CALIFORNIA COASTAL COMMISSION

South Coast Area Office 200 Oceangate, Suite 1000 Long Beach, CA 90802-4302 (562) 590-5071

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STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-02-142 **APPLICANT:** City of San Clemente AGENT: Chris Webb, Moffatt and Nichol Engineers **PROJECT LOCATION:** North Beach, Linda Lane, T-Street North and T-Street South, City of San Clemente (Orange County) **PROJECT DESCRIPTION:** The project involves a 5-year permit for opportunistic beach replenishment at four receiver sites throughout the City of San Clemente. The maximum proportion of fine-grained particles (or fines, defined as silts and clays passing through the number 200 sieve) in this sand source is 25%. Sand will be delivered to the replenishment site(s) by trucks or other suitable means (scrapers, conveyors) and placed using conventional earth moving equipment (e.g. bulldozer). LOCAL APPROVAL: Mitigated Negative Declaration approved by City of San Clemente, dated 12/30/02.

SUMMARY OF STAFF RECOMMENDATION:

The City of San Clemente is requesting a 5-year permit for opportunistic beach replenishment at four receiver sites throughout the City. The City has developed a detailed program and set of criteria to apply to potential beach replenishment projects that may arise over the next 5 years. Projects that fall within the program parameters, which include maximum amounts of sand, deposition methods, and grain size criteria, could be found by the Executive Director to be consistent with the subject permit and allowed to proceed without additional approval from the Commission. Projects which do not meet the standards of the program, or raise any additional potential for impacts to coastal resources, would require further review and approval by the Commission through a separate coastal development permit.

In this report, the "New Project Submittal Package" refers to the proposed requirements for information and conditions that all new beach replenishment projects approved under the subject permit must comply with. The New Project Submittal Package is attached as Exhibit 1, and consists of four separate items: Item 1 is the Project Flowchart showing how a particular project would go through the review process. Item 2 is the Minimum Criteria

5-02-142 (City of San Clemente) Page 2 of 28

Acceptability Checklist. Item 3 is the Project Notification Report. Item 4 is the Monitoring Plan.

Staff is recommending that the Commission <u>APPROVE</u> a coastal development permit for the proposed project with special conditions requiring 1) local public hearings for every sand replenishment project, 2) preliminary pre-construction monitoring of surfgrass resources, 3) a prohibition on construction during summer holiday weekends, and a limit on the number of beaches at which work can occur simultaneously to two, 4) a requirement that an on-site debris manager be present at all nourishment projects, 5) water quality BMPs to be incorporated into every project, 6) affirmative approval of the Executive Director for any future beach nourishment projects approved under this permit, evidence of Army Corps of Engineers approval, and assumption of risk, 7) monitoring of recreational and access impacts associated with individual beach replenishment projects, 8) a requirement that any biological impacts be mitigated.

SUBSTANTIVE FILE DOCUMENTS:

- 1. City of San Clemente certified Land Use Plan (LUP)
- Final Mitigated Negative Declaration San Clemente Beach Replenishment Project, 12/30/03
- Technical Report, San Clemente Beach Replenishment Program, Criteria and Concept Design, by Moffat & Nichol, January 2002.

I. <u>STAFF RECOMMENDATION, MOTION AND RESOLUTION OF</u> APPROVAL

Staff recommends that the Commission make the following motion and adopt the following resolution to **APPROVE** the permit application with special conditions.

MOTION

I move that the Commission approve CDP #5-02-142 pursuant to the staff recommendation.

Staff recommends a <u>YES</u> vote. Passage of this motion will result in adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION OF APPROVAL WITH CONDITIONS

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a

5-02-142 (City of San Clemente) Page 3 of 28

Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. Standard Conditions

- 1. <u>Notice of Receipt and Acknowledgment.</u> The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Expiration.</u> If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. <u>Assignment.</u> The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions

- 1. <u>Revised Public Notification Process.</u> **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, the following revisions to the New Project Submittal Package (attached as Exhibit 1):
 - A. The Project Flowchart shall indicate that prior to submitting a completed Project Notification Report to the Coastal Commission for final authorization of a specific proposal, the City must have received approval for that specific sand replenishment project from the San Clemente Planning Commission or City Council through a public hearing.
 - B. In the model Project Notification Report, Section **4.** Public Notification Process, shall be revised to include a requirement that the City, in completing this section of

5-02-142 (City of San Clemente) Page 4 of 28

the New Project Submittal Package, include a listing of the local hearing dates and copies of all the local hearing notices to substantiate the City's compliance with item A of this condition. This section shall also indicate that all written correspondence received by the City regarding the project and minutes of the Planning Commission/City Council meetings will be included with the completed Project Notification Report that is submitted to the Commission.

C. In the model Project Notification Report, Section **4. Public Notification Process**, shall also be revised to include a requirement that public notification include posting each construction site with a notice indicating the expected dates of construction and/or beach closures.

The applicant shall comply with the procedures and submittal requirements outlined in the approved New Project Submittal Package. Any proposed changes to the approved New Project Submittal Package shall be reported to the Executive Director. No change to the New Project Submittal Package shall occur without a Commissionapproved amendment to the permit unless the Executive Director determines that no such amendment is required.

- 2. <u>Revised Pre-Construction Monitoring</u>. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, the following revisions to the model Project Notification Report that is within the New Project Submittal Package:
 - A. Under Section **5. Project Monitoring**, subsection *5.1 Pre-Construction Monitoring*, shall be revised to require that for any beach nourishment project proposed more than one year after the date of approval of the subject permit, a preliminary surfgrass survey prepared by an appropriately qualified professional shall be performed at the replenishment site prior to, and submitted as part of, the completed, project-specific Project Notification Report.
 - B. Subsection 5.1 Pre-Construction Monitoring, shall be revised to include a statement that if pre-construction monitoring identifies potential impacts to coastal resources not identified and addressed in Coastal Development Permit #5-02-142, the specific replenishment project for which the pre-construction monitoring was being conducted shall be suspended and the monitoring results reported to the Executive Director. In that case, no work on the specific replenishment project at issue shall occur without a new permit or an amendment to the subject permit.

The applicant shall undertake the development in accordance with the approved revisions to subsection 5.1 of the model Project Notification Report within the New Project Submittal Package. Any proposed changes to the approved New Project Submittal Package shall be reported to the Executive Director. No change to the New Project Submittal Package shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

3. <u>Revised Construction Schedule</u>. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for

5-02-142 (City of San Clemente) Page 5 of 28

review and written approval, the following revisions to the model Project Notification Report that is within the New Project Submittal Package:

- A. Under Section 1. Introduction, the Proposed Project Limits table shall be revised to indicate that the 4-day per week construction schedule permitted during the Peak Summer season is Monday through Thursday only, and that no work will occur on holidays. The table shall also be revised to indicate no work can occur at any site during the following times: the holiday weekends of Memorial Day and Labor Day, and weekends adjacent to Independence Day when Independence Day falls on a Friday or Monday.
- B. The Proposed Project Limits table shall be revised to indicate that construction will not occur on more than 2 beaches at any one time.

The applicant shall undertake the development in accordance with the approved revisions to the Proposed Project Limits table within the New Project Submittal Package. Any proposed changes to the approved New Project Submittal Package shall be reported to the Executive Director. No change to the New Project Submittal Package shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

- 4. <u>Debris Monitoring</u>. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, the following revisions to the model Project Notification Report that is within the New Project Submittal Package:
 - A. Under Section 2. Source Material, subsection 2.5 Debris Management, shall be revised to include a requirement that a designated on-site debris monitor be present during beach replenishment to monitor for the presence of debris in the sand material. If any debris or non-sand material is detected, the specific beach replenishment project(s) that was/were using that sand material shall be halted at that site(s). Those specific beach replenishment project(s) shall not continue until a new Project Submittal Package with updated information on the composition of the sand material is approved by the Executive Director in accordance with the procedure outlined in the section 8.A. required by condition 6, below.

