lanes in the southbound direction and left-turn lanes at minor intersections along the entire segment. This corridor improvement should also include streetscape and pedestrian enhancements along the project site boundary.

2. **Lankershim Boulevard Corridor Improvements**

The project proposes to improve the traffic flow along key intersections on Lankershim Boulevard between Cahuenga Boulevard and the US-101 northbound off-ramp. This segment includes the western boundary of the project site. These intersection improvements, that include upgrading or installing new traffic signal equipment and/or providing additional roadway capacity, would improve traffic flow along Lankershim Boulevard and enhance ingress/egress to the project site. These intersection improvements are described in more detail below - see “Intersection Improvements.”

3. **Forest Lawn Drive Roadway Improvements**

The project proposes to provide a continuous four-lane cross-section along Forest Lawn Drive between Barham Boulevard/Lakeside Plaza and the State Route (SR) 134 eastbound ramps by widening Forest Lawn Drive between Zoo Drive and the SR 134 Freeway. This improvement is expected to improve the connection between the project and the SR 134 freeway.

F. Project-Related Transportation Improvements

The proposed project includes the construction of new roadway connections and private driveways to serve the access and circulation needs of the development. The applicant shall work with DOT and the Bureau of Engineering on the design of the Project’s internal street system layout in the city of Los Angeles, which includes,

but is not limited to, lane configuration, connectivity to existing street system, implementation of any necessary traffic control devices, etc. As part of the project's design features and description, the following key enhancements are proposed as project-related roadway improvements:

1. **Lakeside Plaza Drive**
   Since Lakeside Plaza Drive is expected to serve as a main access point from Barham Boulevard for Business Area East employees, the project proposes to widen Lakeside Plaza Drive to provide a minimum of two travel lanes in each direction from the Business Area entrance to Barham Boulevard.

2. **Buddy Holly Drive**
   The project proposes to facilitate traffic flow along Buddy Holly Drive between Universal Studios Boulevard and Barham Boulevard by providing additional lanes and enhanced access to the freeway and the project site. Along Buddy Holly Drive between Barham Boulevard and the US 101 northbound off-ramp, the road will provide three westbound travel lanes - this segment will continue to operate as a one-way westbound street. Between the US-101 northbound off-ramp and Donald O'Connor Drive, Buddy Holly Drive will accommodate four or five lanes. At the approach to Donald O'Connor Drive, a dedicated right-turn lane will be provided, and a dedicated left-turn lane onto the northbound US-101 Freeway will also be provided. Between Donald O'Connor Drive and Universal Studios Boulevard, Buddy Holly Drive may operate as a two-way roadway providing four westbound lanes and two eastbound lanes. This proposed improvement will also require review and approval by Caltrans.

3. **Universal Hollywood Boulevard**
   Universal Hollywood Boulevard between Lankershim Boulevard and Universal Studios Boulevard (a private street) would be realigned and improved to enhance traffic circulation, accommodate transit priority lanes and wider sidewalks. Since the project's mixed-use and transit-oriented development features are expected to increase the level of pedestrian activity over what currently exists today, this improvement can serve to enhance the connections between the Universal City Metro Red Line station and the project site.

4. **Universal Studios Boulevard / Buddy Holly Drive**
   This intersection would be improved as part of the Buddy Holly Drive improvement described above. The segment of Buddy Holly Drive between Universal Studios Boulevard and Donald O'Connor Drive may be improved to operate as a two-way roadway to allow access to the new theme park parking structure. If operated under two-way flow, the westbound approach on Buddy Holly Drive would provide two left-turn lanes, one through lane, and two free-flow right-turn lanes. Also, Universal Studios Boulevard would be restriped to provide a northbound right-turn lane, and the eastbound

approach would be restriped to provide one left-turn lane and one shared through/right-turn lane. This configuration would not be needed if Buddy Holly Drive remains a one-way eastbound street.

The Applicant shall provide the necessary infrastructure for all of the intersections internal to the project site that are expected to be signalized by the expected build out year and connected to DOT's traffic signal system. The traffic signals for these intersections should be constructed to ATCS specifications including, but not limited to, all required system loops, interconnect (conduit and twisted pair cable), and miscellaneous communications equipment needed to provide an operating ATCS intersection. Also, the project-related roadway improvements listed above should be constructed in accordance with the Traffic Mitigation Phasing Plan described below.

G. Intersection Improvements

Several intersection improvements are proposed to mitigate the traffic impacts of the project and enhance traffic flow and improve safety at key intersections. These mitigations include upgrades to the traffic signal system, the installation of new traffic signals, and physical improvements including approach widening to provide additional lanes. Intersection improvements, needed to reduce and mitigate the project's traffic impacts, are proposed as follows:

Traffic Signal System Upgrade

Many of the signalized intersections within the City of Los Angeles in the project study area require an upgrade to the signal equipment and hardware. The traffic signals at these intersections currently operate using a Type 170 traffic signal controller. Newer controllers (Type 2070) provide for enhanced and real-time operation of the traffic signal timing. Also, when supplemented by CCTV cameras at key locations, DOT can identify the causes of delay and implement instant signal timing remedies to improve the flow of vehicles and buses. The applicant shall fund the upgrade of the traffic signal controllers and the installation of CCTV cameras at the intersections listed in **Attachment G**.

New Traffic Signals

In the preparation of traffic studies, DOT guidelines indicate that unsignalized intersections should be evaluated solely to determine the need for the installation of a traffic signal or other traffic control device. Additionally, when choosing which unsignalized intersections to evaluate in the study, intersections that are adjacent to the project or that are integral to the project's site access and circulation plan should be identified. Nonetheless, to be conservative, the project's traffic study identified several off-site unsignalized intersections to evaluate. Based on traffic signal warrant analyses conducted at 16 intersections, the applicant proposes to fund the installation of nine new traffic signals at the following intersections:

- Barham Boulevard and C Street
- Buddy Holly Drive, Donald O'Connor Drive and US-101 NB on-ramp *(required only if Buddy Holly Drive or Donald O'Connor Drive operate as two-way streets)*

- Cahuenga Boulevard and US-101 southbound ramps
- Cahuenga Boulevard and Valley Spring Lane
- Forest Lawn Drive and SR-134 westbound ramps
- Lankershim Boulevard and Muddy Waters Drive
- Riverside Drive and SR-134 eastbound on-ramp
- US-101 southbound ramps and Ventura Boulevard / Fruitland Drive
- Universal Studio Boulevard and US-101 southbound on-ramp

The satisfaction of a traffic signal warrant does not in itself require the installation of a signal. Other factors relative to safety, traffic flow, signal spacing, coordination, etc. should be considered. The design and construction of these traffic signals, if deemed warranted by DOT, would be required of the applicant pursuant to the schedule identified in the traffic mitigation phasing plan. DOT's East Valley District Office will issue a Traffic Control Report (TCR) authorizing the installation of each traffic signal within the City of Los Angeles that is warranted per DOT's requirements. The traffic signal warrant analysis shall be prepared pursuant to Section 353 of DOT's Manual of Policies and Procedures and submitted by the applicant to DOT for review. Furthermore, it is the responsibility of the applicant to secure approval and any necessary permits by Caltrans for the traffic signal proposed at freeway ramps. An officially approved TCR does not remove the responsibility of the applicant from securing the acceptance and/or approval by Caltrans where State right-of-way is involved.

If left-turn phasing is proposed at any intersection within the City of Los Angeles, the applicant shall submit a left-turn study analysis pursuant to Section 531 of DOT's Manual of Policies and Procedures. Each left-turn study shall be submitted to DOT's Signal Timing and Operations Division and to DOT's East Valley District Office for review, approval, and preparation of an official TCR for each location.

Physical Improvements (City of Los Angeles)

As stated above, for some locations, street widening was not an option due to right-of-way constraints or DOT did not approve street widening at the expense of reduced sidewalk widths. In other cases, proposals that would require the removal of on-street parking along a roadway with a high demand for parking were not recommended. Traffic mitigations were proposed to mitigate project impacts at intersections along Cahuenga Boulevard. However, since these proposals were in conflict with a city project along Cahuenga Boulevard, these proposed mitigations were not accepted. The city project was awarded grant funding to construct an improvement along Cahuenga Boulevard between Magnolia Boulevard and Lankershim Boulevard. The scope of this improvement was developed with input from Council District 4 and community stakeholders. Therefore, the traffic mitigations that were considered on Cahuenga Boulevard between Magnolia Boulevard and Lankershim Boulevard were not accepted since these designs were not consistent with the intent of the design of the city project. The following intersection improvements are proposed within the City of Los Angeles:

1. Barham Blvd and Cahuenga Blvd West (IS #47) widen to install an additional westbound through lane on Cahuenga Boulevard. The westbound approach would provide two through lanes, and one right-turn lane. This mitigation would require right-of-way acquisition from Caltrans; therefore, this impact would remain unmitigated if the applicant is not successful in acquiring the necessary right-of-way.

2. Barham Blvd and Buddy Holly Dr/Cahuenga Blvd (IS #48) in addition to funding the upgrade of the traffic signal controller, widen the westbound approach to provide a separate left-turn only lane and widen the southbound approach to provide a separate right-turn only lane.

3. Barham Blvd and Coyote Canyon Rd (IS #54) in addition to funding the upgrade of the traffic signal controller, an additional southbound through lane will be installed per the Barham Boulevard roadway improvement described above.

4. Barham Blvd and De Witt Dr (IS #52) an additional southbound through lane will be installed per the Barham Boulevard roadway improvement described above.

5. Barham Blvd and Lake Hollywood Dr (IS #53) an additional southbound through lane will be installed per the Barham Boulevard roadway improvement described above.

6. Barham Blvd and Lakeside Plaza/Forest Lawn Dr (IS #55) in addition to funding the upgrade of the traffic signal controller, this intersection will be improved as part of both the Barham Boulevard roadway improvement and the Lakeside Plaza Drive project-related improvement. When fully improved, the intersection will accommodate: two left-turn lanes, two through lanes, and one right-turn lane on the eastbound approach; two left-turn lanes, one shared through/left-turn lane, and one right-turn lane on the westbound approach; and one left-turn lane, two through lanes, and one shared through/right-turn lane on the southbound approach.

7. Cahuenga Blvd and Riverside Dr (IS #29) in addition to funding the upgrade of the traffic signal controller, restripe the westbound approach on Riverside Drive to install a right-turn lane. The westbound approach would provide one left-turn lane, two through lanes, and one right-turn lane.

8. Cahuenga Blvd and SR 134 Eastbound Ramps (IS #28) in addition to funding the upgrade of the traffic signal controller, provide Caltrans with a fair-share contribution to install a shared left-right-turn lane on the SR 134 Eastbound off-ramp. The eastbound off-ramp approach would provide one left-turn lane, one shared left-right-turn lane, and one right-turn lane. To alleviate expected queues at the ramp that can potentially spill-over onto Cahuenga Boulevard, this improvement would also provide additional

storage by widening the SR 134 eastbound on-ramp to provide two lanes beyond the ramp meter. This mitigation requires approval by Caltrans.

9. Cahuenga Blvd and US 101 southbound ramps (IS #162) a new traffic signal is proposed at this intersection with permitted left-turn phasing for the southbound approach. Due to the proximity of this intersection to the intersection of Cahuenga Boulevard and US 101 northbound off-ramp (IS #68), a single controller design is proposed to coordinate the signal timing for these two intersections. The installation of a traffic signal at this intersection would require review and approval of a signal warrants analysis by Caltrans and by DOT's East Valley District Office.

10. Cahuenga Blvd and Valley Spring Ln (IS #32) - a new traffic signal is proposed at this intersection. However, as discussed above, the installation of a traffic signal at this intersection would require a review and approval of a signal warrants analysis by DOT's East Valley District Office.

11. Forest Lawn Dr & SR 134 eastbound ramps (IS #60) an additional southbound through lane would be installed per the Forest Lawn Drive roadway improvement described above.

12. Forest Lawn Dr & SR 134 westbound ramps (IS #61) install a traffic signal at this intersection and restripe Forest Lawn Drive to install an additional southbound through lane. This intersection is included in the Forest Lawn Drive roadway improvement described above. The installation of a traffic signal at this intersection would require review and approval by Caltrans and DOT's East Valley District Office.

13. Forest Lawn Dr & Zoo Drive (IS #59) widen Forest Lawn Drive to install an additional southbound through lane and to allow for two through lanes and one right-turn lane on the northbound approach. This intersection is included in the Forest Lawn Drive roadway improvement described above.

14. Lankershim Blvd and Moorpark St (IS #20) widen Moorpark Street and install an eastbound right-turn only lane. However, to prevent the permanent elimination of on-street parking, the right-turn lane would be operational only between 7 a.m. and 7 p.m. The widening and posting of "No Stopping between 7 a.m. and 7 p.m." signs would accommodate the right-turn lane. The eastbound approach would provide one left-turn lane, one through lane, and one right-turn lane.

15. Lankershim Blvd and Riverside Dr (IS #19) widen to provide a right-turn lane on the westbound approach of Riverside Drive. The westbound approach would provide one left-turn lane, two through lanes, and one right turn lane.

16. Lankershim Blvd and US 101 northbound off-ramp (#37) - restripe the US

northbound off-ramp to provide a shared through/right lane. The US 101 northbound off-ramp would provide one left-turn lane, a shared through/right lane, and two right-turn lanes. This intersection is included in the Lankershim Boulevard roadway improvement described above. However, if the Metro Universal project is not built, then this improvement would not be needed.

17. Ledge Ave/Moorpark Wy and Riverside Dr (IS #40) in addition to funding the upgrade of the traffic signal controller, the Project proposes to remove the raised median on the east leg of the intersection to accommodate an additional left-turn lane on the westbound approach of Riverside Drive. However, since this mitigation would remove the existing raised median, the applicant should be responsible for the relocation of the median island and a community monument sign to an alternate location. This would require input from Council District 4 and community stakeholders.

18. Metro Driveway and Campo de Cahuenga Wy (IS# 23) upgrade the traffic signal to provide protected left-turn phasing operation for eastbound Campo de Cahuenga Way, and to provide a right-turn signal phase for southbound motorists exiting the Metro Driveway - this right-turn phase will overlap with the eastbound Campo de Cahuenga Way left-turners. If the Metro Universal project is not built, then this improvement would not be needed.

19. Moorpark St and Vineland Ave (IS #11) remove or reconstruct the median to accommodate a right-turn lane on the southbound approach. The southbound approach would provide one left-turn lane, three through lanes, and one right turn lane. To enhance safety by improving visibility, DOT also recommends that the Project remove the raised median islands on the north and south legs to better align the north and southbound left-turn lanes.

20. Riverside Dr and SR 134 eastbound on-ramp (IS #15) a new traffic signal with protected left-turn phasing for the eastbound approach is proposed at this intersection. The eastbound would be striped to provide two left-turn lanes and two through lanes. As discussed above, the installation of a traffic signal at this intersection would require review and approval of a signal warrants analysis by Caltrans and by DOT's East Valley District Office.

Physical Improvements (Los Angeles County/City of Los Angeles)
Additionally, several intersection improvements are proposed in other jurisdictions or at intersections shared with another jurisdiction. The following intersection mitigations, which are all included in the Lankershim Boulevard corridor improvement described above, are also subject to review and consent by Los Angeles County. It should be noted that the design of these improvements assumed the future traffic volumes of the proposed Metro Universal project (one of the 256 related projects) that has been delayed. If the Metro Universal project is not built, then the following intersection improvements should be redesigned since

the projected traffic demands along Lankershim Boulevard would be overstated.

1. Lankershim Blvd and Campo de Cahuenga Wy/Universal Hollywood Dr (IS #36) widen the northbound approach to provide two left-turn lanes, two through lanes, one shared through-right lane, and one right-turn; restripe Campo de Cahuenga Way to provide an additional left-turn lane in the eastbound approach; provide a right-turn overlap arrow for southbound Lankershim Boulevard and restripe southbound Lankershim Boulevard to provide two left-turn lanes, two through lanes, one shared through/right-turn lane, and one right-turn only lane; widen the westbound approach to provide one left-turn lane, two through lanes and one right-turn lane. Included in this improvement are the necessary traffic signal upgrades and improvements to accommodate any necessary left-turn arrows.

   DOT would like to reduce the use of dual right-turn lanes to minimize potential pedestrian conflicts. However, the proposed dual right-turn lanes at this intersection may not result in such conflicts in the future since there is a programmed improvement that would eliminate the north leg crosswalk. This improvement would install a pedestrian bridge connecting the Metro Red Line portal to the east side of Lankershim Boulevard. The Los Angeles County Metropolitan Transportation Authority is currently finalizing the design of this pedestrian overpass.

2. Lankershim Blvd and Main St (IS #35) in addition to funding the upgrade of the traffic signal controller, widen to install a second northbound left-turn lane and upgrade the traffic signal to provide protected left-turn signal phasing operation for northbound Lankershim Boulevard. Also, widen the east leg (Main Street) to enhance ingress and egress from the project site. This improvement would not be needed if the proposed Metro Universal project is not built.

3. Lankershim Blvd and Muddy Waters Dr (IS #72) a new traffic signal is proposed at this intersection. If approved, the new traffic signal would provide protected left-turn phasing operation for southbound Lankershim Boulevard. The installation of a traffic signal at this intersection has not yet been approved by DOT. A review and approval of the traffic signal warrants analysis for this signal is required by DOT's East Valley District Office.

4. Lankershim Blvd and Valleyheart Dr/James Stewart Ave (IS #34) in addition to funding the upgrade of the traffic signal controller, widen the eastbound approach on Valleyheart Drive to provide dual left-turn lanes and a shared through/right lane. Restripe the westbound approach on James Stewart Avenue to provide one left turn, one shared through/left, and dual right-turn lanes. Also, widen Lankershim Boulevard to provide an additional southbound left-turn lane. This improvement would not be needed if the proposed Metro Universal project is not built.

Intersection Improvements (City of Burbank)
The following intersection mitigations are subject to review and approval by the City of Burbank:

1. Evergreen St/Riverside Dr & Alameda Ave (IS #77) fund the upgrade of the traffic signal equipment to connect the intersection to the City of Burbank's Citywide Signal Control System (CSCS).

2. Pass Ave and Alameda Ave (IS #79) fund the upgrade of the traffic signal equipment to connect the intersection to the City of Burbank's CSCS. The project would also widen the westbound approach to add a right-turn lane. The westbound approach would provide one left-turn lane, two through lanes and one right-turn lane.

3. Pass Ave and Olive Ave (IS #81) widen to install an additional northbound left-turn lane on Pass Avenue. The northbound approach would provide two left-turn lanes and three through lanes. This improvement should also include any necessary upgrades to the traffic signal equipment.

4. Pass Ave and SR 134 eastbound off-ramp (IS #78) fund the installation and upgrade of the traffic signal equipment needed to connect the intersection to the City of Burbank's Traffic Signal Interconnect/Signal Timing System and CSCS.

5. Pass Ave and Verdugo Ln (IS #75) fund the installation and upgrade of the traffic signal equipment needed to connect the intersection to the City of Burbank's Traffic Signal Interconnect/Signal Timing System and CSCS.

6. Olive Ave and Warner Brothers Studio Gate 2/Gate 3 (IS #82) fund the upgrade of the traffic signal equipment to connect the intersection to the City of Burbank's CSCS.

7. Olive Ave and Warner Brothers Studio Gate 1/Lakeside Dr (IS #83) widen the eastbound approach to add a right-turn lane. The eastbound approach would provide one shared through/left-turn lane, and one right-turn lane.

H. Neighborhood Traffic Management Program (NTMP)
According to the residential street impact analysis included in the traffic study, three neighborhoods were identified for their potential to be impacted by the project's traffic. A local residential street is considered to be impacted based on an increase in the average daily traffic volumes. The objective of the residential street impact analysis is to determine the potential for cut-through traffic impacts on a residential street that can result from the project. Cut-through trips are measured as vehicles that bypass a congested arterial by instead opting to travel along a residential street. These local street impacts are typically mitigated through the implementation of neighborhood traffic calming measures such as installing speed humps. The traffic study identified three neighborhood boundaries that can

potentially experience increases in cut-through traffic.

The applicant has offered up to $300,000 to fund any necessary NTM measures within these three neighborhood boundaries. This amount, which is commensurate with the size of the project and with the level of residential street impacts that are expected, is acceptable to DOT. Working within this budget, it would be the applicant's responsibility to coordinate with DOT, the affected neighborhood residents, and the local City Council office to design and implement NTM measures approved by DOT and supported by stakeholders.

The applicant has submitted an initial NTMP Implementation Plan to DOT (see **Attachment H**) that sets key milestones and identifies a proposed process in developing a NTM plan for the three identified neighborhoods consistent with DOT policy. This implementation plan should be formalized through an agreement between the applicant and DOT prior to the issuance of the first building permit for this project. As discussed in the initial plan, the agreement should include a funding guarantee, an outreach process and budget for each of the identified neighborhoods, selection and approval criteria for any evaluated NTM measures, and an implementation phasing plan. The final NTM plan, if consensus is reached among the stakeholders, should be completed to the satisfaction of DOT and should consider and evaluate neighborhood improvements that can offset the effects of added traffic, including street trees, sidewalks, landscaping, neighborhood identification features, and pedestrian amenities. Such measures can support trip reduction efforts by encouraging walking, bicycling, and the use of public transit.

I. Traffic Mitigation Phasing Plan

The project is proposed to be built over four phases. To ensure that the full occupancy of the project does not take place until all of the required transportation mitigations are implemented, a mitigation phasing plan has been prepared that coordinates all mitigation measures, project development and the associated permitting (see **Attachment I**). The phasing plan attempts to maintain an appropriate balance between development and corresponding transportation capacity/enhancements. This phasing plan may be modified in the future to adjust the mitigation sequencing or as a result of changes in the project phasing. Any changes to the mitigation phasing plan shall be subject to approval by DOT.

III. Additional Transportation Enhancements

The applicant has committed to fund the following voluntary transportation improvements in addition to the traffic mitigation measures identified above. The anticipated benefit to traffic flow associated with these enhancements has not been quantified; therefore, the project impacts at the study intersections are likely overstated.

A. Traffic Flow and Safety Enhancements

To address local traffic flow and safety needs within the study area, the applicant has agreed to install left-turn arrows at several key intersections. These locations

have been identified by DOT as candidate intersections for the installation of left-turn phasing. If left-turn arrows are deemed warranted by DOT's East Valley District Office, the applicant would design and implement the left-turn signals at the following intersections:

1. Riverton Avenue/Campo de Cahuenga Way & Ventura Boulevard (westbound approach)
2. Lankershim Boulevard & Riverside Drive (eastbound approach)
3. Lankershim Boulevard & Moorpark Street (northbound/eastbound approaches)
4. Cahuenga Boulevard & Camarillo Street (all approaches)
5. Cahuenga Boulevard & Moorpark Street (northbound/southbound approaches)
6. Lankershim Boulevard & Valleyheart Drive/James Stewart Avenue (northbound approach)
7. Cahuenga Boulevard & SR 134 Eastbound Ramps (southbound approach)
8. Radford Avenue/Ventura Place & Ventura Boulevard (westbound/eastbound approaches)
9. US 101 Southbound On-Ramp/Fruitland Avenue & Ventura Boulevard (westbound approach)
10. Lankershim Boulevard & Chandler Boulevard North (northbound approach)
11. Vineland Avenue & Moorpark Street (eastbound approach)

Also, as part of these voluntary traffic improvements, the applicant would fund the design and installation of a new traffic signal at the intersection of Riverside Drive and Strohm Avenue, if deemed warranted by DOT's East Valley District Office.

B. Hollywood Event Management Infrastructure

The Project proposed to fund the design and installation of up to five fixed or portable dynamic roadway message signs that can be utilized to guide motorists during events, alert motorists of traffic conditions and street closures, recommend alternate routes, etc. These signs operate similar to changeable message signs but require significantly less public right-of-way to install. These signs would provide motorists on arterial streets leading up to Hollywood from other parts of the region with advance information and warning regarding lane closures due to special events in Hollywood. Providing motorists with advance information regarding street closures would assist motorists in choosing alternative routes of travel. Alternative routes can be selected early thus avoiding long delays and preventing further congestion. The design, size and placement of these signs will be determined by DOT at a later date.

IV. SITE ACCESS AND CIRCULATION

Currently, the project site provides ten access points - one along the US-101 freeway, five along Lankershim Boulevard, two along Barham Boulevard, and two that are internal to the site. The proposed project would enhance the existing studio entry points and visitor gateways and would install two new public gateways to the project. The two new access points include a public gateway at a proposed new signalized intersection on Barham

Boulevard south of Lakeside Plaza Drive and a public entry/exit point at Buddy Holly Drive and Donald O'Connor Drive. The attached graphic (**Attachment J**) illustrates the proposed vehicular and pedestrian circulation features for the Project.

The project would continue to provide the four existing studio gates along Lankershim Boulevard at James Stewart Avenue, Main Street, Jimi Hendrix Drive, and the visitor gate south of the Technicolor Building at Muddy Waters Drive. Two relocated studio gates entering off Lakeside Plaza Drive would provide direct, controlled access for studio employees, authorized visitors, and deliveries to the Business and Studio Areas.

Universal Hollywood Drive and Universal Studios Boulevard would continue to provide the primary east-west and north-south access to and within the project. As part of the project, Universal Hollywood Drive, which extends between Lankershim Boulevard and Universal Studios Boulevard, providing access to parking structures within Universal Studios Hollywood and Universal CityWalk, would be realigned and widened to facilitate travel between these two roadways. Universal Studios Boulevard extends over the US-101 freeway between Cahuenga Boulevard and Buddy Holly Drive, and connects to the parking structures within Universal CityWalk. Buddy Holly Drive would also be widened and may operate as a two-way roadway between Universal Studios Boulevard and Donald O'Connor Drive. The main function of these primary access roads would continue to be to lead visitors into parking structures, allowing them to then access the rest of the site on foot or by the Universal shuttle system.

Internal project roadways, consisting of public and private streets, would be developed within the project site as needed in accordance with the applicable design guidelines to emergency vehicle access requirements and to ensure efficient circulation. The internal street system within the Studio, Entertainment, and Business Areas would continue to be largely restricted to authorized vehicles, as well as vendor-owned service vehicles and vehicles driven by Universal City studio employees.

This determination does not include approval of the final design plans of the project's driveways, internal circulation, or parking scheme. In order to minimize and prevent last minute building design changes, it is imperative that the applicant, prior to the commencement of building or parking layout design efforts, work with DOT regarding driveway width and internal circulation requirements, so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans to avoid any unnecessary time delays and potential costs associated with late design changes. Final DOT approval shall be obtained prior to issuance of building permits for such phase by submitting detailed site and driveway plans, with a minimum scale of 1"=40', to DOT.

V. GENERAL CONDITIONS

The following conditions are in addition to the traffic mitigation measures identified in DOT's determination.

- In accordance with the project's traffic mitigation phasing plan, all transportation improvements and associated traffic signal work within the City of Los Angeles must be **guaranteed** through the B-Permit process of the Bureau of Engineering, prior to the issuance of the building permits for such phase and **completed** prior to the issuance of the certificates of occupancy for such phase. Temporary certificates of occupancy may be granted in the event of any delay through no fault of the applicant, provided that, in each case, the applicant has demonstrated reasonable efforts and due diligence to the satisfaction of DOT.

- If a proposed traffic mitigation measure does not receive the required approval, a substitute mitigation measure may be provided subject to the approval of DOT or other governing agency with jurisdiction over the mitigation location, upon demonstration that the substitute measure is equivalent or superior to the original measure in mitigating the project's significant traffic impact. To the extent that a mitigation measure proves to be infeasible and no substitute mitigation is available, then a significant traffic impact would remain.

- All improvements along state highways and at freeway ramps require approval from the State of California Department of Transportation (Caltrans). The applicant may be required to obtain an encroachment permit or other approval from Caltrans for each of these improvements before the issuance of any building permits, to the satisfaction of Caltrans, DOT, and the Bureau of Engineering.

- For all of the proposed roadway and intersection improvements within the City of Los Angeles, the final determination on the feasibility shall be made by the Department of Public Works, Bureau of Engineering.

- For all buildings in the City of Los Angeles, a parking and driveway plan shall be submitted to DOT for approval of access and circulation prior to the submittal of building plans for plan check to the Department of Building and Safety.

- A construction work site traffic control plan should be submitted to DOT for review and approval prior to the start of any construction work in the City. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. All construction related traffic should avoid peak commute hours unless otherwise approved by DOT.

- All temporary construction traffic control plans in the City involving temporary traffic signal modifications, the relocation of any signal equipment, and the installation of crash cushions or temporary roadway striping shall be prepared, submitted and signed by a registered Civil or Traffic Engineer in the state of California, on DOT-standard plan format, for review and approval by DOT's Design Division.

- Unless detour plans, worksite traffic control plans, and/or traffic circulation plans are pre-approved by DOT's Design Division, all construction traffic control proposals involving temporary signal modifications and/or relocations of any signal equipment,

and utilizations of temporary traffic striping and crash cushions, are the responsibility of the applicant, and must be submitted, signed and sealed by California Registered Civil Engineers and Traffic Engineers on DOT-standard plan submittal format for approval by DOT's Design Division.

- Pursuant to LAMC 41.20, the applicant shall be advised of the necessity of obtaining Street Use Permits from the Board of Public Works, which normally delegates such permitting authority to the Department of Public Works, Bureau of Street Services, for any proposed street closures.

- All other temporary construction traffic control proposals in the City involving the use of flashing arrow boards, traffic cones, barricades, delineators, construction signage, etc., shall require the review and approval by DOT's East Valley District Office.

- An ordinance adding Section 19.15 to the Los Angeles Municipal Code relative to application fees paid to DOT for permit issuance activities was adopted by the Los Angeles City Council. Ordinance No. 180542, effective March 28, 2009, identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

VI. OTHER COMMENTS

A. Los Angeles River Bike Path

In February 2007, the City of Los Angeles announced the start of a comprehensive Los Angeles River revitalization plan that includes the completion of the bike path along the river to connect Downtown Los Angeles with Canoga Park. In addition to revitalizing the river, the goal of this project is to provide a continuous and functional riverfront bike path that extends through the City of Los Angeles and is part of an integrated Countywide bicycle plan. DOT fully supports the Los Angeles River Bike Path project. The close proximity of this Project and the Metro Red Line station to a bike path along the Los Angeles River Flood Control Channel can provide for an enhanced multi-modal transportation system in this area that provides commuters with more options and alternatives to driving a vehicle. However, the project does not propose providing public access along the Los Angeles River Flood Control Channel (the site's northern boundary) due to existing constraints and since the Applicant does not own the right-of-way. The County of Los Angeles Flood Control District owns the majority of the right-of-way for River Road along the northern end of the project site. DOT is aware of these right-of-way issues and of the constraints that include buildings and electrical substations currently located within the anticipated footprint of any future bike path along the south side of the river channel.

While DOT supports the bicycle system features proposed in the project's design, a truly comprehensive multi-modal system would include a riverfront bike path. This project does not propose to construct any new buildings within 20-feet of the

edge of the Los Angeles River Flood Control Channel, but the project scope does not include the removal of the existing constraints. To preserve the future right-of-way for any Los Angeles River bike path options, DOT recommends that any future plans for the northern edge of the project site prohibit construction within the anticipated footprint of a future Los Angeles River bike path (currently estimated at 20-feet from the edge of the channel).

B. Barham Boulevard Bridge

As stated above, the applicant should continue to work with Caltrans to develop meaningful freeway enhancements that can serve to alleviate commuter congestion. Improving traffic flow along the freeway mainline can provide for enhanced travel along the City's street network. However, any improvements to the US-101 freeway adjacent to the project site should also include the replacement (or retrofitting) and expansion of the Barham Boulevard bridge over the freeway.

CONCLUSION

Under the Alternative 10 scenario, the project is expected to result in four unmitigated traffic impacts after implementation of the proposed transportation mitigation program. Of these four intersections, two are expected to operate at a level-of-service (LOS) of C or better after build out of the project, and two are adjacent to the project site. While mitigations are proposed at these locations that partially mitigate the project's impacts, a significant impact still remains. Overall, Alternative 10 reduces the total number of unmitigated traffic impacts as it would generate 35% less traffic during the afternoon peak hour than the alternative that was the subject of DOT's report dated April 2, 2010.

If you have any questions, please call me at (213) 972-8476 or Christopher Hy of my staff at (213) 972-8479.

Attachment A:	Proposed Project Land Uses
Attachment B:	Conceptual Site Plan
Attachment C:	Study Area
Attachment D:	Study Intersections
Attachment E:	Trip Generation Summary
Attachment F1:	Project Impact Summary - Level of Service (Signalized Intersections)
Attachment F2:	Level of Service Summary for Unsignalized Intersections
Attachment G:	Traffic Signal Upgrades
Attachment H:	Neighborhood Traffic Management Plan Implementation Process
Attachment I:	Transportation Improvement Phasing Plan
Attachment J:	Project Circulation

/Universal/Evolution Plan/alternative 10/NBCU Evolution Plan Assessment Letter 081312.pdf

c: Renee Weitzer, Fourth Council District
Mark Lyum, NBC/Universal
Pat Gibson, Gibson Transportation Consulting, Inc.
Srinath Raju, Raju Associates, Inc.
Bruce Lackow, Matrix Environmental
Elmer Alvarez, Caltrans
Bill Winter, LA County
Jay Kim, DOT Planning
Brian Gallagher, DOT Operations
Carl Mills, Bureau of Engineering

ATTACHMENT A
NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
PROPOSED PROJECT LAND USES

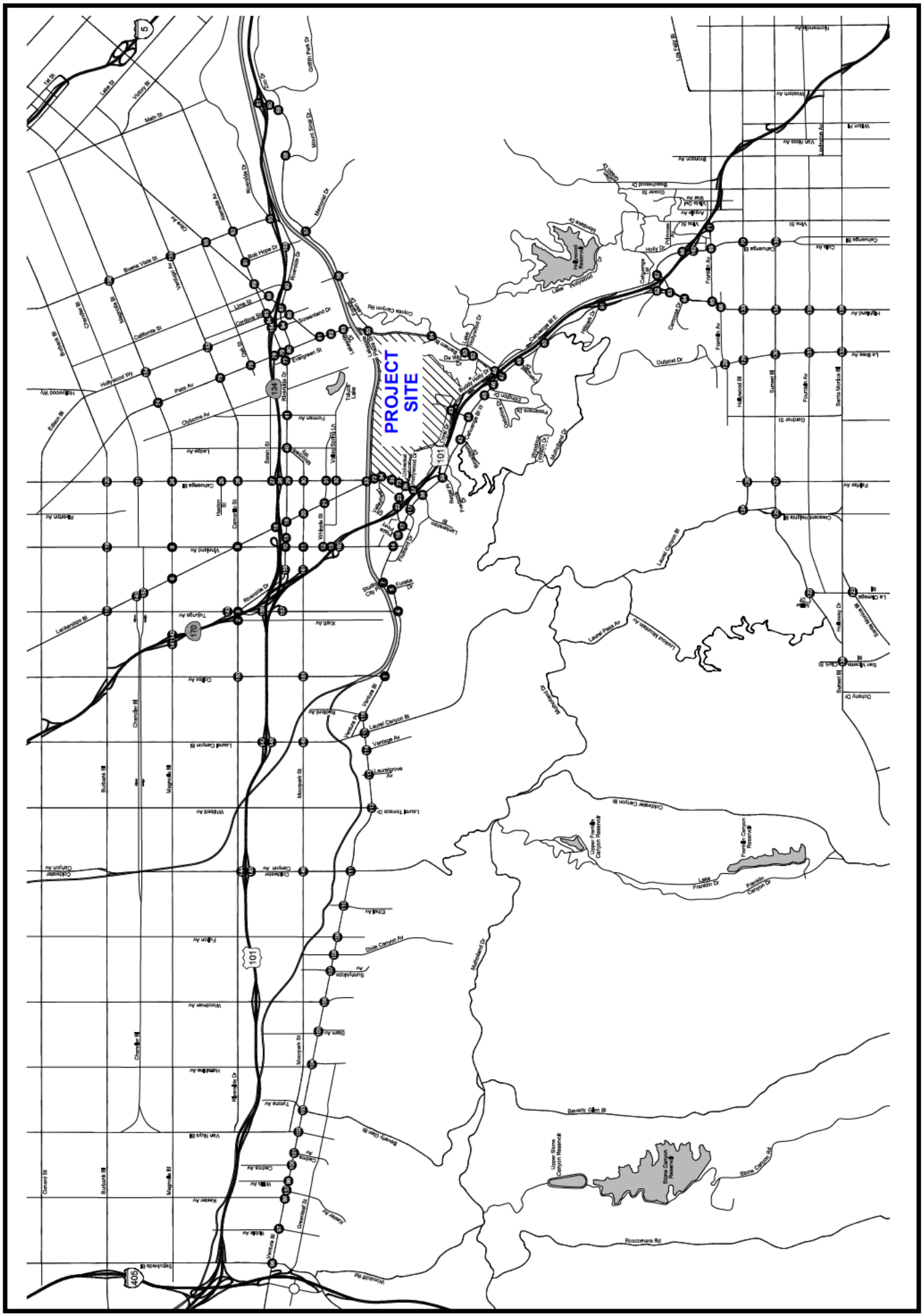
Land Use		Existing Development	Demolition	Gross New Development	Alternate 10 - Net New Development	Totals - Existing and New Development
Stud o (square feet)		1,228,120	185,051	493,000	307,949	1,536,069
Stud o Off ce (square feet)		942,545	97,680	745,000	647,320	1,589,865
Off ce (square feet)		463,430	54,594	550,000	495,406	958,836
Enterta nment (square feet)		775,132	107,105	445,000	337,895	1,113,027
Enterta nment Reta (square feet)		656,144	30,784	70,000	39,216	695,360
Amph theater (square feet)		110,600	110,600	60,000	-50,600	60,000
Hote (square feet)				900,000	900,000	900,000
Hote (guest rooms)				1,000	1,000	1,000
TOTAL	**(square feet)**	**4,175,971**	**585,814**	**3,263,000**	**2,677,186**	**6,853,157**
	(guest rooms)	**4,175,971**	**585,814**	**1,000**	**1,000**	**1,000**

ATTACHMENT B

ATTACHMENT B
NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
CONCEPTUAL SITE PLAN

ATTACHMENT B

ATTACHMENT B



ATTACHMENT C
NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
STUDY AREA

ATTACHMENT B

ATTACHMENT D

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
STUDY INTERSECTIONS

No.	Intersection	Jurisdiction
1.	Colfax Avenue & Ventura Boulevard	City of Los Angeles
2.	Kraft Avenue/SR 170 SB Off Ramp & Riverside Drive	City of Los Angeles/Caltrans
3.	Tujunga Avenue & Riverside Drive/Camarillo Street	City of Los Angeles
4.	Tujunga Avenue & Ventura Boulevard	City of Los Angeles
5.	Eureka Drive & Ventura Boulevard	City of Los Angeles
6.	Lankershim Boulevard & Magnolia Boulevard	City of Los Angeles
7.	Studio City Place & Ventura Boulevard	City of Los Angeles
8.	Vineland Avenue & Magnolia Boulevard	City of Los Angeles
9.	Vineland Avenue/Lankershim Boulevard & Camarillo Street	City of Los Angeles
10.	Vineland Avenue & Riverside Drive	City of Los Angeles
11.	Vineland Avenue & Moorpark Street	City of Los Angeles
12.	Vineland Avenue & Whipple Street	City of Los Angeles
13.	Vineland Avenue & US 101 NB Off Ramp	City of Los Angeles/Caltrans
14.	Vineland Avenue & Ventura Boulevard	City of Los Angeles
15. [a]	SR 134 EB On Ramp e/o Vineland Avenue & Riverside Drive	City of Los Angeles/Caltrans
16.	Plaza Parkway & Ventura Boulevard	City of Los Angeles
17.	Riverton Avenue/Campo de Cahuenga Way & Ventura Boulevard	City of Los Angeles
18.	Lankershim Boulevard & SR 134 WB Off Ramp	City of Los Angeles/Caltrans
19.	Lankershim Boulevard & Riverside Drive	City of Los Angeles
20.	Lankershim Boulevard & Moorpark Street	City of Los Angeles
21.	Lankershim Boulevard & Whipple Street	City of Los Angeles
22.	US 101 NB Ramps & Campo de Cahuenga Way	City of Los Angeles/Caltrans
23.	Metro Driveway & Campo de Cahuenga Way	City of Los Angeles
24.	Cahuenga Boulevard & Magnolia Boulevard	City of Los Angeles
25.	Cahuenga Boulevard & Huston Street	City of Los Angeles
26.	Cahuenga Boulevard & Camarillo Street	City of Los Angeles
27.	Cahuenga Boulevard & SR 134 WB Off Ramp	City of Los Angeles/Caltrans
28.	Cahuenga Boulevard & SR 134 EB Ramps	City of Los Angeles/Caltrans
29.	Cahuenga Boulevard & Riverside Drive	City of Los Angeles
30.	Cahuenga Boulevard & Moorpark Street	City of Los Angeles
31.	Cahuenga Boulevard & Whipple Street	City of Los Angeles
32. [b]	Cahuenga Boulevard & Valley Spring Lane	City of Los Angeles
33.	Lankershim Boulevard & Cahuenga Boulevard	City of Los Angeles
34.	Lankershim Boulevard & Valleyheart Drive/James Stewart Avenue	City of Los Angeles/County of Los Angeles
35.	Lankershim Boulevard & Main Street	City of Los Angeles/County of Los Angeles
36.	Lankershim Boulevard & Campo de Cahuenga Way/Universal Hollywood Drive	City of Los Angeles/County of Los Angeles
37.	Lankershim Boulevard & US 101 NB Off Ramp	City of Los Angeles/Caltrans
38. [c]	Lankershim Boulevard & Ventura Boulevard/Cahuenga Boulevard	City of Los Angeles
39.	US 101 SB Ramps/Regal Place & Cahuenga Boulevard	City of Los Angeles/Caltrans
40.	Ledge Avenue/Moorpark Way & Riverside Drive	City of Los Angeles
41.	Forman Avenue & Riverside Drive	City of Los Angeles
42.	Broadlawn Drive & Cahuenga Boulevard	City of Los Angeles
43.	Universal Center Drive/Universal Studios Boulevard & Buddy Holly Drive	City of Los Angeles/County of Los Angeles
44.	Universal Studios Boulevard & Cahuenga Boulevard	City of Los Angeles
45.	Oakshire Drive & Cahuenga Boulevard	City of Los Angeles
46.	US 101 SB Ramps w/o Barham Boulevard/Cahuenga Boulevard & Cahuenga Boulevard	City of Los Angeles/Caltrans
47.	Barham Boulevard & Cahuenga Boulevard	City of Los Angeles
48.	Barham Boulevard & Buddy Holly Drive/Cahuenga Boulevard	City of Los Angeles
49.	Oakcrest Drive & Cahuenga Boulevard	City of Los Angeles
50.	Mulholland Drive & Cahuenga Boulevard	City of Los Angeles
51.	Cahuenga Boulevard & Hillpark Drive	City of Los Angeles
52.	Barham Boulevard & De Witt Drive	City of Los Angeles
53.	Barham Boulevard & Lake Hollywood Drive	City of Los Angeles
54.	Barham Boulevard & Coyote Canyon Road	City of Los Angeles
55.	Barham Boulevard & Lakeside Plaza Drive/Forest Lawn Drive	City of Los Angeles
56.	Warner Brothers Studios Gate 7/Gate 8 & Forest Lawn Drive	City of Los Angeles
57.	Memorial Drive & Forest Lawn Drive	City of Los Angeles
58.	Mount Sinai Drive & Forest Lawn Drive	City of Los Angeles
59.	Forest Lawn Drive & Zoo Drive	City of Los Angeles
60. [b]	Forest Lawn Drive & SR 134 EB Ramps	City of Los Angeles/Caltrans

Notes:

[a] Intersection is uncontrolled.

