

These mitigation measures are required of development in the Beach and Edinger Corridors Specific Plan area pursuant to certified Environmental Impact Report No. 08-008.

**Aesthetics**

**MM4.1-1** For projects that may result in a potential shade/shadow impact on nearby light-sensitive uses, the following mitigation measure shall be implemented at the City’s discretion:

Prior to issuance of a building permit, the Applicant shall be required to perform a shade and shadow analysis that demonstrates that the project will not result in significant impacts according to the following criteria. Shadowing impacts in the Specific Plan boundary are considered significant when shadows would be cast upon potentially sensitive uses during a substantial portion (greater than 50 percent) of the main daylight hours (9:00 A.M. to 3:00 P.M. during the fall, winter, and spring seasons, and 9:00 A.M. to 5:00 P.M. [daylight savings time] during the summer season). Light-sensitive uses are those that depend upon light for their operation (e.g., solar panels) or for which solar access is essential for their function (e.g., swimming pools). Light-sensitive uses also include public parks and routinely useable outdoor spaces associated with residences and schools (e.g., yards and playgrounds).

**MM4.1-2** Proposed new structures shall be designed to maximize the use of non-reflective façade treatments, such as matte paint or glass coatings. Prior to issuance of building permits for the proposed project, the Applicant shall indicate provision of these materials on the building plans.

**Air Quality**

**MM4.2-1** Project applicants shall require by contract specifications that all diesel-powered equipment used will be retrofitted with after-treatment products (e.g., engine catalyts). Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

**MM4.2-2** Project applicants shall require by contract specifications that all heavy-duty diesel-powered equipment operating and refueling at the project site use low-NO<sub>x</sub> diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of California Air Resources Board diesel) in the South Coast Air Basin (this does not apply to diesel-powered trucks traveling to and from the project site). Contract specifications shall be included in project construction documents, which

shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

**MM4.2-3** Project applicants shall require by contract specifications that construction equipment engines be maintained in good condition and in proper tune per manufacturer’s specification for the duration of construction. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

**MM4.2-4** Project applicants shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

**MM4.2-5** As required by South Coast Air Quality Management District Rule 403—Fugitive Dust, all construction activities that are capable of generating fugitive dust are required to implement dust control measures during each phase of project development to reduce the amount of particulate matter entrained in the ambient air. These measures include the following:

- Application of soil stabilizers to inactive construction areas
- Quick replacement of ground cover in disturbed areas
- Watering of exposed surfaces three times daily
- Watering of all unpaved haul roads three times daily
- Covering all stock piles with tarp
- Reduction of vehicle speed on unpaved roads
- Post signs on-site limiting traffic to 15 miles per hour or less
- Sweep streets adjacent to the project site at the end of the day if visible soil material is carried over to adjacent roads
- Cover or have water applied to the exposed surface of all trucks hauling dirt, sand, soil, or other loose materials prior to leaving the site to prevent dust from impacting the surrounding areas
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads to wash off trucks and any equipment leaving the site each trip.

**MM4.2-6** Project applicants shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes. Diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds shall be turned off when not in use for more than 5 minutes. Contract

specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.2-7** Project applicants shall require by contract specifications that construction parking be configured to minimize traffic interference during the construction period and, therefore, reduce idling of traffic. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.2-8** Project applicants shall require by contract specifications that temporary traffic controls are provided, such as a flag person, during all phases of construction to facilitate smooth traffic flow. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.2-9** Project applicants shall require by contract specifications that construction activities that affect traffic flow on the arterial system be scheduled to off-peak hours (10:00 A.M. to 4:00 P.M.). Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.2-10** Project applicants shall require by contract specifications that dedicated on-site and off-site left-turn lanes on truck hauling routes be utilized for movement of construction trucks and equipment on site and off site to the extent feasible during construction activities. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.2-11** Upon issuance of building or grading permits, whichever is issued earlier, notification shall be mailed to owners and occupants of all developed land uses within 300 feet of a project site within the Specific Plan providing a schedule for major construction activities that will occur through the duration of the construction period. In addition, the notification will include the identification and contact number for a community liaison and designated construction manager that would be available on site to monitor construction activities. The construction manager shall be responsible for complying with all project requirements related to PM<sub>10</sub> generation. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contract information for the community liaison and construction manager will be located at the construction office, City Hall, the police department, and a sign on site.

**MM4.2-12** Project applicants shall require by contract specifications that the architectural coating (paint and primer) products used would have a VOC rating of 125 grams per liter or less. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed and approved by the City of Huntington Beach.

