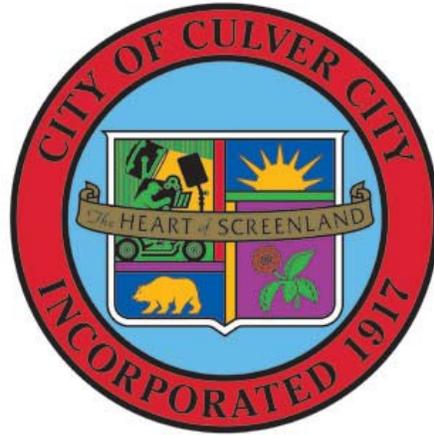


Culver CITY



**EL NIÑO
PREPARATION PLAN
2015/16**

October, 2015



EL NIÑO PREPARATION PLAN FOR 2015/16

PURPOSE:

According to the Climate Prediction Center of the National Oceanic Atmospheric Administration, there is a greater than 95 percent chance of a strong El Niño lasting through the 2015/16 winter season, which typically brings with it sustained periods of heavy rainfall. The City of Culver City (City) has created the following plan to guide the community on how to prepare for the impacts of El Niño in addition to outlining the City's strategy in response to the storms.

The City has created the www.culvercity.org/elnino webpage to educate and inform the public. The webpage provides up-to-date information on the progress of the El Niño conditions along with information on how to prepare for severe rain storm events.

I. HOW YOU CAN PREPARE:

Checklist for Property Preparedness:

1. **Yard Clean-Up:** Make a general inspection of your entire yard area for yard debris, outdoor furniture or other objects that could be blown by storm winds. Securing loose items to the ground or removing and storing them indoors may prevent having to collect these items from your roof or from your neighbors' yards.
2. **Drains and Gutters:** Make sure all drains and gutters are cleared of debris and are functioning properly before the storm season. If buildings do not have gutters and drains, consider having them installed.
3. **Roofs:** Inspect your roof (or hire a roofing contractor) to check for loose tiles, loose shingles, or to look for holes or other signs of trouble that indicate your roof may need immediate repair.
4. **Retaining Walls:** Visually inspect all retaining wall drains, surface drains, culverts, ditches, etc. for obstructions or other signs of malfunction before the storm season as well as after each storm event.
5. **Slopes:** Visually inspect all sloped areas for signs of gullyng, surface cracks, slumping etc. Also inspect patios, retaining walls, garden walls, etc. for signs of cracking or rotation. Such signs might be indications of slope movement; if you notice any problems, it would be wise to have the site inspected by a geotechnical engineer. See Exhibit C for links to lists of geotechnical firms. To learn more about



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how to prepare, read the *Homeowners Guide for Flood, Debris Flow and Erosion Control* by visiting:

<https://www.piersystem.com/external/content/document/2511/455983/1/STORM%20BOOKLET%202010.pdf>.

6. **Bare Ground:** Make sure your yard does not have large bare areas which may be a source for mudflows during a storm event. Put down mulch and establish many native plants to vegetate these bare areas before the storm season.
7. **Storm Drains:** Visually inspect nearby storm drains during storm events; if obstructed, clear the material from the drain, or request that the City's Public Works Department clear the obstruction, by calling 310-253-6420.
8. **Tree Trimming:** Trim trees and landscaping as needed to ensure that branches and limbs are clear of your structure, driveway and overhead power lines (Contact your power company -- [Southern California Edison](#) or the [Los Angeles Department of Water and Power](#) to trim trees that have grown over or around power lines on your property).