The applicant shall undertake the development in accordance with the approved revisions to Section 2.5 of the model Project Notification Report within the New Project Submittal Package. Any proposed changes to the approved New Project Submittal Package shall be reported to the Executive Director. No change to the New Project Submittal Package shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

5. <u>Staging Plans</u>. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, revisions to the model Project Notification Report that is within the New Project

5-02-142 (City of San Clemente) Page 6 of 28

Submittal Package to include the following additions to Section **3. Transportation and Placement**:

- A. During the construction stages of the project, the permittee shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to implement the project. Construction equipment shall not be washed on the beach or in the beach parking lots. Construction debris and sediment shall be properly contained and secured on site with BMPs, to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of construction. Debris shall be disposed at a debris disposal site outside the coastal zone.
- B. Provide plans for staging and storage of equipment. Where feasible, public parking areas shall not be used for staging or storage of equipment and materials. Where use of public parking spaces is unavoidable, the minimum number of public parking spaces (on and off-street) that are required at each receiver site for the staging of equipment, machinery and employee parking shall be used. At each site, the number of public parking spaces utilized shall be the minimum necessary to implement the project.
- C. Access corridors and staging areas shall be located in a manner that has the least impact on public access via the maintenance of existing public parking areas and traffic flow on coastal access routes (El Camino Real, for example).

The applicant shall comply with the submittal requirements within, and undertake the development in accordance with, the revisions to Section 3 of the model Project Notification Report within the approved New Project Submittal Package. Any proposed changes to the approved New Project Submittal Package shall be reported to the Executive Director. No change to the New Project Submittal Package shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

- 6. <u>Special Requirements:</u> **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, revisions to the model Project Notification Report that is within the New Project Submittal Package in the form of a new Section **8. Special Requirements** added to the end of the Report. Section 8 shall include the following requirements:
 - A. <u>Timing of Executive Director Approval</u>: The Executive Director of the Coastal Commission shall review the completed New Project Submittal Package within 30 days of receipt of the Package unless there are unusual circumstances. Within this time period, the Executive Director shall provide a written response

of 1) approval of the specific sand replenishment project proposed; or, 2) a requirement that the project receive a new, separate coastal development permit; or 3) a request for additional information; or 4) a statement that additional time to review the project will be necessary and an indication of the anticipated response date. A failure of the ED to respond within 30 days will not result in the specific project being deemed approved; written approval from the Executive Director is required prior to the initiation of any work.

- B. <u>Other Permits</u>: Prior to commencement of construction on any specific beach replenishment project, the applicant shall provide to the Executive Director copies of all other required state or federal discretionary permits, and required leases from the California State Lands Commission, for the development. The applicant shall inform the Executive Director of any changes to the development required by such permits. Such changes shall not be incorporated into any beach replenishment project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
- C. U.S. Army Corps of Engineers Permit: Prior to commencement of construction on any specific beach replenishment project, the applicant shall provide to the Executive Director a copy of a U.S. Army Corps of Engineers permit, or letter of permission, or evidence that no Corps permit is necessary for the project. The applicant shall inform the Executive Director of any changes to the project required by the U.S. Army Corps of Engineers. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
- D. Assumption of Risk, Waiver of Liability and Indemnity: By acceptance of Coastal Commission permit 5-02-142 at its implementation at the site listed in this completed Project Notification Report, the applicant acknowledges and agrees (i) that the site may be subject to hazards such as erosion and landslides; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

The applicant shall undertake the development in accordance with the approved provisions of Section 8 of the model Project Notification Report. Any proposed changes to the approved New Project Submittal Package shall be reported to the Executive Director. No change to the New Project Submittal Package shall occur

5-02-142 (City of San Clemente) Page 8 of 28

without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

- 7. <u>Recreational Monitoring:</u> **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director for review and written approval, revisions to the Monitoring Plan that is within the New Project Submittal Package to include the following additions to Section **2. PHYSICAL MONITORING**, subsection **2.3 Surfing**:
 - A. The title to Subsection 2.3 shall be revised as 2.3 Surfing/Recreation.
 - B. The following item #5 shall be added under the heading for subsection 2.3: Sand shall be visually evaluated in the course of the proposed post-construction monitoring, and if it appears that the sand is becoming hard packed, the City will evaluate methods of remediating the hard-packed sand including but not limited to the appropriateness of remedial grading to push the sand into the surfzone and submit a report and recommendation of available options to the Executive Director of the Commission as a new project. The Executive Director shall determine whether the proposed remediation may be authorized under this coastal development permit or whether the work shall require an amendment to this permit or a new permit.
 - C. The following item #6 shall be added under subsection 2.3: General recreation and access impacts shall be assessed by observing traffic flows during construction, and collecting complaints regarding the project that may be received from the public at the City. These factors must be assessed and evaluated in the post-project report, which must include recommendations for improvements.

The applicant shall undertake the development in accordance with the approved revisions to the Monitoring Plan within the New Project Submittal Package. Any proposed changes to the approved New Project Submittal Package shall be reported to the Executive Director. No change to the New Project Submittal Package shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

- 8. <u>Biological Mitigation:</u> Any inadvertent impacts to sensitive habitat areas by the proposed development shall be reported to the Executive Director within 2 weeks of occurrence and shall be mitigated. Such mitigation shall require an amendment to this permit or a new permit unless the Executive Director determines that no amendment or new permit is legally required.
- 9. <u>Approval of Excavation/Dredging Site:</u> The subject permit is only for sand replenishment projects. All other development proposals that may be involved in obtaining the sand source such as but not limited to non-exempt grading, new construction or dredging, if located within the Coastal Zone, shall require the approval of the Coastal Commission or its successor agency through a coastal development permit or an amendment to this permit, unless such development is exempt from permit requirements under the Coastal Act and its implementing regulations.

10. <u>Scope and Term of Permit Approval</u>: The development authorized by this coastal development permit is limited to beach nourishment that is consistent with the 'Proposed Project Limits' identified in the applicant's submittal including but not limited to the placement sites, maximum annual quantities of beach nourishment, seasonal limitations, and methods of delivery. The authorization for continuing development pursuant to this permit shall expire 5 years from the date of Commission approval.

IV. Findings and Declarations

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The Commission hereby finds and declares:

A. PROJECT LOCATION AND DESCRIPTION

The City of San Clemente is proposing an opportunistic sand replenishment program intended to allow for and expedite the processing of multiple beach replenishment projects over a fiveyear period beginning from the date of Commission approval of this permit. The program is designed to capitalize on opportunities to obtain surplus sand from upland construction, development, or dredging projects, as they arise, and to place the sand on the City's beaches instead of losing the material to an inland disposal site. The proposed beach replenishment project differs from replenishment proposals the Commission typically considers in that specific sand sources have not been identified or proposed.

The City of San Clemente has approximately 4.6 miles of coastline. The proposed program would allow for the placement of a maximum combined total of approximately 300,000 cubic yards of beach quality material per year on four beaches in the City. The four project sites are: 1) North Beach, just south of the San Clemente Metrolink train station and at the terminus of Avenida Pico, extending a distance of 1,500 feet; 2) Linda Lane Beach, located south of Mariposa Point and north of the City pier, extending a distance of 1,500 feet; 3) T-Street Beach North, extending from the pier 1,000 feet south; and 4) T-Street Beach South extending a distance of 1,200 feet south from the main surfing site (see Exhibit 3). One stockpile site has also been identified, known as the Animal Shelter site, a .5-acre lot east of Avenida Pico and north of El Camino Real, used for equipment and storage by the City.

Beach sand would be placed either below the mean high tide line, as a layer over the beach surface as a berm, or as a dike along the toe of the existing revetment that protects the railway in this area, depending on the particular site and time of placement. Transport to the fill site would be by trucks, or, if feasible, to the T-Street sites by train. Since the T-Street sites are located adjacent to the railroad tracks, and there is not any revetment between the tracks and beach, material could reach these sites by train and sidecar-dumped directly onto the beach or conveyed from the railcar by a belt system. Conventional earth moving equipment would be used to spread the sand on the beach. In the event that suitable sand was available but site or timing constraints precluded immediate placement on the beach, sand would be stored on the stockpile site until an appropriate time and approval had been obtained for placement at a beach site. Since the program may involve placing sand below the

mean ordinary high water mark line, a lease from the California State Lands Commission would be required, for some projects.

The subject permit is intended to expedite the implementation of opportunistic beach sand replenishment projects over the next 5 years by establishing a set of detailed and rigorous criteria and parameters under which future potential sand sources could be evaluated. If a particular sand source met the criteria, placement of that sand could be approved by the Executive Director under the subject permit. If any particular sand source fell outside the criteria outlined herein, or any other potential risks to coastal resources not identified and discussed in this report were identified by Commission staff, a separate coastal development permit would be required.