[b] Intersection is controlled by stop signs on minor approach.

[c] Denotes Congestion Management Program (CMP) arterial monitoring station.

ATTACHMENT B

ATTACHMENT D - Continued

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
STUDY INTERSECTIONS

No.	Intersection	Jurisdiction
61. [b]	Forest Lawn Drive & SR 134 WB Ramps	City of Los Angeles/Caltrans
62.	Cahuenga Boulevard/Highland Avenue & Pat Moore Way/US 101 On Ramps	City of Los Angeles/Caltrans
63.	Highland Avenue & Odin Street	City of Los Angeles
64.	Highland Avenue & Camrose Drive	City of Los Angeles
65.	Highland Avenue & Franklin Avenue	City of Los Angeles
66.	Highland Avenue & Franklin Place/Franklin Avenue	City of Los Angeles
67. [b]	Odin Street & Cahuenga Boulevard	City of Los Angeles
68.	Cahuenga Boulevard & US 101 NB Off Ramp	City of Los Angeles/Caltrans
69.	Cahuenga Boulevard & Franklin Avenue	City of Los Angeles
70.	Cahuenga Boulevard & Hollywood Boulevard	City of Los Angeles
71.	Vine Street & Franklin Avenue/US 101 SB Off Ramp	City of Los Angeles/Caltrans
72. [b]	Lankershim Boulevard & Muddy Waters Drive	City of Los Angeles/County of Los Angeles
73. [a]	Lankershim Boulevard & Jimi Hendrix Drive	City of Los Angeles/County of Los Angeles
74.	Pass Avenue & Magnolia Boulevard	City of Burbank
75.	Pass Avenue & Verdugo Avenue	City of Burbank
76.	Pass Avenue & Oak Street	City of Burbank
77.	Evergreen Street/Riverside Drive & Alameda Avenue	City of Burbank
78.	Pass Avenue & SR 134 EB Off Ramp	City of Burbank/Caltrans
79.	Pass Avenue & Alameda Avenue	City of Burbank
80.	Pass Avenue & Riverside Drive	City of Burbank
81.	Olive Avenue & Pass Avenue	City of Burbank
82.	Olive Avenue & Warner Brothers Studios Gate 2/Gate 3	City of Burbank
83.	Olive Avenue & Warner Brothers Studios Gate 1/Lakeside Drive	City of Burbank
84.	Hollywood Way & Alameda Avenue	City of Burbank
85.	Cordova Street/SR 134 WB Off Ramp & Alameda Avenue	City of Burbank/Caltrans
86.	Hollywood Way & Olive Avenue	City of Burbank
87.	Olive Avenue & Riverside Drive	City of Burbank
88.	Lima Street & Olive Avenue	City of Burbank
89.	Olive Avenue & Alameda Avenue	City of Burbank
90.	California Street & Riverside Drive	City of Burbank
91.	Bob Hope Drive & Alameda Avenue	City of Burbank
92.	Buena Vista Street & Alameda Avenue	City of Burbank
93.	Buena Vista Street/SR 134 EB On Ramp & Riverside Drive/SR 134 WB Ramps	City of Burbank/Caltrans
94. [a]	SR 134 EB On Ramp/Screenland Drive & Riverside Drive	City of Burbank/Caltrans
95.	Buena Vista Street & Olive Avenue	City of Burbank
96. [c]	Sepulveda Boulevard & Ventura Boulevard	City of Los Angeles
97.	Noble Avenue & Ventura Boulevard	City of Los Angeles
98.	Kester Avenue (West) & Ventura Boulevard	City of Los Angeles
99.	Willis Avenue & Ventura Boulevard	City of Los Angeles
100.	Cedros Avenue (West) & Ventura Boulevard	City of Los Angeles
101.	Cedros Avenue (East) & Ventura Boulevard	City of Los Angeles
102.	Van Nuys Boulevard & Ventura Boulevard	City of Los Angeles
103.	Tyrone Avenue/Beverly Glen Boulevard & Ventura Boulevard	City of Los Angeles
104.	Hazeltine Avenue (West) & Ventura Boulevard	City of Los Angeles
105.	Stern Avenue (West) & Ventura Boulevard	City of Los Angeles
106. [c]	Woodman Avenue & Ventura Boulevard	City of Los Angeles
107.	Sunnyslope Avenue & Ventura Boulevard	City of Los Angeles
108.	Dixie Canyon Avenue & Ventura Boulevard	City of Los Angeles
109.	Fulton Avenue & Ventura Boulevard	City of Los Angeles
110.	Valley Vista Boulevard/Ethel Avenue & Ventura Boulevard	City of Los Angeles
111.	Coldwater Canyon Avenue & Ventura Boulevard	City of Los Angeles
112.	Whitsett Avenue/Laurel Terrace Drive & Ventura Boulevard	City of Los Angeles
113.	Laurelgrove Avenue & Ventura Boulevard	City of Los Angeles
114.	Vantage Avenue & Ventura Boulevard	City of Los Angeles
115. [c]	Laurel Canyon Boulevard & Ventura Boulevard	City of Los Angeles
116.	Radford Avenue/Ventura Place & Ventura Boulevard	City of Los Angeles
117. [a]	US 101 SB On Ramp n/o Lankershim Boulevard & Ventura Boulevard	City of Los Angeles/Caltrans
118.	Lankershim Boulevard/Tujunga Avenue & Burbank Boulevard	City of Los Angeles
119.	Vineland Avenue & Burbank Boulevard	City of Los Angeles
120.	Cahuenga Boulevard & Burbank Boulevard	City of Los Angeles

Notes:

[a] Intersection is uncontrolled.

[b] Intersection is controlled by stop signs on minor approach.

[c] Denotes Congestion Management Program (CMP) arterial monitoring station.

ATTACHMENT B

ATTACHMENT D - Continued

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
STUDY INTERSECTIONS

No.	Intersection	Jurisdiction
121.	Cahuenga Boulevard & Chandler Boulevard	City of Los Angeles
122.	La Cienega Boulevard & Sunset Boulevard	City of West Hollywood
123. [c]	La Cienega Boulevard & Santa Monica Boulevard	City of West Hollywood
124.	Laurel Canyon Boulevard & Hollywood Boulevard	City of Los Angeles
125.	Crescent Heights Boulevard & Sunset Boulevard	City of Los Angeles
126.	Fairfax Avenue & Hollywood Boulevard	City of Los Angeles
127.	Fairfax Avenue & Sunset Boulevard	City of Los Angeles
128.	La Brea Avenue & Franklin Avenue	City of Los Angeles
129.	La Brea Avenue & Hollywood Boulevard	City of Los Angeles
130.	La Brea Avenue & Sunset Boulevard	City of Los Angeles
131.	La Brea Avenue & Fountain Avenue	City of West Hollywood/City of Los Angeles
132.	La Brea Avenue & Santa Monica Boulevard	City of West Hollywood
133.	Highland Avenue & Hollywood Boulevard	City of Los Angeles
134.	Highland Avenue & Sunset Boulevard	City of Los Angeles
135.	Highland Avenue & Fountain Avenue	City of Los Angeles
136. [c]	Highland Avenue & Santa Monica Boulevard	City of Los Angeles
137.	Kester Avenue (East) & Ventura Boulevard	City of Los Angeles
138.	San Vicente Boulevard/Clark St & Sunset Boulevard	City of West Hollywood
139.	Cahuenga Boulevard & Sunset Boulevard	City of Los Angeles
140.	Lankershim Boulevard & Chandler Boulevard (North)	City of Los Angeles
141.	SR 170 SB Ramps & Magnolia Boulevard	City of Los Angeles/Caltrans
142.	SR 170 NB Ramps & Magnolia Boulevard	City of Los Angeles/Caltrans
143. [a]	Tujunga Avenue & SR 170 NB On Ramp/Private Driveway	City of Los Angeles/Caltrans
144.	Coldwater Canyon Avenue & US 101 NB Ramps	City of Los Angeles/Caltrans
145.	Coldwater Canyon Avenue & US 101 SB Ramps	City of Los Angeles/Caltrans
146.	Coldwater Canyon Avenue & Moorpark Street	City of Los Angeles
147.	Laurel Canyon Boulevard & US 101 NB Ramps	City of Los Angeles/Caltrans
148.	Laurel Canyon Boulevard & US 101 SB Ramps	City of Los Angeles/Caltrans
149.	Laurel Canyon Boulevard & Moorpark Street	City of Los Angeles
150.	Colfax Avenue & Riverside Drive	City of Los Angeles
151.	Colfax Avenue & Moorpark Street	City of Los Angeles
152.	Lankershim Boulevard & Chandler Boulevard (South)	City of Los Angeles
153.	Hollywood Way & Verdugo Avenue	City of Burbank
154.	Hollywood Way & Magnolia Boulevard	City of Burbank
155.	Buena Vista Street & Verdugo Avenue	City of Burbank
156.	Buena Vista Street & Magnolia Boulevard	City of Burbank
157. [b]	Tujunga Avenue & US 101 SB Off Ramp	City of Los Angeles/Caltrans
158. [a]	Tujunga Avenue & US 101 NB On Ramp	City of Los Angeles/Caltrans
159. [b]	US 101 SB Off Ramp & Riverside Drive	City of Los Angeles/Caltrans
160.	Vineland Avenue & US 101 SB Ramps	City of Los Angeles/Caltrans
161. [a]	US 101 NB On Ramp & Moorpark Street	City of Los Angeles/Caltrans
162. [b]	Cahuenga Boulevard & US 101 SB Ramps	City of Los Angeles/Caltrans
163. [b]	Bob Hope Drive & SR 134 EB Off Ramp	City of Burbank/Caltrans
164. [a]	SR 134 WB On Ramp & Alameda Avenue	City of Burbank/Caltrans

Notes:

[a] Intersection is uncontrolled.

[b] Intersection is controlled by stop signs on minor approach.

[c] Denotes Congestion Management Program (CMP) arterial monitoring station.

ATTACHMENT B

ATTACHMENT E

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
TRIP GENERATION SUMMARY

EVOLUTION PLAN PROJECT (1)

Scenario	Daily	A.M. Peak Hour			P.M. Peak Hour		
		In	Out	Total	In	Out	Total
Existing Development	44,883	2,433	582	3,015	1,530	3,184	4,714
Net Project without TDM Program	36,451	1,538	1,531	3,069	1,396	2,227	3,623
Full Site without TDM Program	81,334	3,971	2,113	6,084	2,926	5,411	8,337
Full Site with TDM Program	72,991	3,556	1,787	5,343	2,560	4,924	7,484
Net Project with TDM Program	**28,108**	**1,123**	**1,205**	**2,328**	**1,030**	**1,740**	**2,770**

ALTERNATIVE 10

Scenario	Daily	A.M. Peak Hour			P.M. Peak Hour		
		In	Out	Total	In	Out	Total
Existing Development	44,883	2,433	582	3,015	1,530	3,184	4,714
Net Alternatlive 10 without TDM Program	23,601	1,642	599	2,241	447	1,752	2,197
Full Site without TDM Program	68,484	4,075	1,181	5,256	1,977	4,936	6,911
Full Site with TDM Program	64,022	3,704	1,071	4,775	1,837	4,575	6,412
Net Alternative 10 with TDM Program	**19,139**	**1,271**	**489**	**1,760**	**307**	**1,391**	**1,698**

Difference between Alternative 10 and Project with TDM Program	**(8,969)**	**148**	**(716)**	**(568)**	**(723)**	**(349)**	**(1,072)**

(1) SOURCE: Table 20 of the Project Transportation Study

ATTACHMENT F1

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

PROJECT IMPACT SUMMARY - LEVEL OF SERVICE (SIGNALIZED INTERSECTIONS)

No.		Intersection	Peak Hour	Future without Alternative 10		Future with Alternative 10 with TDM, Before Mitigations				Future with Alternative 10 with TDM Program and Mitigation Measures								
				V/C	LOS	V/C	LOS	Change in V/C	Significant Impact?	V/C	LOS	Required Evolution Plan Mitigation V/C	Mitigation V/C Effectiveness	Required Metro Universal Mitigation V/C	Mitigation Shared with Metro Universal	Leftover Mitigation V/C after Metro Universal Required Credit	Required V/C Improvement to eliminate Evolution Plan Significant Impact	Residual Significant Impact?
1.	[a]	Colfax Avenue &	A.M.	0.770	C	0.793	C	0.023	NO	0.755	C	0.000	0.038	0.000	NO	0.038		NO
		Ventura Boulevard	P.M.	1.032	F	1.057	F	0.025	YES	1.019	F	0.016	0.038	0.017	YES	0.021		NO
2.	[a]	Kraft Avenue/SR 170 SB Off-Ramp &	A.M.	0.663	B	0.700	B	0.037	NO	0.647	B	0.000	0.053	0.000	NO	0.053		NO
		Riverside Drive	P.M.	0.613	B	0.621	B	0.008	NO	0.592	A	0.000	0.029	0.000	NO	0.029		NO
3.	[a]	Tujunga Avenue &	A.M.	1.171	F	1.200	F	0.029	YES	1.158	F	0.020	0.042	0.017	YES	0.025		NO
		Riverside Drive/Camarillo Street	P.M.	1.126	F	1.128	F	0.002	NO	1.118	F	0.000	0.010	0.000	NO	0.010		NO
4.	[a]	Tujunga Avenue &	A.M.	0.696	B	0.719	C	0.023	NO	0.682	B	0.000	0.037	0.000	NO	0.037		NO
		Ventura Boulevard	P.M.	0.841	D	0.867	D	0.026	YES	0.831	D	0.007	0.036	0.000	NO	0.036		NO
5.	[a]	Eureka Drive &	A.M.	0.695	B	0.719	C	0.024	NO	0.683	B	0.000	0.036	0.000	NO	0.036		NO
		Ventura Boulevard	P.M.	0.668	B	0.694	B	0.026	NO	0.657	B	0.000	0.037	0.000	NO	0.037		NO
6.	[a]	Lankershim Boulevard &	A.M.	1.197	F	1.206	F	0.009	NO	1.196	F	0.000	0.010	0.000	NO	0.010		NO
		Magnolia Boulevard	P.M.	1.107	F	1.113	F	0.006	NO	1.103	F	0.000	0.010	0.000	NO	0.010		NO
7.	[a]	Studio City Place &	A.M.	0.617	B	0.643	B	0.026	NO	0.606	B	0.000	0.037	0.000	NO	0.037		NO
		Ventura Boulevard	P.M.	0.683	B	0.709	C	0.026	NO	0.673	B	0.000	0.036	0.000	NO	0.036		NO
8.	[a]	Vineland Avenue &	A.M.	1.101	F	1.104	F	0.003	NO	1.094	F	0.000	0.010	0.000	NO	0.010		NO
		Magnolia Boulevard	P.M.	1.402	F	1.406	F	0.004	NO	1.396	F	0.000	0.010	0.000	NO	0.010		NO
9.	[a]	Vineland Avenue/Lankershim Boulevard &	A.M.	1.351	F	1.376	F	0.025	YES	1.324	F	0.016	0.052	0.021	YES	0.031		NO
		Camarillo Street	P.M.	1.205	F	1.216	F	0.011	YES	1.206	F	0.002	0.010	0.000	NO	0.010		NO
10.	[a]	Vineland Avenue &	A.M.	1.124	F	1.175	F	0.051	YES	1.068	F	0.042	0.107	0.028	YES	0.079		NO
		Riverside Drive	P.M.	0.820	D	0.843	D	0.023	YES	0.791	C	0.004	0.052	0.000	NO	0.052		NO
11.	[a]	Vineland Avenue &	A.M.	1.127	F	1.136	F	0.009	NO	1.051	F	0.000	0.085	0.000	NO	0.085		NO
		Moorpark Street	P.M.	1.056	F	1.073	F	0.017	YES	1.037	F	0.008	0.036	0.004	YES	0.032		NO
12.	[a]	Vineland Avenue &	A.M.	0.500	A	0.501	A	0.001	NO	0.491	A	0.000	0.010	0.000	NO	0.010		NO
		Whipple Street	P.M.	0.446	A	0.447	A	0.001	NO	0.437	A	0.000	0.010	0.000	NO	0.010		NO
13.	[a]	Vineland Avenue &	A.M.	0.484	A	0.485	A	0.001	NO	0.471	A	0.000	0.014	0.000	NO	0.014		NO
		US 101 NB Off-Ramp	P.M.	0.405	A	0.406	A	0.001	NO	0.396	A	0.000	0.010	0.000	NO	0.010		NO
14.	[a]	Vineland Avenue &	A.M.	1.027	F	1.075	F	0.048	YES	0.909	E	0.039	0.166	0.080	YES	0.086		NO
		Ventura Boulevard	P.M.	1.049	F	1.087	F	0.038	YES	0.987	E	0.029	0.100	0.043	YES	0.057		NO
16.	[a]	Plaza Parkway &	A.M.	0.804	D	0.847	D	0.043	YES	0.713	C	0.024	0.134	0.010	YES	0.124		NO
		Ventura Boulevard	P.M.	0.539	A	0.566	A	0.027	NO	0.529	A	0.000	0.037	0.000	NO	0.037		NO
17.	[a]	Riverton Avenue/Campo de Cahuenga Way &	A.M.	0.640	B	0.646	B	0.006	NO	0.691	B	0.000	-0.045	0.000	NO	0.000		NO
		Ventura Boulevard	P.M.	0.616	B	0.648	B	0.032	NO	0.657	B	0.000	-0.009	0.000	NO	0.000		NO
18.	[a]	Lankershim Boulevard &	A.M.	0.935	E	0.965	E	0.030	YES	0.916	E	0.021	0.049	0.021	YES	0.028		NO
		SR 134 WB Off-Ramp	P.M.	0.597	A	0.615	B	0.018	NO	0.605	B	0.000	0.010	0.000	NO	0.010		NO
19.	[a]	Lankershim Boulevard &	A.M.	1.259	F	1.337	F	0.078	YES	1.192	F	0.069	0.145	0.069	YES	0.076		NO
		Riverside Drive	P.M.	1.060	F	1.082	F	0.022	YES	0.995	E	0.013	0.087	0.018	YES	0.069		NO
20.	[a]	Lankershim Boulevard &	A.M.	1.368	F	1.463	F	0.095	YES	1.137	F	0.086	0.326	0.075	YES	0.251		NO
		Moorpark Street	P.M.	1.178	F	1.233	F	0.055	YES	1.138	F	0.046	0.095	0.017	YES	0.078		NO
21.	[a]	Lankershim Boulevard &	A.M.	0.951	E	1.034	F	0.083	YES	0.889	D	0.074	0.145	0.065	YES	0.080		NO
		Whipple Street	P.M.	0.489	A	0.528	A	0.039	NO	0.518	A	0.000	0.010	0.000	NO	0.010		NO
22.	[a]	US 101 NB Ramps &	A.M.	0.235	A	0.264	A	0.029	NO	0.362	A	0.000	-0.098	0.000	NO	0.000		NO
		Campo de Cahuenga Way	P.M.	0.667	B	0.727	C	0.060	YES	0.727	C	0.027	0.000	0.003	YES	0.000	0.027	YES
23.	[a]	Metro Driveway &	A.M.	0.202	A	0.219	A	0.017	NO	0.237	A	0.000	-0.018	0.000	NO	0.000		NO
		Campo de Cahuenga Way	P.M.	0.607	B	0.671	B	0.064	NO	0.697	B	0.000	-0.026	0.072	YES	0.000		NO
24.	[a]	Cahuenga Boulevard &	A.M.	1.828	F	1.845	F	0.017	YES	1.809	F	0.008	0.036	0.016	NO	0.020		NO
		Magnolia Boulevard	P.M.	1.403	F	1.408	F	0.005	NO	1.329	F	0.000	0.079	0.000	NO	0.079		NO
25.	[a]	Cahuenga Boulevard &	A.M.	0.940	E	0.956	E	0.016	YES	0.923	E	0.007	0.033	0.000	NO	0.033		NO
		Huston Street	P.M.	0.549	A	0.553	A	0.004	NO	0.480	A	0.000	0.073	0.000	NO	0.073		NO
26.	[a]	Cahuenga Boulevard &	A.M.	1.489	F	1.507	F	0.018	YES	1.472	F	0.009	0.035	0.017	YES	0.018		NO
		Camarillo Street	P.M.	1.278	F	1.282	F	0.004	NO	1.234	F	0.000	0.048	0.000	NO	0.048		NO
27.	[a]	Cahuenga Boulevard &	A.M.	0.702	C	0.805	D	0.103	YES	0.740	C	0.064	0.065	0.000	NO	0.065		NO
		SR 134 WB Off-Ramp	P.M.	0.555	A	0.591	A	0.036	NO	0.554	A	0.000	0.037	0.000	NO	0.037		NO

ATTACHMENT B

ATTACHMENT F1 (Continued)

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

PROJECT IMPACT SUMMARY - LEVEL OF SERVICE (SIGNALIZED INTERSECTIONS)

No.	Intersection	Peak Hour	Future without Alternative 10		Future with Alternative 10 with TDM, Before Mitigations				Future with Alternative 10 with TDM Program and Mitigation Measures								
			V/C	LOS	V/C	LOS	Change in V/C	Significant Impact?	V/C	LOS	Required Evolution Plan Mitigation V/C	Mitigation V/C Effectiveness	Required Metro Universal Mitigation V/C	Mitigation Shared with Metro Universal	Leftover Mitigation V/C after Metro Universal Required Credit	Required V/C Improvement to eliminate Evolution Plan Significant Impact	Residual Significant Impact?
28. [a]	Cahuenga Boulevard &	A.M.	0.924	E	0.966	E	0.042	YES	0.678	B	0.033	0.288	0.010	YES	0.278		NO
	SR 134 EB Ramps	P.M.	0.969	E	1.077	F	0.108	YES	0.899	D	0.099	0.178	0.088	YES	0.090		NO
29. [a]	Cahuenga Boulevard &	A.M.	1.158	F	1.221	F	0.063	YES	1.019	F	0.054	0.202	0.065	YES	0.137		NO
	Riverside Drive	P.M.	1.291	F	1.372	F	0.081	YES	1.215	F	0.072	0.157	0.067	YES	0.090		NO
30. [a]	Cahuenga Boulevard &	A.M.	1.047	F	1.129	F	0.082	YES	0.987	E	0.073	0.142	0.139	YES	0.003	0.070	YES
	Moorpark Street	P.M.	1.117	F	1.202	F	0.085	YES	1.148	F	0.076	0.054	0.138	YES	0.000	0.076	YES
31. [a]	Cahuenga Boulevard &	A.M.	0.658	B	0.727	C	0.069	YES	0.578	A	0.027	0.149	0.000	NO	0.149		NO
	Whipple Street	P.M.	0.692	B	0.777	C	0.085	YES	0.723	C	0.046	0.054	0.000	NO	0.054		NO
33. [a]	Lankershim Boulevard &	A.M.	0.837	D	0.938	E	0.101	YES	0.745	C	0.082	0.193	0.090	YES	0.103		NO
	Cahuenga Boulevard	P.M.	0.636	B	0.699	B	0.063	NO	0.602	B	0.000	0.097	0.000	NO	0.097		NO
34. [a]	Lankershim Boulevard &	A.M.	0.715	C	0.769	C	0.054	YES	0.579	A	0.015	0.190	0.000	NO	0.190		NO
	Valleyheart Drive/James Stewart Avenue	P.M.	0.904	E	1.000	E	0.096	YES	0.787	C	0.087	0.213	0.116	YES	0.097		NO
35. [a], [b]	Lankershim Boulevard &	A.M.	0.880	D	0.939	E	0.059	YES	0.726	C	0.040	0.213	0.110	PART AL	0.103		NO
	Main Street	P.M.	0.760	C	0.965	E	0.205	YES	0.721	C	0.166	0.244	0.114	PART AL	0.130	0.036	YES
36. [a], [b]	Lankershim Boulevard &	A.M.	1.034	F	1.254	F	0.220	YES	1.121	F	0.211	0.133	0.020	PART AL	0.113	0.098	YES
	Campo de Cahuenga Way/Universal Hollywood Drive	P.M.	1.375	F	1.563	F	0.188	YES	1.120	F	0.179	0.443	0.140	PART AL	0.303		NO
37. [a]	Lankershim Boulevard &	A.M.	0.937	E	1.094	F	0.157	YES	0.730	C	0.148	0.364	0.060	YES	0.304		NO
	US 101 NB Off-Ramp	P.M.	0.877	D	0.978	E	0.101	YES	0.647	B	0.082	0.331	0.000	NO	0.331		NO
38. [a], [c]	Lankershim Boulevard &	A.M.	0.952	E	1.003	F	0.051	YES	0.884	D	0.042	0.119	0.011	YES	0.108		NO
	Ventura Boulevard/Cahuenga Boulevard	P.M.	0.911	E	0.945	E	0.034	YES	0.790	C	0.025	0.155	0.011	YES	0.144		NO
39. [a]	US 101 SB Ramps/Regal Place &	A.M.	0.846	D	0.882	D	0.036	YES	0.817	D	0.017	0.065	0.000	NO	0.065		NO
	Cahuenga Boulevard	P.M.	0.810	D	0.850	D	0.040	YES	0.657	B	0.021	0.193	0.000	NO	0.193		NO
40. [a]	Ledge Avenue/Moorpark Way &	A.M.	1.070	F	1.110	F	0.040	YES	0.894	D	0.031	0.216	0.093	YES	0.123		NO
	Riverside Drive	P.M.	1.067	F	1.125	F	0.058	YES	0.918	E	0.049	0.207	0.094	YES	0.113		NO
41. [a]	Forman Avenue &	A.M.	0.798	C	0.820	D	0.022	YES	0.759	C	0.003	0.061	0.000	NO	0.061		NO
	Riverside Drive	P.M.	0.901	E	0.939	E	0.038	YES	0.855	D	0.029	0.084	0.022	YES	0.062		NO
42. [a]	Broadlawn Drive &	A.M.	0.661	B	0.692	B	0.031	NO	0.656	B	0.000	0.036	0.000	NO	0.036		NO
	Cahuenga Boulevard	P.M.	0.447	A	0.527	A	0.080	NO	0.490	A	0.000	0.037	0.000	NO	0.037		NO
43. [a]	Universal Center Drive/Universal Studios Boulevard &	A.M.	0.397	A	0.413	A	0.016	NO	0.403	A	0.000	0.010	0.000	NO	0.010		NO
	Buddy Holly Drive	P.M.	0.892	D	0.876	D	-0.016	NO	0.866	D	0.000	0.010	0.000	NO	0.010		NO
44. [a]	Universal Studios Boulevard &	A.M.	0.668	B	0.705	C	0.037	NO	0.591	A	0.000	0.114	0.000	NO	0.114		NO
	Cahuenga Boulevard	P.M.	0.724	C	0.800	C	0.076	YES	0.658	B	0.037	0.142	0.000	NO	0.142		NO
45. [a]	Oakshire Drive &	A.M.	0.718	C	0.753	C	0.035	NO	0.649	B	0.000	0.104	0.000	NO	0.104		NO
	Cahuenga Boulevard	P.M.	0.776	C	0.844	D	0.068	YES	0.637	B	0.044	0.207	0.000	NO	0.207		NO
46. [a]	US 101 SB Ramps w/o Barham Boulevard &	A.M.	1.225	F	1.283	F	0.058	YES	1.171	F	0.049	0.112	0.000	NO	0.112		NO
	Cahuenga Boulevard	P.M.	1.368	F	1.468	F	0.100	YES	1.222	F	0.091	0.246	0.000	NO	0.246		NO
47. [a]	Barham Boulevard &	A.M.	1.072	F	1.092	F	0.020	YES	1.079	F	0.011	0.013	0.000	NO	0.013		NO
	Cahuenga Boulevard	P.M.	1.356	F	1.374	F	0.018	YES	1.322	F	0.009	0.052	0.007	YES	0.045		NO
48. [a]	Barham Boulevard &	A.M.	1.109	F	1.121	F	0.012	YES	1.103	F	0.003	0.018	0.000	NO	0.018		NO
	Buddy Holly Drive/Cahuenga Boulevard	P.M.	1.323	F	1.321	F	-0.002	NO	0.980	E	0.000	0.341	0.000	NO	0.341		NO
49. [a]	Oakcrest Drive &	A.M.	0.973	E	0.992	E	0.019	YES	0.962	E	0.010	0.030	0.000	NO	0.030		NO
	Cahuenga Boulevard	P.M.	0.723	C	0.739	C	0.016	NO	0.721	C	0.000	0.018	0.000	NO	0.018		NO
50. [a]	Mulholland Drive &	A.M.	1.051	F	1.075	F	0.024	YES	1.046	F	0.015	0.029	0.000	NO	0.029		NO
	Cahuenga Boulevard	P.M.	1.061	F	1.085	F	0.024	YES	1.066	F	0.015	0.019	0.000	NO	0.019		NO
51. [a]	Cahuenga Boulevard &	A.M.	0.869	D	0.885	D	0.016	NO	0.857	D	0.000	0.028	0.000	NO	0.028		NO
	Hillpark Drive	P.M.	0.725	C	0.738	C	0.013	NO	0.719	C	0.000	0.019	0.000	NO	0.019		NO
52. [a]	Barham Boulevard &	A.M.	1.028	F	1.040	F	0.012	YES	1.018	F	0.003	0.022	0.000	NO	0.022		NO
	De Witt Drive	P.M.	1.005	F	1.005	F	0.000	NO	0.917	E	0.000	0.088	0.000	NO	0.088		NO
53. [a]	Barham Boulevard &	A.M.	1.168	F	1.179	F	0.011	YES	1.157	F	0.002	0.022	0.000	NO	0.022		NO
	Lake Hollywood Drive	P.M.	1.093	F	1.115	F	0.022	YES	1.094	F	0.013	0.021	0.000	NO	0.021		NO
54. [a]	Barham Boulevard &	A.M.	1.049	F	1.059	F	0.010	YES	1.038	F	0.001	0.021	0.000	NO	0.021		NO
	Coyote Canyon Road	P.M.	0.927	E	0.923	E	-0.004	NO	0.896	D	0.000	0.027	0.000	NO	0.027		NO

ATTACHMENT B

ATTACHMENT F1 (Continued)

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

PROJECT IMPACT SUMMARY - LEVEL OF SERVICE (SIGNALIZED INTERSECTIONS)