If, after taking practical steps to prepare your property for winter storms, you still have concerns about slope stability, flooding, mudflows, etc., consider stockpiling sandbags and plastic sheeting. The sandbags may be stacked to form a barrier to keep water from flooding low areas. Plastic sheeting may be placed on slopes and secured with sand bags to prevent water from eroding the soil. Below is an image of how to properly stack sandbags. To learn how to design a sandbag layout based on their specific application, visit: <https://dpw.lacounty.gov/wmd/HomeOwners/sandbags.cfm>





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Emergency Plan:

Prepare an emergency plan and build a disaster supply kit (for more information, visit: <http://www.culvercity.org/emergencyprep>) Remember that landlines and wireless cell phone towers may not be operational or may be busy during a disaster and it may be easier to call long distance, so designate an out-of-state friend or family member as a “check-in-contact” for everyone to call to give an update as to their whereabouts and status. In order for this emergency/disaster communication plan to work, your loved ones need to know who your “check in-contact” is and your “check-in-contact” must know that he/she has been designated as such. For more information visit the above-referenced website.

1. This El Niño season is predicted to bring periods of long, recurrent storms that may make it difficult to run your everyday errands. Make sure you have an adequate supply of food, water and medicine on hand so you don't have to leave home during a storm to replenish your supply.
2. Stock up on pet food and medicine, and make sure pet ID tags are up to date.
3. Register your cell phone, email, and/or office number with the City's emergency alert system (Nixle) by visiting <http://www.nixle.com>. By registering, you will receive timely information regarding emergency notices in the manner you desire.
4. Sign up with Alert LA to receive emergency notifications from the County of Los Angeles by visiting: <http://portal.lacounty.gov/wps/portal/alertla>
5. During a disaster, first responders may have other priorities that may delay their ability to get to you and your neighborhood. The City's Community Emergency Response Team (CERT) members are trained to provide assistance to the community during a disaster. Consider registering with [CERT](#) to learn more about disaster preparedness, first aid skills and to be trained as a responder for your neighborhood. <http://www.culvercity.org/en/Government/PublicSafety/Cert.aspx>
6. Contact your elderly neighbors to see if they need any assistance with their El Niño preparations.
7. Avoid visiting flood control channels during severe storm events. Even though the Ballona and Centinela flood control channels, along with their tributaries are designed to handle large volumes of storm water runoff, water may suddenly overflow their banks during severe rain storms that occur over an extended period.

Landslides, Mud and Debris Flows:

Any area composed of very weak or fractured materials resting on a steep slope may experience a landslide. Although the physical cause of many landslides cannot be removed, geologic investigations, good engineering practices, and effective



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enforcement of land-use management regulations may reduce landslide hazards. The United States Geological Survey (USGS) scientists continue to produce landslide susceptibility maps for many areas in the United States. In every state, USGS scientists monitor stream flows, noting changes in sediment load carried by rivers and streams that may result from landslides. The City's landslide and flood maps are included in Exhibit A of this plan and the County of LA slope stability and landslide maps are available at: <http://www.quake.ca.gov/gmaps/WH/landslidemaps.htm>.

II. CITY PREPARATIONS:

Fire Department:

1. Community Messaging: The Fire Department recently updated its webpage content, which now provides general disaster preparedness, flood and wildfire information. El Niño preparation messaging is already underway via social media channels. Weather updates and winter storm preparation messaging will be relayed via social media, Nixle and press releases prior to the rainy season.
2. Emergency Operation Center Staff Member Training: In September 2015, the Emergency Preparedness Division conducted two five-hour training sessions for Emergency Operations Center (EOC) staff members. The training included a review of EOC functions and practice scenarios involving flood disasters.
3. Swift Water Rescue Training: Prior to the start of the rainy season, the Fire Department will conduct refresher training for swift water rescues. This training will enable firefighters to safely and effectively extract victims from flood control channels during high water events.
4. Sandbag Supplies: The Fire Department will work with the Public Works Department to ensure there is an adequate amount of sand and sandbags for the public self-serve drive up area at Fire Station One. The sand and sandbags are provided to City residents for emergency flood and erosion control purposes only. Residents living in properties that are subject to flooding may obtain free sand and sandbags at any time from Fire Station One, located at 9600 Culver Boulevard. The sand and sandbags are stored next to the driveway/gate located on the north side of Irving Place. Residents may use the shovel, sand and sandbags provided to fill up to 25 of their own sand bags.