The bulk of the testing and review of potential sand sources would take place at the City of San Clemente prior to the project even being submitted to Commission staff. All potential sand projects would have to undergo three stages of project review at the City. Stage 1 involves reviewing the potential sand source material against a detailed Minimum Criteria Acceptability checklist (see Exhibit 1, Item 2). The review includes an assessment of possible pollutants, contaminants, grain size, color, and particle shape. The maximum proportion of fine-grained particles (or fines, defined as silts and clays passing through the number 200 sieve) to total volume that could be placed on the beach under any circumstances is 25%, with the remainder being 75% larger-grained sand. The material must be free of trash and debris, must reasonably match the color of natural beach sand after exposure to the marine environment, must be less than 10% manufactured sand, and must not form a hardpan after placement. Any sample not meeting these pre-determined standards would be rejected.

If the sand source meets the required criteria in the Minimum Criteria Acceptability checklist, Stage 2 requires development of a Sampling & Analysis Plan (SAP) prepared for and approved by the U.S. Army Corps of Engineers (ACOE). Sand must be free of contaminants and chemical hazards based on Tier I testing protocol as specified by the ACOE and US EPA. Sand must be chemically inert and not possess characteristics that would adversely affect water quality, including temperature, dissolved oxygen, or pH. The results of these analyses would be distributed to the ACOE and EPA for review and approval.

At the third stage, the City would evaluate the sand material in the context of the subject permit limits for project size, location, disposal method, timing, etc. The proposed timing of sand placement on the beach has been designed to replicate nature as closely as possible. Natural sediment delivery to the coast occurs during the wet season (fall and winter); therefore, to the extent feasible, sand placement projects will occur during that time. No more than 1/3 of the total allowed material could be placed on the beach outside the wet season.

The table under the **Introduction** of the Project Notification Report (Item 3 of Exhibit 1) contains parameters for the time, placement method, and amount of suitable sand that could be placed on any of the four receiver sites. For example, at North Beach, no more than a total of 125,000 cubic yards of sand could be placed on the beach within any one year. The lineal extent of replenishment could not exceed 1,500 feet. Placement could be either as a

5-02-142 (City of San Clemente) Page 11 of 28

1

berm or at the Mean High Tide Line. Sand could be placed either in the Fall/Winter (Sept. 21 – March 21) or in the Spring/Summer (March 21 – Sept 21), but different criteria apply depending on the season. Up to 25% fine material can be included in the sand only if it were placed in the winter. No more than 4 weeks of work could be done at North Beach during the summer. Only projects that comply with these specific criteria for each receiver beach could be considered under the proposed permit.

At Stage 4, the City would submit a particular sand deposition project for the approval of the Executive Director, as well as the other relevant resources. Information submitted (see Item 3, Project Notification Report, of Exhibit 1) would include all of the detailed information involved in performing the above analyses, such that the Executive Director could make a determination of whether the project conforms with the project limits. This information would also outline the pre-, during, and post-construction monitoring plan for the project. As proposed, this monitoring must include biological monitoring (grunion, nearshore reefs and surfgrass, shorebirds), physical monitoring (turbidity, beach profiling), and recreational monitoring (surfing impacts). Item 4 of Exhibit 1 shows the detailed monitoring program which would occur for each individual project, as well as annual summary reports. The City will also be responsible for keeping track of the cumulative beach replenishments which have occurred under the subject permit and providing this information to the Executive Director.

Also included at this stage would be the public notification package associated with the particular sand placement project. Notification would be done through notices in local newspapers, or direct mailings, notices in utility bills, or cable TV local announcements.

Thus, at the time any particular project was submitted for the Executive Director's approval, there would be site-specific information on the composition, chemistry, and grain size of the sand source material, the receiver beach, the timing and size of the project, the deposition method, a monitoring program, and a public notification program. Executive Director discretion at this point would be highly constrained, as only projects which met the specific standards for each of these items, as contained in the attached Exhibit 1 and as conditioned herein, could be approved under the subject permit.

After a project is completed, all of the pre- and post-construction surveys and monitoring are required to be submitted as a final report to the Executive Director, to evaluate the impact of the particular project and to aid in the review of future projects under the subject permit.

As proposed, the Executive Director would have 30 days to respond to the City's project submittal, after which time, the project would be deemed approved, and the City would be able to proceed. (However, see Special Condition #6A above, and findings under **BIOLOGICAL RESOURCES AND WATER QUALITY**, below, which indicate that, as conditioned, an affirmative approval from the Executive Director would be required for each nourishment project). The Executive Director could also request additional information. Again, as noted above, although the Executive Director could only approve projects that fall within the parameters outlined in this permit, staff could reject a particular project for any reason, and require that it be reviewed and approved by the Commission as a separate permit.

5-02-142 (City of San Clemente) Page 12 of 28

The project would potentially allow the placement of up to 300,000 cubic yards of sand each year, although, in practice, the City expects to start with relatively small-scale projects followed by physical and biological monitoring of the project's impacts. Data from these initial small-scale projects will provide data that could be used to modify the program if needed and ultimately increase project sizes while maintaining biological and recreational protection.

Exhibit 1 is the "New Project Submittal Package," which contains the process, parameters, and requirements for beach replenishment projects that would be reviewed under the subject permit. The New Project Submittal Package consists of four separate items: Item 1 is the Project Flowchart showing how a particular project would go through the review process. Item 2 is the Minimum Criteria Acceptability Checklist. Item 3 is the Model Project Notification Report. Item 4 is the Monitoring Plan.

B. RECREATION AND PUBLIC ACCESS

Many policies of the Coastal Act address public access. The following are most applicable to the proposed development and state, in part:

Section 30210

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(I) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) adequate access exists nearby...

Section 30213

5-02-142 (City of San Clemente) Page 13 of 28

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred....

Section 30214(a)

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(1) Topographic and geologic site characteristics.

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

Section 30220

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30233(b)

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

Finally, Section 30604(c) of the Coastal Act requires that a specific access finding be made in conjunction with any development located between the sea and the first public roadway, indicating that the development is in conformity with the public access and public recreation policies of Chapter 3. In this case, such a finding can be made.

The following goals, policies and implementations measures in the certified LUP are relevant to the proposed project:

301. OVERVIEW OF COASTAL POLICIES

Provide and maintain a comprehensive and safe beach access network.

5-02-142 (City of San Clemente) Page 14 of 28

- Provide and maintain recreational areas, recreational activities, and visitor serving facilities.
- Protect, where appropriate, public view corridors and historic resources.
- Provide and maintain a safe and healthy beach for the enjoyable utilization of the marine environments.

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 Protect and preserve, where possible, significant wildlife habitats which exist in the Coastal Zone.

302. COASTAL LAND USE GOALS AND POLICIES

E. OPEN SPACE LAND USE POLICIES

Goal

V. Preserve open spaces for the City's residents which provide visual relief, amenities and recreational opportunities, protect environmental resources, protect the population from environmental resources [sic], protect the population from environmental hazards, and are in balance with new development (GP Objective 1.9).

304. RECREATIONAL AND VISITOR SERVING GOALS AND POLICIES

B. RECREATIONAL POLICIES

- XI.4 Protect the City's recreational resources including the recreational facilities, parks, surfing areas, and community events identified in section **207** of this plan.
- XI.10 Maintain the valuable beach resources as a fundamental element to conserve and develop sensitively, thus enhancing the quality and livability of the City of San Clemente (GP Policy 8.7).
- XI.11 Locate and enhance the beach areas that will accept limited recreational development without destroying existing natural beauty (GP Policy 8.7.2).
- XI. 13 Emphasize the protection, enhancement, and sensitive development of park and open space areas which possess great scenic, environmental, historic, and cultural values.

404. RECREATIONAL AND VISITOR SERVING FACILITIES

D. RECREATIONAL FACILITIES

5. Emphasize the protection, enhancement and sensitive development of park and open space areas which possess great scenic, environmental, historic, and cultural values.

6. Emphasize the protection of the City's water-oriented recreational activities including surfing, body boarding, body surfing, swimming, fishing and other related activities.

5-02-142 (City of San Clemente) Page 15 of 28

General Recreation/Traffic and Parking

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The above policies establish the shoreline as a valuable asset to the environment and economy of the Southern California region and the State, worthy of protection and enhancement. The shoreline is also considered a resource of national significance. Beach erosion has been an increasing problem in the Southern California region, and in many past projects the Commission has identified beach replenishment as a means to preserve and enhance the environmental quality, recreational capacity, and property protection for the region's shoreline. Additional sand on beaches increases the amount of recreational area available for public uses, decreases the rate of beach erosion, and provides a buffer (a wider beach) between waves and adjacent public and private development, thereby reducing pressure to construct shoreline protective devices which can adversely affect both the visual quality of scenic coastal areas and shoreline sand supply.