**MM4.2-13** Project applicants shall require by contract specifications that materials that do not require painting be used during construction to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed and approved by the City of Huntington Beach.

**MM4.2-14** Project applicants shall require by contract specifications that pre-painted construction materials be used to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed and approved by the City of Huntington Beach.

## Biological Resources

**MM4.3-1** Nesting avian species protected by the MBTA:

- a. Prior to any construction or vegetation removal between February 15 and August 31, a nesting bird survey shall be conducted by a qualified biologist of all habitats within 250 feet of the construction area. Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities and surveys will be conducted in accordance with CDFG protocol as applicable. If no active nests are identified on or within 250 feet of the construction site, no further mitigation is necessary. A copy of the pre-construction survey shall be submitted to the City of Huntington Beach. If an active nest of a MBTA protected species is identified onsite (per established thresholds) a 100-foot no-work buffer shall be maintained between the nest and construction activity. This buffer can be reduced in consultation with CDFG and/or USFWS.
- b. Completion of the nesting cycle shall be determined by qualified ornithologist or biologist.

**MM4.3-2** Wetland Habitat

- a. For projects located on vacant (nondeveloped) land, preparation of a wetland delineation shall be required as deemed necessary by the City of Huntington Beach. The delineation shall be conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual, and the September 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), The delineation report shall be prepared and submitted to the U.S. Army Corps of Engineers (USACE) for their verification. A copy of the USACE's verification letter and the delineation report shall be provided to the City of Huntington Beach. If no wetlands are present on the project site, no additional measures shall be required.
- b. Prior to the issuance of grading permits by the City, if wetlands are present on the project site (based on the verified wetland delineation), the project applicant shall acquire all applicable

wetland permits. These permits include, but would not be limited to, a Section 404 Wetlands Fill Permit from the USACE, or a Report of Waste Discharge from the Regional Water Quality Control Board (RWQCB), and a Section 401 Water Quality Certification from the RWCQB. Additionally, a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Game (CDFG) would be required for development that would cross or affect any stream course (including the Barge Canal).

- c. The project applicant shall, where feasible, preserve the maximum amount of existing wetlands and establish minimum 25- to 50-foot buffers around all sides of these features. In addition, the final project design shall not cause significant changes to the pre-project hydrology, water quality, or water quantity in any wetland that is to be retained on site. This shall be accomplished by avoiding or repairing any disturbance to the hydrologic conditions supporting these wetlands, as verified through wetland protection plans.
- d. Where avoidance of existing wetlands and drainages is not feasible, then mitigation measures shall be implemented for the project-related loss of any existing wetlands on site, such that there is no net loss of wetland acreage or habitat value.

Wetland mitigation shall be developed as a part of the Section 404 CWA permitting process, or for nonjurisdictional wetlands, during permitting through the RWQCB and/or CDFG. Mitigation is to be provided prior to construction related impacts on the existing wetlands. The exact mitigation ratio is variable, based on the type and value of the wetlands affected by the project, but agency standards typically require a minimum of 1:1 for preservation and 1:1 for construction of new wetlands. In addition, a wetland mitigation and monitoring plan shall be developed that includes the following:

- Descriptions of the wetland types, and their expected functions and values
- Performance standards and monitoring protocol to ensure the success of the mitigation wetlands over a period of five to ten years
- Engineering plans showing the location, size and configuration of wetlands to be created or restored
- An implementation schedule showing that construction of mitigation areas shall commence prior to or concurrently with the initiation of construction
- A description of legal protection measures for the preserved wetlands (i.e., dedication of fee title, conservation easement, and/or an endowment held by an approved conservation organization, government agency or mitigation bank)

## Cultural and Paleontological Resources

**MM4.4-1** Prior to development activities that would demolish or otherwise physically affect buildings or structures 45 years old or older or affect their historic setting, the project applicant shall retain a cultural resource professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History to determine if the project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. The investigation shall include, as determined appropriate by the cultural resource professional and the City of Huntington Beach, the appropriate archival research, including, if necessary, an updated records search of the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System and a pedestrian survey of the proposed development area to determine if any significant historic-period resources would be adversely affected by the proposed development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any historical resources within the development area and includes recommendations and methods for eliminating or reducing impacts on historical resources. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or reducing impacts on historical resources identified in the technical report or memorandum.