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Police Department:

The Police Department is actively involved in the following internal and external preparedness programs:

1. The Police Department's mutual aid officers have been in discussions with the Los Angeles County Sheriff's Department – Emergency Operations Bureau regarding sustainability and response options during high water events.
2. The network of mutual aid agencies are reaching out to one another to share information and resources.
3. The Police Department will be using sandbags in order to minimize the intrusion of water into the police headquarters facility, reviewing options for storing and parking of emergency vehicles and procuring emergency rations and lodging accommodations for on-duty personnel.
4. The emergency responsiveness of the Police Department is being enhanced by developing partnerships with private sector businesses and organizations.
5. Police Department staff members will participate in EOC activation drills and ICS training in conjunction with other city departments.
6. A list of critical facilities and a variety of evacuation/unification sites throughout the City has been prepared.

Public Works/Parks, Recreation and Community Services Department:

1. Storm Drain/Catch Basin Flooding: Staff members clear debris from all storm drains and catch basins just prior to the rainy season. During heavy downpours, however, some storm drains may experience momentary flooding. A map depicting those areas is included in Exhibit B of this plan. To curtail flooding, staff is visiting these and other areas frequently during heavy downpours to remove blockages to ensure water flow is maximized. Members of the community who observe storm drain blockages may report them to the City by calling 310-253-6420.
2. Sandbag Supplies: In addition to providing Fire Station One with a supply of sandbags for dispensing to the public, staff members will maintain a pallet full of



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sandbags for immediate use during emergencies (approximately 200 sandbags) in the Public Works Yard. The sandbags will be replenished as necessary throughout the rainy season. Residents living in properties that are subject to flooding may obtain free sand and sandbags at any time from Fire Station One, located at 9600 Culver Boulevard. The sand and sandbags are stored next to the driveway/gate located on the north side of Irving Place. Residents may use the shovel, sand and sandbags provided to fill up to 25 of their own sand bags.

3. Tree Limb Failures: The recent drought has weakened tree limbs, which may fail due to their weight from absorbing too much water. To report street or park tree limb failures call 310-253-6420.
4. Equipment Testing: Staff members are testing portable water pump equipment to ensure it is in good working condition and ready for immediate use. In addition, batteries in barricade lights are being tested and charged or replaced if necessary to make sure they are operational. Graders and dump trucks are being prepared to respond to areas vulnerable to flooding, slope collapse and storm debris.
5. Building and Park Facilities: Prior to the rainy season, staff will conclude their roof inspections (and perform repairs if necessary) to ensure they are in good condition, clear gutters of debris and make sure storm water pathways remain unobstructed.

Transportation Department:

The Transportation Department anticipates impacts from storms to its transit service operations as well as to its maintenance facility. Since the entire region will be impacted by these storms, deploying TransMAC (a mutual aid agreement with other transit agencies) may not be feasible. Transportation recognizes the need to be self-sufficient and to use resources that are immediately available within the City.

With regard to Culver CityBus operations, Transportation has evaluated alternative routes to determine detour options during flooding, especially in the lowest lying streets within the service area. Transportation also investigated areas along the routes subject to landslides and identified detours around them along with reviewing the emergency management plan with particular focus on evacuations and sheltering in place. All employees have been required to inspect their City-issued backpacks for completeness.

A full inspection of the Transportation facility was completed to ensure its readiness. Drains and rain gutters were cleared and possible areas of water accumulation or flooding were identified on the property. Fueling stations and facility generators were inspected and tested to ensure their full operability should power be lost.