Information submitted by the applicant documents that like other beaches in Orange and San Diego counties, natural sediment deposition along the City's coastal beaches is much lower than historic production rates. It is estimated that historically, San Clemente beaches received an annual sediment yield of 39,000 cy from local river sources within the Oceanside Cell, and the present yield is half that. As a result of this net loss of sediment deposition over the project area, the local beach profiles reflect these conditions and show severe signs of erosion, which is why the local beach widths are now much narrower than historic widths. For example, North beach is currently approximately 60 feet in width, while historically (1981), it was approximately 110 feet wide.

In response to this situation, the proposed opportunistic sand program has been proposed to allow for and to expedite beach replenishment at four receiver sites in the City of San Clemente. It is impossible to say how long any particular fill sand project would remain on the beach, given the possible variations in amount of material and disposal location. However, during the time the sand remains on the beach the public will have the benefit of wider sandy beaches, and any sand deposited on the beach will become part of the littoral cell system.

Nevertheless, the project is expected to have some temporary adverse impacts on public access and recreation. All of the project beaches are currently used for various recreational activities including fishing, swimming, surfing and sunbathing. During construction, a beach fill site would have to be closed, creating a temporary adverse impact on recreation. The impact will be particularly significant during higher tides and at work areas where the entire beach area would be closed to the water line, and people cannot get past the work area to the rest of the beach except by traveling inland around the construction area. Typically, the Commission has prohibited construction on beaches or in recreational areas from occurring during the summer months, or, if summer construction is unavoidable, prohibited construction policies listed above as well. Consequently, in order to allow for the greatest flexibility in getting available sand to the beach such that public access and recreation can be improved consistent with the policies listed above, the proposed project includes allowances for some work during the summer and on weekends.

5-02-142 (City of San Clemente) Page 16 of 28

However, beach access in the City would never be completely restricted. The program has established limits on the season and amount of time that any particular beach could be closed (see the table under the **Introduction** of the Project Notification Report (Item 3 of Exhibit 1)). For example, in the peak summer season (Memorial Day weekend through Labor Day weekend), construction can not occur more than 4 days a week at any site, Monday through Friday, except at North Beach, which tends to be less impacted than the beaches closer to the pier. No more than a total of 4 weeks of construction (4 days a week) could occur during the peak summer period at Linda Lane. Even in the winter, there are limits on construction to minimize recreational impacts. For example, at T-Street South, construction is limited to 6.5 weeks, 5 days a week from September 21 through March 21. The periods identified are the maximum annual total potential replenishment timeframes. As noted above, individual replenishment projects would likely be much smaller and require much shorter construction periods than the maximum. The maximum allowed amount of sand might not be placed each year, which would also mean fewer construction impacts.

Most sand replenishment is expected to occur during the rainy season, because placing sand at that time most closely mimics the pattern of natural sand movement (see <u>Marine Resources</u>, below). Assuming that the maximum quantity of sand were placed each year, then the following construction closure times would be required. North Beach would be closed for 10 weeks in the fall/winter and 4 weeks in the spring/summer. Linda Lane would be closed for 6.5 weeks in fall/winter and 4 weeks in the spring/summer. T-Street North and South would be closed for 2 to 3 weeks in the fall/winter and 1 week in the spring/summer. The closures would not extend over the entire length of the beach, but only at the portions of the beach where earthmoving equipment are actively working. One-half of a particular beach may be closed while the other half remains open during work. In general, the water area is expected to remain open during construction activities, although the City would retain the ability to restrict access to the water if safety conflicts arose at a particular site. Due to City noise regulations, construction activities would be limited to normal weekday working hours and Saturdays from 7 AM to 6 PM.

As proposed, Saturday construction would be permitted on North Beach in order to maximize the window of time available to place sand on this beach. The purpose of the project is to benefit public access and recreation, and the more flexibility the contractor has in scheduling, the less likely and individual project will experience expensive, non-productive "down-time." In addition, allowing work on more days per week reduces the number of trips per day necessary, which can help avoid traffic impacts (see <u>Traffic and Parking</u>, below). Since North Beach is upcoast of virtually all of the other beaches in San Clemente, sand placed at this beach may eventually benefit all of the other beaches downcoast. Thus, allowing the maximum flexibility for sand delivery at this site is likely to have the greatest long-term benefit to all of San Clemente's beaches. In this particular case, as proposed, only a maximum total of 4 weeks of construction would be allowed at North Beach during the entire spring/summer season. So a maximum of 4 Saturdays between March 21 and September 21 at North Beach could be impacted.

Again, the Commission understands the importance of the project in providing enhanced access and recreational opportunities and protection of upland development. However, the Commission must weigh these benefits against potential adverse impacts to assure

5-02-142 (City of San Clemente) Page 17 of 28

consistency with Coastal Act policies. Therefore, Special Condition 3 requires a revised construction schedule, incorporated in the Project Notification Report, which prohibits work on the holiday weekends of Memorial Day and Labor Day-at any of the 4 project sites. That is, no work can occur on the Saturday prior to Memorial Day, or the Saturday prior to Labor Day (as proposed, no work would ever occur on Sundays or holidays). Because particularly heavy weekend beach use also occurs when Independence Day falls on a Friday or Monday, the condition also prohibits Saturday construction in this circumstance. The condition further requires that construction cannot occur on more than two beaches at any one time. The City has indicated that it is unlikely that replenishment will ever occur at more than one beach at a time, but there may be situations in which sand availability would allow simultaneous beach nourishment. Limiting the number of simultaneous projects to two beaches will allow for a maximum opportunity for beach replenishment while limiting the potential impacts to public access and recreation. The condition also clarifies that the 4-day construction window permitted at certain times and locations (see table located at Exhibit 1, Project Notification Report, Introduction) refers only to Monday-Thursdays, and adds a statement that no work shall occur on holidays during the summer. To further limit adverse impacts on public access, Special Condition adds a requirement to the public notification process that each construction site be posted with a notice indicating the expected dates of construction and/or beach closures

The proposed program includes a public notification package to inform the public prior to the initiation of any sand replenishment project, which will help reduce the impact the project will have on the public. Public notification could include the City's Coastal Advisory Committee Workshops, City council Meetings, Chamber of Commerce/Downtown Business Association articles, City Publications, newspaper articles, signage, notices in local newspapers, or direct mailings, notices in utility bills, or cable TV local announcements. However, the Commission is concerned that the proposed public notification measures do not specially include a requirement for a public hearing on the project. Special Condition 1 requires that sand replenishment projects proposed under the subject permit must be approved by the San Clemente Planning Commission or City Council through a public hearing. This hearing must be held prior to submittal of the Project Notification Report, such that any local concerns can be addressed prior to the Executive Director's review. The condition requires that all written correspondence received by the City regarding the project and minutes of the Planning Commission/City Council meetings will be included in the Project Notification for the Executive Director's review. Thus, the public will have adequate opportunities to be notified of, and provide input on future replenishment projects.

Traffic and Parking

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As proposed, at the North Beach Fill Site, trucks would utilize the controlled railroad at-grade crossing and public street, which leads by the Capistrano Trailer Court and North Beach. The trucks would then pass through a gated fence at the end of the public street, and over a box-channel bridge at the flood control channel. The trucks would then drive onto a temporary construction road onto the beach, dump their loads, and drive back onto the construction road and back through the same route. Earthmovers will push the sand from the truck drop site onto the beach and/or into the water (see Exhibit 4).

5-02-142 (City of San Clemente) Page 18 of 28

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The Linda Lane Beach Fill Site would also be serviced by trucks and scrapers. The trucks would dump the sand onto North Beach, and scrapers would then pick up the sand and proceed south to Linda Lane around Mariposa Point during low tides. A temporary construction road over the sand seaward of the railroad tracks may be developed depending on the access around Mariposa Point, which periodically changes.

The project could have an adverse impact on public access and recreation if construction vehicles significantly increase traffic flows. In order to minimize traffic disruptions, the project includes limits on the number and frequency of truck trips (see Exhibit 5). A project-specific traffic route plan must also be created for each nourishment project. The timing of sand delivery is estimated to be approximately 40% longer at Linda Lane than at North Beach site because of a lower delivery rate, which depends on existence of low tides, exposed rock that may limit access, and use of four-wheel drive trucks requiring double handling of the material. Therefore, less sand will be delivered to Linda Lane over a specified time period, as compared to the North Beach site.

A small amount of material could also be trucked to the Linda Lane Beach Fill Site or the T-Street Beach Fill sites via access over the pier at-grade crossing. To access the beach, trucks would travel from Avenida Palizada to Calle Sevilla to Avenida Del Mar to the at-grade crossing. Because this route passes through a more congested residential and commercial community, the total volume to be trucked will be limited to 2,400 cubic yards per week to minimize adverse impacts. Similar limits have been place on rail transport (Exhibit 5).