No.	Intersection	Peak Hour	Future without Alternative 10		Future with Alternative 10 with TDM, Before Mitigations				Future with Alternative 10 with TDM Program and Mitigation Measures								
			V/C	LOS	V/C	LOS	Change in V/C	Significant Impact?	V/C	LOS	Required Evolution Plan Mitigation V/C	Mitigation V/C Effectiveness	Required Metro Universal Mitigation V/C	Mitigation Shared with Metro Universal	Leftover Mitigation V/C after Metro Universal Required Credit	Required V/C Improvement to eliminate Evolution Plan Significant Impact	Residual Significant Impact?
55. [a]	Barham Boulevard &	A.M.	1.352	F	1.383	F	0.031	YES	1.241	F	0.022	0.142	0.000	NO	0.142		NO
	Lakeside Plaza Drive/Forest Lawn Drive	P.M.	1.204	F	1.213	F	0.009	NO	1.077	F	0.000	0.136	0.000	NO	0.136		NO
56. [a]	Warner Brothers Studios Gate 7/Gate 8 &	A.M.	0.732	C	0.753	C	0.021	NO	0.762	C	0.000	-0.009	0.000	NO	0.000		NO
	Forest Lawn Drive	P.M.	0.542	A	0.559	A	0.017	NO	0.537	A	0.000	0.022	0.000	NO	0.022		NO
57. [a]	Memorial Drive &	A.M.	0.529	A	0.550	A	0.021	NO	0.559	A	0.000	-0.009	0.000	NO	0.000		NO
	Forest Lawn Drive	P.M.	0.535	A	0.552	A	0.017	NO	0.534	A	0.000	0.018	0.000	NO	0.018		NO
58. [a]	Mount Sinai Drive &	A.M.	0.531	A	0.551	A	0.020	NO	0.561	A	0.000	-0.010	0.000	NO	0.000		NO
	Forest Lawn Drive	P.M.	0.443	A	0.460	A	0.017	NO	0.441	A	0.000	0.019	0.000	NO	0.019		NO
59. [a]	Forest Lawn Drive &	A.M.	1.141	F	1.180	F	0.039	YES	0.573	A	0.030	0.607	0.000	NO	0.607		NO
	Zoo Drive	P.M.	0.816	D	0.843	D	0.027	YES	0.708	C	0.008	0.135	0.000	NO	0.135		NO
62. [a]	Cahuenga Boulevard/Highland Avenue &	A.M.	0.738	C	0.748	C	0.010	NO	0.738	C	0.000	0.010	0.000	NO	0.010		NO
	Pat Moore Way/US 101 On-Ramps	P.M.	0.616	B	0.636	B	0.020	NO	0.626	B	0.000	0.010	0.000	NO	0.010		NO
63. [a]	Highland Avenue &	A.M.	0.861	D	0.872	D	0.011	NO	0.862	D	0.000	0.010	0.000	NO	0.010		NO
	Odin Street	P.M.	0.710	C	0.720	C	0.010	NO	0.710	C	0.000	0.010	0.000	NO	0.010		NO
64. [a]	Highland Avenue &	A.M.	0.744	C	0.751	C	0.007	NO	0.741	C	0.000	0.010	0.000	NO	0.010		NO
	Camrose Drive	P.M.	0.697	B	0.702	C	0.005	NO	0.692	B	0.000	0.010	0.000	NO	0.010		NO
65. [a], [d]	Highland Avenue &	A.M.	-	F	-	F	0.010	YES	-	F	0.001	0.010	0.000	NO	0.010		NO
	Franklin Avenue	P.M.	-	F	-	F	0.005	NO	-	F	0.000	0.010	0.000	NO	0.010		NO
66. [a], [d]	Highland Avenue &	A.M.	-	F	-	F	0.014	YES	-	F	0.005	0.010	0.002	YES	0.008		NO
	Franklin Place/Franklin Avenue	P.M.	-	F	-	F	0.009	NO	-	F	0.000	0.010	0.000	NO	0.010		NO
67. [a]	Odin Street &	A.M.	0.571	A	0.577	A	0.006	NO	0.577	A	0.000	0.000	0.000	NO	0.000		NO
	Cahuenga Boulevard	P.M.	0.771	C	0.775	C	0.004	NO	0.775	C	0.000	0.000	0.000	NO	0.000		NO
68. [a]	Cahuenga Boulevard &	A.M.	0.652	B	0.663	B	0.011	NO	0.663	B	0.000	0.000	0.000	NO	0.000		NO
	US 101 NB Off-Ramp	P.M.	1.071	F	1.077	F	0.006	NO	1.077	F	0.000	0.000	0.000	NO	0.000		NO
69. [a]	Cahuenga Boulevard &	A.M.	0.875	D	0.880	D	0.005	NO	0.870	D	0.000	0.010	0.000	NO	0.010		NO
	Franklin Avenue	P.M.	1.325	F	1.328	F	0.003	NO	1.318	F	0.000	0.010	0.000	NO	0.010		NO
70. [a]	Cahuenga Boulevard &	A.M.	0.925	E	0.927	E	0.002	NO	0.927	E	0.000	0.000	0.000	NO	0.000		NO
	Hollywood Boulevard	P.M.	0.825	D	0.829	D	0.004	NO	0.829	D	0.000	0.000	0.000	NO	0.000		NO
71. [a]	Vine Street &	A.M.	0.665	B	0.665	B	0.000	NO	0.655	B	0.000	0.010	0.000	NO	0.010		NO
	Franklin Avenue/US 101 SB Off-Ramp	P.M.	0.543	A	0.545	A	0.002	NO	0.535	A	0.000	0.010	0.000	NO	0.010		NO
74.	Pass Avenue &	A.M.	0.776	C	0.778	C	0.002	NO	0.795	C	0.000	-0.017	0.000	NO	0.000		NO
	Magnolia Boulevard	P.M.	0.889	D	0.891	D	0.002	NO	0.887	D	0.000	0.004	0.000	NO	0.004		NO
75.	Pass Avenue &	A.M.	0.866	D	0.877	D	0.011	NO	0.847	D	0.000	0.030	0.000	NO	0.030		NO
	Verdugo Avenue	P.M.	1.203	F	1.209	F	0.006	NO	1.139	F	0.000	0.070	0.000	NO	0.070		NO
76.	Pass Avenue &	A.M.	0.526	A	0.528	A	0.002	NO	0.541	A	0.000	-0.013	0.000	NO	0.000		NO
	Oak Street	P.M.	0.626	B	0.627	B	0.001	NO	0.627	B	0.000	0.000	0.000	NO	0.000		NO
77. [e]	Evergreen Street/Riverside Drive &	A.M.	0.740	C	0.755	C	0.015	NO	0.647	B	0.000	0.108	0.000	NO	0.108		NO
	Alameda Avenue	P.M.	0.827	D	0.849	D	0.022	YES	0.764	C	0.003	0.085	0.000	NO	0.085		NO
78.	Pass Avenue &	A.M.	0.789	C	0.793	C	0.004	NO	0.757	C	0.000	0.036	0.000	NO	0.036		NO
	SR 134 EB Off-Ramp	P.M.	0.696	B	0.701	C	0.005	NO	0.651	B	0.000	0.050	0.000	NO	0.050		NO
79. [e]	Pass Avenue &	A.M.	0.987	E	0.994	E	0.007	NO	0.978	E	0.000	0.016	0.000	NO	0.016		NO
	Alameda Avenue	P.M.	1.078	F	1.094	F	0.016	YES	1.011	F	0.007	0.083	0.005	YES	0.078		NO
80. [e]	Pass Avenue &	A.M.	0.818	D	0.834	D	0.016	NO	0.809	D	0.000	0.025	0.000	NO	0.025		NO
	Riverside Drive	P.M.	0.641	B	0.645	B	0.004	NO	0.604	B	0.000	0.041	0.000	NO	0.041		NO
81. [e]	Olive Avenue &	A.M.	0.967	E	0.986	E	0.019	YES	0.859	D	0.010	0.127	0.000	NO	0.127		NO
	Pass Avenue	P.M.	0.948	E	0.965	E	0.017	YES	0.770	C	0.008	0.195	0.000	NO	0.195		NO
82. [e]	Olive Avenue &	A.M.	0.807	D	0.811	D	0.004	NO	0.781	C	0.000	0.030	0.000	NO	0.030		NO
	Warner Brothers Studios Gate 2/Gate 3	P.M.	0.853	D	0.859	D	0.006	NO	0.865	D	0.000	-0.006	0.000	NO	0.000		NO
83. [e]	Olive Avenue &	A.M.	0.652	B	0.661	B	0.009	NO	0.648	B	0.000	0.013	0.000	NO	0.013		NO
	Warner Brothers Studios Gate 1/Lakeside Drive	P.M.	0.825	D	0.831	D	0.006	NO	0.795	C	0.000	0.036	0.000	NO	0.036		NO
84. [e]	Hollywood Way &	A.M.	1.315	F	1.319	F	0.004	NO	1.323	F	0.000	-0.004	0.000	NO	0.000		NO
	Alameda Avenue	P.M.	1.266	F	1.272	F	0.006	NO	1.272	F	0.000	0.000	0.000	NO	0.000		NO

ATTACHMENT B

ATTACHMENT F1 (Continued)

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

PROJECT IMPACT SUMMARY - LEVEL OF SERVICE (SIGNALIZED INTERSECTIONS)

No.	Intersection	Peak Hour	Future without Alternative 10		Future with Alternative 10 with TDM, Before Mitigations				Future with Alternative 10 with TDM Program and Mitigation Measures								
			V/C	LOS	V/C	LOS	Change in V/C	Significant Impact?	V/C	LOS	Required Evolution Plan Mitigation V/C	Mitigation V/C Effectiveness	Required Metro Universal Mitigation V/C	Mitigation Shared with Metro Universal	Leftover Mitigation V/C after Metro Universal Required Credit	Required V/C Improvement to eliminate Evolution Plan Significant Impact	Residual Significant Impact?
85. [e]	Cordova Street/SR 134 WB Off-Ramp &	A.M.	1.052	F	1.055	F	0.003	NO	1.055	F	0.000	0.000	0.000	NO	0.000		NO
	Alameda Avenue	P.M.	0.941	E	0.955	E	0.014	YES	0.949	E	0.005	0.006	0.008	NO	0.000		NO
86. [e]	Hollywood Way &	A.M.	0.791	C	0.796	C	0.005	NO	0.800	C	0.000	-0.004	0.000	NO	0.000		NO
	Olive Avenue	P.M.	1.207	F	1.209	F	0.002	NO	1.216	F	0.005	-0.007	0.000	NO	0.000		NO
87. [e]	Olive Avenue &	A.M.	0.786	C	0.788	C	0.002	NO	0.788	C	0.000	0.000	0.000	NO	0.000		NO
	Riverside Drive	P.M.	0.871	D	0.872	D	0.001	NO	0.868	D	0.000	0.004	0.000	NO	0.004		NO
88. [e]	Lima Street &	A.M.	0.435	A	0.435	A	0.000	NO	0.406	A	0.000	0.029	0.000	NO	0.029		NO
	Olive Avenue	P.M.	0.452	A	0.453	A	0.001	NO	0.430	A	0.000	0.023	0.000	NO	0.023		NO
89. [e]	Olive Avenue &	A.M.	0.937	E	0.941	E	0.004	NO	0.852	D	0.000	0.089	0.000	NO	0.089		NO
	Alameda Avenue	P.M.	1.100	F	1.108	F	0.008	NO	1.061	F	0.000	0.047	0.000	NO	0.047		NO
90.	California Street &	A.M.	0.605	B	0.606	B	0.001	NO	0.606	B	0.000	0.000	0.000	NO	0.000		NO
	Riverside Drive	P.M.	0.827	D	0.829	D	0.002	NO	0.825	D	0.000	0.004	0.000	NO	0.004		NO
91. [e]	Bob Hope Drive &	A.M.	0.985	E	0.986	E	0.001	NO	0.986	E	0.000	0.000	0.000	NO	0.000		NO
	Alameda Avenue	P.M.	1.013	F	1.017	F	0.004	NO	1.017	F	0.000	0.000	0.000	NO	0.000		NO
92. [e]	Buena Vista Street &	A.M.	0.937	E	0.938	E	0.001	NO	0.933	E	0.000	0.005	0.000	NO	0.005		NO
	Alameda Avenue	P.M.	0.946	E	0.949	E	0.003	NO	0.949	E	0.000	0.000	0.000	NO	0.000		NO
93.	Buena Vista Street/SR 134 EB On-Ramp &	A.M.	1.075	F	1.075	F	0.000	NO	1.073	F	0.000	0.002	0.000	NO	0.002		NO
	Riverside Drive/SR 134 WB Ramps	P.M.	1.020	F	1.023	F	0.003	NO	1.019	F	0.000	0.004	0.000	NO	0.004		NO
95. [e]	Buena Vista Street &	A.M.	1.121	F	1.123	F	0.002	NO	1.076	F	0.000	0.047	0.000	NO	0.047		NO
	Olive Avenue	P.M.	1.099	F	1.100	F	0.001	NO	1.052	F	0.000	0.048	0.000	NO	0.048		NO
96. [a], [c]	Sepulveda Boulevard &	A.M.	1.291	F	1.291	F	0.000	NO	1.264	F	0.000	0.027	0.000	NO	0.027		NO
	Ventura Boulevard	P.M.	1.485	F	1.485	F	0.000	NO	1.485	F	0.000	0.000	0.000	NO	0.000		NO
97. [a]	Noble Avenue &	A.M.	0.815	D	0.828	D	0.013	NO	0.791	C	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.873	D	0.884	D	0.011	NO	0.847	D	0.000	0.037	0.000	NO	0.037		NO
98. [a]	Kester Avenue &	A.M.	0.777	C	0.777	C	0.000	NO	0.753	C	0.000	0.024	0.000	NO	0.024		NO
	Ventura Boulevard	P.M.	0.818	D	0.830	D	0.012	NO	0.793	C	0.000	0.037	0.000	NO	0.037		NO
99. [a]	Willis Avenue &	A.M.	0.676	B	0.691	B	0.015	NO	0.654	B	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.729	C	0.747	C	0.018	NO	0.710	C	0.000	0.037	0.000	NO	0.037		NO
100. [a]	Cedros Avenue (West) &	A.M.	0.784	C	0.798	C	0.014	NO	0.761	C	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.941	E	0.959	E	0.018	YES	0.922	E	0.009	0.037	0.000	NO	0.037		NO
101. [a]	Cedros Avenue (East) &	A.M.	1.078	F	1.094	F	0.016	YES	1.056	F	0.007	0.038	0.000	NO	0.038		NO
	Ventura Boulevard	P.M.	0.835	D	0.838	D	0.003	NO	0.800	C	0.000	0.038	0.000	NO	0.038		NO
102. [a]	Van Nuys Avenue &	A.M.	1.125	F	1.143	F	0.018	YES	1.103	F	0.009	0.040	0.000	NO	0.040		NO
	Ventura Boulevard	P.M.	1.297	F	1.318	F	0.021	YES	1.278	F	0.012	0.040	0.000	NO	0.040		NO
103. [a]	Tyrone Avenue/Beverly Glen Boulevard &	A.M.	0.864	D	0.879	D	0.015	NO	0.843	D	0.000	0.036	0.000	NO	0.036		NO
	Ventura Boulevard	P.M.	1.004	F	1.006	F	0.002	NO	0.969	E	0.000	0.037	0.000	NO	0.037		NO
104. [a]	Hazeltine Avenue (West) &	A.M.	0.751	C	0.767	C	0.016	NO	0.730	C	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.871	D	0.890	D	0.019	NO	0.853	D	0.000	0.037	0.000	NO	0.037		NO
105. [a]	Stern Avenue (West) &	A.M.	0.597	A	0.613	B	0.016	NO	0.577	A	0.000	0.036	0.000	NO	0.036		NO
	Ventura Boulevard	P.M.	0.605	B	0.624	B	0.019	NO	0.587	A	0.000	0.037	0.000	NO	0.037		NO
106. [a], [c]	Woodman Avenue &	A.M.	0.818	D	0.835	D	0.017	NO	0.799	C	0.000	0.036	0.000	NO	0.036		NO
	Ventura Boulevard	P.M.	0.903	E	0.923	E	0.020	YES	0.886	D	0.011	0.037	0.000	NO	0.037		NO
107. [a]	Sunnyslope Avenue &	A.M.	0.697	B	0.714	C	0.017	NO	0.677	B	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.624	B	0.644	B	0.020	NO	0.607	B	0.000	0.037	0.000	NO	0.037		NO
108. [a]	Dixie Canyon Avenue &	A.M.	0.665	B	0.682	B	0.017	NO	0.645	B	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.701	C	0.722	C	0.021	NO	0.685	B	0.000	0.037	0.000	NO	0.037		NO
109. [a]	Fulton Avenue &	A.M.	0.857	D	0.874	D	0.017	NO	0.837	D	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.868	D	0.888	D	0.020	YES	0.851	D	0.001	0.037	0.000	NO	0.037		NO
110. [a]	Valley Vista Boulevard/Ethel Avenue &	A.M.	0.775	C	0.795	C	0.020	NO	0.758	C	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.765	C	0.786	C	0.021	NO	0.749	C	0.000	0.037	0.000	NO	0.037		NO
111. [a]	Coldwater Canyon Avenue &	A.M.	1.217	F	1.237	F	0.020	YES	1.197	F	0.011	0.040	0.007	YES	0.033		NO
	Ventura Boulevard	P.M.	1.491	F	1.515	F	0.024	YES	1.475	F	0.015	0.040	0.007	YES	0.033		NO

ATTACHMENT B

ATTACHMENT F1 (Continued)

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

PROJECT IMPACT SUMMARY - LEVEL OF SERVICE (SIGNALIZED INTERSECTIONS)

No.	Intersection	Peak Hour	Future without Alternative 10		Future with Alternative 10 with TDM, Before Mitigations				Future with Alternative 10 with TDM Program and Mitigation Measures								
			V/C	LOS	V/C	LOS	Change in V/C	Significant Impact?	V/C	LOS	Required Evolution Plan Mitigation V/C	Mitigation V/C Effectiveness	Required Metro Universal Mitigation V/C	Mitigation Shared with Metro Universal	Leftover Mitigation V/C after Metro Universal Required Credit	Required V/C Improvement to eliminate Evolution Plan Significant Impact	Residual Significant Impact?
112. [a]	Whitsett Avenue/Laurel Terrace Drive &	A.M.	0.744	C	0.765	C	0.021	NO	0.725	C	0.000	0.040	0.000	NO	0.040		NO
	Ventura Boulevard	P.M.	0.904	E	0.928	E	0.024	YES	0.888	D	0.015	0.040	0.002	YES	0.038		NO
113. [a]	Laurelgrove Avenue &	A.M.	0.609	B	0.629	B	0.020	NO	0.592	A	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.729	C	0.752	C	0.023	NO	0.715	C	0.000	0.037	0.000	NO	0.037		NO
114. [a]	Vantage Avenue &	A.M.	0.682	B	0.704	C	0.022	NO	0.667	B	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.710	C	0.733	C	0.023	NO	0.697	B	0.000	0.036	0.000	NO	0.036		NO
115. [a], [c]	Laurel Canyon Boulevard &	A.M.	1.152	F	1.175	F	0.023	YES	1.135	F	0.014	0.040	0.013	YES	0.027		NO
	Ventura Boulevard	P.M.	1.069	F	1.095	F	0.026	YES	1.055	F	0.017	0.040	0.013	YES	0.027		NO
116. [a]	Radford Avenue/Ventura Place &	A.M.	0.649	B	0.673	B	0.024	NO	0.634	B	0.000	0.039	0.000	NO	0.039		NO
	Ventura Boulevard	P.M.	0.640	B	0.645	B	0.005	NO	0.606	B	0.000	0.039	0.000	NO	0.039		NO
118. [a]	Lankershim Boulevard/Tujunga Avenue &	A.M.	1.189	F	1.194	F	0.005	NO	1.184	F	0.000	0.010	0.000	NO	0.010		NO
	Burbank Boulevard	P.M.	1.170	F	1.178	F	0.008	NO	1.168	F	0.000	0.010	0.000	NO	0.010		NO
119. [a]	Vineland Avenue &	A.M.	0.843	D	0.850	D	0.007	NO	0.840	D	0.000	0.010	0.000	NO	0.010		NO
	Burbank Boulevard	P.M.	0.798	C	0.803	D	0.005	NO	0.793	C	0.000	0.010	0.000	NO	0.010		NO
120. [a]	Cahuenga Boulevard &	A.M.	1.169	F	1.174	F	0.005	NO	1.147	F	0.000	0.027	0.000	NO	0.027		NO
	Burbank Boulevard	P.M.	1.080	F	1.084	F	0.004	NO	1.074	F	0.000	0.010	0.000	NO	0.010		NO
121. [a]	Cahuenga Boulevard &	A.M.	0.471	A	0.476	A	0.005	NO	0.455	A	0.000	0.021	0.000	NO	0.021		NO
	Chandler Boulevard	P.M.	0.706	C	0.712	C	0.006	NO	0.695	B	0.000	0.017	0.000	NO	0.017		NO
122.	La Cienega Boulevard &	A.M.	0.831	D	0.832	D	0.001	NO	0.832	D	0.000	0.000	0.000	NO	0.000		NO
	Sunset Boulevard	P.M.	1.218	F	1.222	F	0.004	NO	1.222	F	0.000	0.000	0.000	NO	0.000		NO
123. [c]	La Cienega Boulevard &	A.M.	1.067	F	1.066	F	-0.001	NO	1.066	F	0.000	0.000	0.000	NO	0.000		NO
	Santa Monica Boulevard	P.M.	0.916	E	0.917	E	0.001	NO	0.917	E	0.000	0.000	0.000	NO	0.000		NO
124. [a]	Laurel Canyon Boulevard &	A.M.	0.607	B	0.611	B	0.004	NO	0.601	B	0.000	0.010	0.000	NO	0.010		NO
	Hollywood Boulevard	P.M.	0.754	C	0.754	C	0.000	NO	0.744	C	0.000	0.010	0.000	NO	0.010		NO
125. [a]	Crescent Heights Boulevard &	A.M.	1.243	F	1.250	F	0.007	NO	1.250	F	0.000	0.000	0.000	NO	0.000		NO
	Sunset Boulevard	P.M.	0.981	E	0.981	E	0.000	NO	0.981	E	0.000	0.000	0.000	NO	0.000		NO
126. [a]	Fairfax Avenue &	A.M.	0.950	E	0.953	E	0.003	NO	0.953	E	0.000	0.000	0.000	NO	0.000		NO
	Hollywood Boulevard	P.M.	0.875	D	0.875	D	0.000	NO	0.875	D	0.000	0.000	0.000	NO	0.000		NO
127. [a]	Fairfax Avenue &	A.M.	0.728	C	0.730	C	0.002	NO	0.730	C	0.000	0.000	0.000	NO	0.000		NO
	Sunset Boulevard	P.M.	0.949	E	0.952	E	0.003	NO	0.952	E	0.000	0.000	0.000	NO	0.000		NO
128. [a], [d]	La Brea Avenue &	A.M.	-	E	-	E	0.007	NO	-	E	0.000	0.010	0.000	NO	0.010		NO
	Franklin Avenue	P.M.	-	E	-	E	0.007	NO	-	E	0.000	0.010	0.000	NO	0.010		NO
129. [a]	La Brea Avenue &	A.M.	1.026	F	1.033	F	0.007	NO	1.023	F	0.000	0.010	0.000	NO	0.010		NO
	Hollywood Boulevard	P.M.	0.930	E	0.934	E	0.004	NO	0.924	E	0.000	0.010	0.000	NO	0.010		NO
130. [a]	La Brea Avenue &	A.M.	0.929	E	0.933	E	0.004	NO	0.923	E	0.000	0.010	0.000	NO	0.010		NO
	Sunset Boulevard	P.M.	1.091	F	1.101	F	0.010	YES	1.091	F	0.001	0.010	0.000	NO	0.010		NO
131.	La Brea Avenue &	A.M.	1.076	F	1.079	F	0.003	NO	1.079	F	0.000	0.000	0.000	NO	0.000		NO
	Fountain Avenue	P.M.	1.033	F	1.035	F	0.002	NO	1.035	F	0.000	0.000	0.000	NO	0.000		NO
132.	La Brea Avenue &	A.M.	0.977	E	0.979	E	0.002	NO	0.979	E	0.000	0.000	0.000	NO	0.000		NO
	Santa Monica Boulevard	P.M.	1.080	F	1.083	F	0.003	NO	1.083	F	0.000	0.000	0.000	NO	0.000		NO
133. [a], [d]	Highland Avenue &	A.M.	-	F	-	F	0.016	YES	-	F	0.007	0.010	0.002	YES	0.008		NO
	Hollywood Boulevard	P.M.	-	F	-	F	0.017	YES	-	F	0.008	0.010	0.002	YES	0.008		NO
134. [a]	Highland Avenue &	A.M.	0.930	E	0.949	E	0.019	YES	0.939	E	0.010	0.010	0.000	NO	0.010		NO
	Sunset Boulevard	P.M.	0.896	D	0.914	E	0.018	YES	0.904	E	0.009	0.010	0.000	NO	0.010		NO
135. [a]	Highland Avenue &	A.M.	0.991	E	0.999	E	0.008	NO	0.989	E	0.000	0.010	0.000	NO	0.010		NO
	Fountain Avenue	P.M.	0.793	C	0.804	D	0.011	NO	0.794	C	0.000	0.010	0.000	NO	0.010		NO
136. [a], [c]	Highland Avenue &	A.M.	0.918	E	0.922	E	0.004	NO	0.912	E	0.000	0.010	0.000	NO	0.010		NO
	Santa Monica Boulevard	P.M.	0.938	E	0.939	E	0.001	NO	0.929	E	0.000	0.010	0.000	NO	0.010		NO
137. [a]	Kester Avenue (East) &	A.M.	0.697	B	0.710	C	0.013	NO	0.673	B	0.000	0.037	0.000	NO	0.037		NO
	Ventura Boulevard	P.M.	0.996	E	1.010	F	0.014	YES	0.973	E	0.005	0.037	0.000	NO	0.037		NO
138.	San Vicente Boulevard/Clark St &	A.M.	0.959	E	0.962	E	0.003	NO	0.962	E	0.000	0.000	0.000	NO	0.000		NO
	Sunset Boulevard	P.M.	1.117	F	1.119	F	0.002	NO	1.119	F	0.000	0.000	0.000	NO	0.000		NO

ATTACHMENT B

ATTACHMENT F1 (Continued)

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

PROJECT IMPACT SUMMARY - LEVEL OF SERVICE (SIGNALIZED INTERSECTIONS)

No.		Intersection	Peak Hour	Future without Alternative 10		Future with Alternative 10 with TDM, Before Mitigations				Future with Alternative 10 with TDM Program and Mitigation Measures								
				V/C	LOS	V/C	LOS	Change in V/C	Significant Impact?	V/C	LOS	Required Evolution Plan Mitigation V/C	Mitigation V/C Effectiveness	Required Metro Universal Mitigation V/C	Mitigation Shared with Metro Universal	Leftover Mitigation V/C after Metro Universal Required Credit	Required V/C Improvement to eliminate Evolution Plan Significant Impact	Residual Significant Impact?
139.	[a]	Cahuenga Boulevard &	A.M.	0.907	E	0.908	E	0.001	NO	0.898	D	0.000	0.010	0.000	NO	0.010		NO
		Sunset Boulevard	P.M.	0.814	D	0.817	D	0.003	NO	0.807	D	0.000	0.010	0.000	NO	0.010		NO
140.	[a]	Lankershim Boulevard &	A.M.	0.594	A	0.601	B	0.007	NO	0.601	B	0.000	0.000	0.000	NO	0.000		NO
		Chandler Boulevard (North)	P.M.	0.353	A	0.356	A	0.003	NO	0.356	A	0.000	0.000	0.000	NO	0.000		NO
141.	[a]	SR 170 SB Ramps &	A.M.	0.776	C	0.787	C	0.011	NO	0.749	C	0.000	0.038	0.000	NO	0.038		NO
		Magnolia Boulevard	P.M.	0.606	B	0.607	B	0.001	NO	0.563	A	0.000	0.044	0.000	NO	0.044		NO
142.	[a]	SR 170 NB Ramps &	A.M.	0.551	A	0.561	A	0.010	NO	0.521	A	0.000	0.040	0.000	NO	0.040		NO
		Magnolia Boulevard	P.M.	0.712	C	0.715	C	0.003	NO	0.705	C	0.000	0.010	0.000	NO	0.010		NO
144.	[a]	Coldwater Canyon Avenue &	A.M.	0.560	A	0.561	A	0.001	NO	0.551	A	0.000	0.010	0.000	NO	0.010		NO
		US 101 NB Ramps	P.M.	0.551	A	0.552	A	0.001	NO	0.542	A	0.000	0.010	0.000	NO	0.010		NO
145.	[a]	Coldwater Canyon Avenue &	A.M.	0.632	B	0.633	B	0.001	NO	0.623	B	0.000	0.010	0.000	NO	0.010		NO
		US 101 SB Ramps	P.M.	0.605	B	0.605	B	0.000	NO	0.595	A	0.000	0.010	0.000	NO	0.010		NO
146.	[a]	Coldwater Canyon Avenue &	A.M.	0.953	E	0.955	E	0.002	NO	0.945	E	0.000	0.010	0.000	NO	0.010		NO
		Moorpark Street	P.M.	1.103	F	1.104	F	0.001	NO	1.094	F	0.000	0.010	0.000	NO	0.010		NO
147.	[a]	Laurel Canyon Boulevard &	A.M.	0.765	C	0.765	C	0.000	NO	0.755	C	0.000	0.010	0.000	NO	0.010		NO
		US 101 NB Ramps	P.M.	0.692	B	0.692	B	0.000	NO	0.682	B	0.000	0.010	0.000	NO	0.010		NO
148.	[a]	Laurel Canyon Boulevard &	A.M.	0.735	C	0.736	C	0.001	NO	0.726	C	0.000	0.010	0.000	NO	0.010		NO
		US 101 SB Ramps	P.M.	0.646	B	0.646	B	0.000	NO	0.636	B	0.000	0.010	0.000	NO	0.010		NO
149.	[a]	Laurel Canyon Boulevard &	A.M.	1.174	F	1.177	F	0.003	NO	1.167	F	0.000	0.010	0.000	NO	0.010		NO
		Moorpark Street	P.M.	1.287	F	1.290	F	0.003	NO	1.280	F	0.000	0.010	0.000	NO	0.010		NO
150.	[a]	Colfax Avenue &	A.M.	1.000	E	1.001	F	0.001	NO	0.991	E	0.000	0.010	0.000	NO	0.010		NO
		Riverside Drive	P.M.	1.005	F	1.006	F	0.001	NO	0.996	E	0.000	0.010	0.000	NO	0.010		NO
151.	[a]	Colfax Avenue &	A.M.	0.864	D	0.866	D	0.002	NO	0.856	D	0.000	0.010	0.000	NO	0.010		NO
		Moorpark Street	P.M.	0.654	B	0.655	B	0.001	NO	0.645	B	0.000	0.010	0.000	NO	0.010		NO
152.	[a]	Lankershim Boulevard &	A.M.	0.758	C	0.766	C	0.008	NO	0.766	C	0.000	0.000	0.000	NO	0.000		NO
		Chandler Boulevard (South)	P.M.	0.609	B	0.619	B	0.010	NO	0.619	B	0.000	0.000	0.000	NO	0.000		NO
153.	[e]	Hollywood Way &	A.M.	1.265	F	1.267	F	0.002	NO	1.271	F	0.000	-0.004	0.000	NO	0.000		NO
		Verdugo Avenue	P.M.	1.162	F	1.165	F	0.003	NO	1.162	F	0.000	0.003	0.007	NO	0.000		NO
154.	[e]	Hollywood Way &	A.M.	1.277	F	1.279	F	0.002	NO	1.283	F	0.000	-0.004	0.000	NO	0.000		NO
		Magnolia Boulevard	P.M.	1.053	F	1.054	F	0.001	NO	1.054	F	0.000	0.000	0.000	NO	0.000		NO
155.	[e]	Buena Vista Street &	A.M.	1.012	F	1.013	F	0.001	NO	1.015	F	0.000	-0.002	0.000	NO	0.000		NO
		Verdugo Avenue	P.M.	1.176	F	1.181	F	0.005	NO	1.178	F	0.000	0.003	0.000	NO	0.003		NO
156.	[e]	Buena Vista Street &	A.M.	1.068	F	1.072	F	0.004	NO	1.074	F	0.000	-0.002	0.000	NO	0.000		NO
		Magnolia Boulevard	P.M.	1.147	F	1.147	F	0.000	NO	1.147	F	0.000	0.000	0.000	NO	0.000		NO
160.		Vineland Avenue &	A.M.	0.724	C	0.762	C	0.038	NO	0.580	A	0.000	0.182	0.001	NO	0.181		NO
		US 101 SB Ramps	P.M.	0.664	B	0.680	B	0.016	NO	0.597	A	0.000	0.083	0.000	NO	0.083		NO

Notes:

[a] ntersection is operating under the LADOT Adaptive Traffic Control System (ATCS). A credit of 0.10 in V/C ratio was included in the analysis.

[b] The mitigation proposed for the intersection by Metro Universal was further expanded by the Evolution Plan.

[c] Denotes CMP arterial monitoring station.

[d] Traffic counts at this location were not fully representative of the situation due to downstream constraints and pedestrian conflicts. LOS is based on field observations and has not been calculated based on the Universal City Transportation Model.

[e] ntersection is connected to the City of Burbank's Traffic Signal nterconnect & Signal Timing System. A credit of 0.02 in V/C ratio was included in the analysis.

ATTACHMENT B

ATTACHMENT F2

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

LEVEL OF SERVICE SUMMARY - UNSIGNALIZED INTERSECTIONS

No.		Intersection	Peak Hour	Future without Alternative 10		Future with Alternative 10 with TDM, Before Mitigations			Future with Alternative 10 with TDM Program and Mitigation Measures		
				Delay	LOS	Delay	LOS	Meets Signal Warrants [a]	V/C or Delay	LOS	Meets Signal Warrants/Signal Proposed? [a]
15.	[b], [c]	SR 134 EB On-Ramp e/o Vineland Avenue &	A.M.	**	F	**	F	**YES**	0.570	A	**YES**
		Riverside Drive	P.M.	**	F	**	F	**YES**	0.663	B	**YES**
32.	[c], [d]	Cahuenga Boulevard &	A.M.	**	F	**	F	NO	0.547	A	**YES [e]**
		Valley Spring Lane	P.M.	**	F	**	F	NO	0.705	C	**YES [e]**
60.	[d]	Forest Lawn Drive &	A.M.	**	F	**	F	**YES**	26.6	D	N/A
		SR 134 EB Ramps	P.M.	35.1	E	32.1	D	**YES**	15.5	C	N/A
61.	[c], [d]	Forest Lawn Drive &	A.M.	**	F	**	F	**YES**	0.663	B	**YES**
		SR 134 WB Ramps	P.M.	**	F	**	F	**YES**	0.439	A	**YES**
72.	[c], [d]	Lankershim Boulevard &	A.M.	**	F	**	F	**YES**	0.545	A	**YES**
		Muddy Waters Drive	P.M.	**	F	**	F	**YES**	0.880	D	**YES**
73.	[d]	Lankershim Boulevard &	A.M.	14.1	B	15.8	C	N/A	16.3	C	N/A
		Jimmy Hendrix Drive	P.M.	24.1	C	32.2	D	N/A	31.5	D	N/A
94.	[d]	SR 134 EB On-Ramp/Screenland Drive &	A.M.	13.2	B	13.3	B	N/A	11.9	B	N/A
		Riverside Drive	P.M.	33.6	D	34.5	D	N/A	26.6	D	N/A
117.	[b], [c]	US 101 SB On-Ramp n/o Lankershim Boulevard &	A.M.	0.0	A	0.0	A	N/A	0.602	B	**YES**
		Ventura Boulevard	P.M.	0.0	A	0.0	A	N/A	0.685	B	**YES**
143.	[b]	Tujunga Avenue &	A.M.	16.5	C	16.7	C	N/A	16.7	C	N/A
		SR 170 NB On-Ramp/Private Driveway	P.M.	12.5	B	12.7	B	N/A	12.7	B	N/A
157.	[c], [d]	Tujunga Avenue &	A.M.	16.0	C	16.0	C	N/A	16.0	C	N/A
		US 101 SB Off-Ramp	P.M.	53.2	F	53.2	F	N/A	53.2	F	N/A
158.	[b]	Tujunga Avenue &	A.M.	12.2	B	12.2	B	N/A	12.2	B	N/A
		US 101 NB On-Ramp	P.M.	10.6	B	10.6	B	N/A	10.6	B	N/A
159.	[d]	US 101 SB Off-Ramp &	A.M.	25.3	D	31.9	D	N/A	20.7	C	N/A
		Riverside Drive	P.M.	14.5	B	15.0	B	N/A	13.9	B	N/A
161.	[b], [c]	US 101 NB On-Ramp &	A.M.	11.0	B	11.1	B	N/A	11.1	B	N/A
		Moorpark Street	P.M.	18.0	C	18.7	C	N/A	18.7	C	N/A
162.	[c], [d]	Cahuenga Boulevard &	A.M.	**	F	**	F	**YES**	1.155	F	**YES**
		US 101 SB Ramps	P.M.	**	F	**	F	**YES**	1.321	F	**YES**
163.	[d]	Bob Hope Drive &	A.M.	**	F	**	F	N/A	**	F	N/A
		SR 134 EB Off-Ramp	P.M.	**	F	**	F	N/A	**	F	N/A
164.	[b], [c]	SR 134 WB On-Ramp &	A.M.	0.0	A	0.0	A	N/A	0.0	A	N/A
		Alameda Avenue	P.M.	0.0	A	0.0	A	N/A	0.0	A	N/A

Notes:

[a] The unsignalized intersections are analyzed for signal warrants only if the intersection is projected to operate at LOS E or F and Alternative 10 adds traffic to the intersection. N/A signifies that the intersection operates at LOS D or better and/or Alt

[b] Intersection is uncontrolled. Analysis was done using 2000 Highway Capacity Manual Two-Way Stop-Controlled methodology. For the purpose of evaluating the operating conditions of the intersection, level of service is based on average vehicular delay in sec

[c] Intersection is proposed to be signalized as part of the Project improvement program and will operate under the LADOT Adaptive Traffic Control System (ATCS). A credit of 0.10 in V/C ratio was include in the analysis.

[d] Intersection is controlled by stop signs on minor approach. Analysis was done using 2000 Highway Capacity Manual Two-Way Stop-Controlled methodology. For the purpose of evaluating the operating conditions of the intersection, level of service is based o

[e] While the intersection does not meet signal warrants, the Project would fund the installation of a traffic signal as part of the Neighborhood Traffic Management Plan upon LADOT's approval.

** Indicates oversaturated conditions, i.e. long waits at the approaches controlled by stop signs. Delay cannot be calculated.

ATTACHMENT B

ATTACHMENT G
NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
TRAFFIC SIGNAL UPGRADES

The applicant shall fund the upgrade of the traffic signal controllers to provide a Type 2070 controller at the following intersections:

1. Barham Boulevard and Buddy Holly Drive/Cahuenga Boulevard
2. Barham Boulevard and Coyote Canyon Road
3. Barham Boulevard and Lakeside Plaza Drive/Forest Lawn Drive
4. Broadlawn Drive and Cahuenga Boulevard
5. Cahuenga Boulevard and Burbank Boulevard
6. Cahuenga Boulevard and Camarillo Street
7. Cahuenga Boulevard and Chandler Boulevard
8. Cahuenga Boulevard and Hillpark Drive
9. Cahuenga Boulevard and Huston Street
10. Cahuenga Boulevard and Magnolia Boulevard
11. Cahuenga Boulevard and Moorpark Street
12. Cahuenga Boulevard and Riverside Drive
13. Cahuenga Boulevard and SR 134 eastbound ramps
14. Cahuenga Boulevard and SR 134 westbound off-ramp
15. Cahuenga Boulevard and Whipple Street
16. Coldwater Canyon Avenue and Moorpark Street
17. Coldwater Canyon Avenue and US 101 northbound ramps
18. Coldwater Canyon Avenue and US 101 southbound ramps
19. Colfax Avenue and Moorpark Street
20. Colfax Avenue and Riverside Drive
21. Forman Avenue and Riverside Drive
22. Highland Avenue and Camrose Drive
23. Highland Avenue and Fountain Avenue
24. Highland Avenue and Odin Street
25. La Brea Avenue & Sunset Boulevard
26. Lankershim Boulevard and Cahuenga Boulevard
27. Lankershim Boulevard and Magnolia Boulevard
28. Lankershim Boulevard and Main Street
29. Lankershim Boulevard and Moorpark Street
30. Lankershim Boulevard and Riverside Drive
31. Lankershim Boulevard and Valleyheart Drive/James Stewart Avenue
32. Lankershim Boulevard and Whipple Street
33. Laurel Canyon Boulevard and Hollywood Boulevard
34. Laurel Canyon Boulevard and US 101 northbound ramps
35. Laurel Canyon Boulevard and US 101 southbound ramps
36. Ledge Avenue/Moorpark Way and Riverside Drive
37. Memorial Drive and Forest Lawn Drive
38. Mulholland Drive and Cahuenga Boulevard
39. Oakshire Drive & Cahuenga Boulevard
40. SR 170 northbound ramps and Magnolia Boulevard
41. SR 170 southbound ramps and Magnolia Boulevard

42. Tujunga Avenue and Riverside Drive/Camarillo Street
43. Universal Center Drive/Universal Studios Boulevard and Buddy Holly Drive
44. Vine Street and Franklin Avenue/US 101 southbound off-ramp
45. Vineland Avenue and Burbank Boulevard
46. Vineland Avenue/Lankershim Boulevard and Camarillo Street
47. Vineland Avenue and Riverside Drive
48. Vineland Avenue and US 101 northbound off-ramp
49. Vineland Avenue and Whipple Street

The applicant shall also fund the installation of CCTV cameras at the following intersections:

1. Barham Boulevard & Lakeside Plaza Drive/Forest Lawn Drive
2. Cahuenga Boulevard & Sunset Boulevard
3. Coldwater Canyon Avenue & US 101 northbound ramps
4. Coldwater Canyon Avenue & US 101 southbound ramps
5. Highland Avenue & Santa Monica Boulevard
6. Lankershim Boulevard & Cahuenga Boulevard
7. Laurel Canyon Boulevard & US 101 northbound ramps
8. Laurel Canyon Boulevard & US 101 southbound ramps
9. SR 170 southbound ramps & Magnolia Boulevard
10. Tujunga Avenue & Riverside Drive/Camarillo Street

ATTACHMENT H
NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

LADOT Neighborhood Traffic Management Process

This appendix sets forth the Los Angeles Department of Transportation's (LADOT) process for implementation of Neighborhood Traffic Management Plan(s) for the Project.