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III. ADDITIONAL RESOURCES:

Federal:

- Center for Disease Control and Prevention – <http://emergency.cdc.gov/disasters/landslides.asp>
- National Oceanic and Atmospheric Administration (NOAA) – <http://www.noaa.gov>
- National Flood Insurance Program (NFIP) – <https://www.floodsmart.gov>
- U.S. Department of Homeland Security Federal Emergency Management Agency (FEMA) – <http://www.fema.gov>
- U.S. Forest Service – <http://www.fs.fed.us>
- U.S. Geological Survey (USGS) – <http://www.usgs.gov>
- USGS Debris Flow Maps – <http://pubs.usgs.gov/of/2003/ofr-03-475/>

State of California:

- Department of Conservation – <http://www.conservation.ca.gov>

County of Los Angeles:

- County of LA -- Office of Emergency Management – <http://lacoa.org>
- County of LA -- Department of Public Works – <http://dpw.lacounty.gov>
- County of LA -- Department of Public Works Coordinated Agency Recovery Effort (CARE) <http://www.dpw.lacounty.gov/care/>
- County of LA -- Fire Department – <http://fire.lacounty.gov>
- County of LA -- Sheriff's Department – <http://sheriff.lacounty.gov>
- County of LA – El Nino Preparation Plan – [English](#) - [Spanish](#) - [Chinese](#)

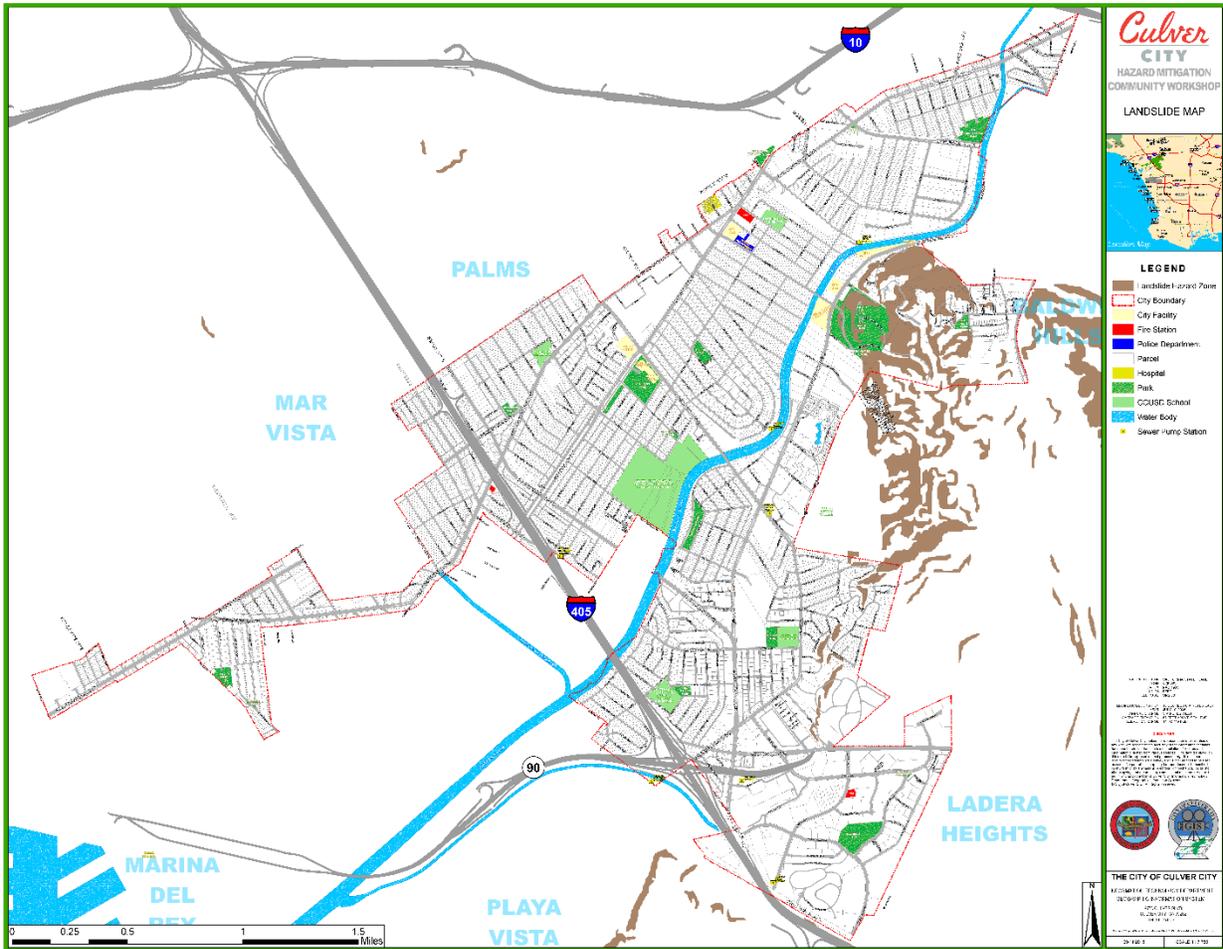
Other Organizations:

- American Red Cross – <http://www.redcross.org>
- City of Culver City – <http://www.culvercity.org/elnino>
- Geological Society of America – <http://geology.com>
- National Landslide Hazards Mitigation Strategy – <http://pubs.usgs.gov>
- Flood Resolutions USA – <http://www.floodresolutionsusa.com>



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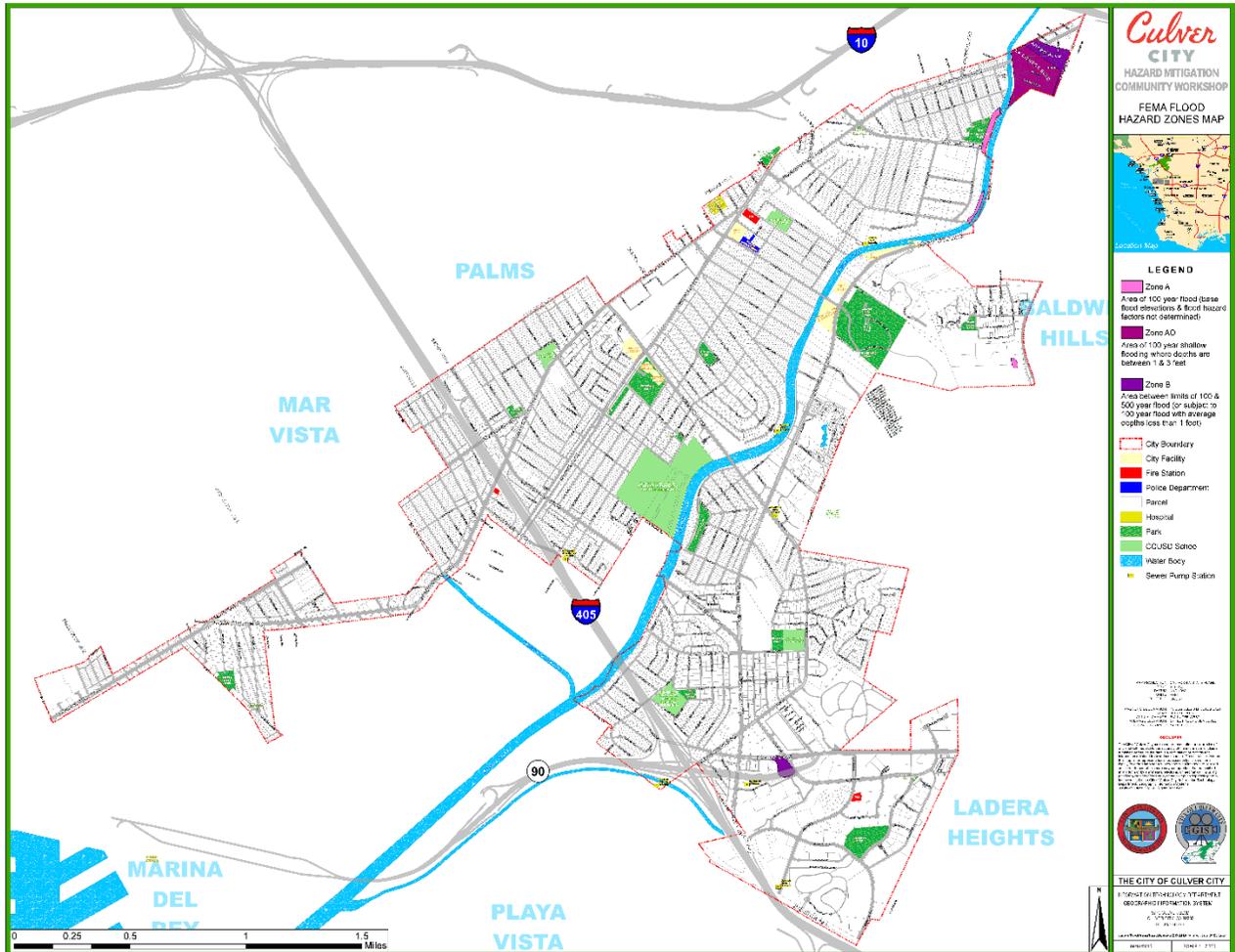
EXHIBIT A-1 CULVER CITY LANDSLIDE MAP