**MM4.4-2(a)** Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to determine if the project could result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or disturb human remains. The investigation shall include, as determined appropriate by the archaeologist and the City of Huntington Beach, an updated records search of the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System, updated Native American consultation, and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any archaeological resources within the development area and includes recommendations and methods for eliminating or avoiding impacts on archaeological resources or human remains. The measures shall include, as appropriate, subsurface testing of archaeological resources and/or construction monitoring by a qualified professional and, if necessary, appropriate Native American monitors identified by the applicable tribe (e.g., the Gabrieliño Tongva Nation)

and/or the Native American Heritage Commission. The methods shall also include procedures for the unanticipated discovery of human remains, which shall be in accordance with Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or avoiding impacts on archaeological resources identified in the technical report or memorandum. Projects that would not encounter undisturbed soils and would therefore not be required to retain an archaeologist shall demonstrate non-disturbance to the City through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM4.4 2(b).

**MM4.4-2(b)** If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project-related earth-disturbing activities (including projects that would not encounter undisturbed soils), all earth-disturbing activity within 100 feet of the find shall be halted and the City of Huntington Beach shall be notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the appropriate Information Center.

**MM4.4-3(a)** Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project applicant shall retain a professional paleontologist to determine if the project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The investigation shall include, as determined appropriate by the paleontologist and the City of Huntington Beach, a paleontology records check and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies the paleontological sensitivity of the development area and includes recommendations and methods for eliminating or avoiding impacts on paleontological resources or unique geologic features. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined

necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or avoiding impacts on paleontological resources or unique geologic features identified in the technical report or memorandum. Projects that would not encounter undisturbed soils and would therefore not be required to retain a paleontologist shall demonstrate non-disturbance to the City through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM4.4-3(b).

**MM4.4-3(b)** Should paleontological resources (i.e., fossil remains) be identified at a particular site during project construction, the construction foreman shall cease construction within 100 feet of the find until a qualified professional can provide an evaluation. Mitigation of resource impacts shall be implemented and funded by the project applicant and shall be conducted as follows:

1. Identify and evaluate paleontological resources by intense field survey where impacts are considered high
2. Assess effects on identified sites
3. Consult with the institutional/academic paleontologists conducting research investigations within the geological formations that are slated to be impacted
4. Obtain comments from the researchers
5. Comply with researchers' recommendations to address any significant adverse effects where determined by the City to be feasible

In considering any suggested mitigation proposed by the consulting paleontologist, the City of Huntington Beach staff shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, applicable policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.

## Geology and Soils

**MM4.5-1** Future development in the Beach Boulevard and Edinger Avenue Corridors Specific Plan area shall prepare a grading plan to contain the recommendations of the final soils and geotechnical report. These recommendations shall be implemented in the design of the project, including but not limited to measures associated with site preparation, fill placement, temporary shoring and permanent dewatering, groundwater seismic design features, excavation stability, foundations, soil stabilization, establishment of deep foundations, concrete slabs and pavements, surface drainage, cement type and

corrosion measures, erosion control, shoring and internal bracing, and plan review.

## Hazards and Hazardous Materials

**MM4.6-1** Prior to the issuance of grading permits on any project site, the site developer(s) shall:

- Investigate the project site to determine whether it or immediately adjacent areas have a record of hazardous material contamination via the preparation of a preliminary environmental site assessment (ESA), which shall be submitted to the City for review. If contamination is found the report shall characterize the site according to the nature and extent of contamination that is present before development activities precede at that site.
- If contamination is determined to be on site, the City, in accordance with appropriate regulatory agencies, shall determine the need for further investigation and/or remediation of the soils conditions on the contaminated site. If further investigation or remediation is required, it shall be the responsibility of the site developer(s) to complete such investigation and/or remediation prior to construction of the project.
- If remediation is required as identified by the local oversight agency, it shall be accomplished in a manner that reduces risk to below applicable standards and shall be completed prior to issuance of any occupancy permits.
- Closure reports or other reports acceptable to the Huntington Beach Fire Department that document the successful completion of required remediation activities, if any, for contaminated soils, in accordance with City Specification 431-92, shall be submitted and approved by the Huntington Beach Fire Department prior to the issuance of grading permits for site development. No construction shall occur in the affected area until reports have been accepted by the City.

**MM4.6-2** In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction of the proposed project, construction activities in the immediate vicinity of the contamination shall cease immediately. If contamination is encountered, a Risk Management Plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., City of Huntington Beach Fire Department). If needed, a Site Health and

Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area.

**MM4.6-3** Prior to the issuance of grading permits, future development in the Specific Plan shall comply with HBFD City Specification No. 429, Methane District Building Permit Requirements. A plan for the testing of soils for the presence of methane gas shall be prepared and submitted by the Applicant to the HBFD for review and approval, prior to the commencement of sampling. If significant levels of methane gas are discovered in the soil on the future development project site, the Applicant's grading, building and methane plans shall reference that a sub-slab methane barrier and vent system will be installed at the project site per City Specification No. 429, prior to plan approval. If required by the HBFD, additional methane mitigation measures to reduce the level of methane gas to acceptable levels shall be implemented.