ELIGIBLE NEIGHBORHOODS

After implementation of the Project's proposed Transportation Demand Management (TDM) program and traffic mitigation measures, the following five neighborhoods have the potential to experience neighborhood intrusion traffic:

a. Neighborhood A – Riverside Drive to the north, Cartwright Avenue to the east, Landale Street/Woodbridge Street to the south, and Vineland Avenue/Lankershim Boulevard to the west

b. Neighborhood B – Kling Street to the north, Lankershim Boulevard to the east, the SR 134 freeway to the south, and Vineland Avenue to the west

c. Neighborhood C – Sarah Street to the north, Ledge Avenue/Placidia Avenue to the east, Valley Spring Lane/Moorpark Street to the south, and Cahuenga Boulevard to the west

TRAFFIC CALMING MEASURES

The following are traffic calming measures that may be included in Neighborhood Traffic Management Plan(s) for the Project.

Non-restrictive Control Measures

Non-restrictive control measures are intended to reduce traffic speeds on local streets and/or make the neighborhood streets less inviting for through traffic. Non-restrictive traffic calming measures may include, but are not limited to, traffic circles, speed humps, roadway narrowing effects (raised medians, traffic chokers, etc.), landscaping features, roadway striping changes (adding bike lanes or parking striping to reduce the perceived width of the roadway), and stop sign pattern.

Non-restrictive Improvements

Non-restrictive improvements include neighborhood improvements that can offset the effects of added traffic, including street trees, sidewalks, landscaping, neighborhood identification features, and pedestrian amenities. Such measures can support trip reduction efforts by encouraging walking, bicycling, and the use of public transit.

NEIGHBORHOOD TRANSPORTATION MANAGEMENT PLAN(S) BUDGET

Based on its experience implementing Transportation Management Plans, LADOT has determined that a budget of up to $300,000 is appropriate for the development of Neighborhood Transportation Management Plan(s) for the eligible neighborhoods identified above. The Applicant or its successor shall guarantee the budget in a form reasonably satisfactory to LADOT. The $300,000 budget is allocated among the three neighborhoods (based on the number of residential street blocks in each neighborhood) as follows:

Neighborhood A – $69,000
Neighborhood B – $21,000
Neighborhood C – $210,000

Consultant time to develop the plans shall be paid by the Applicant or its successors and shall not be counted against the $300,000 budget, but data collection and mailing costs shall be included in the budget as shall the costs associated with the design of any changes approved by the neighborhood.

NEIGHBORHOOD TRANSPORTATION MANAGEMENT PLAN PROCESS

Each Neighborhood Transportation Management Plan process shall include three workshops that shall take place over a maximum four-month time period. Each workshop shall be rescheduled a maximum of one time if a quorum of the Committee (described below) is not present in person or by proxy. Failure to deliver a quorum for two consecutive meetings duly called and approved by the Committee shall constitute a declaration of non-interest in the process and the process shall cease, and all unused funds allocated to that neighborhood shall be returned to the Applicant or is successors.

a. Data Collection – Based on the schedule in the final subphasing mitigation program for the Project, the transportation consultant for the Applicant or its successors shall collect and submit to LADOT appropriate traffic data (average daily trips, speed data, intersection turning movement counts, roadway characteristics, etc.) for each of the neighborhoods.

b. Kick-Off Neighborhood Workshops – Based on the schedule in the final Project subphasing mitigation program, the transportation consultant for the Applicant or its successors shall hold a “Kick-off Workshop” meeting with the residents for each of the neighborhoods. Working with the Council Office, residents in the boundaries of the neighborhood will be invited to participate in the workshops. At the Kick-off Workshop, each neighborhood shall select a Committee of seven members by a consensus of the neighbors present at the meeting. If less than seven members of the neighborhood attend the Kick-off Workshop, the meeting will be rescheduled. If less than seven members attend the rescheduled Kick-off Workshop, that shall constitute a declaration of non-interest in the process and the process shall cease and all funds allocated to that neighborhood shall be returned to the Applicant.

A majority of the Committee members must be present at each of the workshops for the Neighborhood Transportation Management Plan. The Agenda for the "Kick-off Workshop" shall include the following:

i. Identify the process to be used to develop the Neighborhood Traffic Management Plan
ii. Identify the non-restrictive control measures and non-restrictive improvement choices for the neighborhood
iii. Discuss the existing and anticipated traffic issues in the neighborhood
iv. Match the types of improvements with the types of problems that each measure addresses
v. Identify the types of improvements that the neighbors are likely to support

c. Draft Plan – Based on the data and input from the Kick-off Workshop, the transportation consultant for the Applicant or its successors shall develop a draft plan to implement for the neighborhood. The transportation consultant for the Applicant shall review the proposed measures with the appropriate City agency (LADOT, Bureau of Engineering, Street Services and Sanitation, etc.) to confirm the feasibility of each of the measures.

d. Neighborhood Workshop 2 – Upon completion of a draft plan, Neighborhood Workshop 2 shall be held to get reaction to the draft plan and suggestions for modifications to the plan from the residents.

e. Revised Plan – Based on input obtained during Neighborhood Workshop 2, the transportation consultant for the Applicant or its successors shall revise the draft plan for the neighborhood. The transportation consultant for the Applicant shall review the revised plan with the appropriate City agency (LADOT, Bureau of Engineering, Street Services and Sanitation, etc.) to confirm the feasibility of each of the measures.

f. Neighborhood Workshop 3 – Upon completion of the revised plan, Neighborhood Workshop 3 shall be held to finalize the plan. The plan shall be finalized based on the consensus of the residents present at Neighborhood Workshop 3.

g. Information Brochure – The transportation consultant for the Applicant or its successors shall prepare an information brochure that summarizes the final plan approved in Neighborhood Workshop 3 and a process for the neighborhood to approve or reject the plan. LADOT shall cause the information brochure to be mailed to all households in the neighborhood at issue.

h. Approval/Rejection of the Plan – If a majority of the households in the neighborhood approve of the plan, the Applicant or its successors shall implement the traffic management plan on a temporary basis based on the schedule in the final Project subphasing mitigation program. If a majority of the households do not approve of the plan, the measures in the plan shall not be implemented, the process shall be declared over and all remaining funds for that neighborhood shall be returned to the Applicant or its successors.

i. Approval on Final Plan – If step h.) above resulted in the approval of the plan and temporary measures were implemented, six months after the implementation of the temporary measures, LADOT shall cause a second survey of the households in the neighborhood at issue to determine the level of interest in making the temporary traffic measures in the plan permanent. If a majority of the households in the neighborhood approve of permanent implementation of the measures, the traffic measures shall be made permanent. If a majority of the households do not approve of the traffic measures, the measures shall be removed.

Upon completion of steps a.) through i.) above, the Applicant's or its successors' responsibility for the Neighborhood Traffic Management Plan shall be deemed complete and any remaining funds allocated for that neighborhood shall be returned to the Applicant.

ATTACHMENT B

ATTACHMENT I

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

TRANSPORTATION IMPROVEMENT PHASING PLAN (Accelerated)

ATTACHMENT I

ALTERNATE MITIGATION PHASING PROGRAM BY PHASE -- ALTERNATE PROPOSAL FOR ACCELERATED IMPLEMENTATION

Development/Mitigation		Mitigation Monitoring Program Reference	P.M. Peak Hour Trips Trigger				Jurisdiction/Agency
			Phase 1 (2010 - 2015)	Phase 2 (2016 - 2020)	Phase 3 (2021 - 2025)	Phase 4 (2026 - 2030)	
Land Use - Net New Development [a], [b]							
Studio/Business Areas West and Back Lot (Lankershim) (Zone A)			164	564	758	1,028	
Entertainment Area (Zone B)			(142)	113	458	808	
Studio/Business Areas East (Lakeside) (Zone C)			40	163	292	361	
Studio/Business West/Back Lot and Entertainment Areas (Zones A & B)			22	677	1,216	1,836	
Entertainment & Studio/Business Areas East (Zones B & C)			(102)	276	750	1,169	
Studio/Business Areas East and West/Back Lot (Zones A & C)			204	727	1,050	1,389	
Studio/Business Areas West/Back Lot, Entertainment, & Studio/Business East (Zones A, B, & C)			62	840	1,508	2,197	
Mitigation/Improvement [c], [d], [e], [f], [g]							
Buddy Holly Drive Improvements		**MM B-19**	**Zone B**				City of Los Angeles/County of Los Angeles
Lakeside Plaza Drive Roadway Improvements		**MM B-20**			**Zone C**		City of Los Angeles
Universal Hollywood Drive Roadway Improvements		**Des Feat B-7**	**Zone B**	**Zone B**			City of Los Angeles/County of Los Angeles
TDM - TMA, TIC, Transit Passes, Flex Cars, GRH, etc.		**Des Feat B-1**	**Zones A, B, & C**	**Zones A, B, & C**	**Zones A, B, & C**	**Zones A, B, & C**	City of Los Angeles/County of Los Angeles
US 101 Southbound On-Ramp at Universal Studios Boulevard		**MM B-3**	**Zone B**	**Zone B**			City of Los Angeles/Caltrans
US 101 Interchange Improvements at Universal Terrace Parkway		**MM B-4**			**Zones A & B**		City of Los Angeles/Caltrans
Barham Boulevard Corridor Improvements							City of Los Angeles
Add Third Southbound Lane from Forest Lawn to Buddy Holly	*Physical*	**MM B-5**		**Zone B**			
Int. 52 - Barham Boulevard & De Witt Drive	*Physical*	**MM B-5**		**Zone B**			City of Los Angeles
Int. 53 - Barham Boulevard & Lake Hollywood Drive	*Physical*	**MM B-5**		**Zone B**			City of Los Angeles
Int. 54 - Barham Boulevard & Coyote Canyon Road	*Physical*	**MM B-5**		**Zone B**			City of Los Angeles
Int. 55 - Barham Boulevard & Lakeside Plaza Drive & Forest Lawn Drive	*Physical*	**MM B-20**		**Zone C**			City of Los Angeles
	Signal	**MM B-20**		**Zone C**			
Lankershim Boulevard Corridor Improvements							
Int. 34 - Lankershim Boulevard & Valleyheart Drive/James Stewart Avenue	*Physical*	**MM B-6**	**Zones A & B**				City of Los Angeles/County of Los Angeles
Int. 35 - Lankershim Boulevard & Main Street	*Physical*	**MM B-6**	**Zones A & B**				City of Los Angeles/County of Los Angeles
	Signal	**MM B-6**	**Zones A & B**				City of Los Angeles/County of Los Angeles
Int. 36 - Lankershim Boulevard & Campo de Cahuenga Way/Universal Hollywood Drive	*Physical*	**MM B-6**	**Zones A & B**				City of Los Angeles/County of Los Angeles
	Signal	**MM B-6**	**Zones A & B**				City of Los Angeles/County of Los Angeles
Int. 37 - Lankershim Boulevard & US 101 NB Off-Ramp	*Physical*	**LADOT Assess Letter**		**Zones A & B**			City of Los Angeles/Caltrans
Int. 72 - Lankershim Boulevard & Muddy Waters Drive	*Signal*	**MM B-6**	**Zones A & B**				City of Los Angeles/County of Los Angeles

Notes:

[a] The Project development sub-phasing plan is approximate and may be subject to revisions.

[b] P.M. peak hour trip generation for each sub-phase would determine the specific transportation improvements implemented. P.M. peak hour trip generation to be estimated as sub phases develop using the following factors: Production Support = 0.57 per ksf, Sound Stages = 0.43 per ksf, Office = 1.28 per ksf, Studio Office = 0.63 per ksf, Warehouse = 0.35 per ksf, Entertainment/New Amphitheater = 0.93 per ksf, Entertainment Retail = 0.89 per ksf, Existing Amphitheater = Residential Apartments = 0.62 per DU, Neighborhood Retail = 1.73 per ksf, and Community Amenities = 1.42 per ksf.

[c] The sub-phasing plan may be revised, where appropriate and as determined by LADOT: (1) upon demonstration that measures for each sub-phase in the revised sub-phasing plan are equivalent or superior to the original mitigation measures, and/or (2) upon Applicant has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT.

[d] Prior to the issuance of any building permit for each sub-phase, all on- and off-site mitigation measures for the sub-phase shall be complete or suitably guaranteed to the satisfaction of LADOT.

[e] Temporary Certificates of Occupancy may be granted in the event of any delay through no fault of the Applicant, provided that, in each case, the Applicant has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT.

[f] Substitute mitigation measures may be provided subject to the approval by the agency with jurisdiction over the location of the improvement, upon demonstration that the substitute mitigation measure is equivalent or superior to the original mitigation

[g] Prior to the issuance of any temporary or permanent Certificate of Occupancy in the final sub-phase, all required improvements in the entire mitigation phasing plan shall be funded, completed, or resolved to the satisfaction of LADOT.

ATTACHMENT B

ATTACHMENT I (Continued)

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
TRANSPORTATION IMPROVEMENT PHASING PLAN (Accelerated)

ATTACHMENT I (continued)
ALTERNATE MITIGATION PHASING PROGRAM BY PHASE -- ALTERNATE PROPOSAL FOR ACCELERATED IMPLEMENTATION

Development/Mitigation			P.M. Peak Hour Trips Trigger				Jurisdiction/Agency
			Phase 1 (2010 - 2015)	Phase 2 (2016 - 2020)	Phase 3 (2021 - 2025)	Phase 4 (2026 - 2030)	
Land Use - Net New Development [a], [b]							
Studio/Business Areas West and Back Lot (Lankershim) (Zone A)			164	564	758	1,028	
Entertainment Area (Zone B)			(142)	113	458	808	
Studio/Business Areas East (Lakeside) (Zone C)			40	163	292	361	
Studio/Business West/Back Lot and Entertainment Areas (Zones A & B)			22	677	1,216	1,836	
Entertainment & Studio/Business Areas East (Zones B & C)			(102)	276	750	1,169	
Studio/Business Areas East and West/Back Lot (Zones A & C)			204	727	1,050	1,389	
Studio/Business Areas West/Back Lot, Entertainment, & Studio/Business East (Zones A, B, & C)			62	840	1,508	2,197	
Mitigation/Improvement (continued) [c], [d], [e], [f], [g]							
Forest Lawn Drive Corridor Improvements				**Zone C**			
Int. 59 - Forest Lawn Drive & Zoo Drive	*Physical*	**MM B-7**		**Zone C**			City of Los Angeles
Int. 60 - Forest Lawn Drive & SR 134 EB Ramps	*Physical*	**MM B-7**		**Zone C**			City of Los Angeles/Caltrans
Int. 61 - Forest Lawn Drive & SR 134 WB Ramps	*Signal*	**MM B-7**		**Zone C**			City of Los Angeles/Caltrans
Forest Lawn Westbound Off-Ramp Widening	*Physical*	**MM B-7**		**Zone C**			
Transit System Improvements							
Regional Bus Transit		**MM B-1**		**Zones A & B**			City of Los Angeles/Metro
Local Shuttle - Lakeside Plaza Drive to Universal City Metro Red Line station		**MM B-2**			**Zone C**	**Zone C**	City of Los Angeles/Metro
Local Shuttle - Red Line Station to Downtown Burbank Metrolink station		**MM B-2**		**Zones A & C**			City of Los Angeles/City of Burbank/Metro
Local Shuttle - Universal Hollywood Drive/Lankershim to Theme Park/City Walk		**MM B-2**	**Zone B**				City of Los Angeles/Metro
Bus Enhancements (Next Bus, Lo Emmission, Bus Call, Shelters)		**MM B-2**					
Hollywood Event Management Infrastructure		**Des Feat B-8**	**Zones A, B, & C**				City of Los Angeles
Traffic Flow and Safety Program: Left-turn Signals		**LADOT Assess Letter**	**Zones A & B**				City of Los Angeles
City of Los Angeles System-wide Signal System Upgrade		**LADOT Assess Letter**	**Zones A, B, & C**				City of Los Angeles
Specific Intersection Improvements							
Int. 11 - Vineland Avenue & Moorpark Street	*Physical*	**MM B-8**		**Zones A & B**			City of Los Angeles
Int. 15 - SR 134 EB On-Ramp & Riverside Drive	*Physical*	**MM B-22**		**Zones A & B**			City of Los Angeles/Caltrans
	Signal	**MM B-22**		**Zones A & B**			City of Los Angeles/Caltrans
Int. 19 - Lankershim Boulevard & Riverside Drive	*Physical*	**MM B-9**	**Zones A & B**				City of Los Angeles
Int. 20 - Lankershim Boulevard & Moorpark Street	*Physical*	**MM B-10**	**Zones A & B**				City of Los Angeles
Int. 28 - Cahuenga Boulevard & Ventura Freeway eastbound ramps	*Physical*	**MM B-23**		**Zones A, B, & C**			
	Signal	**MM B-23**		**Zones A, B, & C**			
Int. 29 - Cahuenga Boulevard & Riverside Drive	*Physical*	**MM B-12**		**Zones A & B**			City of Los Angeles
Int. 32 - Cahuenga Boulevard & Valley Spring Lane	*Signal*	**MM B-15**		**Zones A & B**			City of Los Angeles
Int. 40 - Ledge Avenue/Moorpark Way & Riverside Drive	*Physical*	**LADOT Assess Letter**		**Zones A & C**			City of Los Angeles
	Signal	**LADOT Assess Letter**		**Zones A & C**			City of Los Angeles

Notes:
[a] The Project development sub-phasing plan is approximate and may be subject to revisions.
[b] P.M. peak hour trip generation for each sub-phase would determine the specific transportation improvements implemented. P.M. peak hour trip generation to be estimated as sub phases develop using the following factors: Production Support = 0.57 per ksf, Sound Stages = 0.43 per ksf, Office = 1.28 per ksf, Studio Office = 0.63 per ksf, Warehouse = 0.35 per ksf, Entertainment/New Amphitheater = 0.93 per ksf, Entertainment Retail = 0.89 per ksf, Existing Amphitheater = Residential Apartments = 0.62 per DU, Neighborhood Retail = 1.73 per ksf, and Community Amenities = 1.42 per ksf.
[c] The sub-phasing plan may be revised, where appropriate and as determined by LADOT: (1) upon demonstration that measures for each sub-phase in the revised sub-phasing plan are equivalent or superior to the original mitigation measures, and/or (2) upon Applicant has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT.
[d] Prior to the issuance of any building permit for each sub-phase, all on- and off-site mitigation measures for the sub-phase shall be complete or suitably guaranteed to the satisfaction of LADOT.
[e] Temporary Certificates of Occupancy may be granted in the event of any delay through no fault of the Applicant, provided that, in each case, the Applicant has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT.
[f] Substitute mitigation measures may be provided subject to the approval by the agency with jurisdiction over the location of the improvement, upon demonstration that the substitute mitigation measure is equivalent or superior to the original mitigation
[g] Prior to the issuance of any temporary or permanent Certificate of Occupancy in the final sub-phase, all required improvements in the entire mitigation phasing plan shall be funded, completed, or resolved to the satisfaction of LADOT.

ATTACHMENT B

ATTACHMENT I (Continued)

NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10

TRANSPORTATION IMPROVEMENT PHASING PLAN (Accelerated)

ATTACHMENT I (continued)

ALTERNATE MITIGATION PHASING PROGRAM BY PHASE -- ALTERNATE PROPOSAL FOR ACCELERATED IMPLEMENTATION

Development/Mitigation			P.M. Peak Hour Trips Trigger				Jurisdiction/Agency
			Phase 1 (2010 - 2015)	Phase 2 (2016 - 2020)	Phase 3 (2021 - 2025)	Phase 4 (2026 - 2030)	
Land Use - Net New Development [a], [b]							
Studio/Business Areas West and Back Lot (Lankershim) (Zone A)			164	564	758	1,028	
Entertainment Area (Zone B)			(142)	113	458	808	
Studio/Business Areas East (Lakeside) (Zone C)			40	163	292	361	
Studio/Business West/Back Lot and Entertainment Areas (Zones A & B)			22	677	1,216	1,836	
Entertainment & Studio/Business Areas East (Zones B & C)			(102)	276	750	1,169	
Studio/Business Areas East and West/Back Lot (Zones A & C)			204	727	1,050	1,389	
Studio/Business Areas West/Back Lot, Entertainment, & Studio/Business East (Zones A, B, & C)			62	840	1,508	2,197	
Mitigation/Improvement (continued) [c], [d], [e], [f], [g]							
Specific Intersection Improvements (continued)							
Int. 47 - Barham Boulevard & Cahuenga Boulevard	*Physical*	**Des Feat B-9 MM B-18**		**Zones B & C**			City of Los Angeles
Int. 48 - Barham Boulevard Buddy & Holly Drive/Cahuenga Boulevard	*Physical*	**MM B-19**	**Zones B & C**				City of Los Angeles
Int. 75 - Pass Avenue & Verdugo Lane	*Signal*	**MM B-27**		**Zones A, B, & C**			City of Burbank
Int. 77 - Evergreen Street/Riverside Drive & Alameda Avenue	*Physical*	**MM B-29**		**Zones A, B, & C**			City of Burbank
	Signal	**MM B-29**		**Zones A, B, & C**			
Int. 78 - Pass Avenue & SR 134 EB Off-Ramp	*Signal*	**MM B-30**		**Zone C**			City of Burbank/Caltrans
Int. 79 - Pass Avenue & Alameda Avenue	*Physical*	**MM B-31**			**Zones A, B, & C**		City of Burbank
	Signal	**MM B-31**			**Zones A, B, & C**		City of Burbank
Int. 81 - Olive Avenue & Pass Avenue	*Physical*	**LADOT Assess Letter**		**Zones B & C**			City of Burbank
	Signal	**MM B-33**		**Zones B & C**			City of Burbank
Int. 82 - Olive Avenue & Warner Brothers Studios Gate 2/Gate 3	*Signal*	**MM B-34**		**Zones B & C**			City of Burbank
Int. 83 - Olive Avenue & Warner Brothers Studios Gate 1/Lakeside Drive	*Physical*	**MM B-35**		**Zones B & C**			City of Burbank
Int. 162 - Cahuenga Boulevard & US 101 SB Ramps	*Signal*	**MM B-26**	**Zones A, B, & C**				City of Los Angeles/Caltrans
Burbank Signal Improvements							
Signal Equipment		**MM B-28, 36-39, 41**	**Zones A, B, & C**				City of Burbank
Signal Timing Plan		**MM B-40**	**Zones A, B, & C**				City of Burbank
ATCS		**MM B-40**	**Zones A, B, & C**	**Zones A, B, & C**			City of Burbank
Freeway PSR, PR/ED, PS&E							
US 101/SR 170/SR 134 Interchange		**MM B-47**	**Zones A, B, & C**	**Zones A, B, & C**			Caltrans
US 101/Highland Interchange		**MM B-47**			**Zones A, B, & C**	**Zones A, B, & C**	Caltrans
US 101 Auxiliary Lanes		**MM B-47**		**Zones A, B, & C**	**Zones A, B, & C**	**Zones A, B, & C**	Caltrans
Caltrans Ramp Fair Share Contributions		**MM B-46**		**Zones A, B, & C**	**Zones A, B, & C**		
Construction Management		**MM B-43-44**	**Zones A, B, & C**	**Zones A, B, & C**	**Zones A, B, & C**	**Zones A, B, & C**	
Los Angeles Neighborhood Protection Program		**MM B-45**	**Zones A, B, & C**	**Zones A, B, & C**	**Zones A, B, & C**		City of Los Angeles

Notes:

[a] The Project development sub-phasing plan is approximate and may be subject to revisions.

[b] P.M. peak hour trip generation for each sub-phase would determine the specific transportation improvements implemented. P.M. peak hour trip generation to be estimated as sub phases develop using the following factors: Production Support = 0.57 per ksf, Sound Stages = 0.43 per ksf, Office = 1.28 per ksf, Studio Office = 0.63 per ksf, Warehouse = 0.35 per ksf, Entertainment/New Amphitheater = 0.93 per ksf, Entertainment Retail = 0.89 per ksf, Existing Amphitheater = Residential Apartments = 0.62 per DU, Neighborhood Retail = 1.73 per ksf, and Community Amenities = 1.42 per ksf.

[c] The sub-phasing plan may be revised, where appropriate and as determined by LADOT: (1) upon demonstration that measures for each sub-phase in the revised sub-phasing plan are equivalent or superior to the original mitigation measures, and/or (2) upon Applicant has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT.

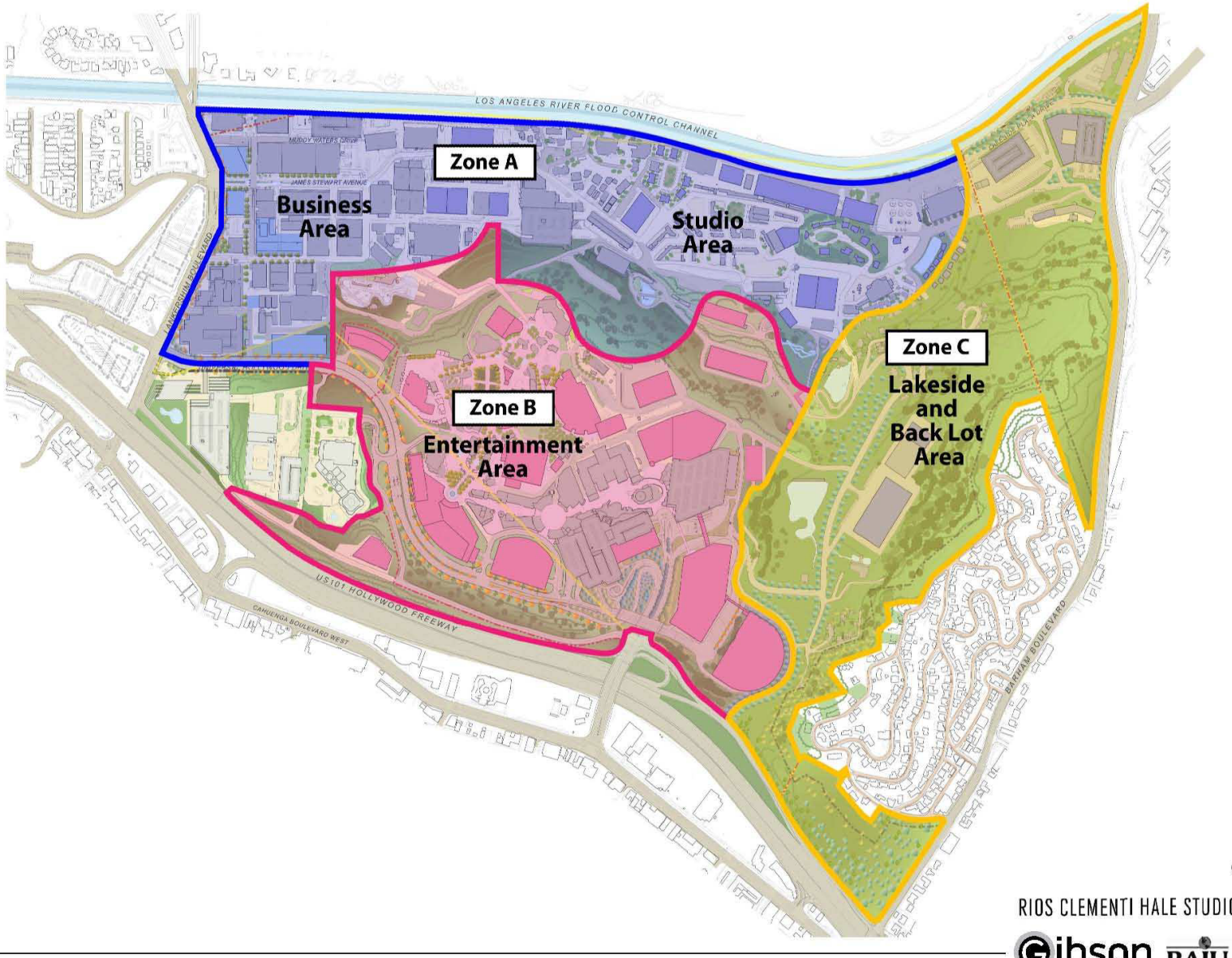
[d] Prior to the issuance of any building permit for each sub-phase, all on- and off-site mitigation measures for the sub-phase shall be complete or suitably guaranteed to the satisfaction of LADOT.

[e] Temporary Certificates of Occupancy may be granted in the event of any delay through no fault of the Applicant, provided that, in each case, the Applicant has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT.

[f] Substitute mitigation measures may be provided subject to the approval by the agency with jurisdiction over the location of the improvement, upon demonstration that the substitute mitigation measure is equivalent or superior to the original mitigation

[g] Prior to the issuance of any temporary or permanent Certificate of Occupancy in the final sub-phase, all required improvements in the entire mitigation phasing plan shall be funded, completed, or resolved to the satisfaction of LADOT.

ATTACHMENT B



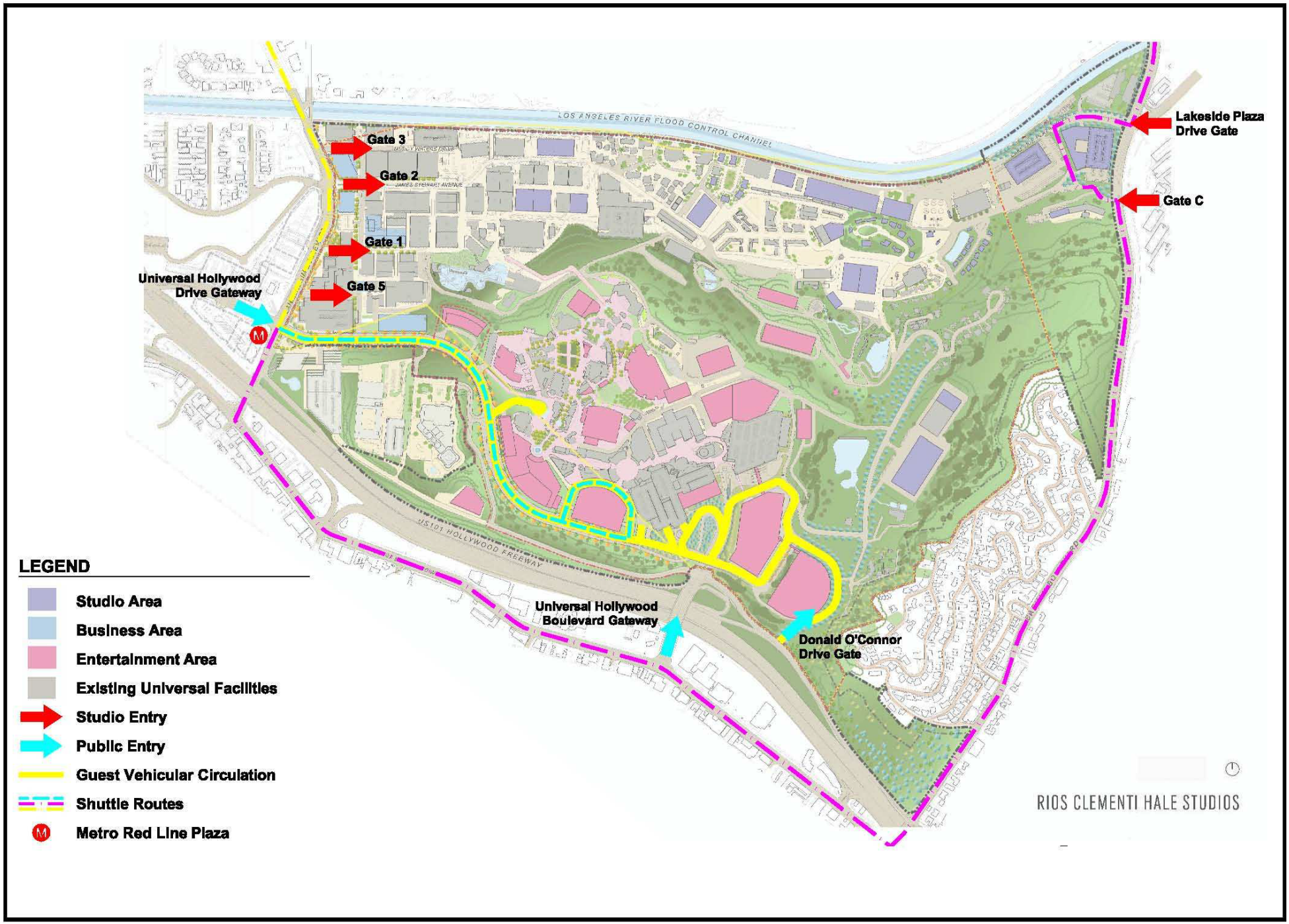
RIOS CLEMENTI HALE STUDIOS

Gibson transportation consulting, Inc. RAJU Associates, Inc.

ATTACHMENT I
TRANSPORTATION IMPROVEMENT PHASING PLAN (ZONE GROUPS)

ATTACHMENT B

ATTACHMENT J
NBC UNIVERSAL EVOLUTION PLAN - ALTERNATIVE 10
PROJECT CIRCULATION

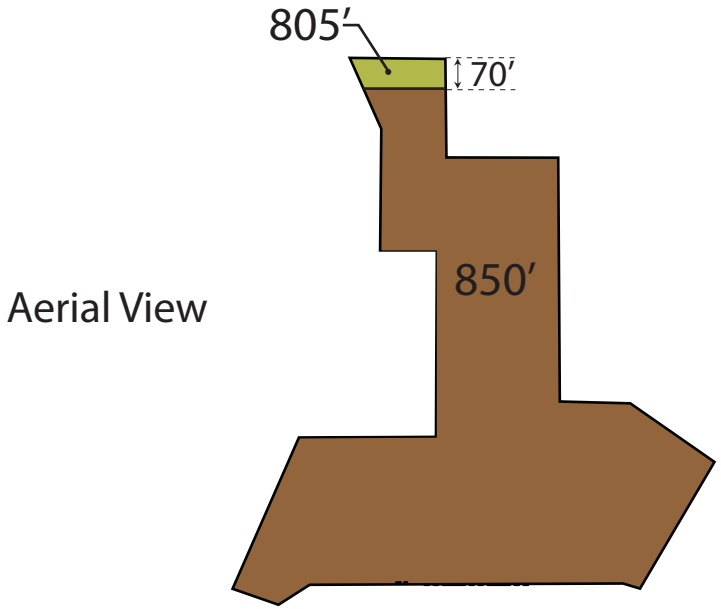


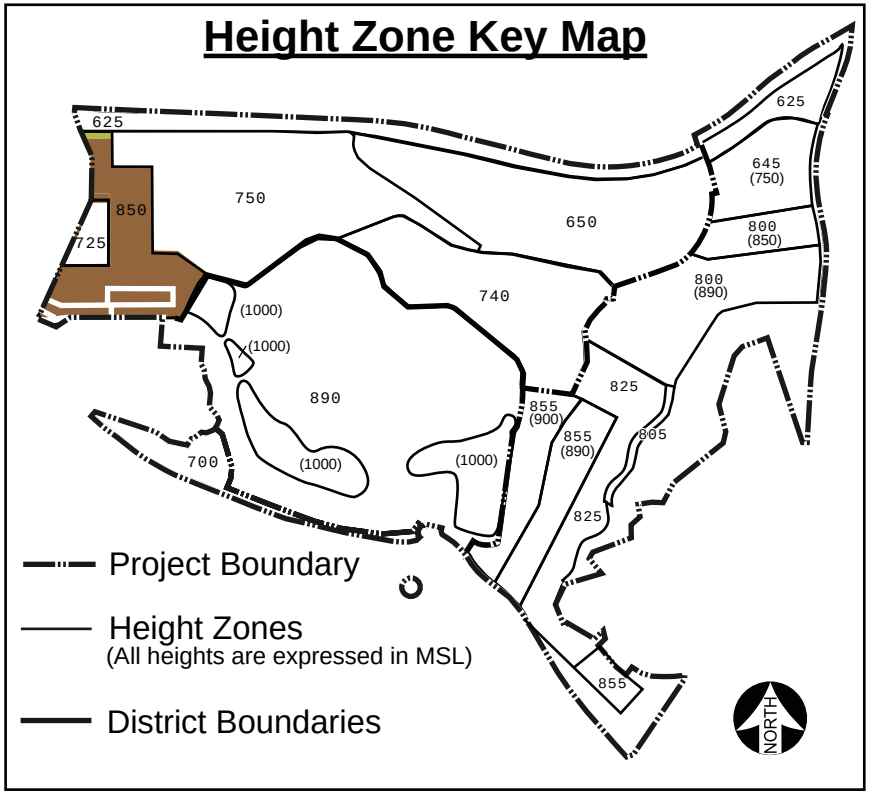
Veneklasen Associates
Consultants in Acoustics | AV | IT | Environmental Noise
1711 Sixteenth Street, Santa Monica, CA 90404 (310) 450-1733

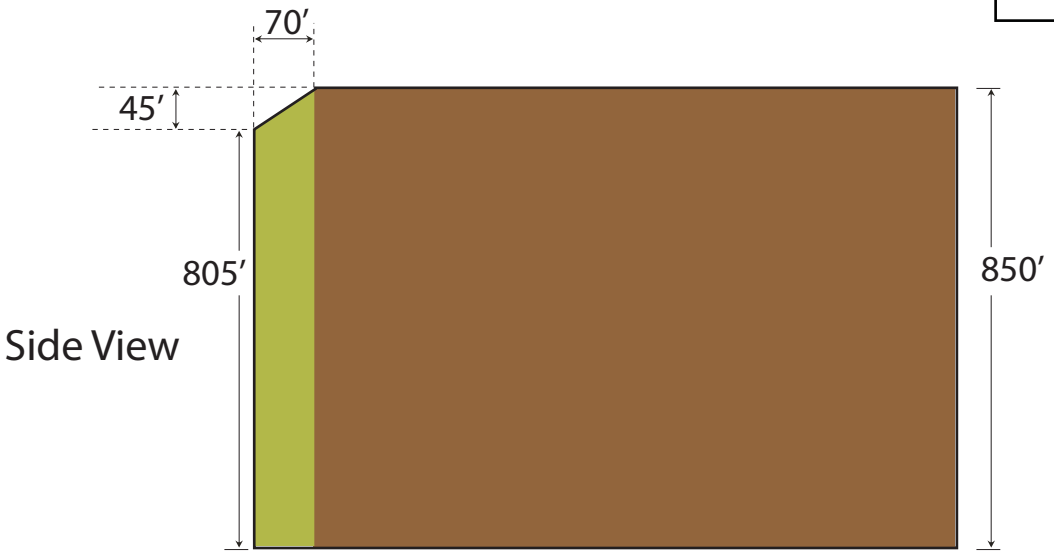
Vibration Mitigation Area Due to Construction

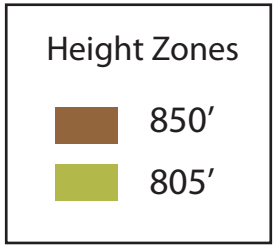
JUNE 2012

ATTACHMENT C









Source: Matrix environmental, 2010.

matrix environmental

ATTACHMENT D
Maximum Allowable Heights
Pursuant to Mitigation Measure E.1-2

ATTACHMENT E

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

GEOTECHNICAL INVESTIGATION
NBC UNIVERSAL EVOLUTION PLAN

UNIVERSAL CITY, CITY OF LOS ANGELES AND LOS ANGELES COUNTY, CALIFORNIA

Prepared for:

Universal Studios LLLP, L.P.