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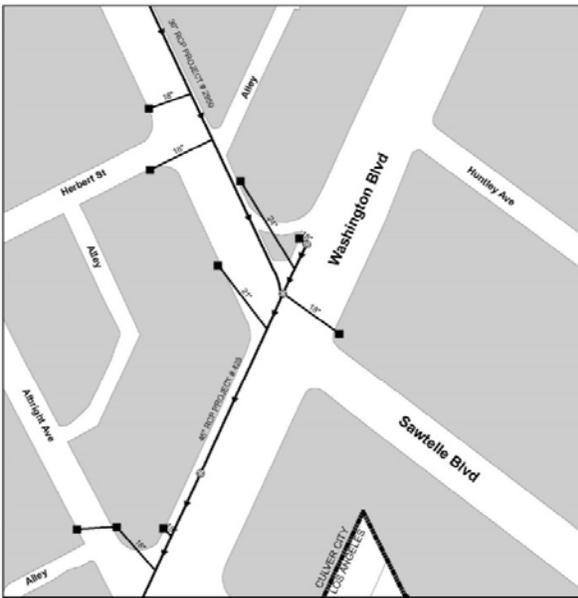
EXHIBIT A-2 CULVER CITY FLOOD MAP





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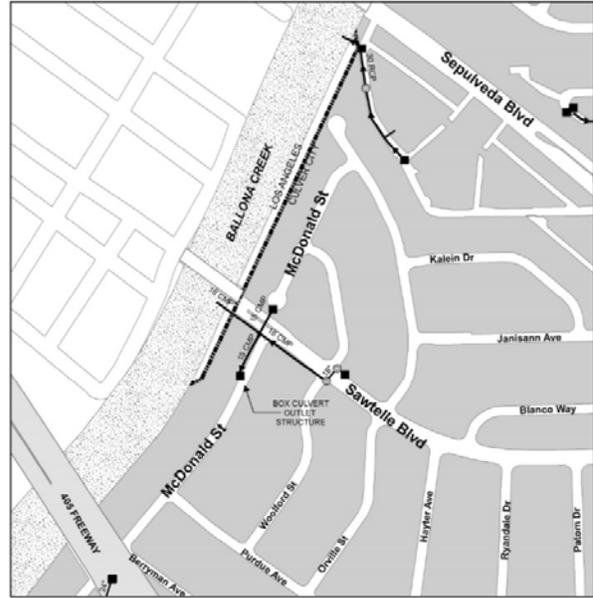
EXHIBIT B-1 POTENTIAL DRAINAGE AREAS OF CONCERN



