

L A R R Y  
W A L K E R



ASSOCIATES

# Memorandum

DATE: April 25, 2013

TO: LA Permit Group

SUBJECT: DRAFT LID Ordinance

Cc: Mack Walker and Sandy Mathews, LWA

Rebecca Winer-Skonovd, Senior Scientist

Paul Hartman, Senior Scientist

707 4th Street, Suite 200

Davis, CA 95616

530.753.6400

530.753.7030 fax

paulh@lwa.com

The recently adopted National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) permit for the Los Angeles Region, Order No. R4-2012-0175 (MS4 Permit), requires Permittees that elect to participate in a Watershed Management Program or Enhanced Watershed Management Program (EWMP) to:

“Demonstrate that there are LID ordinances in place and/or commence development of a LID ordinance(s) meeting the requirements of this Order’s Planning and Land Development Program within 60 days of the effective date of the Order and have a draft policy within 6 months of the effective date of the Order.”

In the interest of meeting this requirement, a draft Low Impact Development (LID) Ordinance is provided as **Attachment A** of this technical memorandum. Guidance for using and understanding the draft LID Ordinance is provided below:

1. Some municipalities may have ordinances already in place associated with the stormwater quality program including a provision regarding Standard Urban Storm Water Mitigation Plan (SUSMP) requirements. In these situations the draft LID Ordinance is intended to replace the SUSMP portion of the municipalities’ Stormwater and Urban Runoff Pollution Control (or similarly titled) ordinance. In cases where a municipality does not have an ordinance addressing SUSMP requirements then the draft LID Ordinance is a stand-alone document.
2. The draft LID Ordinance is designed to ensure compliance with LID requirements for development and redevelopment projects. The ordinance is meant to provide enforceable language for existing or proposed LID Guidance Manuals while also providing a compliance mechanism for new permit requirements.

3. The draft LID Ordinance addresses onsite retention and treatment requirements, but does not address other aspects of Planning and Land Development such as plan review fees or operation and maintenance (O&M) requirements. Plan review fees or O&M requirements may be addressed in other sections of Permittees' stormwater quality ordinances or incorporated by reference via a LID Manual.
4. The draft LID Ordinance was primarily based on the City of Los Angeles' LID Ordinance but modified to include the MS4 Permit requirements. Whenever possible and appropriate definitions from the MS4 Permit were included in the draft LID Ordinance.
5. The draft LID Ordinance is organized to include:
  - a. Findings
  - b. Definitions
  - c. Stormwater Pollution Control Measures for Development Planning and Construction Activities.
6. Gray shading in the draft LID Ordinance indicates areas that are optional and/or areas where the Permittee may wish to provide more detail.
  - a. In particular, this includes language that mentions hydromodification requirements and alternative compliance options and refers to the MS4 Permit for additional language. In these cases, references to the MS4 Permit were provided instead of detailed ordinance language to provide Permittees with flexibility to determine how hydromodification and alternative compliance (e.g., how to manage and track developer offsite mitigation) in the future.
7. The draft LID Ordinance contains language in brackets to indicate where a local program should insert its particular information. An example is the [CITY NAME].

## ATTACHMENT A: DRAFT LID ORDINANCE

### ORDINANCE NO. \_\_\_\_\_

An ordinance amending [MUNICIPAL CODE SECTION REFERENCE(S)] of the [CITY NAME] Municipal Code to expand the applicability of the existing [NAME OF POST-CONSTRUCTION REQUIREMENTS – LIKELY “SUSMP” FOR MOST MUNICIPALITIES] requirements by imposing Low Impact Development (LID) strategies on projects that require building permits and/or encroachment permits.

#### Findings.

- (A) The [CITY NAME] is authorized by Article XI, §5 and §7 of the State Constitution to exercise the police power of the State by adopting regulations to promote public health, public safety and general prosperity.
- (B) The [CITY NAME] has authority under the California Water Code to adopt and enforce ordinances imposing conditions, restrictions and limitations with respect to any activity which might degrade the quality of waters of the State.
- (C) The city is a permittee under the “Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except those Discharges Originating from the City of Long Beach MS4,” issued by the California Regional Water Quality Control Board--Los Angeles Region,” (Order No. R4-2012-0175) which also serves as an NPDES Permit under the Federal Clean Water Act (NPDES No. CAS004001), as well as Waste Discharge Requirements under California law (the “Municipal NPDES permit”). In order to participate in a Watershed Management Program and/or Enhanced Watershed Management Program, the Municipal NPDES permit requires permittees to develop and implement a LID Ordinance.
- (D) The [CITY NAME] has applied an integrated approach to incorporate wastewater, stormwater and runoff, and recycled water management into a single strategy through its Integrated Resources Plan.
- (E) The [CITY NAME] is committed to a stormwater management program that protects water quality and water supply by employing watershed-based approaches that balance environmental, social, and economic considerations.
- (F) Urbanization has led to increased impervious surface areas resulting in increased water runoff causing the transport of pollutants to downstream receiving waters.
- (G) The [CITY NAME] needs to take a new approach to managing rainwater and urban runoff while mitigating the negative impacts of development and urbanization.
- (H) LID is widely recognized as a sensible approach to managing the quantity and quality of storm water and non-stormwater runoff by setting standards and practices to maintain or