March 2010

Shannon & Wilson Project 06-030.1

ATTACHMENT E

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

ALASKA
CALIFORNIA
COLORADO
FLORIDA
MISSOURI
OREGON
WASHINGTON

March 2010

Mr. E. Mark Lyum
NBC Universal, Inc.
100 Universal City Plaza
Universal City, California 91608

Subject: **Report of Geotechnical Investigation**
NBC Universal Evolution Plan
Universal City, City of Los Angeles and Los Angeles County, California
for Universal Studios LLLP, L.P
Shannon & Wilson Project 06-030.1

Dear Mr. Lyum:

We are pleased to submit this report presenting the results of our geotechnical investigation for the NBC Universal Evolution Plan in Universal City, Los Angeles.

The findings, conclusions and recommendations developed during this investigation are described in the report.

Sincerely,

Shannon & Wilson, Inc.

John Jeffrey Butelo
Engineering Geologist
Vice President

PROFESSIONAL GEOLOGIST
JOHN J. BUTELO
No. 1150
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

James L. Van Beveren
Geotechnical Engineer
Senior Vice President

REGISTERED PROFESSIONAL ENGINEER
JAMES L. VAN BEVEREN
No. GE852
EXP. 06/30/11
GEOTECHNICAL
STATE OF CALIFORNIA

06-030.1 r03/VB:ay
(1 copy submitted)

706 WEST BROADWAY, SUITE 201
GLENDALE, CALIFORNIA 91204-1032
818•543•4560 FAX 818•543•4565
TDD 1•800•833•6388
www.shannonwilson.com

ATTACHMENT E

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

GEOTECHNICAL INVESTIGATION
NBC UNIVERSAL EVOLUTION PLAN

UNIVERSAL CITY, CITY OF LOS ANGELES AND LOS ANGELES COUNTY, CALIFORNIA

Prepared for:

Universal Studios LLLP, L.P.

Shannon & Wilson

March 2010

Shannon & Wilson Project 06-030.1

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SUMMARY

We have completed our geotechnical investigation as input for the NBC Universal Evolution Plan (the Project) in Universal City, California, for Universal Studios LLLP, L.P. The investigation was authorized to determine the geotechnical conditions, including geologic hazards, within the Universal Studios property.

A geotechnical investigation was performed in 1996 by Converse Consultants West for development of an earlier Environmental Impact Report (EIR) and the information in that prior report was used in preparation of this report. Concurrently with the preparation of this report, we performed an investigation for filing of a Tentative Tract Map within the Mixed-Use Residential Area of the site. The results of that investigation were also utilized in the preparation of this report.

The Project site is located on the north flank of the Santa Monica Mountains at the easterly limits of the San Fernando Valley. The Los Angeles River Flood Control Channel borders the site along the north boundary. The Project site is topographically segmented into three general areas, the relatively flat area in the north/northwest portion of the site, adjacent to the Los Angeles River Flood Control Channel and Lankershim Boulevard; the upper graded plateau in the central and south portions of the Project site, and the Back Lot in the eastern hills that extend along the east side of the Project site. The lower lot and the upper graded plateau are separated by north and northwest facing slopes.

The Project site has a history of many generations of development, including channelization of the Los Angeles River, development of studio, office and Back Lot, and construction of entertainment facilities and infrastructure. Fill and recent alluvium are present adjacent to the Los Angeles River Flood Control Channel, and several generations of fill are present throughout the site. The higher portions of the Project site are underlain by bedded sedimentary bedrock of the Topanga Formation.

Geologic hazards present on the Project site include slope stability within the eastern hillside of the site and liquefaction on the northern flat area. This report describes the geotechnical conditions of the site, and presents recommendations needed to mitigate the potential geologic hazards. It also presents preliminary data for design of foundations, grading, paving and hardscape.

SCOPE

This report presents the results of our geotechnical investigation for the NBC Universal Evolution Plan (the Project). The location of the Project site in relation to the surrounding properties is shown on Figure 1, Vicinity Map. The Project is described on Figure 2, NBC Universal Evolution Plan.

A geotechnical investigation was performed by Converse Consultants West (Converse) for a previous Draft Environmental Impact Report (EIR). The results of the Converse investigation were submitted in their report dated November 14, 1996. That prior report was based on the findings of numerous investigations performed by Converse and other geotechnical firms during the development of the Project. A bibliography, listing the results of the prior investigations within the Project, is presented at the end of this report. Concurrent with this report, we performed an investigation for development of the proposed Mixed-Use Residential Area of the Project and the results of that investigation were submitted in a report entitled: Report of Geotechnical Investigation, Proposed Universal Village Development, Tentative Tract Number 98564, Universal City, Los Angeles, California.

This investigation was authorized to provide geotechnical data for the NBC Universal Evolution Plan. The scope included 1) determining the physical characteristics of the existing soils and bedrock at the Project site, and 2) addressing the geological hazards pertinent to the proposed development. This report presents recommendations to mitigate potential geological hazards as well as preliminary recommendations for designing the foundations, and for grading, paving and stockpile requirements. Our recommendations are based on a site reconnaissance, our geotechnical investigation and the reported conditions from prior aforementioned investigations on the Project site.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for Universal Studios LLLP, L.P. and their design consultants to be used solely in the design of the NBC Universal Evolution Plan. The report has not been prepared for use by other parties, and may not contain sufficient information for purposes of other parties or other uses.

PROJECT DESCRIPTION

PROJECT LOCATION

Universal Studios LLLP, L.P. (the Applicant) is proposing a development program called the NBC Universal Evolution Plan (the Project) as shown on Figure 2, NBC Universal Evolution Plan. The Project is designed to meet the future needs of existing on-site businesses as well as the establishment of a new residential community that contributes to meeting the future housing needs of the eastern San Fernando Valley.

The Project encompasses approximately 391 acres, located two miles north of Hollywood and 10 miles northwest of downtown Los Angeles, in central Los Angeles County. The Project site is also located approximately 1.5 miles south and east of the junction of U.S. Route 101 (Hollywood Freeway) and State Route 134 (Ventura Freeway). The Project site is bounded by the Los Angeles River Flood Control Channel (LAFCC) to the north, the Hollywood Freeway to the south, Barham Boulevard and residences to the east, and Lankershim Boulevard to the west.

The Project site is located within the foothills of the north face of the Santa Monica Mountains and is topographically segmented into three general areas: (1) the relatively flat northern and western portion of the property located adjacent to the LAFCC and Lankershim Boulevard; (2) a plateau in the center of the property (commonly referred to as the "top-of-the-hill"); and (3) an eastern area that includes some sloping terrain along the property's eastern boundary. The Project site has been extensively developed over the past 90 years, although the eastern portion of the Project site is currently underdeveloped.

The Project site is located within two governmental jurisdictions: the City of Los Angeles (approximately 95 acres) and the County of Los Angeles (approximately 296 acres). The property lines are shown on Figure 1, Vicinity Map. The portion of the Project site within City jurisdiction involves primarily three non-contiguous areas surrounding the County portion, with small areas along the northern boundary of the Project site also located within the City of Los Angeles. Proceeding clockwise from the north, these three areas are as follows: (1) the northeastern corner of the Project site along Barham Boulevard; (2) the southeastern corner of the Project site along Barham Boulevard and Buddy Holly Drive; and, (3) the southern and southwestern portion of the Project site, adjacent to the Hollywood Freeway, which also extends to include a limited amount of frontage along the south side of Universal Hollywood Drive as it

extends towards Lankershim Boulevard. The portion of the Project site within County jurisdiction is a contiguous area encompassing most of the northern, central and western portions of the Project site.

EXISTING SETTING OF THE PROJECT SITE

The Project site is presently developed with the following three principal land uses: (1) studio production (movie, television and commercial) and studio office uses, (2) theme park and related entertainment uses, and (3) retail entertainment uses. The Project site currently consists of approximately 4.2 million square feet of development. The Project site also includes numerous production sets and the Tram Tour.

PROPOSED NBC UNIVERSAL EVOLUTION PLAN

The Project, for planning purposes, has been divided into the following four development areas: (1) Entertainment, (2) Studio, (3) Business, and (4) Mixed-Use Residential. These Areas are shown on Figure 3, Area Diagram.

The Project proposes the development of approximately 2.01 million net square feet of new studio production, office, entertainment and retail uses (approximately 2.65 million square feet of new commercial development less approximately 638,000 square feet of demolition) inclusive of 500 hotel rooms. In addition, approximately 2,937 residential dwelling units are proposed to be constructed within the Mixed-Use Residential Area of the Project Site that is located south of Lakeside Plaza Drive.

The Applicant, in addition to the proposed development described above, is seeking approval from the Local Agency Formation Commission (LAFCO) to annex approximately 76 acres from the County's jurisdiction into the City of Los Angeles. This will have the effect of placing the proposed residential development within the Mixed-Use Residential Area under the jurisdiction of the City of Los Angeles. The proposed Project would also involve detachment of approximately 32 acres of the Project site from the City's jurisdiction into the County, for an overall net change of approximately 44 acres. Should the annexation process be completed, approximately 139 acres of the Project site would be located within the City of Los Angeles, and the remaining approximately 252 acres would be located within the County.

The Project will be implemented via two proposed Specific Plans and various other land use entitlements. One proposed Specific Plan will address development within the County portions of the Project site,

namely the Entertainment, Studio and Business Areas; whereas the other proposed Specific Plan will address development within the City portions of the Project site, mainly the Mixed-Use Residential Area.

PROJECT GRADING

Grading for the Project site will require both excavation and the placing of compacted fills. The estimated quantities of earthwork are shown on Figure 4, Conceptual Grading Plan and are summarized in Table 1, Summary of Cut and Fill Quantities.

Table 1, Summary of Cut and Fill Quantities

Area	Cut (cubic yards)	Fill (cubic yards)
Studio Area	139,000	158,000
Entertainment Area	442,000	111,000
Business Area	104,000	19,000
Mixed-Use Residential Area	4,250,000	3,800,000
Total	**4,935,000**	**4,088,000**

Anticipated phasing of the Mixed-Use Residential Area will require stockpiling excavated soils for future use as compacted fill.

PROJECT CONSTRUCTION/PHASING SCHEDULE

The Project would be developed over a period of years in a number of phases. The Applicant anticipates that construction would conclude by 2030. The timing of actual development would be in response to market conditions.

REGULATORY FRAMEWORK

STATE LEVEL

The State of California adopted the 2007 California Building Code, which is based on the 2006 International Building Code, on January 1, 2008.

The County of Los Angeles adopted the 2007 California Building Code on January 1, 2008 as the County of Los Angeles Building Code Volumes 1 and 2.

Together, the provisions in Volumes 1 and 2 of the Los Angeles County Building Code address issues related to site grading, cut and fill slope design, soil expansion, geotechnical investigations before and during construction, slope stability, allowable bearing pressures and settlement below footings, effects of adjacent slopes on foundations, retaining walls, basement walls, shoring of adjacent properties, and potential primary and secondary seismic effects. The County Department of Building and Safety is responsible for implementing the provisions of the Building Code. The County's primary seismic regulatory document is the Safety Element of the County of Los Angeles General Plan, dated December 1990.

The State of California, Division of Mines and Geology, adopted seismic design provisions in Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California on March 13, 1997.

The Alquist-Priolo Geologic Hazards Zone Act was enacted by the State of California in 1972 to address the hazard and damage caused by surface fault rupture during an earthquake. The Act has been amended ten times and renamed the Alquist-Priolo Earthquake Fault Zoning Act, effective January 1, 1994. The Act requires the State Geologist to establish "earthquake fault zones" along known active faults in the state. Cities and counties that include earthquake fault zones are required to regulate development projects within these zones.

The Seismic Hazard Mapping Act of 1990 was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Act, including strong ground shaking, landslides, and liquefaction. Under this Act, the State Geologist is assigned the responsibility of identifying and mapping seismic hazards zones.

The California Seismic Safety Commission was established by the Seismic Safety Commission Act in 1975 with the intent of providing oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The commission's name was changed to Alfred E. Alquist Seismic Safety Commission in 2006. Since then, the Commission has adopted several documents based on recorded earthquakes, such as the 1994 Northridge earthquake, 1933 Long Beach earthquake, the 1971 Sylmar earthquake, etc. Some of these documents are listed below:

- Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994.

- Seismic Safety in California's Schools, 2004, "Findings and Recommendations on Seismic Safety Policies and Requirements for Public, Private, and Charter Schools", report dated December 1994.
- Findings and Recommendations on Hospital Seismic Safety, report dated November 2001.
- Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006.

Various state and local agencies permit the design and construction and regulate the operation, closure and development of landfills within the State of California. Those agencies include the Regional Water Quality Control Board, the Integrated Waste Management Board, the Department of Toxic Substance Control Board, the Regional Air Resources Board, the Los Angeles County Department of Public Works, the City of Los Angeles Department of Building and Safety, and the South Coast Air Quality Management District.

CITY LEVEL

The City of Los Angeles adopted the 2007 California Building Code, and a series of City of Los Angeles amendments, on January 1, 2008 as the City of Los Angeles Building Code, Volumes 1 and 2. Volume 2 of the Los Angeles City Building Code includes provisions for Foundations, Retaining Walls and Expansive and Compressible Soils in Chapter 18, provisions for Site Work, Demolition and Construction in Chapter 33 and provisions for Grading, Excavation and Fills in a special Chapter 70 developed by and for the City of Los Angeles.

Together, the provisions in Volumes 1 and 2 of the Los Angeles City Building Code address issues related to site grading, cut and fill slope design, soil expansion, geotechnical investigations before and during construction, slope stability, allowable bearing pressures and settlement below footings, effects of adjacent slopes on foundations, retaining walls, basement walls, shoring of adjacent properties, potential primary and secondary seismic effects.

The City of Los Angeles, Grading Division of the Department of Building and Safety, has also adopted their Rules of General Application (RGA), a series of Geotechnical Standards which supplement the requirements of the City of Los Angeles Building Code. The RGAs include specific requirements for seismic design, slope stability, grading, foundation design, geologic investigations and reports, soil and rock testing, and groundwater. The City Department of Building and Safety is responsible for implementing the provisions of the Building Code and Grading Standards.

The City of Los Angeles requires that the firm performing geotechnical investigations, sampling and testing have their laboratory certified by the City, Department of Building and Safety, Materials Control Section.

The City's primary seismic regulatory document is the Safety Element of the City of Los Angeles General Plan, adopted November 26, 1996. The City's regulations incorporate the State's requirements. The objective of the Safety Element is to better protect occupants and equipment during various types and degrees of seismic events. In the Safety Element, specific guidelines are included for the evaluation of liquefaction, tsunamis, seiches, non-structural elements, fault rupture zones, and engineering investigation reports. The City's Emergency Operations Organization (EOO) helps to administer certain policies and provisions of the Safety Element. The EOO is a City department comprised of all City agencies, pursuant to City Administrative Code, Division 8, Chapter 3. The Administrative Code, EOO Master Plan and associated EOO plans establish the chain of command, protocols and programs for integrating all of the City's emergency operations into one unified operation. Each City agency in turn has operational protocols, as well as plans and programs, to implement EOO protocols and programs. A particular emergency or mitigation triggers a particular set of protocols which are addressed by implementing plans and programs. The City's emergency operations program encompasses all of these protocols, plans and programs. Therefore, its programs are not contained in one comprehensive document. The Safety Element goals, objectives and policies are broadly stated to reflect the comprehensive scope of the EOO. As pertains to tsunamis and other flood hazards, the Safety Element refers to the City's Flood Hazard Specific Plan, which addresses areas adjacent to hazards, agency involvement and coordination, and procedures to be implemented during an emergency.

COUNTY LEVEL

The County of Los Angeles adopted the 2007 California Building Code on January 1, 2008 as the County of Los Angeles Building Code, Volumes 1 and 2.

Together, the provisions in Volumes 1 and 2 of the Los Angeles County Building Code address issues related to site grading, cut and fill slope design, soil expansion, geotechnical investigations before and during construction, slope stability, allowable bearing pressures and settlement below footings, effects of adjacent slopes on foundations, retaining walls, basement walls, shoring of adjacent properties, and potential primary and secondary seismic effects. The County Department of Building and Safety is responsible for implementing the provisions of the Building Code. The County's primary seismic

regulatory document is the Safety Element of the County of Los Angeles General Plan, dated December 1990.

VARIATION IN BUILDING CODES

In 2008 the City of Los Angeles and the County of Los Angeles adopted their own building codes, although both codes are based on the 2007 California Building Code. There are differences in the codes between the City and County. Some of the major differences are summarized in Table 2, Comparison of Building Codes.

Table 2, Comparison of Building Codes

Geotechnical Issue	City Code dated 2008	County Code dated 2008
Compaction	Where cohesionless soil has less than 15% finer than 0.005 millimeters, the fill shall be compacted to at least 95%; if the soils have more than 15% finer than 0.005 millimeters the fill shall be compacted to at least 90%.	All fill shall be compacted to a minimum of 90%.
Wall Drainage	Basement wall drains are required unless the walls are designed to resist hydrostatic pressures.	Basement wall drains are not required in well-drained soils
Pile Foundation Interconnection	Interconnection required to resist 10% of vertical load	No requirement

SITE CONDITIONS

The Project site is located on the north flank of the Santa Monica Mountains at the easterly limits of the San Fernando Valley. This area is within the Transverse Ranges Geomorphic Province. The Los Angeles River Flood Control Channel (LAFCC), borders the Project site along the northern boundary.

The Project site is divided into the lower lot in the north and northwest portion, the upper graded plateau in the central and south portions, and the eastern hills that extend along the east side of the Project site. The lower lot and the upper graded plateau are separated by north and northwest facing slopes.

The lower lot is relatively flat at an elevation of approximately 525 to 580 feet above Mean Sea Level (MSL), with a gentle surface gradient north toward the Los Angeles River Flood Control Channel. The lower lot contains sound stages, office space, technical/support space, back-lot sets, transportation services, and parking.

The upper graded plateau ranges in elevation from about 720 to 790 feet MSL, with the highest point near the eastern portion of the plateau in the vicinity of Warehouse #8413. The upper graded plateau has gentle surface gradients to the north, west and south. Prior to grading and development, the upper graded plateau consisted of east-west trending hills with north-south trending ancestral canyons.

The largest of the ancestral canyons bisects the site from the existing Universal Hollywood Drive northward through a closed landfill. The landfill was formed when the north end of this canyon was filled with debris starting in the late 1920s. Landfill operations ceased about 1980. The landfill has been capped, and the face of the slope has been maintained for erosion prevention.

The bulk of the grading activities on the upper graded plateau occurred between 1960 and the early 1980s. These activities consisted of lowering the hills and filling in the canyons until a relatively level topography was achieved. The upper graded plateau contains the remainder of the Entertainment Area (including CityWalk and the Amphitheater) and office space.

The eastern hills are moderately to steeply sloping hillsides ranging in elevation up to 865 feet MSL. These hills have been partially graded in the past and fire roads have been constructed along the southeasterly site limits.

Several man-made water features exist onsite. Falls Lake is located on the eastern portion of the upper graded plateau. Water in Falls Lake is retained by a shallow dam located along the northern edge of the lake. Jaws Lake is located north of Falls Lake on the lower lot at the base of the north facing slope. Park Lake is also located on the lower lot north of Jaws Lake. The Collapsing Bridge pond is located at the north end of the closed landfill. New Falls Lake, which is fed by a man-made waterfall, is located southeast of Falls Lake.

The Los Angeles River which borders the Project site on the north was channelized in the late 1940s. Prior to this, the river had incised meander swings that cut across the north edge of the Project site.

SUBSURFACE INFORMATION

REVIEW OF AVAILABLE INFORMATION

Numerous geotechnical investigations have been performed within the Project site for existing projects over a 60-year period. Our review of previous investigation reports and our recent site investigation formed the basis of our findings, conclusions and recommendations contained in this report. An alphabetical listing of the prior reports, by the firm responsible for preparation of those reports, is presented in the References section at the end of this report.

SITE RECONNAISSANCE

A site reconnaissance was performed as an integral part of our investigation. The reconnaissance included mapping bedrock exposures on the slopes and mapping obvious evidence of slope distress. The results of the mapping are included on Figure 5, Geotechnical Map.

AERIAL PHOTOGRAPHIC REVIEW

Our investigation included a review of vertical, stereo-paired, black and white aerial photographs. This review was performed to evaluate geomorphic conditions that could indicate characteristic features associated with large-scale landslides. Some of these features would include steep slopes associated with a landslide headscarp, deflected natural drainages, transverse topographic fractures, a pronounced protuberant toe, ponded water or other anomalous geomorphic features. The stereo-paired aerial photographs allow the geologist to view the site in three dimensions at thousands of feet above the surface, also referred to as remote sensing. A list of the photographs reviewed for this study are included in the References Section of this report. The results of our review are included in the Landslide Discussion Section.

GEOLOGIC SETTING

GEOLOGIC SETTING

The Project site is located in the southern San Fernando Valley, at the foothills of the Santa Monica Mountains at the northerly mouth of the Cahuenga Pass. The location of the Project site is depicted on Figure 1, Vicinity Map. The San Fernando Valley is an alluvium-filled basin, approximately 12 miles wide and 23 miles long. The alluvium is derived predominantly from bedrock materials comprising the Santa Monica Mountains to the south, the Santa Susana Mountains to the north, the Simi Hills to the west, the San Gabriel Mountains to the northeast, and the Verdugo Mountains to the east. Regionally, the Project site is located in the Transverse Ranges geomorphic province. This province is characterized by east-west trending geologic structure including the nearby Santa Monica Mountains and the east-west trending San Fernando, Santa Susana, Simi, Santa Monica and Hollywood faults.

GEOLOGIC UNITS

General

The Project site is underlain by a variety of geologic units. These units are divided into separate and discrete deposits of differing engineering characteristics that include a closed landfill, man-placed fill, alluvium, colluvium, landslide debris and sedimentary bedrock materials. These units are variable in composition and origin and are described in more detail in the following sections.

Landfill

A relatively large closed landfill is located in the central site limits, just east and north of the Amphitheater structure. The location of the closed landfill is shown on Figure 5, Geotechnical Map. This closed landfill was reportedly filled with debris generated during studio activities between the late 1920s until about 1980. The closed landfill has been capped, and the face of the slope maintained for erosion protection. Landfill materials consisting of an undocumented mix of inert material, mainly construction debris, and restaurant waste have been placed in a north-south trending ancestral canyon to a maximum depth of approximately 130 feet.

Fills (Engineered and Non-Engineered)

Fills have been placed throughout the lower lot, within the upper graded plateau and within the Mixed-Use Residential Area during past grading operations. Some of this fill has been engineered, tested and documented; this fill is identified as Engineered Fill (ef) on Figure 5, Geotechnical Map. Some of the fill has been placed at its current locations without any special compactive effort or geotechnical documentation; this fill is identified as Non-Engineered Fill (nef) on Figure 5.

The non-engineered fills were placed at various times prior to 1950, but as recently as the 1990s. The majority of the engineered fills were placed between the early 1960s and 1981.

The fill materials vary from silty sand to sandy silt with clay. These materials appear to be derived from on-site natural soils and bedrock materials. Fill soils may exist at other locations at the site and may be deeper than encountered in our explorations.

Alluvium/Colluvium Soil

Alluvial soils (alluvium) are natural, fluvial sedimentary deposits typically confined to stream channels, flood plains or alluvial fans. Colluvium (slope wash) is the down-slope accumulation of topsoil, weathered bedrock and other organic materials under the influence of gravity and moisture. These two units often coalesce and are sometimes difficult to separate near their juncture. These deposits are Quaternary age (Pleistocene and Holocene) and usually overlie bedrock and landslide debris. Alluvium has been deposited generally in the lowermost portions of the site near Lankershim Boulevard and along the Los Angeles River Flood Control Channel. Relatively minor deposits have been mapped in the extreme southeasterly portion of the site along Barham Boulevard near the intersection with the Hollywood Freeway. Alluvial consist generally of silty clay, silty sand with interlayered clay and sand.

Landslide Deposits

Features indicative of landsliding were noted at four separate locations designated QlsA, QlsB, QlsC and QlsD. Two of these landslides occupy portions of the Mixed-Use Residential Area on the ridge. These two landslides, designated QlsA and QlsB, were initially recognized during our aerial photographic review as distinct, geomorphic anomalies and were encountered in two and possibly three of our explorations for the Mixed-Use Residential Area.

QlsA:

The larger of these two landslide deposits is located beneath the Warehouse #8413 and occupies an area of approximately 9 acres. The limits of this ancient landslide as interpreted from our aerial photographic review, are depicted on Figure 5, Geotechnical Map, and identified as map symbol QlsA. Based upon observations from geologic downhole logging, the landslide is buried by 4 feet of fill and was observed to consist of very highly weathered sandstone and soft, brecciated shale. The basal landslide rupture surface was observed to be a 4-inch thick very moist, clay gouge layer in contact with competent, hard bedrock materials, below.

An additional, small diameter boring was drilled within the QlsA limits with a hollow stem auger drill rig and may have encountered landslide debris buried by fill materials. It is also possible that grading in this area removed the landslide debris prior to placing of compacted fill. The small diameter boring did not allow for direct observation by a geologist and the presence or absence of the landslide could not be confirmed at this location.

QlsB:

A smaller landslide was recognized northeast of QlsA, upslope of the European Village and beneath Colonial Drive, and occupies approximately 1¼ acres. The limits of this landslide, designated map symbol QlsB, are also depicted on Figure 5. One of our bucket auger borings drilled within the QlsB limits encountered landslide debris to a depth of 21 feet, underlain by hard competent bedrock materials. The basal rupture surface was observed to consist of a 1-inch thick clay gouge layer measured to strike north 30 east and dip 25 degrees to the northwest.

QlsC:

A third possible landslide, designated map symbol QlsC, is located within the adjoining residential development just offsite at the southeast corner of the site. This landslide occupies an area of about half an acre and was recognized in the field and on aerial photographs. This landslide was not explored and is therefore designated a possible landslide that may underlie fill materials within the Project site.

QlsD:

A relatively large landslide feature is located in the north central portion of the Project site. This landslide, designated map symbol QlsD, occupies an area of about 15 acres just east and north of the landfill and south and uphill of the alluvial floor as depicted on Figure 5. The landslide was recognized on stereo-paired, aerial photographs and is best viewed on the 1952 flight.

Physiographically, the landslide is recognized as a well-pronounced geomorphic feature with a characteristic arcuate-shaped headscarp, near-level, mid landslide bench and a protuberant toe that descends to the alluvial-filled valley below. Past grading activities have extensively modified the landslide's original (pre-grading) condition over the years. This area of the Project site is currently used as a warehouse-maintenance facility. Although this landslide was mapped by others, we did not explore this landslide feature during this investigation and, therefore, cannot report on its exact limits and dimensions. QlsD will require exploration during site specific geotechnical investigations.

Bedrock

The Project site is underlain by sedimentary bedrock units of the Topanga Formation consisting of well-bedded sandstone, siltstone and shale. These deposits are marine in origin derived from offshore shoal, turbidite and submarine fan deposits. The bedrock ranges, generally, from moderately hard to moderately soft, but as encountered in our explorations in the ridge area, is locally very hard and well cemented in layers as thick as 6 feet. Surface exposures are typically friable and moderately weathered. Gouged and sheared clay beds were observed along bedding between well-cemented sandstone layers.

Sandstone bedrock units are considered non-expansive. Expansion Index tests on samples of siltstone and shale units from the Mixed-Use Residential Area investigation varied from 12 to 54, indicating that the bedrock varies from non-expansive to a medium expansion potential.

The Topanga Formation is intruded locally by mafic volcanic dikes in the region. The intrusives are generally of a massive diabase composition. Our explorations and observations at the Project site did not encounter volcanic rock units but these units may be encountered during future grading operations.

GEOLOGIC STRUCTURE

Geologic structure at the Project site is exhibited by well-developed bedding planes within the Topanga Formation. Individual Topanga Formation units range from very thickly-bedded (3 to 8 feet) to thinly-bedded (2 to 4 inches). Faulting and folding in the geologic past related to uplift in this portion of the Santa Monica Mountains has warped the geologic structure into a broad, westerly plunging syncline. Bedding planes in the northeasterly portion of the Project site, in the area of the ridge along Barham Boulevard, dip from 20 to 38 degrees to the southwest. Alternatively, bedding planes in the west and southerly portion dip to the northwest from 18 to 40 degrees. Based upon data from our investigation, the synclinal axis trends approximately due west and plunges approximately 20 degrees near the location of the Central Warehouse. Bedding planes west and southerly of the warehouse comprise the southerly limb of the syncline while those north of the axis dip to the southwest. Due to the broad nature of the synclinal fold, the exact location of the fold axis could not be accurately determined but the approximate location and orientation of the fold axis is depicted on Figure 5.

Numerous inactive faults and shears (minor faults) were observed in our bucket auger borings and in surface exposures. These faults are late Miocene and Pliocene Age and are the result of local orogenic activity concurrent with uplift of the Santa Monica Mountains. These fault features are exhibited by offset bedding and dragged (folded) bedding planes and are common in the Topanga Formation. The faults and shears encountered appear to be randomly oriented are generally considered discontinuous and do not display a preferred orientation. Evidence of recent activity was not observed during our site reconnaissance or review of aerial photographs. Previous reports by others do not indicate active faults at the Project site.

Fractures and joints are also common within the Topanga Formation. These joints, as encountered in our explorations, were observed to be widely spaced, tight and stained with iron and manganese oxides and infilled, locally, with carbonates and gypsum.

GROUNDWATER BASIN

Groundwater storage is generally within the deep alluvial deposits that fill the valley floor under confined and unconfined conditions. Groundwater in the lower lot has been measured by others in the past to depths between 20 and 40 feet below the ground surface. Historically, the highest groundwater levels on the Project site have been within 10 feet of the ground surface adjacent to the Los Angeles River on the north side of the Project site (California Division of Mines and Geology 1999). These high water levels existed

prior to the channelization of the Los Angeles River. Based on Project site data, and likely due to the channelization of the river and the control of surface runoff, the high groundwater level is not expected to rise above depths of 15 feet at the Project site.

Borings drilled within the bedrock in the upper graded plateau and within the eastern hills encountered water seepage at various depths. This water seepage is a result of surface infiltration perched within joints and fissures in the bedrock. During grading, temporary excavations and cut slopes may reveal occurrences of groundwater seepage in the natural soils or the bedrock requiring construction dewatering.

GEOLOGIC HAZARDS

FAULTING & SEISMICITY

The Project site is not located within a currently established Alquist-Priolo Earthquake Fault (AP) Zone for surface rupture hazard and there are no known active faults present at the site. The closest AP Zone to the Project site is approximately 5 miles to the northeast. This zone is associated with the Verdugo fault (California Geological Survey, 1979).

The numerous faults in southern California include active, potentially active and inactive faults. Classification for these major groups are based upon criteria developed by the California Division of Mines and Geology (CDMG, now known as the California Geologic Survey) for the AP Zone Act program. By definition, an active fault has ruptured within Holocene geologic time (about the last 11,000 years). Active faults are not known to be located at the Project site and surface rupture from fault plane displacement propagating to the surface is therefore considered remote.

Potentially active faults are those faults that display latest movement during Quaternary Geologic time where Holocene activity cannot be demonstrated. The Quaternary includes the Holocene and Pleistocene Ages and represents the last 1.6 million years of geologic time. Potentially active faults are not considered an imminent fault rupture hazard but the potential cannot be completely dismissed. Inactive faults are those faults where the latest displacement is older than the Pleistocene (Ice Age) and are not considered a surface rupture hazard to the Project site.

The closest active fault to the Project site is the Hollywood fault located approximately 1½ miles to the southeast at the southern base of the Santa Monica Mountains. The Hollywood fault is generally poorly-

defined near the surface and has been located based upon water well, oil well, and geophysical data, as well as near-surface trenching and drilling by numerous investigators. The Hollywood fault is considered active, based upon geomorphic evidence and fault trenching and drill hole correlation studies but has not yet been included within an Alquist-Priolo Earthquake Fault Zone by the State Geologist.

The Project site is approximately 1½ miles Northwest of the boundary of the Elysian Park Fold and Thrust Belt. The Elysian Park fault is actually a blind fault (i.e. A buried fault that does not extend to the surface) capped by a fold and thrust structure. The axial trend of the fold extends approximately 12 miles through the Elysian Park-Repetto Hills from about Silver Lake on the west to the Whittier Narrows on the east. The 1987 Whittier Narrows earthquake (magnitude 5.9) has been attributed to subsurface thrust faults, which are reflected at the earth's surface by a west-northwest trending anticline known as the Elysian Park Anticline, or the Elysian Park Fold and Thrust Belt. The subsurface faults that create the structure are not exposed at the surface and do not present a potential surface rupture hazard; however, as demonstrated by the 1987 earthquake and two smaller earthquakes on June 12, 1989, the faults are a source for future seismic activity. As such, the Elysian Park Fold and Thrust Belt should be considered an active feature capable of generating future earthquakes.

The active Mission Wells segment of the San Fernando fault zone is about 9 miles north of the Project site. Surface rupture occurred along the Tujunga, Sylmar, and Mission Wells segments of the San Fernando fault zone during the February 9, 1971 San Fernando earthquake. The San Fernando fault zone comprises a number of left lateral/reverse frontal faults bounding the southern margin of the San Gabriel and Santa Susana Mountains. This fault slipped on February 9, 1971, causing an earthquake of magnitude 6.4.

The Northridge Thrust fault is an inferred blind thrust fault that is considered the western extension of the Oak Ridge fault. This thrust fault is believed to be the causative fault of the January 17, 1994 Northridge earthquake. The Northridge Thrust is located beneath the majority of the San Fernando Valley. This thrust fault is not exposed at the surface and does not present a potential surface fault rupture hazard. However, the Northridge Thrust is an active feature that can generate future earthquakes.

The Oak Ridge fault is a blind thrust fault located beneath the Santa Susana Mountains approximately 17 miles northeast of the Project site. The fault associated with the 1994 Northridge earthquake is probably part of the Oak Ridge fault system, as it shares many of the characteristics of this fault. This blind thrust

fault is known either as the Pico Thrust, named for the Pico Anticline (a geologic fold it is creating), or as the Northridge Thrust.

A list of known active faults and their distances from the Project site are indicated in Table 3, Major Faults Considered to be Active in Southern California.

Table 3, Major Faults Considered to be Active in Southern California

Fault	Maximum Credible Earthquake			Slip Rate (mm/yr)	Distance From Site (miles)	Direction From Site
Hollywood	7.0	(c)	RO	1.5	1½	SSE
Elysian Park Fold and Thrust Belt	7.1	(c)	RO	1.7	1½	SE
Santa Monica Mountains	7.2	(c)	RO	4.0	2	S
Verdugo	6.75	(d)	RO	0.5	5	NE
Northridge	6.9	(h)	RO	1.5	>5	NW
Newport-Inglewood Zone	7.0	(d)	SS	1.0	7	S
Raymond	6.7	(f)	RO	0.4	9	E
San Fernando	6.8	(g)	RO	5.0	9	N
Sierra Madre	7.3	(c)	RO	4.0	9	NE
Oak Ridge – Pico Thrust	6.7	(g)	RO	4.0	17	NW
Whittier	7.1	(b)	SS	3.0	18	SE
San Andreas (Mojave Segment)	8.2	(e)	SS	30.0	30	NE

(a) Greensfelder, CDMG Map Sheet 23, 1974.
(b) Blake, 1995
(c) Dolan et al., 1995
(d) Mualchin & Jones, 1992
(e) OSHPD, 1995
(f) Wesnousky, 1986
(g) SCEDC
(h) Peterson el al., 1996
SS Strike Slip
NO Normal Oblique
RO Reverse Oblique

Site to fault distances measured using location of late Quaternary fault rupture map by Ziony and Jones, 1989 at a scale of 1:250,000.