WASHINGTON BLVD AT SAWTELLE AVE

- Storm Drain Main Line
- Lateral
- Catch Basin
- Manholes
- ▭ City Boundary

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Date: 9/15/2015



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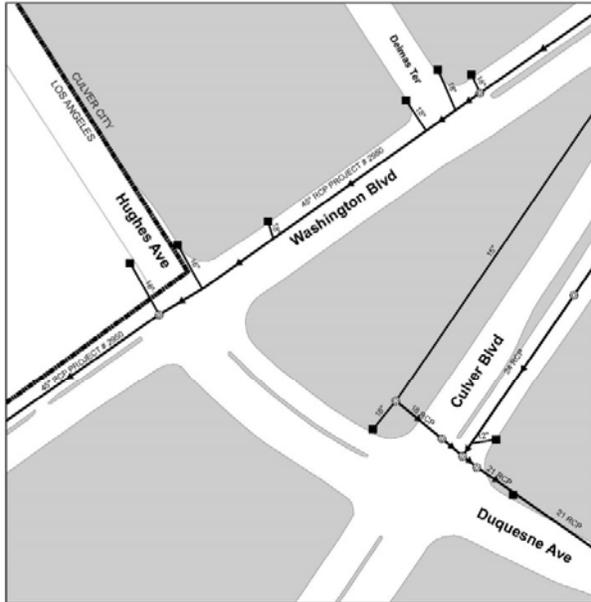
- Catch Basin
- Manholes
- Storm Drain Main Line
- Lateral
- ▭ City Boundary

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Date: 9/15/2015



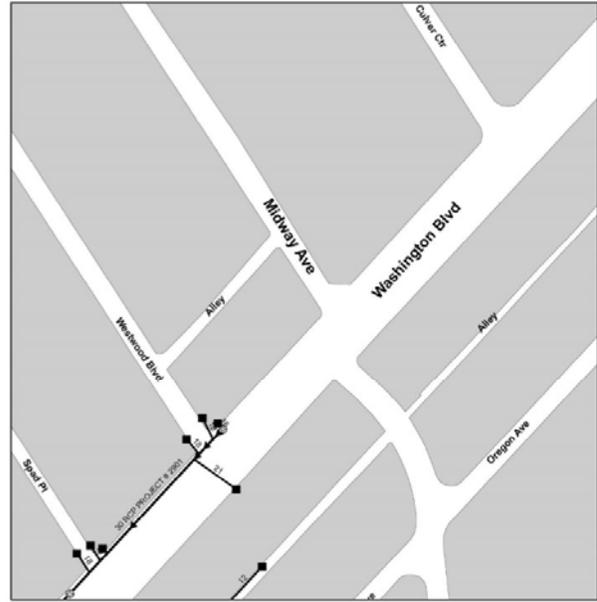
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EXHIBIT B-2 POTENTIAL DRAINAGE AREAS OF CONCERN



WASHINGTON BLVD AT HUGHES AVE

- Storm Drain Main Line
- Lateral
- Catch Basin
- ⊙ Manholes
- ▭ City Boundary



WASHINGTON BLVD AT MIDWAY AVE

- Storm Drain Main Line
- Lateral
- Catch Basin
- ⊙ Manholes





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EXHIBIT C GEOTECHNICAL ENGINEERING FIRMS

The following links to lists of local geotechnical firms are provided as a convenience to property owners seeking to hire a firm to inspect or perform improvements to their property. The firms on these lists have not been vetted by the City, and the City does not endorse or guarantee the quality of the products and services these firms may provide. Property owners should complete their own due diligence process to evaluate and select a firm:

Thomasnet.com:

<http://www.thomasnet.com/southern-california/geotechnical-engineering-services-26205005-1.html>

The Yellow pages:

<http://www.yellowpages.com/los-angeles-ca/geotechnical-engineers>