The Mitigated Negative Declaration determined that with the project limits on hauling trips and frequencies, no individual project would generate sufficient traffic to decrease the Level of Service on El Camino Real, Avenida Pico, or Avenida Del Mar during construction. With regard to parking, as proposed, the North Beach parking lot will remain open and available to the public. Some limited, temporary use of street parking may be necessary during construction operations. However, Special Condition 5 allows the use of public parking spaces only where unavoidable and where the minimum number of spaces necessary is used. In order to ensure that the project-specific traffic route plans protected against increased congestion, the condition also requires that access corridors and staging areas be located in a manner that has the least impact on public access and traffic flows on coastal access routes. Given the proposed limits on work during the summer season and the restraints on number of truck trips, public access and recreation is not expected to be significantly restricted by construction activities.

Surfing

Surfing occurs throughout the project area, and City beaches are considered relatively highquality surfing location. Surfing could potentially be impacted not only by restriction of access to the water during construction, but through the modification of existing sand bars and reefs by sand placement and deposition, and poor water quality caused either by turbidity generated during and after construction, or contaminants being released into the surfzone by the fill material.

As noted above, the water area is expected to remain open during construction activities, and limits have been placed on the season and amount of time construction can occur. The

5-02-142 (City of San Clemente) Page 19 of 28

City proposes to test all potential sand sources to verify that the sand is free of contaminants prior to placement on any beach fill site. They must also perform background research of the potential for the material to possess contaminants based on Tier I testing protocol as specified by the ACOE and the U.S. EPA. Therefore, there should not be any health threats to surfers from contamination.

According to the Mitigated Negative Declaration for the project, there is a potential for a "low level turbidity plume to occur in the water during construction activities." However, turbidity will be minimized by restricting the amount of fines in the placement sand to no more than 25% in the Fall/Winter period, and 20% during the Spring and Summer season (see detailed discussion Fines below under Biological Resources). In addition, the program requires monitoring of turbidity by lifeguards during construction. If turbidity levels reach higher than ambient levels and extend beyond the end of the pier for more than three days, the operation must be curtailed, or cease, to decrease turbidity to below this criterion. In addition, turbidity monitoring and reporting will be done daily during nourishment. Although no significant recreational impacts are expected from turbidity, the monitoring will provide information that will allow future projects to more accurately assess and avoid turbidity.

With regard to the potential modification of sand bars due to beach nourishment, changes in the formation of offshore sand bars are a naturally occurring event, and there are seasonal periodic changes to surfing localities. The Mitigated Negative Declaration notes that the project could add a relatively large sand "slug" to the system over a short time frame thereby changing bottom conditions at the sites. This impact could be adverse and significant if sand deposition caused waves to close-out over a long period of time (months) rather than peak, or resulted in a perpetual shorebreak at the beach rather than a nearshore bar for waves to break over. However, any such occurrence is most likely to be a short-term condition while the sand is naturally redistributed over the bottom. The project may cause potentially beneficial impacts to surfing by contributing sand to the nearshore that will be deposited in bars throughout the City. More sand in the system provides material for enhanced sand bar formation and may result in larger or longerlasting bars, and improved surfing conditions. The report indicates that informal observations of the 2000 SANDAG beach replenishment project showed surfing conditions improved at each sand placement site after construction because of sand bar formation. Surfing will be monitored visually after construction for six months to determine if project impacts occurred. If so, the program proposes to incorporate more restrictions to either avoid surf sites or reduce sand quantities placed near surf sites.

Special Condition 7 requires additional recreational monitoring including monitoring of the sand to identify if the sand is becoming hard packed, and assessing the appropriateness of remedial grading to push the sand into the surfzone. Remedies must be submitted to the Executive Director as a new project and the Executive Director will determine whether the proposed remediation may be authorized under this coastal development permit or whether the work shall require an amendment to this permit or a new permit. As conditioned, general recreation and access impacts such as traffic flows and complaints from the public must also be evaluated in the post-project report to aid in the review of future nourishment projects under the subject program.

Conclusion

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5-02-142 (City of San Clemente) Page 20 of 28

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In summary, the proposed project will have short-term and temporary impacts on public access and recreation, which have been minimized by restrictions and conditions on the amount of work than can occur during the summer. The project overall will have a positive impact on San Clemente's beaches. The proposed sand monitoring program will provide information regarding the short and long-term effects of beach replenishment, including how long the sand remains on the beach at different sites in different conditions. The surfing and recreational monitoring will provide similarly detailed information. Currently, this type of data is not available, and the proposed project will be extremely useful in planning and designing effective beach replenishment projects in the future. Therefore, as conditioned, the proposed project can be found consistent with the public access and recreation policies of the Coastal Act.

B. BIOLOGICAL RESOURCES AND WATER QUALITY

Section 30230 of the Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Act states in part:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff...

Section 30233 of the Act states in part:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(I) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

5-02-142 (City of San Clemente) Page 21 of 28

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5). Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

[...]

Section 30240 of the Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The following goals, policies and implementations measures in the certified LUP are relevant to the proposed project:

306. WATER AND MARINE RESOURCES GOALS AND POLICIES

5-02-142 (City of San Clemente) Page 22 of 28

Policies

- XIV.4 Provide a clean and enjoyable marine environment that sufficiently meets the needs of beach users (GP Policy 7.7).
- XIV. 5 Maintain and enhance the City's beaches and marine resources (GP Policy
- XIV.7 Continue monitoring sand movement, researching the impacts of coastal erosion and methods of mitigating further coastal damage to San Clemente's beaches environment (GP Policy 7.8.1).
- XIV.8 Maintain a healthy coastline, preventing degradation of the community's visual and environmental resources (GP Policy 7.9).
- XIV.II Permit extraction of significant mineral resources, such as borrow material that may be used for beach replenishment, as an interim use prior to development (GP Policy 10.7).

307. ENVIRONMENTALLY SENSITIVE HABITAT GOALS AND POLICIES

Policies

- XV.7 Review of all projects within the Coastal Zone shall include an assessment of the potential impact on natural habitat areas.
- XV.15 Identify the key beach areas which are important to protect through land use regulation because of their inherent environmental, ecological, and or aesthetic contributions.
- XV. 16 Maintain the presence of parklands and open space in the Coastal Zone in order to conserve and enhance the natural environment thereby improving the quality and livability of the City of San Clemente.

406. WATER AND MARINE RESOURCES

B. SHORELINE

1. Where appropriate, require projects that extract sand during development to use the borrowed material to replenish beach sand.

The Coastal Act policies identified above require the Commission to address impacts on marine resources by considering the timing of deposition of the material on the beach, the composition of the material, the location of the receiver beach, and the presence of environmentally sensitive resources. Development in areas adjacent to sensitive marine habitat areas and parks and recreation areas such as beaches must be sited and designed to prevent impacts which would significantly degrade those areas, and must be compatible with the continuance of those habitat and recreation areas. The restoration of beaches is a permitted use in open coastal waters under Section 30233; however, the project must be the least environmentally damaging alternative, and any impacts must be mitigated.

5-02-142 (City of San Clemente) Page 23 of 28

Deposition of material onto the beach can affect marine life through the direct burial of organisms on the beach and in the nearshore environment, by the secondary movement of beach fill material within the littoral drift zone that could bury reefs and organisms, and by increasing turbidity in adjacent waters, which could adversely affect the growth of kelp and impact the ability of shorebirds to find food in offshore waters.

A biological assessment performed on the subject site in October 2000, described the predominant intertidal habitat along San Clemente's shoreline as sandy beach, although some rocky outcrops are present at Mariposa Point, upcoast of San Clemente Pier where relic exposures extend from mid beach to the low intertidal. Beyond the surf zone, the seafloor is a mosaic of sand and low-to-high relief patch reef. Some pinnacles of the reef are visible in the nearshore zone at low tide, while two prominent offshore pinnacles break the surface offshore of Mariposa Point and downcoast of San Clemente Pier. Other reef habitats are located south of the pier offshore of T-Street. Sensitive biological resources found within the region between San Clemente and Oceanside that have a potential to be affected by beach fill include intertidal and nearshore reefs that support surfgrass and giant kelp, and State and Federally listed species including the California least tern, western snowy plover, the California brown pelican and the endangered tidewater goby. Intertidal and subtidal reconnaissance surveys were conducted at and in the vicinity of each of the four proposed fill sites to assess the presence of reefs, surfgrass and the other above-listed sensitive biological resources, as well as for California grunion.