A list of known potentially active faults and their distances from the Project site are indicated in Table 4, Major Faults Considered to be Potentially Active:

Table 4, Major Faults Considered to be Potentially Active

Fault	Maximum Credible Earthquake			Slip Rate (mm/yr)	Distance From Site (Miles)	Direction From Site
San Jose	6.7	(e)	RO	0.5	28	ESE
Chino	7.0	(d)	NO	1.0	36	SE
Duarte	6.7	(a)	RO	0.1	30	NE
Rialto-Colton	6.4	(h)	SS	n/d	54	E
Norwalk	6.7	(a)	RO	0.1	22	SE
Coyote Pass	6.7	(c)	RO	0.1	12	SE
Los Alamitos	6.2	(c)	SS	0.1	24	SE
MacArthur Park	6.1	(d)	SS	0.1	6	SW
Overland	6.0	(a)	SS	0.1	12	SW
Charnock	6.5	(a)	SS	0.1	10	SW
Santa Susana	6.9	(e)	RO	6.2	14	NW

(a) Slemmons, 1979
(b) Greensfelder, CDMG Map Sheet 23, 1974
(c) Mark, 1977
(d) Blake, 1995
(e) Dolan et al., 1995
(f) Mualchin & Jones, 1992
(g) OSHPD, 1995
(h) Wesnousky, 1986
SS Strike Slip
NO Normal Oblique
RO Reverse Oblique
n/d Not determined

Site to fault distances measured using location of late Quaternary fault rupture map at a scale of 1:250,000 as documented by Ziony and Jones, 1989

Several earthquakes of moderate to large magnitude (greater than 5.3) have occurred in the southern California area within the last 60 years. A list of these earthquakes is included in Table 5, List of Major Historic Earthquakes. These epicenters are plotted relative to the Project site on Figure 6, Regional Seismicity Map.

Table 5, List of Major Historic Earthquakes

Earthquake	Date of Earthquake	Magnitude	Distance to Epicenter (miles)	Direction to Epicenter
Long Beach	March 11, 1933	6.4	43	SSE
San Fernando	February 9, 1971	6.6	19	NW
Whittier Narrows	October 1, 1987	5.9	16	SE
Sierra Madre	June 28, 1991	5.4	20	E
Big Bear	June 28, 1992	6.4	86	E
Landers	June 28, 1992	7.3	98	E
Northridge	January 17, 1994	6.7	12	W

It should be noted that major earthquakes have not been recorded within historic time on all of the faults considered to be active in southern California. Evidence of the fault's potential activity is based on the fault's rupturing materials younger than about 11,000 years and our historic records are limited to a few hundred years.

Surface traces of the regionally extensive Benedict Canyon fault have been mapped through the westerly portion of the Project site in the Studio Area. This fault is not considered active or potentially active but influences geologic structure regionally and juxtaposes bedrock units along the fault trace. The mapped surface traces of the Benedict Canyon fault is plotted on Figure 5.

The Project site is not exposed to a greater than normal seismic risk than other areas of southern California. However, based on the active and potentially active faults in the region, the Project site could be subjected to significant ground shaking in the event of an earthquake. This hazard is common to southern California and can be mitigated if the buildings are designed and constructed in conformance with applicable building codes and sound engineering practices.

SECONDARY SEISMIC EFFECTS

The site is located approximately 12 miles from the Pacific Ocean shoreline. As a result of this distance, tsunamis are not considered a significant hazard to the Project site. Large bodies of uncovered water such as reservoirs, lakes or ponds are not located above the Project site and hazards related to seiching are not considered a hazard to the Project site. The site is not located within a flood hazard zone as mapped by the County, the City or flood rate insurance maps. Therefore, geologic hazards related to flooding are not considered a significant hazard to the Project site.

SLOPE STABILITY

The Project site is located within areas designated by the state geologist where previous occurrence of landslide movement or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacement to the event that mitigation would be required (California Geologic Survey, 1999). The bedrock consists of well-bedded Topanga Formation sandstone, siltstone and shale. Bedding within the Topanga Formation is well-defined and dips generally to the north, northwest and northeast and where the bedding is oriented toward the slope face, the slopes are subject to landsliding. Our review of aerial photographs and geomorphic analyses indicated features indicative of landsliding at four separate locations. These landslides are discussed above in the Landslide Deposits section.

Buttress fills, apparently placed to stabilize west-facing cut slopes during previous grading in the area of the QlsA landslide, are reported within the east central portion of the Project site. The reported locations and limits of these buttress fills are depicted on Figure 5, Geotechnical Map.

A slope stability hazard exists in the vicinity of the existing landslides and anywhere the bedding could be exposed, particularly the north and west-facing slopes. We have identified the areas of these hazards on Figure 7, Geotechnical Hazards Map.

LIQUEFACTION

Portions of the property are located within areas designated by the state geologist where historic occurrence of liquefaction or local geologic, geotechnical, and groundwater conditions indicate a potential for permanent ground displacement to the extent that mitigation would be required (California Geologic Survey, 1999). Liquefaction potential is greatest where the groundwater level is shallow, and loose sands or silts occur within a depth of about 50 feet or less. In general, liquefaction potential decreases as grain size and clay and gravel content increase. As ground acceleration and shaking duration increase during an earthquake, liquefaction potential increases.

The north side of the Project site adjacent to the Los Angeles River Flood Control Channel is underlain by loose to medium dense granular soils and the groundwater is potentially within 50 feet of grade. The soils in this area are susceptible to liquefaction. This potentially liquefiable zone varies from about 100 feet to over 800 feet south of the river and is within the non-engineered fill (nef) and the recent alluvium (Qal) as shown on Figure 3, Geotechnical Map.

The potential for seismic settlement resulting from liquefaction is estimated to vary from less than one inch to greater than one foot. The greatest amount of settlement would be expected to occur immediately adjacent to the river and would decrease to the south. We have identified the areas of liquefaction potential and have shown them on Figure 4, Geotechnical Hazards Map. Site specific geotechnical investigations, including detailed liquefaction studies, will be required for any new construction within the areas identified on Figure 4 as areas of liquefaction potential.

NON-ENGINEERED FILL

The non-engineered fills may be weak and compressible, particularly with the addition of water. These fills are subject to settlement and are not suitable for support of foundations, slabs on grade, paving or new compacted fills. Cut slopes in these fills are subject to sloughing and failure because of their low shear strength.

CLOSED LANDFILL

The closed landfill is a deep, non-engineered fill with varying amounts of organic and inorganic debris. The landfill appears to have been constructed prior to the state's permitting and closing requirements. Similar to other non-engineered fills, the landfill is subject to settlement, made greater by the depth and decomposable organic matter. Methane gases are generated by the decomposition of the organic matter.

EXPANSIVE SOILS

The clay soils within the natural alluvium and colluvium, within the fill soils and excavated bedrock are subject to expansion and shrinkage resulting from changes in the moisture content. Tests on samples of the clays indicate that the Expansion Index can range up to about 60, which is a medium expansion potential.

FLOODING AND INUNDATION

The Project site is not located in a County or City of Los Angeles flood or inundation hazard zone. The Los Angeles River Flood Control Channel borders the northerly site limits but has been contained and concrete lined and is not considered a flood hazard with respect to the Project site. The Project site is not located in close proximity to large bodies of water and the potential adverse effects of seiching is unlikely.

Oil Wells

According to maps prepared by the State of California Department of Conservation, Division of Oil, Gas and Geothermal Resources, abandoned or active oil wells are not located within or near the Project site. The Project site is not located with the limits of a known oil field.

METHANE GAS

The Project site is not located within a City of Los Angeles Methane Hazard Zone. In addition, the Project site is not located within a known oil field and oil or gas wells are not reported to be located within or near the site limits. However, methane gas may be present in the closed landfill in the central portion of the site. The methane may migrate beyond the closed landfill.

SUBSIDENCE

The Project site is not located within an area of known subsidence (ground surface settlement) associated with fluid withdrawal (groundwater or petroleum), peat oxidation, or hydrocompaction. Historically, the highest groundwater levels have been within 10 feet of the ground surface prior to channelization of the Los Angeles River. After channelization the historic high groundwater level is expected to be about 15 feet. Groundwater could be encountered within excavations that extend more than about 15 feet below ground surface and require dewatering.

If dewatering is required during construction, dewatering is not anticipated to lower groundwater across any substantial distance and any related settlement is expected to be minimal and localized within the area of construction. The settlement would occur quickly and be completed shortly after completion of the excavation. Any potential settlement related to long-term dewatering for building operation would be less than, and already accounted for in, the construction dewatering settlement. Recommendations for the efficient design of any required dewatering systems should be included in the site-specific geotechnical investigations and recommendations for new construction.

Subsidence is, therefore, not considered a significant impact to the Project site.

OTHER HAZARDS OR IMPACTS

SEDIMENTATION AND EROSION

If the Mixed-Used Residential Area is annexed to the City of Los Angeles, it should be anticipated that it may be included within a City of Los Angeles designated Hillside Grading Area, requiring that the stability of all slopes be evaluated. The grading requirements as designated in the City or County building codes, as applicable, for drainage and planting of slopes should be followed. The differences in the building codes are presented in a following section, Variations In Building Codes.

In addition, grading, excavation, and other earth-moving activities could potentially result in erosion and sedimentation. For any grading performed in the “rain season”, generally November to April, provisions will need to be made to control erosion and an erosion control plan must be submitted to the appropriate building department.

LANDFORM ALTERATION

The planned grading within the Mixed-Use Residential Area of the Project site will excavate into an existing north-south trending ridge. The excavation will not, however, reduce the overall height of the ridge at its highest point. Runoff following rain periods is seasonal and limited to brief periods following heavy rains. The grading would not alter any significant canyons, ravines or outcrops. Therefore, no distinct and prominent geologic or topographic features would be adversely affected by the Project.

MINERAL RESOURCES

There are no known economically extractable deposits of mineral resources such as building stone, clay or light-weight aggregate beneath the Project site. Therefore, the Project site is not anticipated to have an impact on mineral resources in the area.

COMPACTION CRITERIA

The County of Los Angeles requires that all compacted fills be placed to a minimum of 90% compaction. The City of Los Angeles requirement depends on the soil type. Cohesionless sands are to be compacted to a minimum of 95% and cohesive silts and clays are to be compacted to a 90% minimum. Both agencies use the same maximum density standard, the ASTM D1557 method and other compaction criteria are comparable.

DRAINAGE AND BENCHING REQUIREMENTS

The County of Los Angeles requires an 8-foot wide drainage terrace on all cut or fill slopes at 25-foot vertical intervals and a 20-foot wide terrace at the midpoint on all cut and fill slopes more than 100 feet in height. The City of Los Angeles also requires an 8-foot wide interceptor terrace on all cut or fill slopes at 25-foot vertical intervals, but requires a 30-foot wide terrace at the midpoint on all cut and fill slopes more than 100 feet in height.

SET-BACK REQUIREMENTS

Both the City and County have a requirement for building setback at the toe of slopes equal to one-half the slope height; the County has a 20-foot maximum distance and the City has a 15-foot maximum distance. At

the top of the slope, the City has a requirement that the horizontal distance between the face of the slope and the base of the building foundation be equal to one-third the slope height, but not more than 40 feet.

IMPACT OF CODE VARIATION

The design for a building project must be in accordance with the applicable building code, depending upon the municipality in which the building project site is located. While there could be differences on the design and construction adherence to either code would mitigate any geologic hazard.

HAZARD MITIGATION

GENERAL

Each of the geologic hazards present on the Project site (Slope Stability, Liquefaction, Non-Engineered Fill, and Closed Landfill) are shown on Figure 7, Geotechnical Hazards Map. Mitigation of these hazards are discussed in this section. Foundation and grading requirements and water runoff infiltration are also discussed.

Comprehensive geotechnical investigations should be prepared for each project as that term is defined in the proposed City and County Specific Plans to the satisfaction of the applicable jurisdiction standard. Each of the hazards described in this report will need to be investigated in detail and recommendations will need to be developed prior to proceeding with design.

Geotechnical observation and testing will be required during the placement of new compacted fills, foundation construction, buttresses, stabilization fills, ground improvement and any other geotechnical-related construction for each project. The geotechnical firm performing these services will need to be approved by the City of Los Angeles, for work within the city limits.

SLOPE STABILITY

A slope stability hazard is present for most west, northeast and north-facing cut slopes. The hazard could be mitigated by either reorienting the cut slopes, reducing the slope angle to the angle of the bedding or flatter, or by construction of buttress and stabilization fills. Reducing the slope angles would require ratios of about 3:1 (horizontal to vertical). There does not appear to be sufficient space to permit this alternative and we, therefore, recommend the use of buttress and stabilization fills. Site-specific geotechnical investigations to

the satisfaction of the applicable jurisdiction's standards should be performed for design of all cut and fill slopes. Typical recommendations for design of buttress and stabilization fills are presented in a following section, Grading Requirements.

The natural slopes at the north-eastern portion of the Project site, where the Project site is adjacent to Barham Boulevard, are stable from deep-seated failures, but these slopes are steep with inclinations as steep as ½:1, up to about 50 feet in height, and are subject to rockfall hazards. This surficial stability hazard could be mitigated by construction of a slough wall and a rockfall catchment fence at the base of the slope adjacent to Barham Boulevard. The catchment fence should be located on top of the wall.

The slough wall should be at least four feet in height. There should be at least four feet of horizontal distance between the slough wall and the face of the slope to permit access by a small skiploader for periodic clearing. The slough wall should be designed to support a lateral pressure equal to the pressure developed by a fluid with a density of 50 pounds per cubic foot. A rock catchment fence should be placed on top of the slough wall for an additional 3 feet to attain a minimum height of 7 feet from the adjacent grade. There should be at least 8 feet of horizontal distance between the top of the fence and the adjacent slope.

This surficial stability hazard could also be mitigated with rock-netting placed over the face of the slope. The rock netting could be used alone or in conjunction with the slough wall and catchment fence.

LIQUEFACTION

The liquefaction hazard is most prevalent within the natural alluvial deposits in the lower lot along the Los Angeles River Flood Control Channel. The location of the areas subject to liquefaction hazards are shown on Figure 7. In general, any areas where the hazard is defined as High, where there is the potential for more than about 4 inches of settlement resulting from liquefaction, will require mitigation for new construction. Mitigation could include ground improvement or deep foundations extending through the potentially liquefiable soils and structurally-supported floor slabs.

Areas with a Moderate potential of liquefaction, where there is between one and four inches of settlement potential, could be mitigated by special foundation design procedures, such as extra reinforcement and strengthening of building foundations and floor slab systems. Areas with low potential for liquefaction may not require any special foundation treatment or ground improvement.

The liquefaction hazard can be mitigated by excavation and recompaction of the potentially liquefiable zone or by in-situ densification. Excavation and recompaction does not appear reasonable for all of the soils immediately adjacent to the river, because the zone extends well below the existing river channel and below groundwater. Site-specific liquefaction hazard studies will be required for new construction within the liquefaction hazard area.

EXPANSIVE SOILS

Expansive soils with a medium expansion potential are present on the Project site. These soils present a hazard to lightly loaded concrete slabs on grade, where the slab can move vertically with changes in the soil's moisture content. This hazard can be mitigated by excavation and replacement of the expansive materials with a soil with a low or non-expansive potential. In general, it should be anticipated that one foot of non-expansive material will be required. The excavated materials can be used in the compacted fills below depths of one foot and removal from the Project site will not be required.

NON-ENGINEERED FILLS

Non-engineered fills are not suitable for support of new fills, foundations, concrete slabs on grade, or paving. During construction, the non-engineered fills will need to be excavated, and replaced as compacted fill properly benched into suitable materials. The limits of the non-engineered fills to be removed and recompacted are shown on Figure 5. In general, most of the excavated materials can be reused in the compacted fills. The suitability of the materials will need to be confirmed during the comprehensive geotechnical investigation.

LANDFILL

Any structures located over the landfill will require deep foundation extending through the landfill and into the underlying bedrock. Downdrag loads resulting from decomposition and settlement of the landfill will need to be added to the design loads on the piles.

Methane gas may be present in the landfill. The methane may also migrate beyond the limits of the landfill. Any new construction located within 1,000 feet of the landfill may require evaluation by a methane specialist and mitigation for methane gas pursuant to County requirements. In addition, if the Mixed-Use Residential Area is annexed into the City, pursuant to the City Municipal Code, the City may also require

mitigation for methane gas for new construction where a methane intrusion hazard exists. A methane specialist should be retained prior to new construction to evaluate the methane hazard and to provide recommendations to mitigate any methane impact, consistent with the applicable County and City requirements.

FOUNDATION REQUIREMENTS

General

New structures should be supported on foundations developing their support either within the bedrock or properly compacted fill. The capability of the existing engineered fills to support new foundations will need to be verified during each project's comprehensive geotechnical investigation. In areas of non-engineered fill and in the areas of the Landfill, deep foundations carried through the non-engineered fill could be used, or the non-engineered fill could be excavated and replaced with properly compacted fill and foundations could be established in the compacted fill.

In areas prone to liquefaction, if the hazard is not mitigated, foundations would need to be carried through the liquefaction potential zone, or deep foundations would be needed.

The limits of the bedrock, engineered fill and non-engineered fill are shown on Figure 5, Geotechnical Map.

Where proposed buildings are to be supported on spread footings in compacted fill, the bedrock should be overexcavated as necessary to achieve at least 3 feet of compacted fill beneath the bottoms of the footings. Any retaining walls planned around the property walls may also be supported on spread footings in either the compacted fill or the bedrock.

Footings in Bedrock

Spread footings carried at least 1 foot into the bedrock and at least 2 feet below the lowest adjacent grade or floor level can be designed to impose a net dead-plus-live load pressure of 10,000 pounds per square foot. A one-third increase in the bearing value can be used for wind or seismic loads.

Footings in Compacted Fill

Spread footings underlain by at least three feet of compacted fill and carried at least 2 feet below the lowest adjacent grade or floor level can be designed to impose a net dead-plus-live load pressure of 3,000 pounds per square foot. A one-third increase in the bearing value can be used for wind or seismic loads.

Pile Foundations

There are a variety of pile foundations that could be used where it is necessary to carry foundation support through a weak or potentially liquefiable deposit or through the landfill. These options could include:

- Drilled cast-in-place pile foundations.
- Driven friction or end-bearing piles.
- Vibrated friction or end-bearing piles.
- Auger cast piles.
- Displacement auger-cast piles.

The presence of groundwater or potentially caving soils (such as the alluvium) may limit the use of conventional drilled cast-in-place piles. It is our understanding, that because of noise and vibrations associated with driven piles, the owner does not plan to use driven piles. The auger-cast piles and the displacement auger-cast piles could be used in a variety of soil and bedrock materials and may be an economical type of deep pile foundation without the disadvantages of excessive noise, vibration or damage to the channel walls. It may be possible to develop downward pile capacities of 150 to 250 kips for 16- to 24-inch diameter piles 40- to 50-feet in length.

Site Coefficient and Seismic Zonation

The structures located in the upper plateau portion of the site can be designed to resist earthquake forces following the 2008 Los Angeles City or Los Angeles County Building Code. The Site Classification may be assumed to be a Site Class C, Very Dense Soil and Soft Rock Profile.

The structures located in the lower plateau portion of the site can be designed to resist earthquake forces following the 2008 Los Angeles City or Los Angeles County Building Code. The Site Classification may be assumed to be a Site Class E, Soft Soil Profile.

The mapped maximum considered earthquake spectral response accelerations, Ss and S1, should be taken as 1.515 and 0.600, respectively, according to the 2008 Los Angeles County Building Code. The site coefficients, Fa and Fv, may be determined for these spectral response acceleration values and for a Site Class C or E, accordingly.

GRADING REQUIREMENTS

General

The placing of all fills will need to be properly engineered and constructed. All vegetation within the limits of grading will need to be removed and existing fills and any unsuitable soils will need to be excavated prior to fill placement.

Grading within the hillside areas will need to address the stability of the slopes. Where favorable bedding exists, the slopes could be constructed at a 2:1 (horizontal to vertical) inclination. If the bedding dips unfavorably out of the slopes, the slopes should either be flattened to the angle of the bedding (or flatter), or the slopes will require stabilization. The degree of stabilization will depend on the orientation of the bedding with respect to the final slope and the depth of the excavation. Where the bedding dips out of the slopes, buttress fills will be required. If the bedding is approximately parallel to the slopes, thinner stabilization fills will suffice. The design of the buttress or stabilization fills will need to be included to the satisfaction of the applicable jurisdiction in the comprehensive investigations prior to new construction in hillside areas.

Buttress and Stabilization Fills

The actual dimensions of the buttress fills will need to be determined when the Planning Subarea elevations and the depth of any building subterranean construction are known. For planning purposes, the buttress fills should be constructed to a width equal to one-half the height of the slope, or to a minimum width of 20 feet. Backdrains will be required behind all buttress and stabilization fills. Compacted fill slopes may be constructed at 2:1. Slopes should be overfilled 5 horizontal feet and trimmed back to a compacted core.

Within the Mixed-Use Residential Area, buttress fills will be required on most of the west facing cut slopes. Stabilization fills will be required on most of the north-facing cut slopes. The buttress and stabilization fill design must also consider subterranean construction in front of these fills. Typical buttress fill details are shown on Figure 8, Typical Buttress Fill Design Criteria. Typical stabilization fill details are shown on Figure 9, Typical Stabilization Fill Design Criteria. The dimensions shown on these details will need to be determined during design.

Compaction

Any required fill should be placed in loose lifts not more than 8 inches thick and compacted to the standard as determined by the ASTM Designation D1557 method of compaction. The fill will need to be compacted in accordance with the City or County of Los Angeles requirements as applicable. Cohesive fills should be compacted to 90%. Granular, non-cohesive soil should be compacted to at least 95%. Where deep fills are required a greater degree of compaction may be required to reduce the settlement of the completed fills.

We anticipate shrinkage factors of 10% and 15% when compacting the fill/alluvium to 90% and 95%, respectively. Similarly, bedrock will bulk 5% and 0% when excavated and recompacted to 90% and 95%.

Material for Fill

The on-site excavated materials, less any debris or organic matter, can be used in required fills. However, because of their expansive characteristics, the on-site clayey soils should not be used within one foot of the subgrade for floor slabs, walks, and other slabs. Cobbles larger than 4 inches in diameter should not be used in the fill. Any required import material should consist of relatively non-expansive soils with an Expansion Index of less than 35. The imported materials should contain sufficient fines (binder material) so as to be

relatively impermeable and result in a stable subgrade when compacted. All proposed import materials should be approved by the geotechnical consultant-of-record prior to being placed at the site.

Stockpiled Fill

The grading for the Mixed-Use Residential Area may be performed in phases. If a phased development is planned, up to about 450,000 cubic yards of excavated material could be stockpiled on undeveloped portions of future phases. If the stockpile will remain in place after completion of adjacent developments, the exterior slopes of the stockpile should be treated as permanent slopes with drainage requirements consistent with the requirements of the City of Los Angeles or the County of Los Angeles, as applicable.

If the stockpiled fill is to be in place for less than one year or if the stockpile is less than 40 feet in height, the fill would not need to be compacted and tested, but the stockpiled material should be placed in lifts not more than two feet in thickness and rolled with heavy compaction equipment.

If the stockpiled fill is greater than 40 feet in height, the outer portion of the fill, with a width equal to at least the height of the fill, should be compacted to at least 90%. The interior core of the stockpile need not be compacted to the 90% minimum, but should at least be track-rolled with heavy equipment.

The side slopes of the stockpile fill, less than 40 feet in height, may be constructed as steep as 1½:1 (horizontal to vertical). Stockpile fill more than 40 feet in height should not be constructed steeper than a 2:1 slope inclination.

If the stockpiled fill were to be in place for less than one year and if the stockpile were less than 40 feet in height, the normal City requirements for rainy weather erosion protection should be sufficient. This means that the stockpile should be surrounded by sandbags and all runoff should be collected into approved storm water collection devices.

If the stockpile will be in place for more than one year or if the stockpile will be more than 40 feet in height, drainage terraces should be provided on all slopes. The terraces should be at least 8 feet in width and spaced no further than 25 feet apart vertically.

WATER RUNOFF INFILTRATION AND BIO-SWALE

Infiltration of site runoff water into compacted fills can have a long-term detrimental effect on the strength and compressibility of the compacted fills. The water can also have an adverse effect on the stability of the slopes and will need to be removed by subdrains for new buildings from behind building basement walls and retaining walls to prevent development of damaging hydrostatic pressures. Furthermore, the subsurface materials have a relatively low permeability and will not accept large quantities of runoff.

Vegetative swales/filter strips, where runoff is directed along a swale or across a vegetative surface for treatment, may result in partial retention and vegetative uptake and limited percolation of runoff. All vegetated treatment facilities should be constructed with underdrains and, if needed, liners to restrict infiltration to the underlying compacted soils (some areas may not need to include a liner as these soils will effectively act as a liner until perforated pipes are able to drain percolated waters). Collected and treated water should be either discharged to the storm drain systems or potentially used for irrigation elsewhere on the Project site.

RECLAIMED WATER TANK

A reclaimed water tank is planned in the Mixed-Use Residential Area. The tank can be as large as 120 feet in diameter and 10 feet deep and of reinforced concrete or steel construction with up to 850,000 gallon capacity. The conceptual location is on the east side of the Project site at the top of a 150-foot high graded slope. If constructed at this location, the tank would be buried, with the top of the tank exposed and the base will be set back about 30 feet from the face of the slope. It is possible that the reclaimed water tank could be sited at other locations within the Mixed-Use Residential Area. The reclaimed water tank could also be smaller in size or consist of multiple tanks ranging from 25,000 gallons to 250,000 gallons.

The slope adjacent to the conceptual location is potentially unstable and will be stabilized with a buttress fill. The buttress fill will be equipped with a backdrain. The tank will be constructed at the top of the buttress fill. We recommend that the base of the tank consist of a reinforced concrete foundation and that the grading for the buttress extend beneath the entire limits of the tank. If these provisions are made, then this site would be acceptable for the tank.

Drainage should be provided around and beneath the tank. The drainage should consist of a perforated pipe behind the tank walls with gravel backfill and a subdrain beneath the base of the tank. The subdrain should

consist of a layer of permeable gravel with drainage pipes. The drainage pipes and the wall drain should drain to an approved drainage device. With those provisions at the location planned, the tank will not adversely affect the stability of the slope. Because the tank is situated at the top of a high slope, we recommend that provisions be made to capture any leakage resulting from a tank rupture with that leakage directed to an appropriate collection system.

Alternative locations could include elsewhere on graded pads within the Project site either on or adjacent to the slopes or adjacent to the Los Angeles River Flood Control Channel. Other potential geologic hazards could include liquefaction, or the presence of non-engineered fills. If any geologic hazards at these potential sites are mitigated in accordance with the findings, conclusions and recommendations in this report, the locations would then be suitable for siting of the water tank. Detailed geotechnical recommendations will be needed prior to the tank's final design and construction.

Other subterranean reclaimed water tanks may be located in the Studio, Entertainment or Business Areas. These tanks would be 50,000 gallons or less in size and installed pursuant to regulatory requirements. Detailed geotechnical recommendations will be needed prior to the final design and construction of each tank.

PAVING

The required thicknesses of paving and base will depend on the expected wheel loads and volume of traffic (Traffic Index or TI). Assuming that the paving subgrade will consist of the on-site or comparable soils with an R-value of 25 and compacted to at least 90% as recommended, the minimum recommended paving thicknesses are presented in Table 6, Recommended Paving Thicknesses.

Table 6, Recommended Paving Thicknesses

Traffic Use	Traffic Index	Asphalt Paving	Base Course
Parking	5.0	4 inches	4 inches
Drives	6.0	4 inches	8 inches
Street	7.0	5 inches	9 inches
Street	8.0	5 inches	12 inches

The base course should conform to requirements of Section 26 of State of California Department of Transportation Standard Specifications (Caltrans), latest edition, or meet the specifications for untreated base as defined in Section 200-2 of the latest edition of the Standard Specifications for Public Works Construction (Green Book). The base course should be compacted to at least 95%.

HARDSCAPE

The on-site clay soils are expansive and relatively impermeable. Irrigation water could become trapped within the upper soils of landscaped areas particularly if the landscaped areas are covered with permeable planting materials. This trapped water can move laterally beneath slabs, curbs and paving. We recommend that all concrete slabs on grade be underlain by at least one foot of non-expansive soil with an Expansion Index less than 35 to minimize the expansion potential. In addition, we recommend that consideration be given to providing subsurface cutoff walls between landscaped and hardscape areas. The cutoff walls could consist of a concrete-filled trench at least six inches wide and two feet deep. The cutoff walls should extend at least six inches below any adjacent granular non-expansive material or the paving base course. Drain lines would be desirable adjacent to the landscaping.

It should be noted that even with provisions to protect against movement, some movement could occur due to expansive soils. The geotechnical engineer-of-record should be provided with a copy of the hardscape and landscaping plans for review prior to final design.

In the grading section of this report, we recommend that in all areas requiring structural fill, the fill be compacted to at least 90%. In areas to be landscaped, the level of compaction could be reduced to 85%, but we suggest that this lower level of compaction be limited to the upper three feet to reduce the potential for areal settlement as the areas become watered. Compaction to at least 90% will still be required beneath planter walls, sidewalks, paving and hardscape.

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L.T. Evans, Inc., 1974, A Drilled Pile Report, Tour Center – Tour Bridge, Universal City, California, report dated May 1, 1974.

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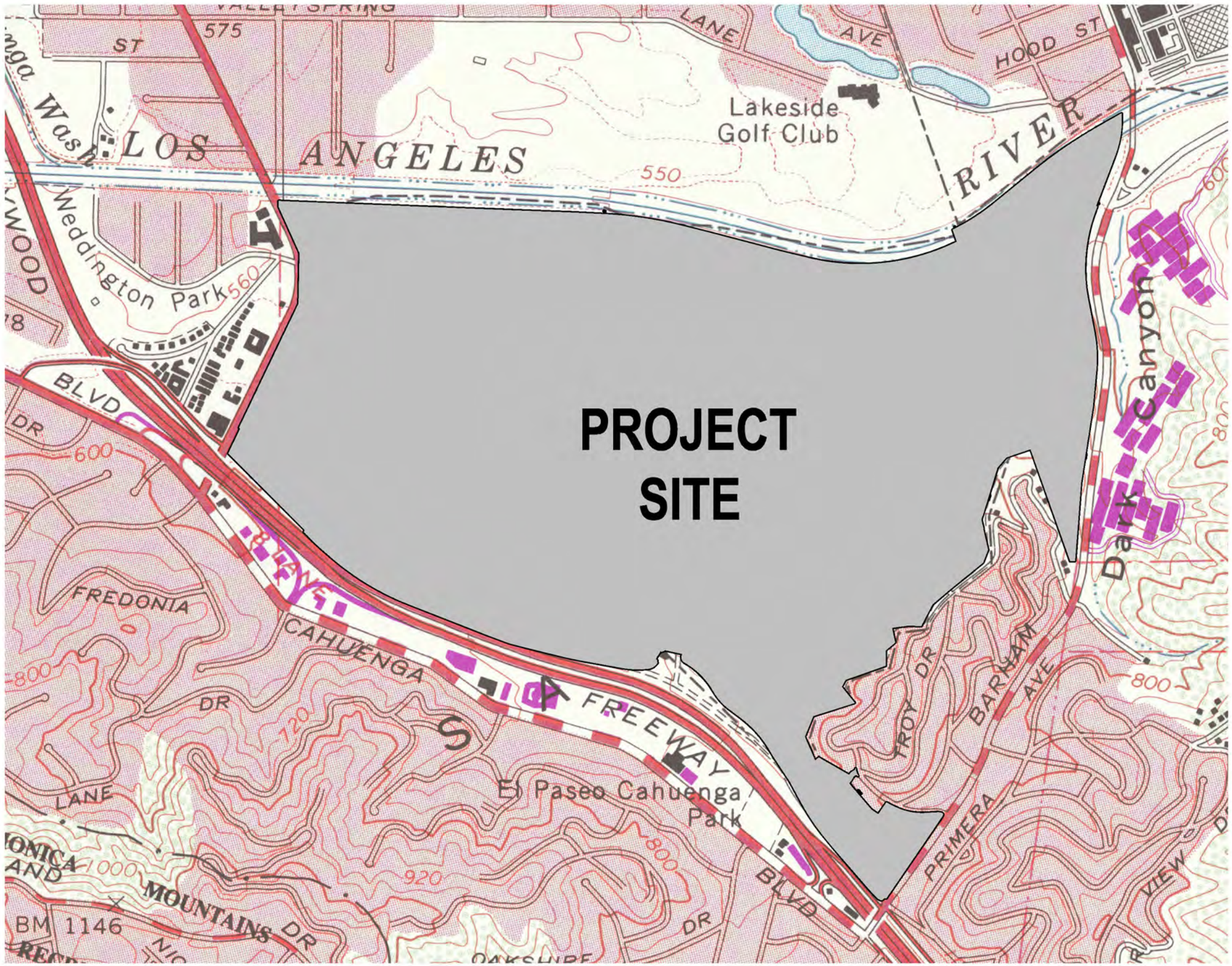
Ziony, J.I., and Yerkes, R.F., 1985, Evaluating Earthquake Hazards in the Los Angeles Region – An Earth Science Perspective: in Ziony, J.I. (editor), U.S. Geological Survey Professional Paper 1360.