**MM4.6-4** To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, the developer shall consult with the City of Huntington Beach Police and Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The developer shall be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing the project site. At any time only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the developer shall coordinate with the City of Huntington Beach Police and Fire Departments to designate proper detour routes and signage indicating alternative routes.

## Hydrology and Water Quality

**MM4.7-1** City of Huntington Beach shall require Applicants for new development and significant redevelopment projects within the Specific Plan area to prepare a project Water Quality Management Plan (WQMP) in accordance with the DAMP requirements and measures described below and with all current adopted permits. The WQMP shall be prepared by a Licensed Civil Engineer and submitted for review and acceptance prior to issuance of a Precise Grading or Building permit.

BMPs in the WQMP shall be designed in accordance with the Municipal NPDES Permit, Model WQMP, DAMP, and City of Huntington Beach LIP. As noted in the Specific Plan, all development projects shall include site design and source control BMPs in the project WQMP. Additionally, new development or significant redevelopment projects and priority projects shall include LID principles to reduce runoff to a level consistent with the maximum extent practicable and treatment control BMPs in the WQMP.

If permanent dewatering is required and allowed by the City, OCWD, and other regulatory agencies, the Applicant shall include a description of the dewatering technique, discharge location, discharge quantities, chemical characteristics of discharged water, operations and maintenance plan, and WDID number for proof of coverage under the De Minimus Threat General Permit or copy of the individual WDR in the WQMP. Additionally, the WQMP shall incorporate any additional BMPs as required by the City Public Works Department.

The WQMP shall include the following additional requirements:

### Project and Site Characterization Requirements

- Entitlement Application numbers and site address shall be included on the title sheet of the WQMP
- In the project description section, explain whether proposed use includes onsite food preparation, eating areas (if not please state), outdoor activities to be expected, vehicle maintenance, service, washing cleaning (if prohibited onsite, please state)
- All potential pollutants of concern for the proposed project land use type as per Table 7.II-1 of the Orange County Model Water Quality Management Plan shall be identified
- A narrative describing how all potential pollutants of concern will be addressed through the implementation of BMPs and describing how site design BMP concepts will be considered and incorporated into the project design shall be included
- Existing soil types and estimated percentages of perviousness for existing and proposed conditions shall be identified
- In Section I of the WQMP, state verbatim the Development Requirements from the Planning Department's letter to the Applicant
- A site plan showing the location of the selected treatment control BMPs and drainage areas shall be included in the WQMP
- A Geotechnical Report shall be submitted to address site conditions for determination of infiltration limitations and other pertinent characteristics.

### Project-Based Treatment Control BMPs

- Infiltration-type BMPs shall not be used unless the Geotechnical Report states otherwise. Depth to seasonal high groundwater is determined to provide at least a 10-foot clearance between the bottom of the BMP and top of the water table. It is expected that infiltration BMPs may be feasible between Holland Drive and Utica Drive, however, a Geotechnical Investigation must be conducted to ensure sufficient properties
- Wet swales and grassed channels shall not be used because of the slow infiltration rates of project site soils, the potentially shallow depth to groundwater, and water conservation needs
- If proprietary Structural Treatment Control devices are used, they shall be sited and designed in compliance with the manufacturers design criteria
- Surface exposed treatment control BMPs shall be selected such that standing water drains or evaporates within 24 hours or as required by the County's vector control

- Excess stormwater runoff shall bypass the treatment control BMPs unless they are designed to handle the flow rate or volume from a 100-year storm event without reducing effectiveness. Effectiveness of any treatment control BMP for removing the pollutants of concern shall be documented via analytical models or existing studies on effectiveness.
- The project WQMP shall incorporate water efficient landscaping using drought tolerant, native plants in accordance with Landscape and Irrigation Plans as set forth by the Association (see below)
- Pet waste stations (stations that provide waste pick-up bags and a convenient disposal container protected from precipitation) shall be provided and maintained
- Building materials shall minimize exposure of bare metals to stormwater. Copper or Zinc roofing materials, including downspouts, shall be prohibited. Bare metal surfaces shall be painted with non-lead-containing paint

The following BMPs shall not be used because they have not been shown to be effective in many situations. Therefore, unless sufficient objective studies and review are available and supplied with the WQMP to correctly size devices and to document expected pollutant removal rates the WQMP shall not include:

- Hydrodynamic separator type devices as a BMP for removing any pollutant except trash and gross particulates
- Oil and Grit separators

Any Applicant proposing development in the Specific Plan Area is encouraged to consider the following BMPs:

- Sand filters or other filters (including media filters) for rooftop runoff
- Dry swales. A dry swale treatment system could be used if sufficient area, slope gradient, and length of swale could be incorporated into the project design. Dry swales could remove substantial amounts of nutrients, suspended solids, metals, and petroleum hydrocarbons
- Other proprietary treatment devices (if supporting documentation is provided)

#### Non-Structural BMPs

The WQMP shall include the following operations and maintenance BMPs under the management of a Homeowners/Business Association (Association), where applicable. The Association shall fund and implement an operational and maintenance program that includes the following:

- The Association shall dictate minimum landscape maintenance standards and tree trimming requirements for the total project site. Landscape maintenance shall be performed by a qualified landscape maintenance company or individual in accordance with a Chemical Management Plan detailing chemical application methods, chemical handling procedures, and worker training. Pesticide application shall be performed by a certified applicator. No chemicals shall be stored on-site unless in a covered and contained area and in accordance with an approved Materials Management Plan. Application rates shall not exceed labeled rates

for pesticides, and shall not exceed soil test rates for nutrients. Slow release fertilizers shall be used to prevent excessive nutrients in stormwater or irrigation runoff.

- The Association shall have the power and duty to establish, oversee, guide, and require proper maintenance and tree trimming procedures per the ANSI A-300 Standards as established by the International Society of Arborist. The Association shall require that all trees be trimmed by or under the direct observation/direction of a licensed/certified Arborist for the entire area. The Association shall establish minimum standards for maintenance for the total community, and establish enforcement thereof for the total community. The Association shall rectify problems arising from incorrect tree trimming, chemical applications, and other maintenance within the total community.
- Landscape irrigation shall be performed in accordance with an Irrigation Management Plan to minimize excess irrigation contributing to dry- and wet-weather runoff. Automated sprinklers shall be used and be inspected at least quarterly and adjusted yearly to minimize potential excess irrigation flows. Landscape irrigation maintenance shall be performed in accordance with the approved irrigation plans, the City Water Ordinance and per the City Arboricultural and Landscape Standards and Specifications.
- Proprietary stormwater treatment systems maintenance shall be in accordance with the manufacturer's recommendations. If a nonproprietary treatment system is used, maintenance shall be in accordance with standard practices as identified in the current CASQA (2003) handbooks, operations and maintenance procedures outlined in the approved WQMP, City BMP guidelines, or other City-accepted guidance.
- Signage, enforcement of pet waste controls, and public education would improve use and compliance, and therefore, effectiveness of the program, and reduce the potential for hazardous materials and other pollution in stormwater runoff. The Association shall prepare and install appropriate signage, disseminate information to residents and retail businesses, and include pet waste controls (e.g., requirements for pet waste clean up, pet activity area restrictions, pet waste disposal restrictions) in the Association agreement/Conditions, Covenants, and Restrictions.
- Street sweeping shall be performed at an adequate frequency to prevent build up of pollutants (see <http://www.fhwa.dot.gov/environment/ultraurb/> for street sweeping effectiveness).
- The Association shall develop a maintenance plan for BMPs and facilities identifying responsible parties and maintenance schedules and appropriate BMPs to minimize discharges of contaminants to storm drain systems during maintenance operations.
- Reporting requirements: the Association shall prepare an annual report and submit the annual report to the City of Huntington Beach documenting the BMPs operations and maintenance conducted that year. The annual report shall also address the potential system deficiencies and corrective actions taken or planned.

#### Site Design BMPs

Any Applicant proposing development in the Specific Plan Area is required to incorporate LID principles as defined in the Municipal NPDES Permit and is encouraged to consider the following BMPs, if allowed in accordance with the Geotechnical Report and limitations on infiltration BMPs:

- Use of porous concrete or asphalt (if acceptable to the Geotechnical Engineer and where infiltration will not adversely affect groundwater) or other pervious pavement for driveways, paths, sidewalks, and courtyards/open space areas, to the maximum extent practicable, would reduce pollutants in stormwater runoff as well as provide some detention within the material void<sup>1</sup> space. If porous paver blocks are used, they shall be adequately maintained to provide continued porosity (effectiveness)
- Incorporation of rain gardens or cisterns to reuse runoff for landscape irrigation
- Green roofs to reduce runoff and treat roof pollutants
- Site design and landscape planning to group water use requirements for efficient irrigation