The surveys determined that rocky intertidal habitat is present at Mariposa Point, between the North Beach Fill Site and the Linda Lane Beach Fill Site. It extends for a distance of approximately 1,400 feet along the shoreline and approximately 250 feet into the wave zone. Offshore, patchy reef habitat is present along the entire shoreline northwest and southeast of the program area. Surfgrass is common to abundant on the intertidal and shallow subtidal reefs. Exhibit 6 shows a map of the biological resources in the project vicinity. Exhibit 7 contains a summary of biological information for each beach fill site.

Because of the ecological importance of surfgrass and reefs to the intertidal and nearshore environment, various configurations and volumes of beach fill material were analyzed by the City to develop configurations that would not result in impacts to these resources. The proposed placement locations and quantities are a result of these analyses. Modeling of sand dispersion was used to determine the proposed placement footprint and quality so, as a worst case, sand would not bury more than 2/3 of surfgrass blade lengths for more than six months, which was determined to be a less than significant impact.

The composition of the sand replenishment material can also affect the environment. The applicant proposes to test and analyze potential beach nourishment sand sources that have up to 25% fines. This is the upper limit of what would be considered for placement on the beaches, and not a standard for all material that would be placed. The 25% cut-off for fines would enable the applicant to consider a fairly large range of potential source materials. According to the applicant, if up to 25% fines are used as an initial screen for possible nourishment material, almost all the potentially available nourishment material that the City expects to review could be considered within this effort. If the fines content were reduced to be up to 20%, this would decrease the material that could be considered for nourishment

5-02-142 (City of San Clemente) Page 24 of 28

to only 75% of that which would be considered with 25% fines. A limit of 15% fines would reduce to potentially available material to only 30% and a 10% limit on fines would reduce the potentially available material to only 15%. The inclusion of up to 25% fines in the opportunistic sand program will maximize the amount of potentially beneficial material that could be tested and analyzed for consideration as beach nourishment material.

A 25% fines content is higher than most beach nourishment projects the Commission has considered in the past. In most cases, the Commission has required that beach nourishment materials have an 80 percent or more sand content¹. One concern relating to the amount of fines in nourishment sediment is that the nourishment effort can introduce a grain size that is not already part of the receiver environment. The other concern is turbidity associated with fines. According to the information submitted by the applicant, the proposed 25% maximum fines content is well below the natural quantity of fines delivered annually from local streams and rivers during the winter season. Since the sites are near to and under the influence of discharges from San Juan Creek, they are accustomed to the fluxes of sedimentation and turbidity from fines during the wet winter season. The applicant took sediment samples along profiles at both Linda Lane and North Beach. The composite sample for Linda Lane had only 5% fines and the composite sample for North Beach had only 8% fines. However, both profiles show an offshore zone where there are high concentrations of fine material. The sample for Linda Lane, from -24' MLLW (Mean Lower Low Water), had 16% fines; the sample for North Beach, from -30' MLLW had 34% fines. These sample results show that fine sediments are now found in the nearshore areas of both Linda Lane and North Beach. Thus, the addition of fine sediments as part of a beach nourishment effort, would not be introducing a physical sediment type that is not already part of the littoral system.

In addition, placement of material with more than 20% fines is restricted to only the fall/winter season. As noted previously, most of the sand replenishment is anticipated to occur during the rainy season, when turbidity is naturally higher. The seasonal limits are designed to mimic the natural sediment delivery to the coast by rivers and streams. Up to 100% placement is proposed during the winter season, and no more than 33% proposed during the summer season when natural sediment delivery is very low.

As noted above, the program requires monitoring of turbidity by lifeguards during construction. If turbidity levels reach higher than ambient levels and extend beyond the end of the pier for more than three days, the operation must be curtailed or cease to decrease turbidity to below this criterion. Thus bird foraging should be able to continue during construction. The turbidity monitoring and reporting includes the length of the turbidity plume estimated and recorded on a map, documentation of project information such as replenishment site, placement method (below the mean high tide line, over existing sand, as sand dike), timing of the operation (start date, stop date, hours of operation), quantity of material, physical and chemical characteristics, and the source of the material. Although no

¹ The Commission has approved use of materials containing less than 80% sand for beach nourishment purposes in at least one other case. Coastal Development Permit 5-99-282 for beach nourishment within Newport Bay allowed use of materials containing less than 80% sand when the content of sand/fines is within 10% of the sand/fines content of the receiver beach.

5-02-142 (City of San Clemente) Page 25 of 28

significant environmental impacts are expected from turbidity, the monitoring will provide information to allow future projects to more accurately assess and avoid turbidity.

The biological assessment concluded that any sedimentation on the reefs and increase in turbidity would be very limited and within the late summer to winter oceanographic season sedimentation rates. However, to be conservative, measures are incorporated into the program to minimize impacts including maintaining a 1,000-ft. buffer distance between the North Beach Fill site and Mariposa Point, and a 500-ft. buffer distance on either side of the walkover at the T-Street Beach Fill Sites. In addition, biological monitoring will occur at designated placement site(s) during predicted grunion spawning periods throughout the spawning season immediately prior to construction to identify the potential for eggs to be present, with construction stopping if grunion are present. If grunion spawning is confirmed, beach deposition shall be limited to areas above mean high tide, or buffer zones will be created excluding fill activities from spawning sites. Sediment monitoring will occur to document habitat effects, and a surfgrass health inventory will be performed before and after construction to verify that no impacts to resources will take place. A qualified biologist must also examine the beach area prior to any fill activities to check for western snowy plovers. If the birds are present, any planned beach activity will be temporarily halted until the monitor determines that the birds have moved away from the fill area.

However, as proposed, when an individual beach replenishment project is submitted to the Executive Director for review under the subject permit, that City must "describe all preconstruction monitoring that will be conducted." Typically, prior to approval of a beach nourishment project, the Commission requires that a preliminary project-specific biological survey have been completed at the project site for surfgrass. (Additional pre-construction monitoring is often done within 30 days of project implementation, where necessary). The City has performed these preliminary studies. However, because the subject permit will be in effect for 5 years, the map of surfgrass resources submitted with the application may not be accurate or useful 3-5 years from now. Therefore, Special Condition 5 requires that for all beach nourishment projects occurring more than 1 year after approval of the subject permit, a preliminary surfarass survey must be performed at the replenishment site prior to, and submitted as part of, the Project Notification Report. Thus, the Executive Director will have site-specific, recent information on the presence and location of surfgrass prior to approving or rejecting any particular replenishment project. The condition further requires that if pre-construction monitoring identifies any potential impacts to coastal resources not identified and addressed in this permit, the replenishment project shall be suspended and the monitoring results reported to the Executive Director. In that case, no work on the project shall occur without a new permit or an amendment to the subject permit.

The project has been designed and sited to avoid impacts to sensitive habitat, and no impacts to any biological resources are anticipated. Consistent with Section 30240, the project will enhance a recreation beach area. However, in the event that unexpected adverse impacts do occur, Special Condition 8 informs the applicant that any impacts to sensitive habitat areas by the proposed development shall be reported to the Executive Director within 10 days of occurrence and shall be mitigated. Such mitigation shall require an amendment to this permit or a new permit unless the Executive Director determines that no amendment or new permit is legally required. Thus, any impacts that occur will be mitigated.

5-02-142 (City of San Clemente) Page 26 of 28

Special Condition 3 limits construction to no more than 2 beaches at any one time, which will further minimize the potential for adverse environmental impacts. Construction equipment used for the project has the potential to contaminate the sand from minor spills and leaks from equipment. Special Condition 5 also prohibits the storage of construction material in the surfzone, and washing vehicles on the beach. Any debris resulting from construction activities must be removed from the project site within 24 hours of completion of construction. In addition, Special Condition 4 requires that an on-site debris monitoring be present during beach replenishment. If any debris or non-sand material is detected, the project must be halted, until new information on the composition of the sand material is approved by the Executive Director As conditioned, no significant impacts to water quality are expected. The program has received a water quality certification from the California Regional Water Quality Control Board (RWQCB), which determined that the project was consistent with the applicable requirements of the RWQCB Water Quality Control Plan (Basin Plan). The State Lands Commission has also granted preliminary approval to the concept of allowing future sand replenishment projects to proceed under the subject program.

Special Condition 6 requires the submittal of any required discretionary permits from other agencies. In particular, the project is currently undergoing review by the Army Corps of Engineers. Should any project modifications be required as a result of other permits, an amendment to this permit may be necessary. Special Condition 8 notifies the applicant that the subject permit does not cover the development that provides the sand source for beach replenishment, such as dredging or new construction. Those projects must receive separate coastal development permits when the source is obtained in the coastal zone.