AERIAL PHOTOGRAPHS

Stereo-paired, black and white aerial photographs were reviewed to evaluate geomorphic conditions that could indicate characteristic features associated with large scale landslides. A list of the photographs reviewed is presented below:

AERIAL PHOTOGRAPHS

Photograph Date	Flight/Frame	Scale
10/18/98	C127-24-54-55	1 inch = 2,000 feet
6/10/95	C113-24-236-237-235	1 inch = 2,000 feet
5/10/93	C88-23-229-230	1 inch = 2,000 feet
5/25/90	C81-8-28-29-27	1 inch = 2,800 feet
7/7/88	19291-92-93	1 inch = 2,200 feet
1/27/86	F-492-493	1 inch = 2,800 feet
5/12/79	FCLA-4-205-206	1 inch = 2,800 feet
11/7/76	76162-208-09-10	1 inch = 2,000 feet
4/20/72	107-12-17-18	1 inch = 4,000 feet
1/30/70	60-3-70-71-72	1 inch = 4,000 feet
3/4/69	25-16-71-72-73	1 inch = 1,000 feet
11/4/52	11-4K-151-152	1 inch = 1,666 feet
10/27/54	20K-43-44-45	1 inch = 1,666 feet



800' 400' 0 800' 1600'

GRAPHIC SCALE

REFERENCE: TOPOGRAPHIC MAP BURBANK 7½' QUADRANGLE MAP BY USGS 1996

NBC Universal
Evolution Plan

VICINITY MAP

March 2010 51-1-06030-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIGURE 1

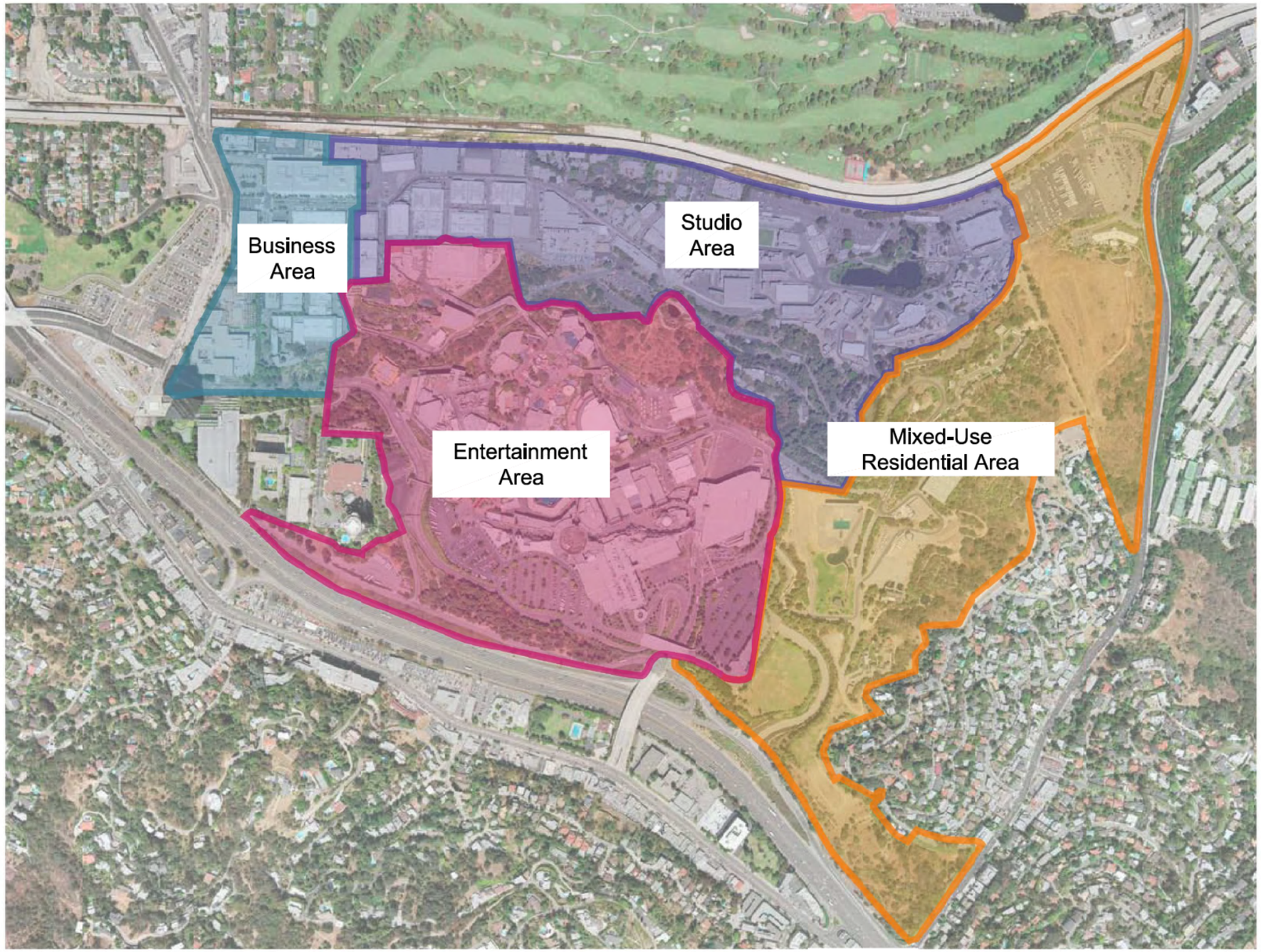
NBC Universal
Evolution Plan

NBC UNIVERSAL EVOLUTION PLAN

March 2010 51-1-06030-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIGURE 2



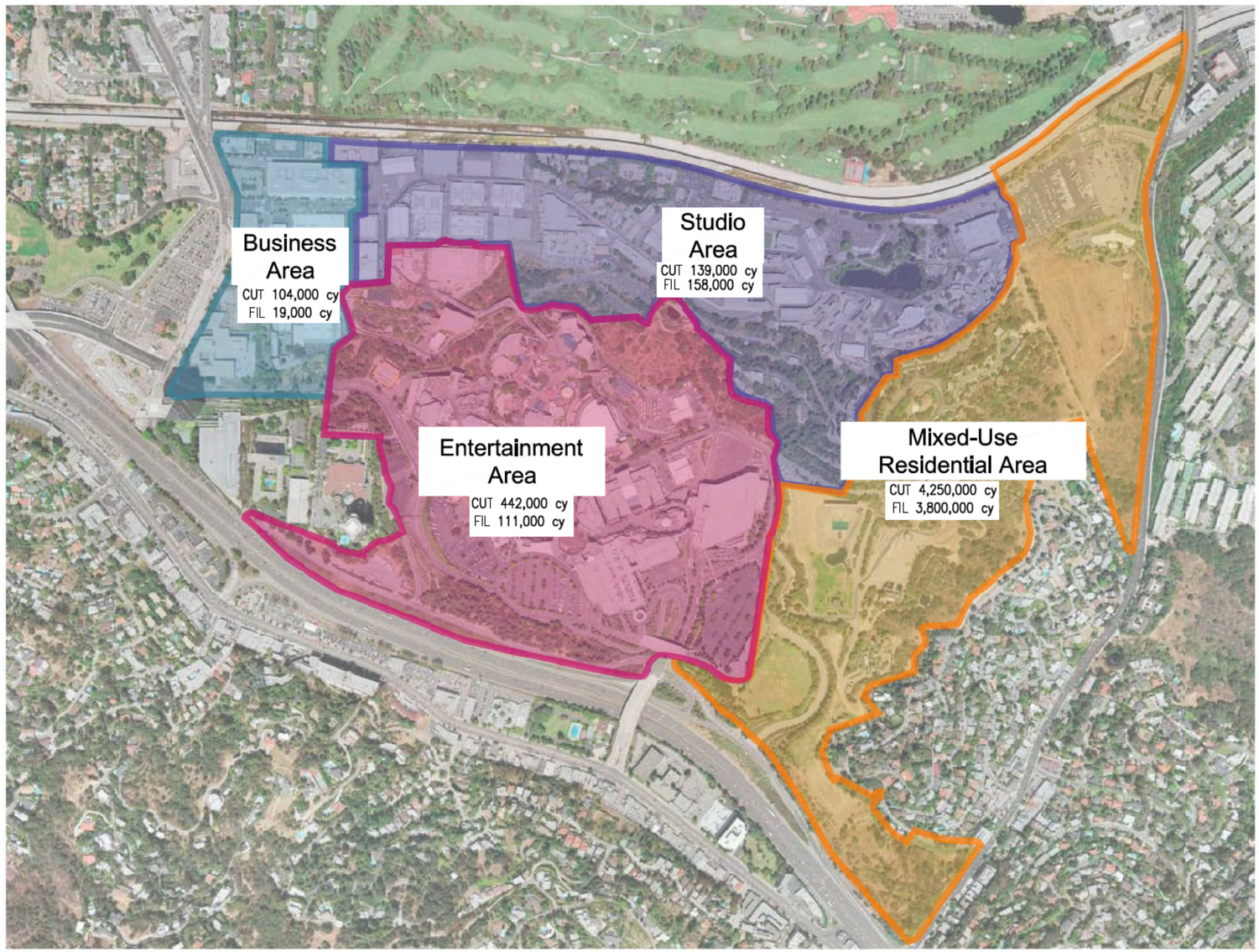
NBC Universal
Evolution Plan

AREA DIAGRAM

March 2010 51-1-06030-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIGURE 3



800' 400' 0 800' 1600'

GRAPHIC SCALE

NBC Universal
Evolution Plan

CONCEPTUAL GRADING PLAN

March 2010 51-1-06030-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIGURE 4

EXPLANATION

GEOLOGIC UNITS

ef	ENGINEERED FILL
nef	NON-ENGINEERED FILL
Qal	ALLUVIUM
col	COLLUVIUM
Qls	LANDSLIDE DEBRIS
Tt	TOPANGA FORMATION interbedded sandstone, siltstone and shale
CLOSED LANDFILL	CLOSED LANDFILL

GEOLOGIC UNITS

- GEOLOGIC CONTACT DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE BURIED
- BENEDICT CANYON FAULT (efter Dibblee, 1991) Dashed where approximate, dotted where inferred
- APPROXIMATE LIMITS OF LANDSLIDE DEBRIS
- APPROXIMATE LOCATION AND PLUNGE OF SYNCLINAL FOLD AXIS
- REPORTED LIMITS OF EXISTING BUTTRESS FILL
- CREEP AFFECTED SLOPE

N 161500
N 161000
N 160500
N 160000
N 159500

E 179500 E 180000 E 180500 E 182000 E 182500 E 183000 E 183500 E 184000 E 184500 E 185000

200' 100' 0' 200' 400'
GRAPHIC SCALE
Note: For reduced sized prints, original scale is in inches

REFERENCE: TOPOGRAPHIC MAP BY EIR SEPTEMBER 19 2007

NBC Universal
Evolution Plan

GEOTECHNICAL MAP

March 2010 51-1-06030-001

SHANNON & WILSON, INC. Geotechnical and Environmental Consultants

FIGURE 5

NBC Universal
Evolution Plan

REGIONAL SEISMICITY MAP

March 2010 51-1-06030-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIGURE 6

EXPLANATION

GEOLOGIC UNITS

- ef — ENGINEERED FILL
- nef — NON-ENGINEERED FILL
- Qal — ALLUVIUM
- col — COLLUVIUM
- Qls — LANDSLIDE DEBRIS
- Tt — TOPANGA FORMATION interbedded sandstone, siltstone and shale
- CLOSED LANDFILL — CLOSED LANDFILL

GEOLOGIC UNITS

- GEOLOGIC CONTACT DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE BURIED
- BENEDICT CANYON FAULT (after Dibblee, 1991) Dashed where approximate, dotted where inferred
- APPROXIMATE LIMITS OF LANDSLIDE DEBRIS
- APPROXIMATE LOCATION AND PLUNGE OF SYNCLINAL FOLD AXIS
- REPORTED LIMITS OF EXISTING BUTTRESS FILL
- CREEP AFFECTED SLOPE

GEOTECHNICAL HAZARDS

- POTENTIAL SLOPE STABILITY HAZARD
- HIGH / MODERATE / LOW — LIQUEFACTION POTENTIAL ZONES
- NON-ENGINEERED FILL REMOVALS

N 161000
N 160500
N 160000
N 159500

E 178500 E 179000 E 179500 E 180000 E 180500 E 182000 E 182500 E 183000 E 183500 E 184000 E 184500 E 185000

200' 100' 0' 200' 400'
GRAPHIC SCALE
Note: For reduced sized prints, original scale is in inches

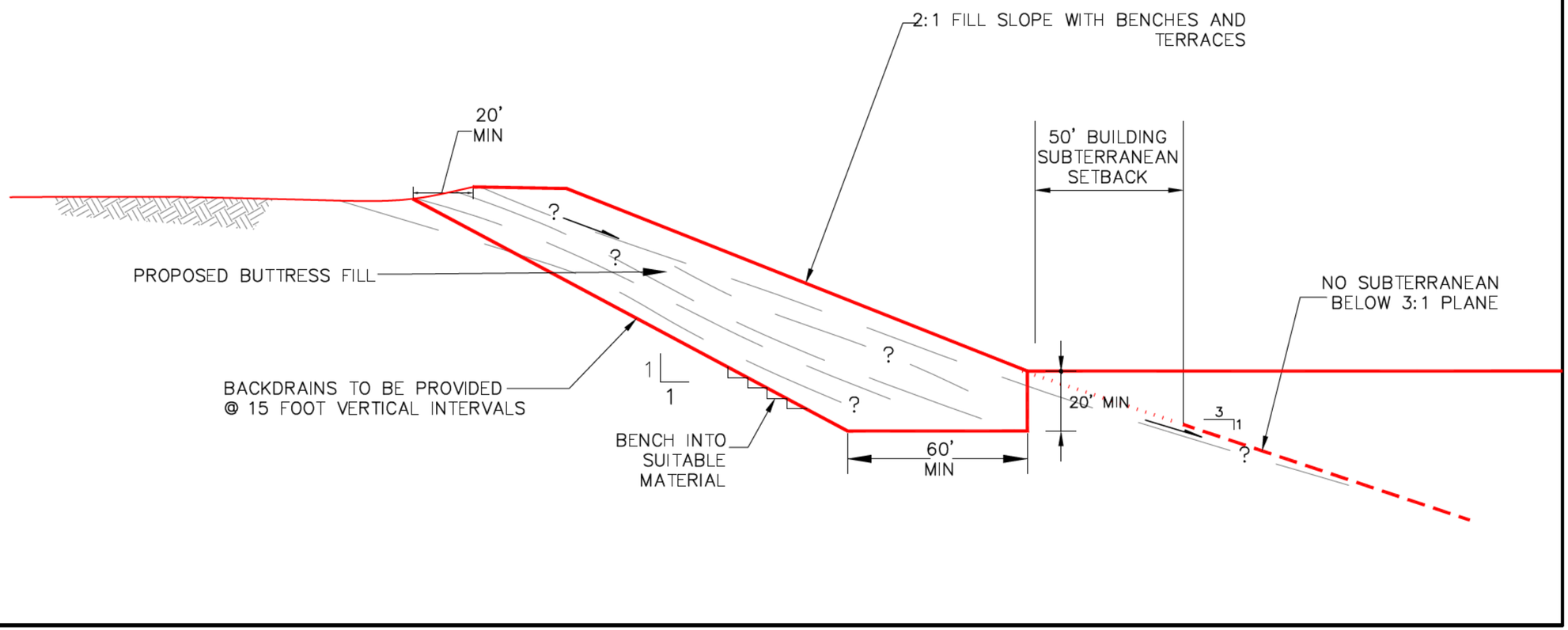
REFERENCE: TOPOGRAPHIC MAP BY EIR SEPTEMBER 19 2007

NBC Universal
Evolution Plan

GEOTECHNICAL HAZARDS MAP

March 2010 51-1-06030-001

SHANNON & WILSON, INC. Geotechnical and Environmental Consultants | **FIGURE 7**



TYPICAL BUTTRESS FILL DESIGN CRITERIA
SCALE: 1"=40'

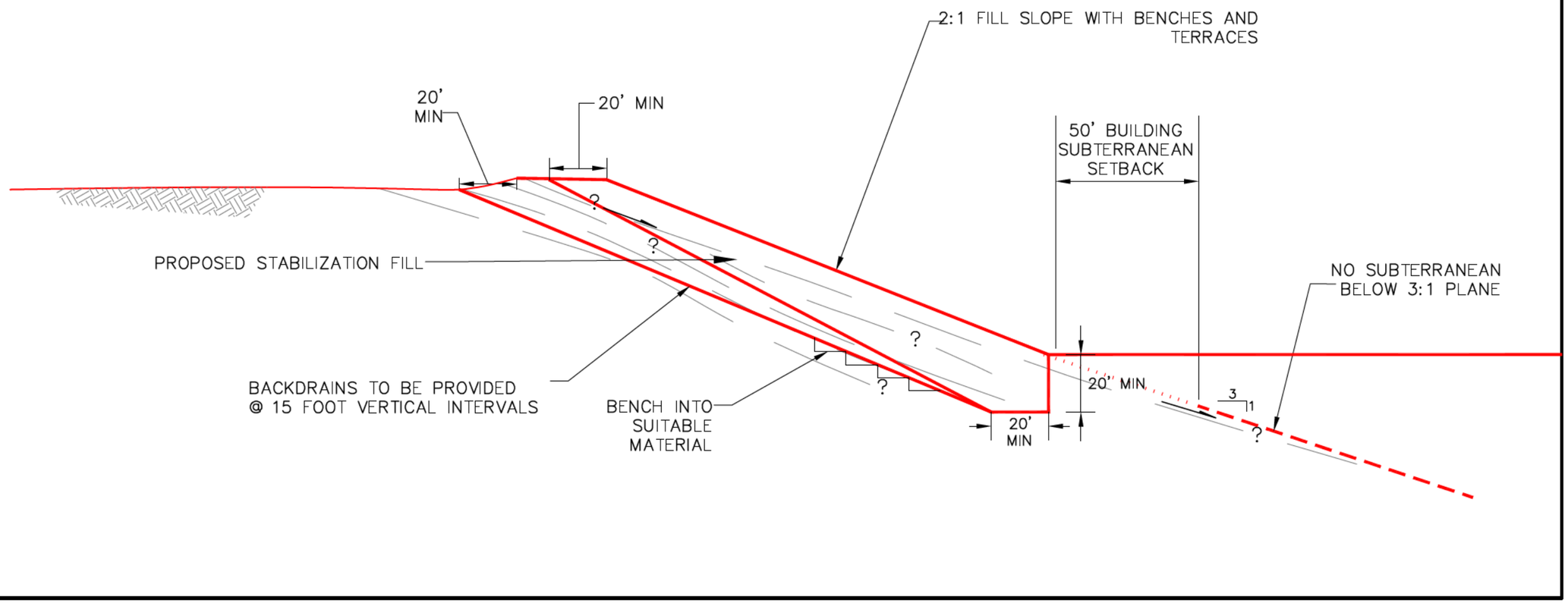
NBC Universal
Evolution Plan

TYPICAL BUTTRESS FILL DESIGN CRITERIA

March 2010 51-1-06030-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIGURE 8



TYPICAL STABILIZATION FILL DESIGN CRITERIA
SCALE: 1"=40'

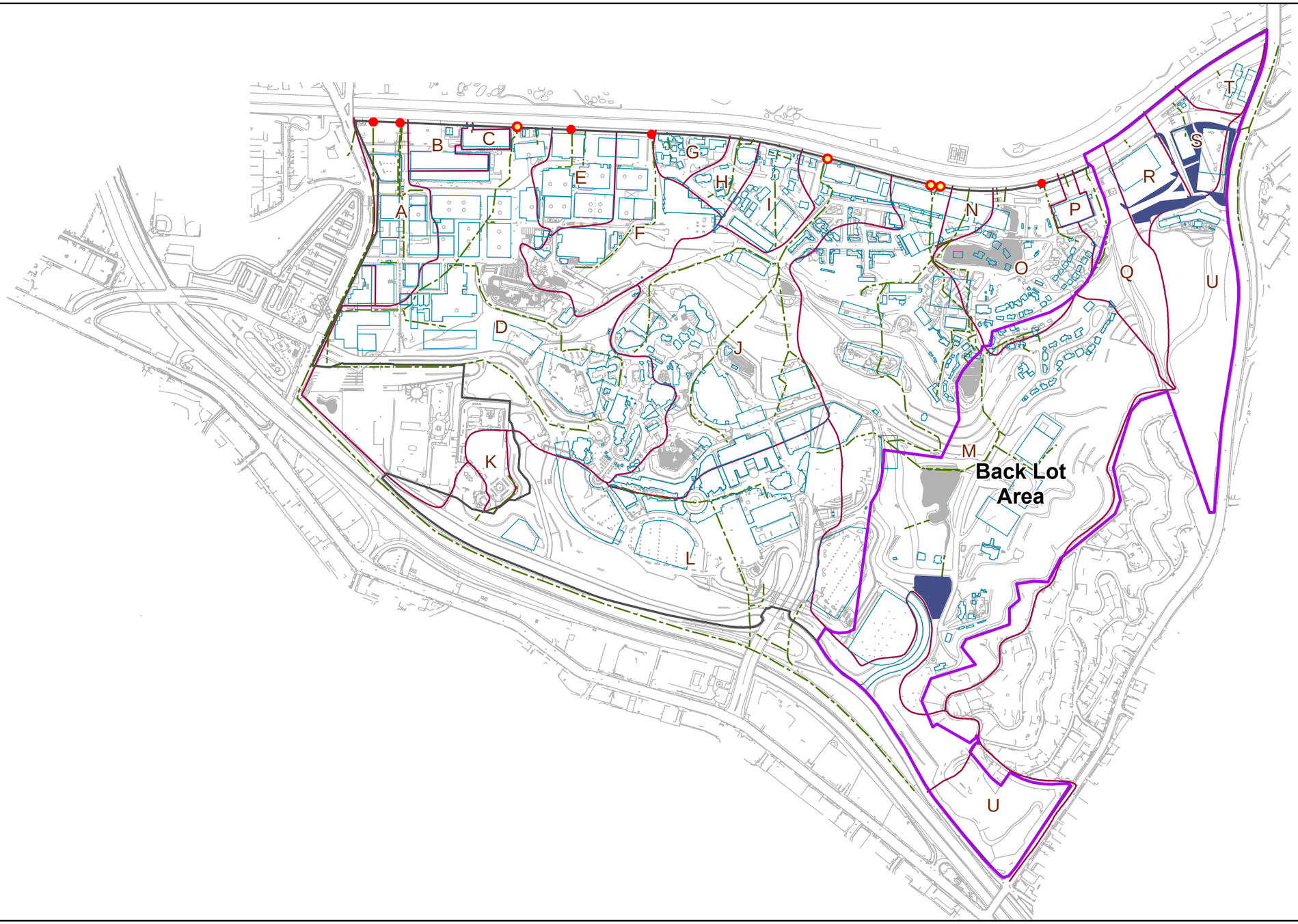
NBC Universal
Evolution Plan

TYPICAL STABILIZATION FILL DESIGN CRITERIA

March 2010 51-1-06030-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIGURE 9



Legend

- Backlot Boundary
- Bioretention Facility
- Property Boundary Line
- Commercial / Office Buildings
- Storm Drain (18" or larger)
- Subwatershed
- Existing CDS Units
- Existing CDS Unit with Proposed Media Filter

N

350 0 700

Feet

NBC Universal Evolution Plan Project
Drainage Areas

Attachment F

K:\30887_Universal\2012\Figure1_Alternative10LIDBMPs.mxd

ATTACHMENT G

UNIVERSAL STUDIOS HISTORIC DISTRICT

Historic Preservation Plan

Prepared for:

Universal City Studios LLLP, L.P.
100 Universal City Plaza
Universal City, CA 91608

Prepared by:

HISTORIC RESOURCES GROUP, LLC
1728 Whitley Avenue
Hollywood, CA 90028-4809

March, 2010

ATTACHMENT G

TABLE OF CONTENTS

1.0 STATEMENT OF PURPOSE

1.1 Purpose

In November of 2008, a Historical Resources Technical Report was prepared for Universal City Studios LLLP, L.P. (the "Applicant") to determine if historical resources were present within the Universal Studios property and assess any potential impacts to historical resources by the proposed NBC Universal Evolution Plan. The Technical Report identified forty (40) buildings and one (1) site of historic, cultural, and architectural significance as contributors to a potential Universal Studios Historic District ("Historic District") The Historic District's contributing and non-contributing resources are listed in Table 1.

The purpose of this Historic Preservation Plan (the "Plan") is two-fold:

- To provide appropriate guidance for the rehabilitation[1] of historic buildings, structures, and sites within the Historic District; and

- To establish basic criteria for new construction within the Historic District in order to maintain its historic character.

The Plan will serve as the framework for future repair, maintenance, and alteration and guide architects and designers in designing compatible new construction in the areas identified as potential sites for new buildings within the Historic District. Adjacent contributing buildings provide the design context for new buildings or additions. In general, the Plan does not require any particular type or style of new construction. Instead, the Plan encourages thoughtful, well-proportioned designs employing good quality materials that respect the historic context.

This document should be used in conjunction with the November 2008 Historical Resources Technical Report for Universal City, and technical reference materials, including the "Preservation Briefs" published by the National Park Service, which supplement this Plan.

1.2 Goals and Objectives

The objectives of the Plan are as follows:

- Preserve, maintain and rehabilitate buildings of historic, cultural and architectural importance, while ensuring their continued viability as components of a working Universal Studios by providing flexibility for operational requirements.

- Ensure that changes in the built environment within the Historic District respect its historic character.

[1] "Rehabilitation is defined by the National Park Service as "the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values."

- Respect historic circulation patterns, landscaping, and other features which establish the context of the built form of the Historic District through maintenance of existing features, replication of missing historic features, or the introduction of compatible new features.

- Foster awareness and appreciation of Universal Studios as an important historic resource.

Table 1: Universal City Historic District Resources

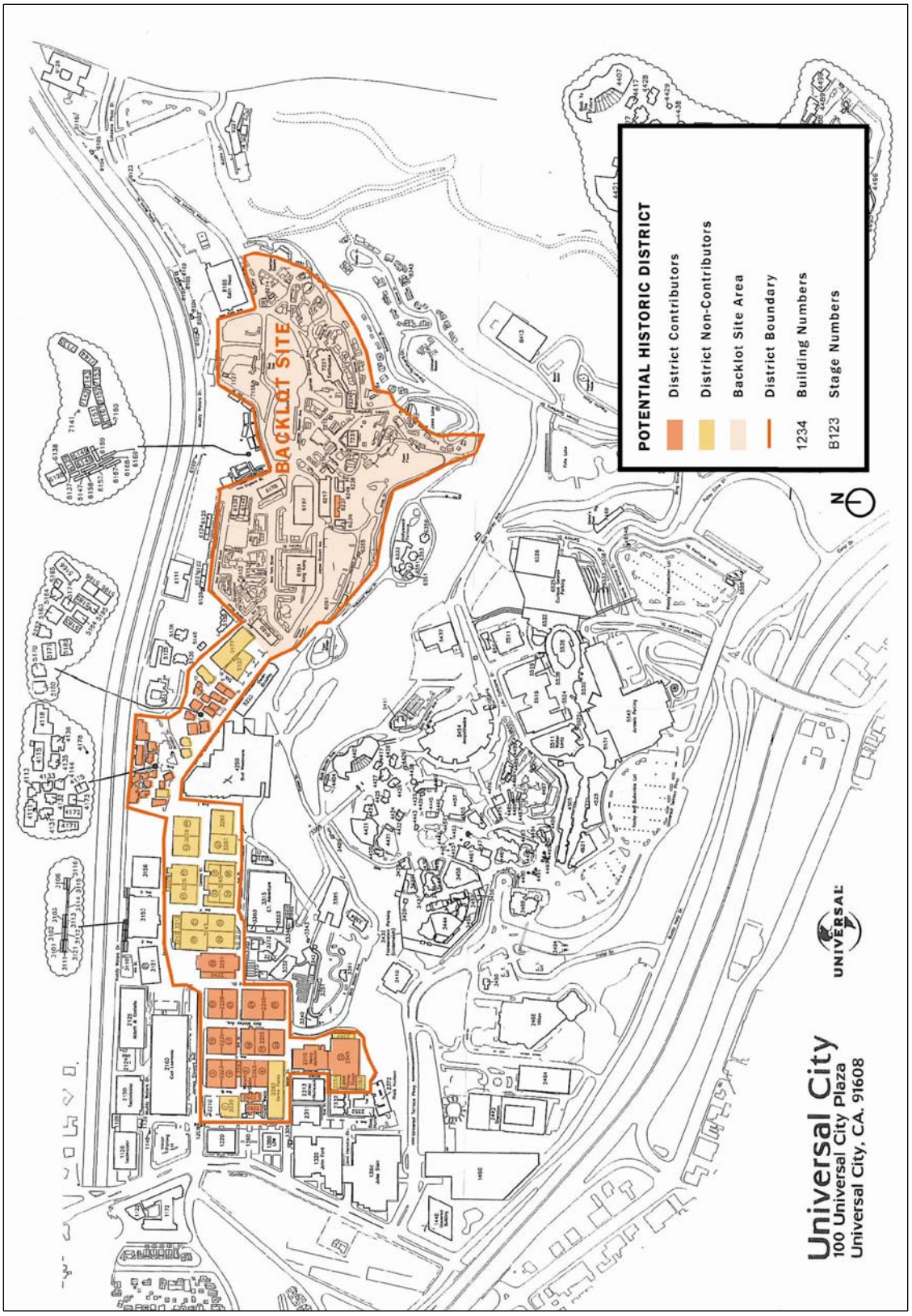
Building No.	Name	Construction Date	Resource Type	District Status
None	Backlot Site	c. 1915	Site	Contributor
2223	Stages 3 & 4	1916/1930	Stage	Contributor
2225	Sound Stages 16 & 17	1916/1930	Stage	Contributor
2228	Sound Stages 22, 23,	c. 1925	Stage	Contributor
2230	Sound Stage 1	c. 1960	Stage	Non-contributor
2243	Power House	c. 1920	Utility	Contributor
2250	Jack Webb	1940	Office	Contributor
2252	William Goetz Bldg.	1941	Office	Contributor
2263	Stages 5 & 6	1916/1938	Stage	Contributor
2265	Sound Stages 18, 19 and 20	c. 1928	Stage	Contributor
2268	Sound Stages 24 and 25	1939	Stage	Contributor
2282	Verna Fields Bldg.	1914/1957 /1960	Studio Services	Non-contributor
2315	Henry Mancini Bldg.	1928	Stage, post-production	Contributor
2333	Jack Foley Stage	1963	Stage	Non-contributor
2345	Sound Stage 12	1928	Stage	Contributor
2347	Sound Repair Shop	1959	Shop	Non-contributor
2353	Storage	1959	Storage	Non-contributor
3205	Power House	1964	Utility	Non-contributor
3212	Backlot Café	After 1964	Studio Services	Non-contributor
3213	Office	Post 1964	Office	Non-contributor
3225	Stage	c.1960	Stage	Non-contributor
3228	Stage	c. 1960	Stage	Non-contributor
3243	Stage	1964	Stage	Non-contributor
3250	Phantom Stage Storage	1939	Storage	Contributor

ATTACHMENT G

Building No.	Name	Construction Date	Resource Type	District Status
3251	Sound Stage 28 ("Phantom Stage")	1924	Stage	Contributor
3265	Soundstages 33, 34, 35, and 36	1959	Stage	Non-contributor
3267	Soundstage 37	c.1970	Stage	Non-contributor
3269	Rehearsal Hall	c. 1970	Stage	Non-contributor
4111	Office Bungalow	1944 (81) c. 1950 (414)	Office/Service Bungalow	Contributor
4113	Office Bungalow	1941	Office/Service Bungalow	Contributor
4115	Office Bldg. C	1946	Office Building	Contributor
4118	Office Bldg. D	c. 1945	Office Building	Contributor
4131	Office Bungalow	1940	Office/Service Bungalow	Contributor
4132	Office Bungalow	1941	Office/Service Bungalow	Contributor
4133	Office Bungalow	1941	Office/Service Bungalow	Contributor
4135	Office Bungalow	1944	Office/Service Bungalow	Contributor
4136	Office Bungalow	c. 1940	Office/Service Bungalow	Contributor
4144	Office Bungalow	1940	Office/Service Bungalow	Contributor
4171	Office Bungalow	c. 1955	Admin. and Office	Contributor
4172	Office Bldg./ Dressing Room	1925 (portion)	Office/Service Bungalow	Non-contributor
4173	Office Bungalow	c. 1930	Office/Service Bungalow	Contributor
4175	Office Bungalow	c. 1925	Office/Service Bungalow	Contributor
5162	Office Bungalow	c. 1941	Office/Service Bungalow	Contributor
5163	Office Bungalow	c. 1950	Office/Service Bungalow	Contributor
5164	Office Bungalow	1940	Office/Service Bungalow	Contributor
5165	Office Bungalow	c. 1940	Office/Service Bungalow	Contributor
5166	Office	c. 1990	Office	Non-contributor
5170	Office Bungalow	c. 1960	Office	Non-contributor
5171	Office Bungalow	1954	Office/Service Bungalow	Contributor
5174	Office Bungalow	c. 1940	Office/Service Bungalow	Contributor
5177	Storage Building	c. 1965	Storage	Non-contributor
5180	Office	c. 1960	Office/Service	Non-

ATTACHMENT G

Building No.	Name	Construction Date	Resource Type	District Status
	Bungalow		Bungalow	contributor
5182	Office Bungalow	c. 1955	Office/Service Bungalow	Contributor
5183	Office Bungalow	c. 1945	Office/Service Bungalow	Contributor
5184	Office Bungalow	1941	Office/Service Bungalow	Contributor
5185	Office Bungalow	1928 (106)	Office/Service Bungalow	Contributor
5186	Office Bungalow	1953	Office/Service Bungalow	Contributor
5187	Office Building	1964	Office Building	Non-contributor
5195	Office Bungalow	1926 (105)	Office/Service Bungalow	Contributor
5196	Office Bungalow	1953	Office/Service Bungalow	Contributor
6237	Film Vault	1946	Storage	Contributor


POTENTIAL HISTORIC DISTRICT
District Contributors
District Non-Contributors
Backlot Site Area
District Boundary
1234 Building Numbers
B123 Stage Numbers
BACKLOT SITE
N
Universal City
100 Universal City Plaza
Universal City, CA. 91608
UNIVERSAL

2.0 DESCRIPTION OF DISTRICT RESOURCES

2.1 Introduction

The Historical Resources Technical Report identified forty (40) buildings and the backlot site as contributing resources to the Historic District. Buildings are categorized into property types identified as historically significant to the production of film on the site. Each type has its own method of construction and associated materials. With few exceptions, most of the contributing buildings are functional in nature and are not representative of any particular architectural style.

The Universal Studios backlot site is an area of open space adjacent to the motion picture production facilities where large-scale, semi-permanent sets were built for outdoor filming. Backlots were defining features of the leading film studios from the film industry's formative years and the Studio Era. While all studios maintained an area containing outdoor sets, not all of these were considered "backlots" in the traditional sense. The outdoor sets at studios such as Paramount and Warner Bros., were centrally located on the studio property with little separation between administrative and production facilities. Other studios maintained studio "ranches" at another location. The term "backlot" as used in this report, specifically identifies separate but adjacent facilities, exclusively dedicated to outdoor filming. In this sense, the Universal Studios backlot is the only remaining studio backlot in Southern California. The Twentieth Century-Fox backlot was sold off around 1960 and developed as Century City. The MGM (now MGM/Sony) backlot was sold off in the mid-1970s. Warner Bros., which never had a traditional backlot, did acquire the nearby Columbia ranch in the early 1990s for outdoor filming use. This land, however, is at a separate location and has no historic association with Warner Bros.

No buildings were found to be individually significant architecturally. Instead, the overall location, relationship of uses, and circulation, give the complex its significance due to its association with the development of the motion picture industry in the United States.

2.2 Property Types

Eight property types were identified as historically significant. They are: stages, theaters, studio service buildings, utilities, storage buildings, film vaults, office buildings, and office/service bungalows. While all building types are represented within the Historic District, representatives of five types have retained sufficient integrity to qualify as contributors to the Historic District.

2.2.1 Architectural Styles

The Historic District contains contributing buildings constructed between 1912 and 1958. They are largely vernacular buildings that are not representative of any one architectural style. Stages, utilities, and storage structures are utilitarian buildings devoid of stylistic elements or decorative detailing. Office buildings tend to be more architecturally expressive, displaying elements of Period-influenced vernacular styles.

The collection of office/service bungalows, historically used as offices for producers, writers, directors, actor's dressing rooms, and services were constructed on a

residential model. These buildings display aspects of Period Revival, Moderne, and Minimal Traditional architectural styles reflective of Southern California residential neighborhoods prior to 1960.

2.2.2 Stages

The stages within the Historic District are clustered in the northwestern corner of the Applicant's property. There are nine (9) contributing buildings of this property type within the Historic District. All were designed in a functional, utilitarian style devoid of decorative detailing and have been modified or re-configured over the years.

Stages 24 and 25
Building No. 2268

Stages 5 and 6
Building No. 2263

Building Numbers:	2223, 2225, 2228, 2230, 2263, 2265, 2268, 2345, 3251,
Construction Method:	Reinforced concrete and/or wood frame with stucco exterior
Character-defining Features:	Large, rectangular masses of two or more stories
	Windowless facades
	Protruding entrance bays
	Recessed entry doors
	Trussed roof systems

2.2.3 Office Buildings

Four (4) contributing buildings to the Historic District are classified as office buildings due to their historic use and similar construction type. All of these are vernacular, two-story buildings with stucco exteriors. Some office buildings display the decorative detailing of architectural styles popular in Southern California in the 1930s and 1940s. Others are more utilitarian with minimal architectural detailing. While the interiors have often been modified many times over the years, the buildings retain their basic exterior detailing.

Jack Webb Office Building
Building No. 2250

William Goetz Office Building
Building No. 2252

Building Numbers:	2250, 2252, 4115, 4118
Construction Method:	Reinforced concrete or wood frame with stucco exterior
Character-defining Features:	Two-story, rectangular massing
	Steel frame, divided-light casement windows; wood sash, multiple light windows
	Front entry surrounds with pilasters and pediments
	Recessed entry doors

2.2.4 Office / Service Bungalows

The majority of contributing buildings within the Historic District are single-story bungalows historically used as offices, actor's dressing rooms, or for service functions. Twenty-four (24) buildings of this type are considered contributors to the Historic District. Most are vernacular buildings that display the detailing of residential architectural styles popular in Southern California from the 1930s through the 1950s. While the interiors have often been modified many times over the years, the buildings retain their basic exterior detailing.

Office Bungalow
Building No. 4144

Office Bungalow
Building No. 5185- 5195

Building Numbers:	4111, 4113, 4131, 4132, 4133, 4135, 4136, 4144, 4171, 4173, 4175, 5162, 5163, 5164, 5165, 5171, 5174, 5182, 5183, 5184, 5185, 5186, 5195, 5196
Construction Method:	Wood frame with stucco exterior
Character-defining Features:	One-story, rectangular massing
	Steel frame, divided-light casement windows; wood frame, divided-light casement windows; wood double-hung sash windows
	Front entry surrounds with pilasters, pediments
	Metal awnings
	Fixed wooden shutters

2.2.5 Utilities

Film studios in the years prior to World War II maintained utility functions to provide the power, heating, cooling, and water necessary to support film production. The Historic District includes a Power House dating from the early 1920s.

Power House
Building No. 2243

Building Number:	2243
Construction Method:	Reinforced concrete with stucco exterior
Character-defining Features:	Large, two-story rectangular mass
	Façade characterized by protruding vertical piers and recessed bays
	Windowless facade
	Gable roof with shallow eaves

2.2.6 Film Vault

The need to house film required the construction of specialized structures designed for film storage. Film vaults were constructed of concrete with heavy metal doors due to the volatile nature of the nitrate film stocks used prior to 1950. The Historic District includes one contributing facility dedicated to film storage.

Film Vault
Building No. 6237

Building Numbers:	6237
Construction Method:	Reinforced concrete with metal panel doors
Character-defining Features:	Concrete, rectangular massing
	Utilitarian, windowless façade
	Specialized, heavy metal doors

2.3 Backlot Site

A backlot site is defined as the area adjacent to the production and administrative facilities where large-scale, semi-permanent sets were built for outdoor filming. The backlot site within the Historic District holds important associations with the activity of film making and its contours and features have been shaped by film making activity over time.

Backlot Site
Western Street

Character-defining Features:

Location in the northeastern portion of the studio district

Circulation pattern of streets, roads, and trails

Large scale sets recreating different streetscapes and locations arranged along key segments of the circulation system

Setting of hills, hillsides, and valleys

3.0 GUIDELINES FOR REHABILITATION, MAINTENANCE, & REPAIR

3.1 General Principals of Rehabilitation

The Secretary of the Interior has established standards for the preservation of historic properties. The Secretary of the Interior's Standards and Guidelines for Rehabilitating Historic Structures[2] (the "Standards"), have been widely used to guide Federal, State, and local agencies in carrying out their historic preservation responsibilities.

According to the Standards, rehabilitation is "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural value." The Standards are attached as **Appendix A.**

The Plan's guidelines for rehabilitation, maintenance, repair, and alteration within the Historic District are based, in part, on the Standards and include the following principles:

i Where maintenance, repair, and alteration of contributing buildings is required, such rehabilitation should respect the historic significance and architectural character of the structure.

ii The ability of the site to continue as a working studio is of utmost importance, therefore, these guidelines shall be applied in a manner which provides for operational flexibility.

iii Where new uses are required, adapt contributing buildings for reuse, if feasible and appropriate to the historic integrity of the structure.

iv Replacement of contributing structures for the same use shall only occur where it is not feasible to upgrade and/or expand a contributing building for continued use.

3.2 Pre-Rehabilitation Assessment

Prior to commencing rehabilitation on any contributing building, the following guidelines should be followed:

i Identify, retain, and preserve features that are important in defining the overall historic character of the building as it appeared during the period of significance. These features may include, but are not limited to, walls and surface finishes, railings, windows, doors, steps, and porches.

ii Evaluate the overall condition of the material to determine whether repairs to features are necessary.

[2] Codified in 36 Code of Federal Regulations 67.

iii Clean materials only when necessary to halt deterioration or remove heavy soiling.

iv If necessary, obtain rehabilitation treatments for specific materials prior to commencing any work.

3.3 Exterior Materials

3.3.1 Concrete

Exterior features as well as exterior surfaces that remain from the period of significance are important in defining the historic character of the building.

Buildings which have concrete exteriors may exhibit the following conditions: impact damage at building corners; cracks; damage due to spalling; damaged ornamentation of friezes and columns; peeling paint; inappropriate patching methods. Where maintenance, repair or alteration of concrete is to be performed, the guidelines below should be followed.

Guidelines for Concrete:

1. Repair walls and other features where there is evidence of deterioration such as spalling, damp walls, or damaged concrete.

2. Sandblasting shall not be used to prepare or clean exterior masonry.

3. Repair masonry or concrete features by patching, piecing-in, or consolidating the masonry. Repair may also include the limited replacement in kind, or with compatible substitute material, of those extensively deteriorated or missing parts of masonry features when there are surviving prototypes, such as plaster brackets.

4. Install new masonry or concrete features such as steps or door pediments when the historic feature is completely missing. This should be an accurate reconstruction using historical, pictorial, and physical documentation when available. If documentation is not available, this may be a new design that is compatible with the size, scale, material, and color of the historic building.