restore the natural hydrologic character of a development site, reduce off-site runoff, improve water quality, and provide groundwater recharge.

- (f) It is the intent of the [CITY NAME] to replace the existing Standard Urban Stormwater Mitigation Plan (SUSMP) requirements by providing stormwater and rainwater LID strategies for Development and Redevelopment projects as defined under “Applicability.” Where there are conflicts between this Ordinance and previously adopted SUSMP or LID Manuals, the standards in this Ordinance shall prevail.

[MUNICIPAL CODE SECTION REFERENCE(S)] of the [CITY NAME] Municipal Code is amended in its entirety to read as follows:

### **Definitions.**

Except as specifically provided herein, any term used in this [SECTION REFERENCE] shall be defined as that term in the current Municipal NPDES permit, or if it is not specifically defined in either the Municipal NPDES permit, then as such term is defined in the Federal Clean Water Act, as amended, and/or the regulations promulgated thereunder. If the definition of any term contained in this chapter conflicts with the definition of the same term in the current Municipal NPDES permit, then the definition contained in the Municipal NPDES permit shall govern. The following words and phrases shall have the following meanings when used in this chapter:

**Automotive Service Facility** means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes. For inspection purposes, Permittees need not inspect facilities with SIC codes 5013, 5014, 5541, 5511, provided that these facilities have no outside activities or materials that may be exposed to stormwater (Source: Order No. R4-2012-0175).

**Basin Plan** means the Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the Regional Water Board on June 13, 1994 and subsequent amendments (Source: Order No. R4-2012-0175).

**Best Management Practice (BMP)** means practices or physical devices or systems designed to prevent or reduce pollutant loading from stormwater or non-stormwater discharges to receiving waters, or designed to reduce the volume of stormwater or non-stormwater discharged to the receiving water (Source: Order No. R4-2012-0175).

**Biofiltration** means a LID BMP that reduces stormwater pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration and/or evapotranspiration, and filtration. Incidental infiltration is an important factor in achieving the required pollutant load reduction. Therefore, the term “biofiltration” as used in this Ordinance is defined to include only systems designed to facilitate incidental infiltration or achieve the equivalent pollutant reduction as biofiltration BMPs with an underdrain (subject to approval by the Regional Board’s Executive Officer). Biofiltration BMPs include bioretention systems with an underdrain and bioswales (Modified from: Order No. R4-2012-0175).

**Bioretention** means a LID BMP that reduces stormwater runoff by intercepting rainfall on vegetative canopy, and through evapotranspiration and infiltration. The bioretention system typically includes a minimum 2-foot top layer of a specified soil and compost mixture underlain by a gravel-filled temporary storage pit dug into the in-situ soil. As defined in the Municipal NPDES permit, a bioretention BMP may be designed with an overflow drain, but may not include an underdrain. When a bioretention BMP is designed or constructed with an underdrain it is regulated by the Municipal NPDES permit as biofiltration (Modified from: Order No. R4-2012-0175).

**Bioswale** means a LID BMP consisting of a shallow channel lined with grass or other dense, low-growing vegetation. Bioswales are designed to collect stormwater runoff and to achieve a uniform sheet flow through the dense vegetation for a period of several minutes (Source: Order No. R4-2012-0175).

**City** means the [CITY NAME].

**Clean Water Act (CWA)** means the Federal Water Pollution Control Act enacted in 1972, by Public Law 92-500, and amended by the Water Quality Act of 1987. The Clean Water Act prohibits the discharge of pollutants to Waters of the United States unless the discharge is in accordance with an NPDES permit.