However, the Commission is concerned that, as proposed, the new projects submitted under the subject permit would be automatically approved 30 days after submittal of a New Project Submittal Package. As proposed and conditioned, adequate information will be available to the Executive Director to analyze and evaluate new beach sand replenishment projects within the parameters of the proposed permit. Beach replenishment is an important part of the preservation and enhancement of coastal resources, and the Executive Director will endeavor to review new projects within 30 days of receiving a New Project Submittal Package. However, because there may be circumstances under which it may take longer than 30 days to respond to the City, Special Condition 6 states that the Executive Director will review the New Project Submittal Package within 30 days of receipt of the Package unless there are unusual circumstances. Within this time period, the executive director shall provide a written response of 1) approval of the project; or, 2) a requirement that the project receive a new, separate coastal development permit; or 3) a request for additional information; or 4) a statement that additional time to review the project will be necessary and an indication of the anticipated response date. Written approval from the Executive Director is required prior to the initiation of any work. Thus, as conditioned, the Commission can be assured that no new beach replenishment will occur without the review and approval of the Executive Director.

In summary, although the program would allow for a higher percentage of fines than has been typically approved in past projects, and the very nature of the project raises the potential for negative impacts to the benthic tidal environment, the subject program has been designed to minimize potential environmental impacts and, as conditioned, is not anticipated

5-02-142 (City of San Clemente) Page 27 of 28

to have any impacts inconsistent with 30230, 30231, 30233, or 30240. Restrictions on placement locations, timing and quantities have been designed to avoid or limit impacts to sensitive habitat. Biological surveys have not identified any long-term significant impacts to sensitive resources. Initial testing has determined that the proposed receiver beaches have a similar percentage of fines to the proposed placement material. All impacts will be closely monitored, and any unanticipated impacts will be reviewed prior to approval of future projects. As conditioned, the Commission finds that the proposed project will ensure that all environmental impacts are minimized, and if significant impacts do occur despite all precautions, they will be identified and adequately mitigated. Therefore, the proposed project can be found consistent with the resource protection policies of the Coastal Act.

D. HAZARDS

Section 30253 of the Coastal Act states, in part:

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

The proposed development is located in an area subject to tidal action. The tidal environment is dynamic and there are risks associated with development in such areas. For instance, erosion has occurred at the subject beaches where beach nourishment is proposed, and erosion is one form of potential geologic hazard. The fact that the applicant is proposing beach nourishment to restore pre-existing beaches indicates that erosion does occur. However, the applicant will not increase erosion hazards by increasing the size of beaches beyond pre-existing conditions, and increasing the beach size may decrease risks to property. As described above, testing and monitoring the replenishment material will ensure risks to life and health are minimized. Therefore, the proposed project minimizes this hazard consistent with Section 30253.

Because there remains an inherent risk to development along the shoreline, Special Condition 6 requires the applicant to submit a signed document which shall indemnify and hold harmless the California Coastal Commission, its officers, agents and employees against any and all claims, demands, damages, costs, expenses of liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development.

E. LOCAL COASTAL PROGRAM

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit for development in an area with no certified Local Coastal Program ("LCP") only if the project will not prejudice the ability of the local government having jurisdiction to prepare an LCP that conforms with Chapter 3 policies of the Coastal Act. The Commission certified the Land Use Plan (LUP) for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998, the Commission certified with suggested modifications the Implementation Plan (IP) portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. The City re-submitted on June 3,

5-02-142 (City of San Clemente) Page 28 of 28

1999, but withdrew the submittal on October 5, 2000. Therefore, the City has no certified LCP

As conditioned, the proposed development is consistent with the policies contained in the certified Land Use Plan regarding public access, recreation, and environmental protection and the policies in Chapter 3 of the Coastal Act. Therefore, approval of the proposed development will not prejudice the City's ability to prepare a Local Coastal Program for San Clemente that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a).

F. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing monitoring of biological, physical, and recreational impacts, will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

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Exhibit 1: Item 1: Project Flowchart

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DRAFT CITY OF SAN CLEMENTE

MINIMUM CRITERIA ACCEPTABILITY CHECKLIST

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Name:	
Job Title:	
Date:	

SOURCE SITE AND MATERIAL		 			<u></u>		
1) Location of Potential Source Material:		7) F	Physical Inspection of Site:	Yes	No	Do Not Know	N/A
			Date:				
2) Indicate Quantity of Material (Total at site/Net available for possible beach placement)	Do Not Know N/A	$\left[\right]$	Observations:				
Has any Grainsize lesting of Material been done? 3) If ves describe results below. If no, see ASSESSMENT. Yes No	Do Not Know	8) F	Physical Inspection of Sediment Sample:	Yes	No	Do Not Know	N/A
]	Date:				
a) Locations/depths of borings or samples:			Observations:				
		╽┍┷┙		r			<u></u>
b) Grainsize (median, D50, D85, D15, %fines):		9)[Does material contain debris?	Yes	No	Do Not Know	N/A
							•
Has any Chemistry testing of Material been done? Yes No 4) If yes, describe results below. If no, see ASSESSMENT. Yes No	Do Not Know	10) [Does material contain large rocks or boulders?	Yes	No	Do Not Know	N/A
		┨┍┷┷				Deniet	
a) Locations/depths of borings or samples:		11) Timing of Source Availability:					N/A
		╽ _{┛┷}					
b) Chemical constituents present:		12) Where will other excess material at site be distributed?					N/A
	·	▎▁▁▎	· · · · · · · · · · · · · · · · · · ·				
5) Any Previous or Available Geotechnical Data Yes No	Do Not Know	13) L	ist all available technical information about the source location and ma	teriat:			
If yes, provide details and source							
			·				
6) Any Previous or Available Phase1 Site Assessment Data Yes No	Do Not Know		•	,			
If yes, provide details and source			·				
	·	J					
		1 [
		A					

Page 1 of 3

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MINIMUM CRITERIA ACCEPTABILITY CHECKLIST

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		Agree	Dis- Agree	Do Not Know	<u>N/A</u>	Basis for Decision
GE	NERAL MATERIAL CHARACTERIZATION					
	1) material is primarily sand, gravel and/or inert material,					
	 sediments are from locations far removed from sources of contaminants (based on agency judgment), 					
	3) sediments were deposited in pre-industrial times,					
	4) sediments were NOT exposed to modern sources of pollution.					
	5) sediments are NOT from agricultural areas.					

	<u>Yes</u>	No	Do Not Know	<u>N/A</u>	Başis for Decision
POSSIBLE POLLUTANTS MAY BE PRESENT IF:					
The material was known to be exposed to:					
1) urban and agricultural runoff,					
2) sewer overflows/bypassing,					
3) industrial and municipal wastewater discharges,				-	
4) previous dredged or fill discharges.					
5) Iandfill leachate/groundwater discharges,					
6) spills of oil or chemicals.					
7) releases from Superfund and other hazardous waste site					
8) illegal discharges,					
9) air deposition,					
10) biological production (detritus),					
11) mineral deposits.					

D	SCRIBE SITE FACTORS IN ASSESSMENT OF POTENTIAL CONTAMINANTS
	1) <u>bathymetry</u>
	2) water current patterns:
	3) tributary flows:
	4) watershed hydrology and land uses:
	5) sediment and soil types:
	6) sediment deposition rates:

DRAFT CITY OF SAN CLEMENTE

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MINIMUM CRITERIA ACCEPTABILITY CHECKLIST

		Yes	No	<u>Do Not</u> Know	<u>N/A</u>	Basis for Decision
A	SESSMENT					
	Based on the checklist and assessment of factors listed above, does the City determine that the material requires further GRAINSIZE testing?					
	Based on the checklist and assessment of factors listed above, does the City determine that the material requires further CHEMICAL testing?					

A Sampling & Analysis Plan (SAP) is REQUIRED for approval from the Corps of Engineers to determine compatibility. The SAP can include previous data, if available. BEFORE any further testing is conducted, a SAP shall be prepared and submit to the Corps for approval.