5. It is recommended, but not required, that the building be repainted with colors that are historically appropriate to the building and the Historic District.

References:[3]
Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings
Preservation Brief 6: Dangers of Abrasive Cleaning to Historic Buildings

[3] Preservation Briefs are available at the National Park Service website: http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

Preservation Brief 15: Preservation of Historic Concrete: Problems and General Approaches
Preservation Brief 16: The Use of Substitute Materials on Historic Buildings Exteriors
Preservation Brief 23: Preserving Historic Ornamental Plaster
Preservation Brief 37: Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing

3.3.2 Stucco

Exterior features (cornices and door pediments, window architraves, brackets and railings) as well as exterior surfaces and their treatment (modeling, tooling, bonding patterns, joint size, and color) are important in defining the historic character of the building.

Buildings which have stucco exteriors may exhibit the following conditions: impact damage at building corners; cracks; damage due to spalling; damaged ornamentation of friezes and columns; peeling paint; inappropriate patching methods. Where maintenance, repair or alteration of stucco is to be performed, the guidelines below should be followed.

Guidelines for Stucco:

1. Repair walls and other features where there is evidence of deterioration such as spalling, damp walls, or damaged stucco.

2. Sandblasting shall not be used to prepare or clean exterior stucco.

3. Repair stucco by removing the damaged material and patching with new stucco that duplicates the old in strength, composition, color, and texture.

4. Repair may also include the limited replacement in kind, or with compatible substitute material, of those extensively deteriorated or missing parts of features when there are surviving prototypes, such as plaster brackets.

5. Install a new feature such as door pediments or friezes when the historic feature is completely missing. This should be an accurate reconstruction using historical, pictorial, and physical documentation when available. If documentation is not available, this may be a new design that is compatible with the size, scale, material, and color of the historic building.

6. It is recommended, but not required, that the building be repainted with colors that are historically appropriate to the building and the Historic District.

References:[4]
Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings
Preservation Brief 6: Dangers of Abrasive Cleaning to Historic buildings

[4] Preservation Briefs are available at the National Park Service http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

Preservation Brief 16: The Use of Substitute Materials on Historic Buildings Exteriors
Preservation Brief 22: The Preservation and Repair of Historic Stucco
Preservation Brief 23: Preserving Historic Ornamental Plaster
Preservation Brief 37: Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing

3.3.3 Wood

Some buildings within the Historic District have wood elements such as wood frame windows, pilasters, pediments, fixed shutters, and rafters.

Wooden features may exhibit the following conditions: deteriorating material, sealing, paint, eaves, or trim due to weathering. Where maintenance, repair or alteration of wood is to be performed, the guidelines below should be followed.

Guidelines for Wood:

1. Evaluate the overall condition of the wood to determine the extent of protection and maintenance required.

2. Repair wood features by patching, piecing-in, consolidating, or otherwise reinforcing the wood using recognized preservation methods. Repair may also include the limited replacement in kind, or with compatible substitute material, of those extensively deteriorated or missing parts of features where there are surviving prototypes such as brackets, moldings, or sections of siding.

3. Design and install a new wood feature such as a cornice or doorway when the historic feature is completely missing. This should be an accurate restoration using historical, pictorial, and physical documentation. Where documentation does not exist, a new design that is compatible with the size, scale, material, and color of the historic building may be used.

4. Apply compatible paint coating systems following proper surface preparation. Sandblasting shall not be used to prepare or clean historic wood exterior elements. Paint shall match existing surface thickness.

5. It is recommended, but not required, that the building be repainted with colors that are historically appropriate to the building and the Historic District.

References:[5]
Preservation Brief 6: Dangers of Abrasive Cleaning to Historic Buildings
Preservation Brief 10: Exterior Paint Problems on Historic Woodwork
Preservation Brief 13: The Repair of Historic Wooden Windows
Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors

[5] Preservation Briefs are available at the National Park Service http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

3.3.4 Architectural Metals

Some buildings within the Historic District have elements of architectural metal such as cast iron, steel, copper, aluminum, and zinc. These features include façade elements, columns, canopies, windows, stairways, rails, doors, and hardware.

Architectural metal features may exhibit weathering and corrosion. Where maintenance, repair or alteration of metal is to be performed, the guidelines below should be followed.

Guidelines for Architectural Metals:

1. Identify, retain, and preserve architectural metal features and their finishes and colors. Metal features include columns, capitals, window hoods, canopy cladding or fascia, or stairways that are important in defining the overall historic character of the building.

2. Clean architectural metal, when necessary, with gentle nonabrasive cleaning methods to remove corrosion. Sandblasting shall not be used to clean historic metal surfaces.

3. Apply appropriate paint or other coating systems after cleaning in order to decrease the corrosion rate of metals or alloys.

4. Repair architectural metal features by patching, splicing, or otherwise reinforcing the metal. Repairs may also include the limited replacement in kind, or with a compatible substitute material, of those extensively deteriorated or missing parts of features when there are surviving prototypes such as porch balusters, steel sash windows, or porch cresting.

5. Design and install a new architectural metal feature such as an entry door or sheet metal cornice when the historic feature is completely missing. It may be an accurate reconstruction using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.

6. If originally painted, it is recommended, but not required, that the architectural metals be repainted with colors that are historically appropriate to the building and the Historic District.

References:[6]

Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors

[6] Preservation Briefs are available at the National Park Service http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

3.4 Exterior Features

3.4.1 Doors, Entrances, and Porches

Doors, entrances, and porches are often the principal features of historic buildings, particularly when they occur on primary elevations. Their functional and decorative features, such as the type of door, steps, balustrades, and entrances or porches are extremely important in defining the overall historic character of a building. Their retention, protection, and repair should always be carefully considered when planning any maintenance or alteration work.

The current inventory of entry doors varies per building. Stage doors, secondary or utility doors are generally solid panel wood or metal clad.

Doors and porches are subject to weathering and deterioration as are their associated attachments, flashing and hardware. Where maintenance, repair or alteration of doors, entrances, and porches is to be performed, the guidelines below should be followed.

Guidelines for Doors, Entrances and Porches:

1. Identify, retain, and preserve entrances and their functional and decorative features that are important in defining the overall historic character of the building such as doors, transoms, sidelights, pilasters, entablatures, columns, balustrades, and stairs.

2. Protect and maintain the masonry, wood, and architectural metal that comprise entrances and porches through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems, replacement of broken glass, and replacement of deteriorated sealants or glazing compounds.

3. Repair entrances and porches by reinforcing the historic materials. Repair will also generally include the limited replacement in kind, or with compatible substitute material, of those extensively deteriorated or missing parts of repeated features where there are surviving prototypes such as balustrades, cornices, entablatures, columns, sidelights, and stairs.

4. Design and construct a new entrance or porch if the historic entrance or porch is completely missing. It may be a reconstruction based on historical, pictorial, and physical documentation; or a new design that is compatible with the historic character of the building.

5. Design and install additional entrances or porches where required for the new uses in a manner that preserves the historic character of the building. In general, such alterations should be limited to non-character defining elevations. New entrances and porches shall be compatible and may be of contemporary design provided that they do not destroy character-defining features. To the extent feasible, new entrances and porches shall be reversible.

References:[7]
Preservation Brief 10: Exterior Paint Problems on Historic Woodwork
Preservation Brief 27: The Maintenance and Repair of Architectural Cast Iron
Preservation Brief 44: The Use of Awnings on Historic Buildings: Repair, Replacement and New Design

3.4.2 Windows

The type and size of window openings are important in defining the overall historic character of a building. Their retention, protection, and repair should always be carefully considered when planning rehabilitation work.

Wood sash, wood multi-light casement, steel multi-light casement, awning, and fixed metal windows are all represented within the Historic District. Double-hung, casement or fixed wood windows are typical of the smaller residential scale structures. Some windows feature decorative wood shutters.

Metal openings are subject to corrosion, while wood windows or doors may wear out from hard use, warping, or settling. Glazed openings may shatter. Where maintenance, repair or alteration of windows is to be performed, the guidelines below should be followed.

Guidelines for Windows:

1. Identify, retain, and preserve historic window features that are important in defining the overall historic character of the building. Such features include frames, sash, muntins, glazing, sills, heads, hoodmolds, and exterior shutters.

2. Protect and maintain the wood and architectural metal, which comprise the window frame, sash, muntins, and surrounds through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems.

3. Make windows weathertight and improve thermal efficiency by re-caulking and replacing or installing weatherstripping.

4. Design and install new windows when historic windows (frame, sash, and glazing) are completely missing, have been replaced with non-original materials, or are too deteriorated to repair. The replacement windows shall be an accurate reconstruction using in-kind materials based on historical, pictorial, and physical documentation.

5. Replace glass with non-reflective glass to match historic configuration. Double-glazing is permitted if it is not reflective or solar glass.

References:[6]
Preservation Brief 3: Conserving Energy in Historic Buildings
Preservation Brief 9: The Repair of Historic Wooden Windows

[7] Preservation Briefs are available at the National Park Service http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

Preservation Brief 13: The Repair and Thermal Upgrading of Historic Steel Windows
Preservation Brief 44: The Use of Awnings on Historic Buildings: Repair, Replacement and New Design

3.4.3 Roofs

The roof, with its shape (flat, gabled, or shed), features, size, color and patterning of materials (wood shingles, composition) is a contributing factor in defining the building's overall historic character. In addition to the design role it plays, a weathertight roof is essential to the preservation of the entire structure. Thus, protecting and repairing the roof is a critical aspect of a rehabilitation project.

Several different types of roofs exist in the Historic District today. The most common pitches are flat, gabled, shed, and hipped. Coverings include wood shingles, asphalt shingles, composition roll roofing, and red tile. Where maintenance, repair or alteration of roofs is to be performed, the guidelines below should be followed.

Guidelines for Roofs:

1. Protect and maintain a roof by cleaning and refinishing coping, cleaning the gutters and downspouts, and replacing deteriorated flashing. Roof sheathing should also be checked for proper venting to prevent moisture condensation and water penetration, and to insure that materials are free from insect infestation.

2. Provide adequate anchorage for roofing material to guard against wind damage and moisture penetration.

3. Repair a roof by reinforcing the historic materials which comprise roof features, including cornice lines, exposed rafter tails, brackets, and soffits. Replacement or repairs should be in-kind, or with compatible substitute material. When replacing the roof, remove existing membrane down to wood decking. Inspect exposed decking and replace deteriorated wood members.

4. Install mechanical service equipment on the roof so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.

5. Repair broken gutters and downspouts. If repair is not possible, replace in kind to match existing. Re-solder broken joints. Where missing, replicate historic gutters and downspouts or provide compatible new gutters and downspouts.

References:[8]
Preservation Brief 4: Roofing for Historic Buildings
Preservation Brief 19: The Repair and Replacement of Historic Wooden Shingle Roofs
Preservation Brief 30: The Preservation and Repair of Historic Clay Tile Roofs

[8] Preservation Briefs are available at the National Park Service http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

3.5 Health and Safety Code Compliance

It is often necessary to make modifications to an historic building so that it can comply with current health, safety and code requirements. Such work needs to be carefully planned and undertaken so that it does not result in a loss of interior or exterior character-defining spaces, features, and finishes.

Guidelines for Code Compliance

1. Identify the historic building's character-defining spaces, features, and finishes so that code-required work will not result in their damage or loss.

2. Comply with health and safety codes, including seismic codes and barrier-free access requirements, in such a manner that character-defining spaces, features, and finishes are preserved to extent feasible.

3. Use of the current edition of the California Historical Building Code.

4. New structural or seismic reinforcement members, including anchor bolts, shall be hidden from view wherever possible.

References:[9]
Preservation Brief 32: Making Historic Properties Accessible
Preservation Brief 37: Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing
Preservation Brief 41: The Seismic Retrofit of Historic Buildings: Keeping Preservation in the Forefront

[9] Preservation Briefs are available at the National Park Service http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

3.6 Additions and Relocation

3.6.1 Additions

Additions to buildings can change their historic appearance. Therefore, an exterior addition should be considered only after it has been determined that the new use cannot be successfully met by altering non-character-defining interior spaces. In designing an addition, consideration should be given to the new use and the appearance of other buildings in the historic areas of the Historic District.

Guidelines for Additions:

1. New additions should be designed and constructed so that the exterior character-defining features of the historic buildings are not radically changed, obscured, damaged, or destroyed in the process of rehabilitation. To the extent feasible, new additions shall be reversible.

2. New design should always be compatible yet clearly differentiated so that the addition does not appear to be historic.

3. Design for the new work may be contemporary or may reference design motifs from the historic building.

4. The new design should be compatible in terms of mass, materials, relationship of solids to voids, and colors.

References:[10]
Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns.

3.6.2 Relocations

If retention of a contributing building at its present site is not feasible, relocation of the structure to another appropriate location within the studio lot shall be considered. Historically, there is a precedent for the relocation of structures both to and within the lot. While relocation of historic structures is often inappropriate to individual buildings in a community, there is strong justification for this option in the context of movie studio operations.

Guidelines for Relocation:

1. Relocate the building in an appropriate setting in order to retain its integrity of design, materials, feeling and association.

[10] Preservation Briefs are available at the National Park Service http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

2. A relocated structure should still have an orientation, setting and general environment that is comparable and compatible, to the extent feasible, with the property's significance.

3.7 Documentation Procedures

Before undertaking a project to alter, relocate, or demolish any contributing building, or the backlot site, a consultant who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History and/or Historic Architecture shall first conduct a review of the impact of such action on the Historic District and the extent to which such action conforms to the provisions of the Plan.

Prior to any alteration, relocation, or demolition of any contributing building or the initial alteration, relocation, or demolition of the backlot site, an Historic Structures Report will be prepared. The report shall document the significance and physical condition of all contributing buildings and the backlot site through photographs, text, and existing drawings.

One original copy of the documentation as specified below shall be assembled and offered to each of the following:

a) One set shall be sent to the Southern California Information Center at California State University Fullerton.

b) One set shall be offered to and, if accepted, deposited in the archives of the Los Angeles Conservancy.

c) One set shall be offered to and, if accepted, deposited in the archives of Hollywood Heritage.

d) One set shall be offered to and, if accepted, deposited in the archives of the City of Los Angeles Office of Historic Resources.

e) One set shall be offered to and, if accepted, deposited in the Central Library of the Los Angeles Public Library.

Guidelines for Documentation:

Documentation shall include:

1. A brief written historic and descriptive report completed in narrative format, including an architectural data form for each contributing building

2. A site plan showing the location of the building. This site plan shall include a photo key.

3. A sketch floor plan shall accompany each architectural data form.

4. Large format (4" x 5" negative or larger) photographs in accordance with Historic American Buildings Survey (HABS) guidelines. Views shall include contextual views, all exterior elevations, detailed views of significant exterior architectural features, and interior views of significant historical architectural features or spaces (if any).

5. Field photographs (35 mm) based on HABS guidelines. Views should correspond to those in the large format photographs.

6. The report shall include available historic photographs and historic or current plans.

7. In lieu of measured drawings, the overall setting of the Historic District, the backlot site, and any contributing buildings to be demolished may be recorded using digital photography, scanned photographs, and imagery to establish a digital documentation database.

4.0 GUIDELINES FOR NEW CONSTRUCTION

4.1 Introduction

As Universal City evolves within the NBC Universal Evolution Plan, its built form and open space will be altered by new construction. The integrity of the Historic District can be retained through the application of criteria established for the specific features and function of this site.

This section provides criteria for new construction within the Historic District and has the following purposes and uses:

- To ensure that new construction within the Historic District is compatible with the historic character of the Historic District and its contributing resources;
- to ensure that the integrity of the Historic District is maintained;
- to mitigate any potential impact on the Historic District from new construction to a level of insignificance under the CEQA; and
- to be used by planners, architects, designers, owners, and users as a reference to successfully integrate new buildings, landscape, circulation and any other additions within the Historic District while meeting the functional and programmatic requirements of continued, adaptive, and new uses within the Historic District.

The Secretary of the Interior's Standards for Rehabilitation (the Standards) provide general guidelines for treating a range of historic resources. Standards 9 and 10 are written for additions to existing buildings. Therefore, they are relevant to an approach for new construction within historic districts, and provide the underlying principals for the criteria provided here. Standards 9 and 10 are as follows:

New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment. (Standard 9)

New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired. (Standard 10)[11]

For the purposes of this section, the Historic District has been divided into three areas in order to respond more fully to the variety of contributing resources and character-defining features contained within the Historic District. These three areas are the Frontlot, the Midlot, and the Backlot. Specific guidelines for each area are contained in the following pages.

The exigencies of motion picture and television production may necessitate modifications and/or alterations to contributing buildings within the Historic District that do not conform to the guidelines set forth in the Plan. There is historic precedent for the modification of buildings in the Historic District to accommodate motion

[11] The Secretary of the Interior's Standards for Rehabilitation & Guidelines for Rehabilitating Historic Buildings, U.S. Department of the Interior, National Park Service, Cultural Resources, Preservation Assistance Division, Washington, D.C. 1992

picture and television productions. Modifications to contributing buildings that may not conform to the Plan guidelines are permitted provided that: (a) the building is documented prior to modification; and (b) the building is rehabilitated to its condition prior to modification within twenty-four (24) months after the completion of the production-related use of the contributing building.

4.2 New Construction: Frontlot

4.2.1 Overview of the Frontlot

The Frontlot comprises the western portion of the Historic District and represents Universal Studio's historic core. Dominated by stage buildings, the Frontlot contains the largest buildings within the Historic District. Existing uses are primarily technical support functions such as a Foley stage, editing facilities, and dressing rooms, as well as office buildings.

In addition to providing production and support facilities for film and television, the Frontlot is currently an important part of the Universal Studios Hollywood Studio Tour. Large-scale promotional signage affixed to various building facades is an integral part of the Tour.

4.2.2 Contributing Resources and Character-defining Features

Stage Buildings

The Frontlot contains twenty-seven (27) buildings of which thirteen (13) are classified as contributing resources. Nine (9) of the contributing resources located in the Frontlot area are stage buildings. These are buildings 2223, 2225, 2228, 2230, 2263, 2265, 2268, 2345, and 3251. The stage buildings are generally wood and/or steel framed structures with exterior walls finished by conventional painted sand finish cement plaster (stucco). They are typically aggregated into clusters of two or four buildings separated by proportionately narrow circulation spaces used for vehicular access and parking aprons. The existing color patterns in this area are simple, neutral field colors on large plain surfaces, with dark accents at the bottom skirts and openings (doors and windows).

Character-defining features:

1. Functional design, devoid of decorative features.
2. Rectangular footprint.
3. Tall walls without articulation of levels.
4. Flat or low pitched roofs.
5. Flat parapets or simple eaves without wide overhangs.
6. Exposed structural system elements such as trusses, columns, and beams.
7. Membrane roofs.
8. Painted cement plaster and metal panel walls.
9. Few openings; characteristic openings are large doorways for stage loading, personnel doors, and small windows for occasional office spaces.
10. Painted wood or ferrous metal doors and windows.
11. Unscreened and unburied electrical system equipment and distribution.
12. Unscreened HVAC and plumbing systems equipment and distribution, on the ground, at walls, and on roofs.

13. Neutral field colors with darker accent colors associated with functional features or uses (e.g., skirts, trim, doors, windows).
14. Functional, efficient lighting sources and fixtures.

Utility Buildings

The Power House, building 2243, is a contributing resource. This purely functional concrete structure is contiguous with two stage buildings and is consistent with the utilitarian, industrial pattern that characterizes the stages.

Office Buildings

Two of the contributing resources located in the Frontlot area are office buildings. Buildings 2250 and 2252 are two-story, wood frame buildings with painted smooth-troweled cement plaster (stucco) finish. Their proportions, doors, windows, and trims have aspects of the American Colonial Revival architectural style. Both building 2250 and 2252 were relocated from another location to their current pads. The relocation of buildings is understood as a defining characteristic of motion picture studios and is a character-defining feature of the Historic District, primarily for smaller buildings.

Character-defining features:

1. Residential and small office character with modest decorative details.
2. Rectangular footprint.
3. Low scale.
4. Flat or low pitched roofs.
5. Flat parapets.
6. Structural system not expressed.
7. Membrane roofs.
8. Painted cement plaster walls.
9. Openings for doors and window in residential scale.
10. Residential scaled porches with gabled roofs, pediments, and wood posts.
11. Fixed louvered wood shutters at windows.
12. Painted wood or ferrous metal divided light doors and windows.
13. Screened and hidden electrical system equipment and distribution.
14. Screened HVAC and plumbing systems equipment and distribution.
15. Neutral field colors with light trim colors and dark doors and sash.
16. History of building relocation.

Circulation and Open Space

Spaces between and around most of the buildings within the Frontlot provide for circulation and flexible use rather than light, air and amenities. The utilitarian and flexible needs of the Frontlot requires that open space also be used for loading, staging, temporary storage, and other activities that support production, in addition to circulation. Because of these requirements, open space between buildings is in general characterized by utilitarian paving and plants that are limited to small areas of ground cover, ornamental shrubs and trees. The regular arrangement of large rectangular buildings forms a grid pattern.

Character-defining features:

1. Rectangular grid pattern of open space between stages.
2. Linear open spaces that are proportionally narrower than building heights at the stages.
3. Utilitarian paving (e.g., asphaltic concrete, uncolored gray concrete without patterns and insets).
4. Minimal or no landscape at stages.
5. Landscaping, including sod, shrubs, planting beds, and trees at offices.
6. Functional, efficient lighting sources and fixtures.
7. Unscreened HVAC, electrical, and plumbing equipment and distribution.

Setting

The edges of the different areas of the lot do not have consistent edge conditions. The different areas have different characteristics; however, the transitions are abrupt.

Character-defining features:

1. Movie studio building types and uses.
2. Juxtaposition of different areas of building types adjacent to each other at circulation spaces without visual buffers, screens, and transitions from one area to another area.

4.2.3 General Criteria for New Construction within the Frontlot

a. Comply with height limits, land use, and other provisions in the proposed Universal Studios Specific Plan, including alterations and additions.
b. Select sites for new construction within the Frontlot that minimize loss of historic character by retaining and recalling the list of character-defining features.
c. Locate new construction within the Frontlot so as to retain the pattern and limits of existing circulation spaces and building pads.
d. The character of new buildings shall substantially recall the character of adjacent predominant building types, such as large rectangular footprints with tall, flat, unarticulated walls adjacent to sound stages.
e. Retain multi-purpose hardscaped spaces between buildings, except adjacent to office buildings.
f. Signage and promotional graphics, of any quantity, scale, at any location (ground, wall, monument, tower, roof), design (flat, three dimensional), media, lighting source, static, or dynamic, is allowed.
g. Construct attached exterior additions built as signage, film sets or for studio tour functions in such a manner that they are reversible and do not result in substantial loss of the physical integrity of a contributing building.

4.3 New Construction: Midlot

4.3.1 Overview of the Midlot

The Midlot is the central portion of the Historic District and is composed primarily of bungalows. “Bungalow” is the common studio term for smaller buildings designed and constructed in a residential style built to accommodate office uses. Studio bungalows are found in a variety of styles, configurations, and materials.

Within the Historic District, Bungalows are predominantly aggregated into clusters of small buildings organized around surface parking lots and some landscape features. The western-most cluster is bounded by the River Road to the north and is sited at a lower elevation than the eastern-most cluster. The change in grade defines the two clusters. The form and architectural style of the bungalow buildings, their clustered arrangement, and their landscaping, recall the general characteristics of a twentieth-century Los Angeles residential neighborhood.

The Studio Tour passes by the Midlot, but in general does not enter the area or utilize any of its spaces and buildings directly for attractions and promotion.

4.3.2 Contributing Resources and Character-defining Features

Office/Service Bungalows

The Midlot contains thirty-three (33) buildings of which twenty-six (26) are contributing resources. Twenty-four (24) of the contributing resources located in the Midlot area are office bungalows. These are buildings 4111, 4113, 4131, 4132, 4133, 4135, 4136, 4144, 4171, 4173, 4175, 5162, 5163, 5164, 5165, 5171, 5174, 5182, 5183, 5184, 5185, 5186, 5195, and 5196. All are single-story, wood-framed structures with wood or stucco finishes and an eclectic variety of architectural details that includes elements of American Colonial Revival, Moderne, and Minimal-Traditional styles.

Character-defining features include original window and door openings; steel, divided light casement windows; wood sash windows; front porches with pediment roof and wood columns; decorative wood door surrounds; wood fixed shutters; and decorative cornices. All contributing bungalows were relocated from another location to their current sites. The relocation of buildings is understood as a defining characteristic of motion picture studios and is a character-defining feature of the Historic District.

Character-defining features:

1. Residential and small office character with modest decorative details.
2. Rectangular footprint.
3. Low scale.
4. Flat or low pitched roofs.
5. Overhanging eaves; open or boxed.
6. Structural system in general not expressed
7. Membrane or composition shingled roofs.
8. Painted cement plaster walls.
9. Openings for doors and window in residential scale; corner windows.

10. Residential scaled porches with gabled or flat roofs, pediments, and wood posts.
11. Painted wood or ferrous metal divided light doors and windows.
12. Screened and hidden electrical system equipment and distribution.
13. Screened HVAC and plumbing systems equipment and distribution.
14. Neutral field colors with light trim colors and dark doors and sash.
15. History of building relocation.
16. Minimal, wall-mounted signage, used for building number, wayfinding, and identification of occupants.

Office Buildings

Two of the contributing resources located in the Midlot area are office buildings (Buildings 4115 and 4118). Both are two-story, wood frame buildings with smooth troweled cement plaster cladding. Character-defining features include original window and door openings; steel, multi-light casement windows; front porches with pediment roof and wood columns; wood fixed shutters; and decorative cornices. Both building 4115 and 4118 were relocated from another location to their current sites. The relocation of buildings is understood as a defining characteristic of motion picture studios and is a character-defining feature of the Universal Studios Historic District.

4.3.3 General Criteria for New Construction within the Midlot

a. Comply with the proposed height limits, setbacks, land uses and other provisions in the proposed Universal Studios Specific Plan, including alterations, additions, and new buildings.
b. Select sites for new construction within the Midlot that minimize loss of historic character by retaining and recalling the list of character-defining features.
c. Locate new construction within the Midlot so as to retain the pattern and scale of existing circulation spaces, decentralized and building-associated parking areas, and informally arranged building pads.
d. Retain landscaped open spaces, including turf and trees; the retention of shrubs and planting beds is optional.
e. Graphics and signage are allowed. This type of signage may be two or three dimensional, illuminated, and animated. Such signage may be attached to building walls, but shall not extend beyond building wall corners and eaves, or cover windows and doors. Such signage may be freestanding, but shall not exceed the height or width of immediately adjacent buildings as measured from the highest finished grade of such buildings.
f. Construct attached exterior additions built as film sets or for studio tour functions in such a manner that they are reversible and do not result in substantial loss of the physical integrity of a contributing building.
g. Hide or screen HVAC, electrical, and plumbing equipment and distribution.
h. Exterior lighting shall be low-intensity, hidden in landscaping (e.g., tree-mounted), at or below eye-level with a low cut-off to eliminate visibility of direct lighting sources except for luminaries with diffusing screens wall-mounted at exterior doors or on posts at exterior pedestrian walkways.

i. Existing buildings that were previously moved may be moved again to form new building groups that add compatible new construction while retaining the character-defining features listed for the Midlot.

4.4 New Construction: Backlot

4.4.1 Overview of the Backlot

The Backlot comprises the eastern portion and the largest land area of the Historic District. The entire studio, including the Historic District, serves as a shooting location according to need and fit. The Frontlot stage buildings are purpose-built for interior production. Midlot buildings are built for office functions. The Backlot is primarily used for exterior shooting and attractions constructed as part of the studio tour. Accessory uses in this area include technical support, film vaults, storage, toilets, and dressing rooms.

Sets are arranged along irregular linear (street or road-like) and nodal (plaza or courtyard-like) spaces that are designed for shooting films. The arrangements in general create a number of distinct visual environments that represent particular times and places. In some cases the sets are shallow facades with an unfinished rear. In other cases accessory uses are placed in buildings behind the set facades. Studio tour attractions are also placed in purpose-built structures that are disguised as functional structures that resemble technical support or stage buildings.

The Backlot topography in general slopes upward from north to south. The topography has more slope than the other zones in the Historic District. The topography is utilized in the arrangements of sets, open spaces, and the studio tour routes.

The built fabric of the Backlot does not materially represent the history of this portion of the Historic District. The reconstruction, refinishing, and modification of sets is characteristic of film production and set pieces have been continually reconstructed throughout the Studio's history. Major fires, most recently in 1990 and 2008, have also destroyed substantial portions of the Backlot sets which were reconstructed or replaced as needed. Set reconstruction will continue to meet current market demand. These changes are a constant in the history of the Backlot and an essential characteristic of the studio business.

The evolution of the Backlot includes a consistent pattern of the major open spaces, linear and nodal, among the sets and accessory buildings.

4.4.2 Contributing Resources and Character-defining Features

Circulation

The major open spaces, linear and nodal, which appear as a circulation pattern of streets, roads, and trails that connect and delineate sub-areas within the Backlot and provide access to storage and support facilities, are character-defining. These spaces have been graded, re-aligned, and re-paved many times, but the basic circulation diagram is substantially intact from Universal Studio's historic period.

Sets

The use of the Backlot in part for sets is a character-defining feature of the Historic District.

Film Vault

The Backlot contains a film vault (building 6237) that is a contributing building to the Historic District. The film vault is a two story, utilitarian building of steel and concrete construction. Character-defining features of the film vault include the simple, utilitarian articulation of the facades, original door openings, second story cantilevered steel walkway, and exposed exterior system pipes.

4.4.3 General Criteria for New Construction within the Backlot

a. Comply with the proposed height limits, setbacks, land uses and other provisions in the proposed Universal Studios Specific Plan, including alterations, additions, and new buildings.
b. Substantially retain the historic circulation diagram, linear and nodal. This diagram is currently found in streets, roads, and trails.
c. Repair, replace, redesign, dress, and landscape sets as needed for production or attractions.
d. Integrate new construction for tour attractions into set environments or finish to resemble stage buildings.
e. Where feasible, use accessory buildings and other uses as set pieces along character-defining circulation spaces. This can be implemented by landscaping, topography, and designing the exterior of accessory buildings to appear as part of a set.
f. Signage for any purpose is allowed, including promotion. Signage should be integrated into sets and attractions to the extent feasible. There is no limitation as to size, scale, medium, illumination, or any other characteristic. This does not limit the use of any building identification, safety, or code-required signage.
g. Retain the general topography to the extent feasible.

APPENDIX A

The Secretary of the Interiors Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

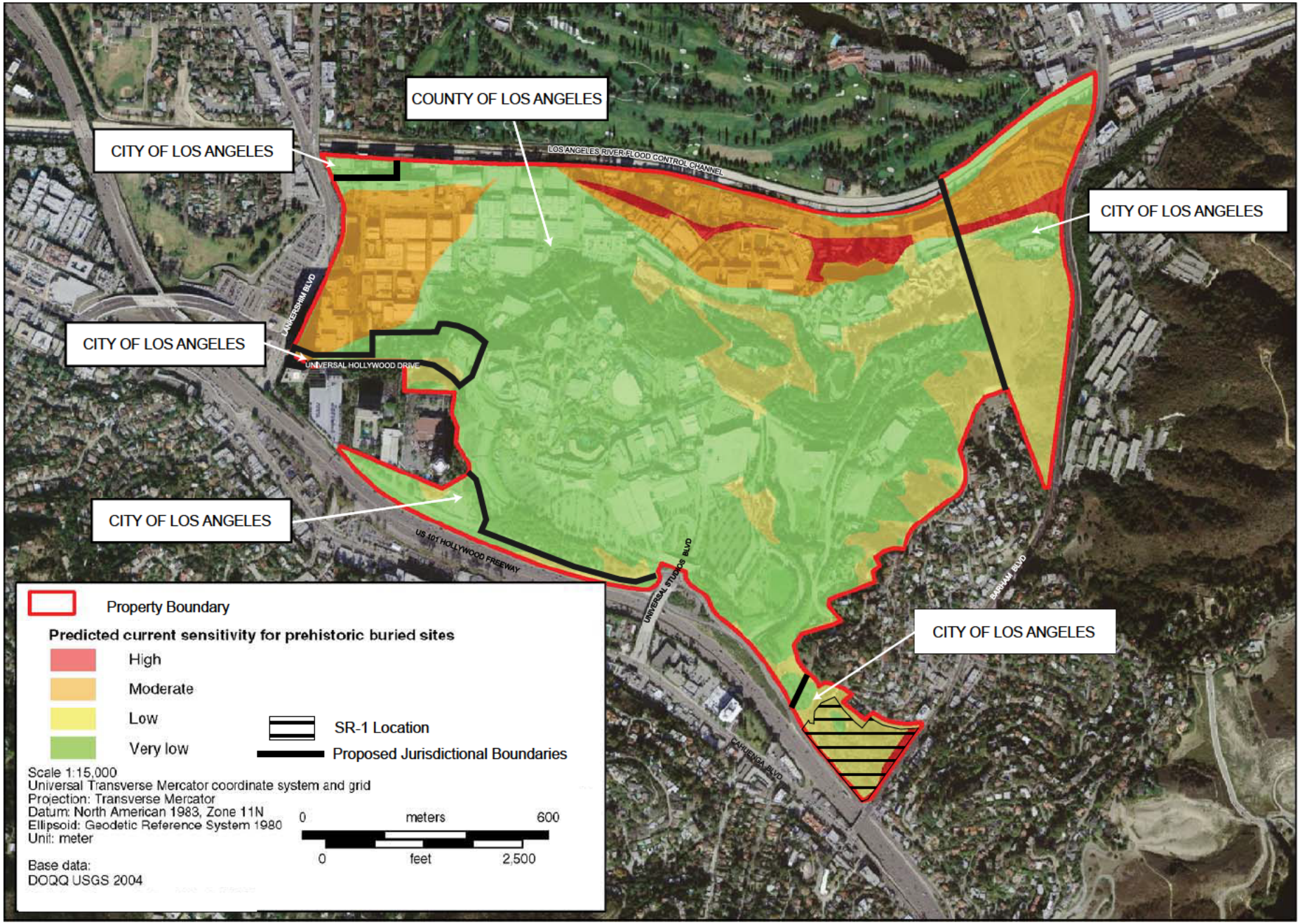
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.



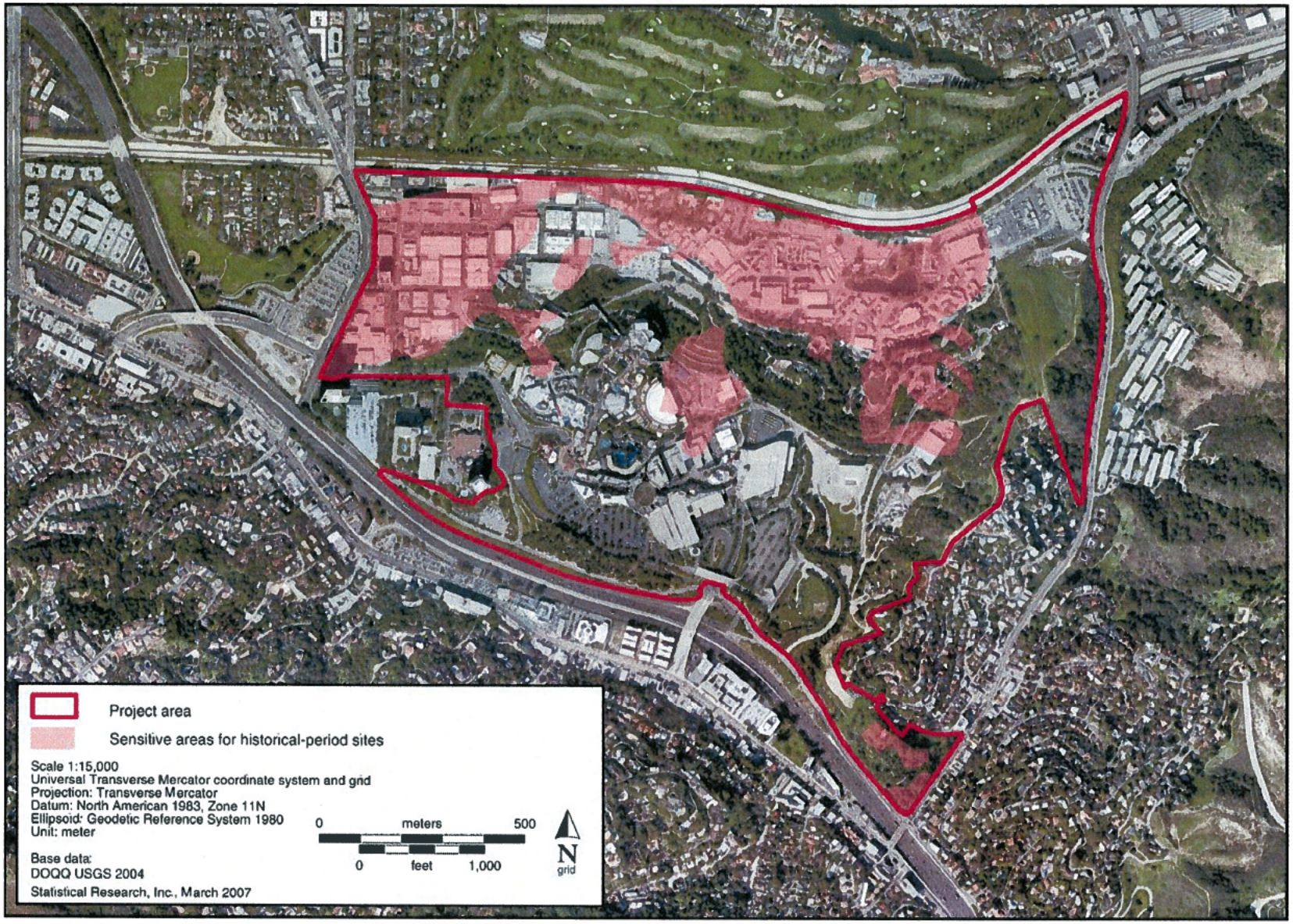
Source: Statistical Research, Inc., March 2010; Matrix Environmental 2012.

matrix environmental

NORTH

Attachment H

Predicted Sensitivity of Project Site for Buried Sites



Source: Statistical Research, Inc., March 2010.

matrix environmental

NORTH

Attachment I
Predicted Sensitivity of
Project Site for Historic Period Sites