**MM4.7-2** The City of Huntington Beach shall require that any Applicant prepare a Groundwater Hydrology Study to determine the lateral transmissivity of area soils and a safe pumping yield such that dewatering activities do not interfere with nearby water supplies. The Groundwater Hydrology Study shall make recommendations on whether permanent groundwater dewatering is feasible within the constraints of a safe pumping level. The Applicant's engineer of record shall incorporate the Hydrology Study designs and recommendations into project plans. If safe groundwater dewatering is determined to not be feasible, permanent groundwater dewatering shall not be implemented. The City Director of Public Works, OCWD, and other regulatory agencies shall approve or disapprove any permanent groundwater dewatering based on the Groundwater Hydrology Study and qualified Engineers' recommendations.

**MM4.7-3** The City of Huntington Beach shall require that the Applicant's Licensed Civil Engineer for each site-specific development prepare a Hydrology and Hydraulic Study to identify the effects of potential stormwater runoff from the specific development on the existing storm drain flows for the 10-, 25-, and 100-year design storm events. The Hydrology and Hydraulic Study shall identify existing runoff and proposed runoff, in addition to existing storm drain system capacity at the development site discharge location to the nearest down-gradient main junction. The Applicant shall design site drainage and document that the proposed development would not increase peak storm event flows over existing conditions for the design storm events. The final site plan shall not exceed an impervious fraction of 0.9, unless sufficient retention is incorporated into the site design to accommodate excess runoff. The Hydrology and Hydraulic Study shall also incorporate all current adopted Municipal NPDES Permit

<sup>1</sup> Void space is the empty space between individual particles.

requirements for stormwater flow calculations and retention/detention features in effect at the time of review.

**MM4.7-4** The City of Huntington Beach shall require that adequate capacity in the storm drain system is demonstrated from the specific development site discharge location to the nearest main channel to accommodate discharges from the specific development. If capacity is demonstrated as adequate, no upgrades will be required. If capacity is not adequate, the City of Huntington Beach shall identify corrective action(s) required by the specific development Applicant to ensure adequate capacity. Corrective action could include, but is not limited to:

- Construction of new storm drains, as identified in the MPD or based on the Hydrology and Hydraulic Study, if the Hydrology and Hydraulic Study identifies greater impacts than the MPD
- Improvement of existing storm drains, as identified in the MPD or based on the Hydrology and Hydraulic Study, if the Hydrology and Hydraulic Study identifies greater impacts than the MPD
- In-lieu fees to implement system-wide storm drain infrastructure improvements
- Other mechanisms as determined by the City Department of Public Works.
- For nonresidential areas, if redevelopment would result in an impervious fraction of less than 0.9 and does not increase the directly connected impervious area compared to existing conditions, runoff is expected to remain the same or less than as assessed in the MPD and only MPD improvements would be required.

Because some storm drain system constraints may be located far downgradient from the actual development site, several properties may serve to contribute to system capacity constraints. Therefore, the City Department of Public Works shall assess each site development and system characteristics to identify the best method for achieving adequate capacity in the storm drain system. Drainage assessment fees/districts to improve/implement storm drains at downstream locations or where contributing areas are large are enforced through *Municipal Code* (Section 14.20).

The City Department of Public Works shall review the Hydrology and Hydraulic Study and determine required corrective action(s) or if a waiver of corrective action is applicable. The site-specific development Applicant shall incorporate required corrective actions into their project design and/or plan. Prior to receiving a Certificate of Occupancy or final inspection, the City Department of Public Works shall ensure that required corrective action has been implemented.

## Noise

**MM4.9-1** Project applicants shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:

- Two weeks prior to the commencement of construction, notification must be provided to surrounding land uses within 300 feet of a

project site disclosing the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period

- Ensure that construction equipment is properly muffled according to industry standards and be in good working condition
- Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible
- Schedule high noise-producing activities between the hours of 8:00 A.M. and 5:00 P.M. to minimize disruption on sensitive uses, Monday through Saturday. Schedule pile-driving activities between the hours of 8:00 A.M. and 4:00 P.M. on Mondays through Fridays only.
- Implement noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 10 minutes
- Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party.

Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

**MM4.9-2** Project applicants shall require by contract specifications that construction staging areas along with the operation of earthmoving equipment within the project area would be located as far away from vibration and noise sensitive sites as possible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

**MM4.9-3** Project applicants shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

**MM4.9-4** Project applicants shall provide proper shielding for all new HVAC systems used by the proposed residential and mixed-use buildings to achieve a noise attenuation of 15 dBA at 50 feet from the equipment.