**Commercial Malls** means any development on private land comprised of one or more buildings forming a complex of stores which sells various merchandise, with interconnecting walkways enabling visitors to easily walk from store to store, along with parking area(s). A commercial mall includes, but is not limited to: mini-malls, strip malls, other retail complexes, and enclosed shopping malls or shopping centers (Source: Order No. R4-2012-0175).

**Construction Activity** means any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that result in land disturbance. Construction does not include emergency construction activities required to immediately protect public health and safety or routine maintenance activities required to maintain the integrity of structures by performing minor repair and restoration work, maintain the original line and grade, hydraulic capacity, or original purposes of the facility. See "Routine Maintenance" definition for further explanation. Where clearing, grading or excavating of underlying soil takes place during a repaving operation, State General Construction Permit coverage by the State of California General Permit for Storm Water Discharges Associated with Industrial Activities or for Stormwater Discharges Associated with Construction Activities is required if more than one acre is disturbed or the activities are part of a larger plan (Source: Order No. R4-2012-0175).

**Control** means to minimize, reduce or eliminate by technological, legal, contractual, or other means, the discharge of pollutants from an activity or activities (Source: Order No. R4-2012-0175).

**Development** means construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail, and other non-residential projects, including public agency

projects; or mass grading for future construction. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety (Source: Order No. R4-2012-0175).

**Directly Adjacent** means situated within 200 feet of the contiguous zone required for the continued maintenance, function, and structural stability of the environmentally sensitive area (Source: Order No. R4-2012-0175).

**Discharge** means any release, spill, leak, pump, flow, escape, dumping, or disposal of any liquid, semi-solid, or solid substance.

**Disturbed Area** means an area that is altered as a result of clearing, grading, and/or excavation (Source: Order No. R4-2012-0175).

**Flow-through BMPs** means modular, vault type “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain (Modified from: Order No. R4-2012-0175).

**General Construction Activities Storm Water Permit (GCASP)** means the general NPDES permit adopted by the State Board which authorizes the discharge of stormwater from construction activities under certain conditions.

**General Industrial Activities Storm Water Permit (GIASP)** means the general NPDES permit adopted by the State Board which authorizes the discharge of stormwater from certain industrial activities under certain conditions.

**Green Roof** means a LID BMP using planter boxes and vegetation to intercept rainfall on the roof surface. Rainfall is intercepted by vegetation leaves and through evapotranspiration. Green roofs may be designed as either a bioretention BMP or as a biofiltration BMP. To receive credit as a bioretention BMP, the green roof system planting medium shall be of sufficient depth to provide capacity within the pore space volume to contain the design storm depth and may not be designed or constructed with an underdrain (Source: Order No. R4-2012-0175).

**Hazardous Material(s)** means any material(s) defined as hazardous by Division 20, Chapter 6.95 of the California Health and Safety Code.

**Hillside** means a property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 25% or greater and where grading contemplates cut or fill slopes (Source: Order No. R4-2012-0175).

**Hydromodification** means the alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources. Hydromodification can cause excessive erosion and/or sedimentation rates, causing excessive turbidity, channel aggradation and/or degradation. (Source: GCASP)

**Impervious Surface** means any man-made or modified surface that prevents or significantly reduces the entry of water into the underlying soil, resulting in runoff from the surface in greater quantities and/or at an increased rate, when compared to natural conditions prior to development. Examples of places that commonly exhibit impervious surfaces include parking lots, driveways, roadways, storage areas, and rooftops. The imperviousness of these areas commonly results from paving, compacted gravel, compacted earth, and oiled earth.

**Industrial Park** means land development that is set aside for industrial development. Industrial parks are usually located close to transport facilities, especially where more than one transport modalities coincide: highways, railroads, airports, and navigable rivers. It includes office parks, which have offices and light industry (Source: Order No. R4-2012-0175).

**Infiltration BMP** means a LID BMP that reduces stormwater runoff by capturing and infiltrating the runoff into in-situ soils or amended onsite soils. Examples of infiltration BMPs include infiltration basins, dry wells, and pervious pavement (Source: Order No. R4-2012-0175).

**LID** means Low Impact Development. LID consists of building and landscape features designed to retain or filter stormwater runoff (Source: Order No. R4-2012-0175).

**MS4** means Municipal Separate Storm Sewer System (MS4). The MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

(40 CFR § 122.26(b)(8)) (Source: Order No. R4-2012-0175)

**National Pollutant Discharge Elimination System (NPDES)** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA §307, 402, 318, and 405. The term includes an “approved program” (Source: Order No. R4-2012-0175).