**MM4.9-5** Prior to issuance of building permits, project applicants shall submit an acoustical study for each development, prepared by a certified acoustical engineer. Should the results of the acoustical study indicate that that exterior (e.g., patios and balconies) and interior noise levels would exceed the standards set forth in the City of Huntington Beach Municipal Code Sections 8.40.050 through 8.40.070, the project applicant shall include design measures that may include acoustical paneling or walls to ensure that noise levels do not exceed City standards. Final project design shall incorporate special design measures in the construction of the residential units, if necessary.

## Public Services

**MM4.11-1** Subject to the City's annual budgetary process, which considers available funding and the staffing levels needed to provide acceptable response time for fire and police services, the City shall provide sufficient funding to maintain the City's standard, average level of service through the use of General Fund monies.

## Transportation/Traffic

**MM4.13-1** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate westbound right turn lane to the intersection of Beach Boulevard at Warner Avenue. Implementation of this improvement would require Caltrans approval.

**MM4.13-2** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of dual northbound and southbound left turn lanes to the intersection of Beach Boulevard at Garfield Avenue. Implementation of this improvement would require Caltrans approval.

**MM4.13-3** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth northbound through lane to the intersection of Brookhurst Street at Adams Avenue.

**MM4.13-4** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate northbound right turn lane to the intersection of Brookhurst Street at Adams Avenue.

**MM4.13-5** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth southbound through lane to the intersection of Brookhurst Street at Adams Avenue.

**MM4.13-6** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth eastbound through lane to the intersection of Brookhurst Street at Adams Avenue.

**MM4.13-7** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth westbound through lane to the intersection of Brookhurst Street at Adams Avenue.

**MM4.13-8** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution to allow a right turn overlap for a westbound right turn at the intersection of Brookhurst Street at Adams Avenue.

**MM4.13-9** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution to allow a right turn overlap for a northbound right turn at the intersection of Brookhurst Street at Adams Avenue.

**MM4.13-10** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a fourth northbound through lane to the intersection of Beach Boulevard at Edinger Avenue. Implementation of this improvement would require Caltrans approval.

**MM4.13-11** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a third westbound through lane to the intersection of Beach Boulevard at Edinger Avenue. Implementation of this improvement would require Caltrans approval.

**MM4.13-12** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate southbound right turn lane to the intersection of Beach Boulevard at Bolsa Avenue. Implementation of this improvement would require Caltrans and City of Westminster approvals.

**MM4.13-13** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a second westbound left turn lane to the intersection of Beach Boulevard at Talbert Avenue. Implementation of this improvement would require Caltrans approval.

**MM4.13-14** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a de facto westbound right turn lane to the intersection of Beach Boulevard at Talbert Avenue. Implementation of this improvement would require Caltrans approval.

**MM4.13-15** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the conversion of a separate westbound right turn lane to a de facto right turn lane at the intersection of Newland Street at Warner Avenue.

**MM4.13-16** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a third westbound through lane to the intersection of Newland Street at Warner Avenue.

**MM4.13-17** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate southbound right turn lane to the intersection of Beach Boulevard at McFadden Avenue. Implementation of this improvement would require Caltrans and City of Westminster approvals.

**MM4.13-18** For future projects that occur within the Specific Plan area, the project applicant(s) shall make a fair share contribution for the addition of a separate northbound right turn lane to the intersection of Beach Boulevard at McFadden Avenue. Implementation of this improvement would require Caltrans and City of Westminster approvals.

## Utilities and Service Systems

**MM4.14-1** The components of future projects in the Specific Plan area shall incorporate the following measures to ensure that conservation and efficient water use practices are implemented per project. Project proponents, as applicable, shall:

- Require employees to report leaks and water losses immediately and shall provide information and training as required to allow for efficient reporting and follow up.
- Educate employees about the importance and benefits of water conservation.
- Create water conservation suggestion boxes, and place them in prominent areas.
- Install signs in restrooms and cafeterias that encourage water conservation.
- Assign an employee to evaluate water conservation opportunities and effectiveness.
- Develop and implement a water management plan for its facilities that includes methods for reducing overall water use.
- Conduct a water use survey to update current water use needs. (Processes and equipment are constantly upgrading, thus changing the need for water in some areas.)
- Repair leaks. Check the water supply system for leaks and turn off unnecessary flows.
- Utilize water-efficient irrigation systems and drought tolerant plant palette and insure that sprinklers are directing water to landscape

- areas, and not to parking lots, sidewalks or other paved areas.
- Adjust the irrigation schedule for seasonal changes.
- Install low-flow or waterless fixtures in public and employee restrooms.
- Instruct cleaning crews to use water efficiently for mopping.
- Use brooms, squeegees, and wet/dry vacuums to clean surfaces before washing with water; do not use hoses as brooms. Sweep or blow paved areas to clean, rather than hosing off (applies outside, not inside).
- Avoid washing building exteriors or other outside structures.
- Sweep and vacuum parking lots/sidewalks/window surfaces rather than washing with water.
- Switch from “wet” carpet cleaning methods, such as steam, to “dry,” powder methods. Change window-cleaning schedule from “periodic” to “as required.”
- Set automatic optic sensors on icemakers to minimum fill levels to provide lowest possible daily requirement. Ensure units are air-cooled and not water-cooled.
- Control the flow of water to the garbage disposal
- Install and maintain spray rinsers for pot washing and reduce flow of spray rinsers for prewash
- Turn off dishwashers when not in use – wash only full loads
- Scrape rather than rinse dishes before washing
- Operate steam tables to minimize excess water use
- Discontinue use of water softening systems where possible
- Ensure water pressure and flows to dishwashers are set a minimum required setting
- Install electric eye sensors for conveyer dishwashers
- Retrofit existing flushometer (tankless) toilets with water-saving diaphragms and coordinate automatic systems with work hours so that they don’t run continuously
- Use a shut-off nozzle on all hoses that can be adjusted down to a fine spray so that water flows only when needed.
- Install automatic rain shutoff device on sprinkler systems
- Launder hotel linens per room by request or after vacancy

**MM4.14-2** The City of Huntington Beach shall require that adequate capacity in the wastewater collection system is demonstrated from the specific development site discharge location to the nearest OCS D main or trunk line to accommodate discharges from the specific development project. If capacity is demonstrated as adequate, no upgrades will be required. If capacity is not adequate, the City of Huntington Beach shall identify corrective action(s) required by the specific development Applicant to ensure adequate capacity. Corrective action could include, but is not limited to:

- Upsize new sewer pipes, as identified in sewer analysis (CR4.14-3)
- Discharge assessment fees/districts to upsize sewer lines at downstream locations or where contributing areas are large
- In-lieu fees to implement system-wide wastewater collection

infrastructure improvements

- Other mechanisms as determined by the City Department of Public Works.

Because some wastewater collection system constraints may be located far down gradient from the actual development site, several properties may serve to contribute to system capacity constraints. Therefore, the City Department of Public Works shall assess each development and system characteristics to identify the best method for achieving adequate capacity in the wastewater collection system.

The City of Huntington Beach Department of Public Works shall review the sewer analysis and determine required corrective action(s) or if a waiver of corrective action is applicable. The site-specific development Applicant shall incorporate required corrective actions into their project design and/or plan. Prior to Final Inspection, the City Department of Public Works shall ensure that required corrective action has been implemented.

## Climate Change

**MM4.15-1** The City shall require by contract specifications that all diesel-powered equipment used would be retrofitted with after-treatment products (e.g., engine catalysts and other technologies available at the time construction commences) to the extent that they are readily available and cost effective when construction activities commence. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.15-2** The City shall require by contract specifications that alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) would be utilized to the extent feasible at the time construction activities commence. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.15-3** The City shall require by contract specifications that developers within the project site use recycled and/or locally available building materials, to the extent feasible, such as concrete, stucco, and interior finishes, for construction of the project and associated infrastructure.

**MM4.15-4** The City shall require developers within the project site to establish a construction management plan with Rainbow Disposal to divert a target of 50 percent of construction, demolition, and site clearing waste.

**MM4.15-5** The City shall require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specifications shall be included in the proposed

project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.15-6** The City shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes. Diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds shall be turned off when not in use for more than five minutes. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Huntington Beach.

**MM4.15-7** The City shall require that any new development within the Specific Plan area provide signs within loading dock areas clearly visible to truck drivers. These signs shall state that trucks cannot idle in excess of five minutes per trip.

**MM4.15-8** The City shall require by contract specifications that electrical outlets are included in the building design of future loading docks to allow use by refrigerated delivery trucks. Future project-specific Applicants shall require that all delivery trucks do not idle for more than five minutes. If loading and/or unloading of perishable goods would occur for more than five minutes, and continual refrigeration is required, all refrigerated delivery trucks shall use the electrical outlets to continue powering the truck refrigeration units when the delivery truck engine is turned off.

**MM4.15-9** The City shall require that any new development within the project site provide a bulletin board or kiosk in the lobby of each proposed structure that identifies the locations and schedules of nearby transit opportunities.