**Natural Drainage System** means a drainage system that has not been improved (e.g., channelized or armored). The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system (Source: Order No. R4-2012-0175).

**New Development** means land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision (Source: Order No. R4-2012-0175).

**Non-Stormwater Discharge** means any discharge to a municipal storm drain system that is not composed entirely of stormwater (Source: Order No. R4-2012-0175).

**Parking Lot** means land area or facility for the parking or storage of motor vehicles used for businesses, commerce, industry, or personal use, with a lot size of 5,000 square feet or more of surface area, or with 25 or more parking spaces (Source: Order No. R4-2012-0175).

**Person** means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, state, governmental entity or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine and the singular shall include the plural where indicated by the context.

**Planning Priority Projects** means development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate stormwater pollution, prior to completion of the project(s) (Modified from: Order No. R4-2012-0175).

**Pollutant** means any "pollutant" defined in Section 502(6) of the Federal Clean Water Act or incorporated into the California Water Code Sec. 13373. Pollutants may include, but are not limited to the following:

- (1) Commercial and industrial waste (such as fuels, solvents, detergents, plastic pellets, hazardous substances, fertilizers, pesticides, slag, ash, and sludge).
- (2) Metals (such as cadmium, lead, zinc, copper, silver, nickel, chromium, and non-metals such as phosphorus and arsenic).
- (3) Petroleum hydrocarbons (such as fuels, lubricants, surfactants, waste oils, solvents, coolants, and grease).
- (4) Excessive eroded soil, sediment, and particulate materials in amounts that may adversely affect the beneficial use of the receiving waters, flora, or fauna of the State.
- (5) Animal wastes (such as discharge from confinement facilities, kennels, pens, recreational facilities, stables, and show facilities).
- (6) Substances having characteristics such as pH less than 6 or greater than 9, or unusual coloration or turbidity, or excessive levels of fecal coliform, or fecal streptococcus, or enterococcus.

**Project** means all development, redevelopment, and land disturbing activities. The term is not limited to "Project" as defined under CEQA (Pub. Resources Code §21065) (Source: Order No. R4-2012-0175).



**Rainfall Harvest and Use** means a LID BMP system designed to capture runoff, typically from a roof but can also include runoff capture from elsewhere within the site, and to provide for temporary storage until the harvested water can be used for irrigation or non-potable uses. The harvested water may also be used for potable water uses if the system includes disinfection treatment and is approved for such use by the local building department (Source: Order No. R4-2012-0175).

**Receiving Water** means “water of the United States” into which waste and/or pollutants are or may be discharged (Source: Order No. R4-2012-0175).

**Redevelopment** means land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of routine maintenance activity; and land disturbing activity related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety (Source: Order No. R4-2012-0175).

**Regional Board** means the California Regional Water Quality Control Board, Los Angeles Region.

**Restaurant** means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812) (Source: Order No. R4-2012-0175).

**Retail Gasoline Outlet** means any facility engaged in selling gasoline and lubricating oils (Source: Order No. R4-2012-0175).

### **Routine Maintenance**

Routine maintenance projects include, but are not limited to projects conducted to:

1. Maintain the original line and grade, hydraulic capacity, or original purpose of the facility.
2. Perform as needed restoration work to preserve the original design grade, integrity and hydraulic capacity of flood control facilities.
3. Includes road shoulder work, regrading dirt or gravel roadways and shoulders and performing ditch cleanouts.
4. Update existing lines\* and facilities to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity.
5. Repair leaks

Routine maintenance does not include construction of new\*\* lines or facilities resulting from compliance with applicable codes, standards and regulations.

\* Update existing lines includes replacing existing lines with new materials or pipes.

\*\* New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines (Source: Order No. R4-2012-0175).

**Significant Ecological Areas (SEAs)** means an area that is determined to possess an example of biotic resources that cumulatively represent biological diversity, for the purposes of protecting biotic diversity, as part of the Los Angeles County General Plan. Areas are designated as SEAs, if they possess one or more of the following criteria:

1. The habitat of rare, endangered, and threatened plant and animal species.
2. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.
3. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County.
4. Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or within Los Angeles County.
5. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent an unusual variation in a population or community.
6. Areas important as game species habitat or as fisheries.
7. Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.
8. Special areas (Source: Order No. R4-2012-0175).

**Site** means land or water area where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity (Source: Order No. R4-2012-0175).

**Storm Drain System** means any facilities or any part of those facilities, including streets, gutters, conduits, natural or artificial drains, channels, and watercourses that are used for the purpose of collecting, storing, transporting or disposing of stormwater and are located within the [CITY NAME].

**Storm Water or Stormwater** means water that originates from atmospheric moisture (rain or snow) and that falls onto land, water, or other surfaces. Without any change in its meaning, this term may be spelled or written as one word or two separate words.

**Stormwater Runoff** means that part of precipitation (rainfall or snowmelt) which travels across a surface to the storm drain system or receiving waters.

**SUSMP** means the Los Angeles Countywide Standard Urban Stormwater Mitigation Plan. The SUSMP was required as part of the previous Municipal NPDES Permit (Order No. 01-182, NPDES No. CAS004001) and required plans that designate best management practices (BMPs) that must be used in specified categories of development projects.

**Urban Runoff** means surface water flow produced by storm and non-storm events. Non-storm events include flow from residential, commercial, or industrial activities involving the use of potable and non-potable water.

[MUNICIPAL CODE SECTION REFERENCE(S)] is amended to read as follows:

**SEC. [X]. STORMWATER POLLUTION CONTROL MEASURES FOR DEVELOPMENT PLANNING AND CONSTRUCTION ACTIVITIES**

- (A) **Objective.** The provisions of this section contain requirements for construction activities and facility operations of Development and Redevelopment projects to comply with the current “Municipal NPDES permit,” lessen the water quality impacts of development by using smart growth practices, and integrate LID design principles to mimic predevelopment hydrology through infiltration, evapotranspiration and rainfall harvest and use. LID shall be inclusive of previously adopted SUSMP requirements.
- (B) **Scope.** This Section contains requirements for stormwater pollution control measures in Development and Redevelopment projects and authorizes the [CITY NAME] to further define and adopt stormwater pollution control measures, to develop LID principles and requirements, including but not limited to the objectives and specifications for integration of LID strategies, and to grant waivers or alternate compliance as allowed by the Municipal NPDES permit and collect fees from projects granted exceptions. . Except as otherwise provided herein, the [CITY NAME] shall administer, implement and enforce the provisions of this Section. Guidance documents supporting implementation of requirements in this Ordinance are hereby incorporated by reference, including SUSMP and LID Manuals.
- (C) **Applicability.** The following Development and Redevelopment projects, termed “Planning Priority Projects,” shall comply with the requirements of [SECTION NUMBER]:
- (1) All development projects equal to 1 acre or greater of disturbed area that adds more than 10,000 square feet of impervious surface area.
  - (2) Industrial parks 10,000 square feet or more of surface area.
  - (3) Commercial malls 10,000 square feet or more of surface area.
  - (4) Retail gasoline outlets with 5,000 square feet or more of surface area.
  - (5) Restaurants (Standard Industrial Classification (SIC) of 5812) with 5,000 square feet or more of surface area.
  - (6) Parking lots with 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces.
  - (7) Streets and roads construction of 10,000 square feet or more of impervious surface area.

- (8) Automotive service facilities (Standard Industrial Classification (SIC) of 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) 5,000 square feet or more of surface area.
- (9) Projects located in or directly adjacent to, or discharging directly to an Environmentally Sensitive Area (ESA), where the development will:
  - a. Discharge stormwater runoff that is likely to impact a sensitive biological species or habitat; and
  - b. Create 2,500 square feet or more of impervious surface area
- (10) Single-family hillside homes.
- (11) Redevelopment Projects
  - a. Land disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on Planning Priority Project categories.
  - b. Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, the entire project must be mitigated.
  - c. Where Redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, only the alteration must be mitigated, and not the entire development.
  - d. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.
  - e. Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.
- (12) Any other project as deemed appropriate by the Director.

**(D) Effective Date.** The Planning and Land Development requirements contained in this Ordinance shall become effective ~~XX~~ days from the adoption of the Ordinance. This includes Planning Priority Projects that are discretionary permit projects or project phases that have not been deemed complete for processing, or discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals within 90 days of adoption of the Ordinance. Projects that have been deemed complete within 90 days of adoption of the Ordinance are not subject to the requirements of this Chapter.

**(E) Stormwater Pollution Control Requirements.** The Site for every Planning Priority Project shall be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest and use.

(1) A new single-family hillside home development shall include mitigation measures to:

- a. Conserve natural areas;
- b. Protect slopes and channels;
- c. Provide storm drain system stenciling and signage;
- d. Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability; and
- e. Direct surface flow to vegetated areas before discharge, unless the diversion would result in slope instability.

(2) Street and road construction of 10,000 square feet or more of impervious surface shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets (December 2008 EPA-833-F-08-009) to the maximum extent practicable.

(3) The remainder of Planning Priority Projects shall prepare a LID Plan to comply with the following:

- a. Retain stormwater runoff onsite for the Stormwater Quality Design Volume (SWQDv) defined as the runoff from:
  - i. The 85th percentile 24-hour runoff event as determined from the Los Angeles County 85th percentile precipitation isohyetal map; or

- ii. The volume of runoff produced from a 0.75 inch, 24-hour rain event, whichever is greater.
- b. Minimize hydromodification impacts to natural drainage systems as defined in the Municipal NPDES Permit. Hydromodification requirements are further specified in [NAME OF POST-CONSTRUCTION BMP HANDBOOK].
- c. When, as determined by the [APPROVING AGENCY], 100 percent onsite retention of the SWQDv is technically infeasible, partially or fully, the infeasibility shall be demonstrated in the submitted LID Plan. The technical infeasibility may result from conditions that may include, but are not limited to:
  - i. The infiltration rate of saturated in-situ soils is less than 0.3 inch per hour and it is not technically feasible to amend the in-situ soils to attain an infiltration rate necessary to achieve reliable performance of infiltration or bioretention BMPs in retaining the SWQDv onsite.
  - ii. Locations where seasonal high groundwater is within five to ten feet of surface grade;
  - iii. Locations within 100 feet of a groundwater well used for drinking water;
  - iv. Brownfield development sites or other locations where pollutant mobilization is a documented concern;
  - v. Locations with potential geotechnical hazards;
  - vi. Smart growth and infill or redevelopment locations where the density and/ or nature of the project would create significant difficulty for compliance with the onsite volume retention requirement.
- d. If partial or complete onsite retention is technically infeasible, the project Site may biofiltrate 1.5 times the portion of the remaining SWQDv that is not reliably retained onsite. Biofiltration BMPs must adhere to the design specifications provided in the Municipal NPDES Permit.
  - i. Additional alternative compliance options such as offsite infiltration may be available to the project Site. The project Site should contact the [APPROVING AGENCY] to determine eligibility. Alternative compliance options are further specified in [NAME OF POST-CONSTRUCTION BMP HANDBOOK].
- e. The remaining SWQDv that cannot be retained or biofiltered onsite must be treated onsite to reduce pollutant loading. BMPs must be selected and designed to meet pollutant-specific benchmarks as required per the Municipal NPDES Permit.

Flow-through BMPs may be used to treat the remaining SWQDv and must be sized based on a rainfall intensity of:

- i. 0.2 inches per hour, or
  - ii. The one year, one-hour rainfall intensity as determined from the most recent Los Angeles County isohyetal map, whichever is greater.
- f. A Multi-Phased Project may comply with the standards and requirements of this section for all of its phases by: (a) designing a system acceptable to the [APPROVING AGENCY] to satisfy these standards and requirements for the entire Site during the first phase, and (b) implementing these standards and requirements for each phase of Development or Redevelopment of the Site during the first phase or prior to commencement of construction of a later phase, to the extent necessary to treat the stormwater from such later phase. For purposes of this section, "Multi-Phased Project" shall mean any Planning Priority Project implemented over more than one phase and the Site of a Multi-Phased Project shall include any land and water area designed and used to store, treat or manage stormwater runoff in connection with the Development or Redevelopment, including any tracts, lots, or parcels of real property, whether Developed or not, associated with, functionally connected to, or under common ownership or control with such Development or Redevelopment.

**(E) Other Agencies of the [CITY NAME].** All [CITY NAME] departments, offices, entities and agencies, shall establish administrative procedures necessary to implement the provisions of this Article on their Development and Redevelopment projects and report their activities annually to the [RESPONSIBLE AGENCY].

**(F) Validity.** If any provision of this Ordinance is found to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect remaining provisions of this Ordinance are declared to be severable.

**(G) Certification.** The City Clerk shall certify to the passage of this ordinance and have it published in accordance with Council policy.

I hereby certify that this ordinance was passed by the Council of the [CITY NAME], at its meeting of \_\_\_\_\_.

[NAME], City Clerk

By \_\_\_\_\_ Deputy

Approved \_\_\_\_\_

\_\_\_\_\_  
Mayor

Approved as to Form and Legality  
[NAME], City Attorney

By \_\_\_\_\_  
[NAME]  
Deputy City Attorney

Date \_\_\_\_\_

File No. \_\_\_\_\_