	Yes	No	Do Not Know	<u>N/A</u>	Basis for Decision
GRAINSIZE					
Does the material fall within the Level I City review requirement, as specified in Table 3.1 of the Technical Report San Clemente Beach Replenishment Program Criteria and Concept Design?					
COLOR					
Is the material similar in color to existing beach sand after exposure to the marine environment?					
PARTICLE SHAPE					
Based on visual inspection, are material grains primarily rounded in shape without sharp points or jagged edges?					
CONCLUSION					
BASED ON RESULTS OF THIS CHECKLIST ASSESSMENT, DOES THIS MATERIAL QUALIFY TO BE CONSIDERED AS OPPORTUNISTIC BEACH FILL? IF YES, CONTACT THE PLANNING AND ENGINEERING DIRECTORS AND PROVIDE ALL SUPPORTING TECHNICAL INFORMATION.?					

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SAN CLEMENTE OPPORTUNISTIC BEACH **REPLENISHMENT PROGRAM PROJECT NOTIFICATION REPORT**

1. Introduction

Provide the basic program outline. Specify the permit conditions (USACE, CCC, RWQCB, and SLC). This Project Notification Report will request agency concurrence and a Notice to Proceed from the USACE.

Placement	Maximum Annual	Maximum Project	Placement	6	Maximum Percent Fine s Allowed		Truc (Volumes a	king and Timing)		By (Volumes a	Rail Ind Timing)
Site	Quantity (CY)	Length (ft)	(1)	Season		CY Per Season	CY Per Week	No. of Weeks	No. Days per Week	CY Per Season	CY Per Week	No. of Weeks	No. Days per Week
North Beach	125 000	1 500	a) Berm	Fall/Winter (Sept 21 – Mar 21)	25%	125,000	13,000	10	6				
North Deach	120,000	1,000	b) MHT	Spring/Summer (Mar 21 – Sept 21)	20%	41,000	10,000	4	6				
				FallAtintar	· · · · ·		!						·
				(Sept 21 - Mar 21)	25%	75,000	8,000	6.5	6				
Linda Lana	75 000	1,500	a) Berm b) MHT c) Dike	Fall/Winter (3) (Sept 21 – Mar 21)	25%	15,000	2,400	6.5	5				
Linda Lane	75.000			Spring (2) (Mar 21 - Memorial Day)	20%	25.000	6,000	4	6				
				Peak Summer (2) (Memorial Day - Labor Day)	20%	25,000	4,000	4	4				
				Fall/Winter (3) (Sept 21 – Mar 21)	25%	15,000	2,400	6.5	5	45,000	18,000	2.5 6	6
T-Street North	45.000	1.000	a) Berm b) MHT	Spring (Mar 21 - Memonal Day)	20%					15.000	15,000	1	6
				Peak Summer (Memonal Day – Labor Day)	20%					13,000	12,000	1	4
				Fall/Winter (3) (Sept 21 – Mar 21)	25%	15,000	2,400	6.5	5	55,000	18,000	3	6
T-Street South	55,000	1,200	a) Berm b) MHT	Spring (Mar 21 – Memorial Day)	20%	-				18.000	15,000	1.2	6
				Peak Summer (Memorial Day – Labor Day)	20%					10,000	12,000	1.5	4
 (a) Berm-b Trucking fr 	each berm or orn North Bea	n upper beach ach around M	n; (b) MHT-pla ariposa Point	cement below the high tic to Linda Lane	de line; (c) Di	ke-sand dik	e along rev	etment					

Proposed Project Limits

(3) Trucking from the Pier at-grade crossing

2. Source Material

2.1. General Site Location

Include maps, figures, and text description of site location and surrounding areas.

2.2. Specific Location of Source Material at Site

Describe where on the site the source material is found

Exhibit 1: Item 3: Project Notification Report

2.3. Volume of Material (Total volume and volume proposed for beach placement)

Describe total volume of material available at site and volume that is being proposed for beach nourishment. The disposal method of excess material will be described in this section.

2.4. Material Testing

Present the Sampling and Analysis Plan that was prepared for and approved by the USACE as part of their permit conditions. The results will be provided, which will include any chemistry and grain size testing. Figures and tables will be provided.

2.5. Debris Management

Describe general content of material with regard to debris. This will include a description of the kinds of debris found in the source material, methods for screening, separating, and/or retrieving the debris, and disposal methods.

3. Transportation and Placement

3.1. Site Location and Timing

Describe which beach site will be used and the timing of project. Include projected schedule.

3.2. Transportation Method

Describe how the material will get to the beach site (truck or train). Outline trucking routes and provide figures, if needed. Indicate how many trucks/trains and frequency. Specify a traffic control plan from the contractor.

3.3. Beach Placement Method

Describe the placement method, including any equipment that may be needed to construct the project. Outline specific public access closures or restrictions. Outline project BMPs, such as flagmen, perimeter fencing, etc. that are proposed.

3.4. Contractor Information

Include Contractor name, address, contact information, etc.

4. Public Notification Process

This section will outline how the public is being notified of the overall program and this specific project. Proposed public noticing methods may include Coastal Advisory Committee (CAC) Workshops, City Council Meetings, Chamber of Commerce/Downtown Business Association articles, City Publications, Newspaper Articles, Signage, Public Television, or Water Billing notices.

5. Project Monitoring

This section will outline the pre-, during, and post-construction monitoring plan for the project. This section will also include the reporting protocols for the monitoring efforts as outlined in the CCC, RWQCB, USACE, and SLC permit requirements.

5.1. Pre-Construction monitoring

Describe all pre-construction monitoring and that will be conducted. This will include biological monitoring and physical monitoring (pre-fill profiles and surfing conditions). The description will include what will be monitored, procedures for the monitoring, frequency, who will conduct the monitoring and their qualifications. Figures representing areas, transects, etc., will be included in the pre-construction monitoring.

5.2. Construction Monitoring

Describe what monitoring will be conducted during construction, including biological and physical monitoring. This will include monitoring protocol and contingency operations for monitoring of turbidity, sedimentation, surfing effects, and biology at the proposed discharge site and adjacent nearshore and offshore areas. Monitoring personnel will be identified and their qualifications will be provided.

5.3. Post-Construction Monitoring

Describe what monitoring will be conducted after construction, including biological and physical monitoring. This will include monitoring protocol and contingency operations for monitoring of sedimentation, biology and effects to surfing at the proposed discharge site and adjacent nearshore and offshore areas. Monitoring personnel will be identified and their qualifications will be provided.

6. Previous Projects in San Clemente

This section will provide a table outlining each placement site and any beach fills that have occurred.

Site	Dates of Placement	Volume (CY)	Total Volume to Date (CY)	Placement Method	Fill Length	Width (if applicable)	%fines
NB							
LL							
TS N							
TS S							

7. Submittals

This section will outline what submittals are required and when the resource agencies can expect them. This will include notification of any violations to the resource agencies.

7.1. Post Discharge Report

Post-Discharge Report will be compiled and submitted to the resource agencies which will include all of the information collected by the City for an individual project, including all preparation testing, volume of material placed at the site, transportation and construction details, finalized project schedule, and monitoring results. An assessment of the project effects, both beneficial and adverse will be presented at the end of every year. This analysis will serve as the basis for any modifications that can be made to optimize the program.

Monitoring Plan for the San Clemente Opportunistic Beach Replenishment Program

This document provides details of the monitoring proposed for the San Clemente Opportunistic Beach Fill Program. Biological Monitoring and Physical Monitoring are discussed.

1. BIOLOGICAL MONITORING

Biological monitoring will be conducted prior to and following the completion of beach fill operations at each of the four beach fill sites and at Mariposa Point. The following programs will be implemented to assess observed effects on intertidal and reef resources.

1.1 Sandy Intertidal Resources

California Grunion - Grunion spawning runs will be monitored at Linda Lane and T-Street Beach Fill Sites when beach fill construction is occurring at these sites during grunion spawning periods (grunion spawning has not historically occurred at North Beach). If grunion are observed, then construction activities will be halted within a buffer zone until the spawn has been completed. In addition, sand berms will be placed around the spawning area, if possible. The buffer zone would extend 65 feet (ft) landward of the highest high water mark and extend both 100 ft upcoast and downcoast from the spawning area. A sand dike would be constructed along the buffer zone to ensure that construction materials and equipment would not enter the spawning area. The buffer zone would be kept in place until the next predicted grunion run (about 14 days) to allow for the eggs to hatch and surveys show that no subsequent spawning occurred in the area.

A report will be prepared within two weeks of the completion of each grunion survey and submitted to the City of San Clemente and the appropriate wildlife and regulatory agencies.

1.2 Nearshore Reefs and Surfgrass Resources

A sediment monitoring program and surfgrass health inventory will be conducted at the nearshore zone off each site that is receiving beach fill as part of a project (and at Mariposa Point is fill is planned at North Beach during a project). Monitoring will occur prior to and after beach fill placement occurs at each site. A series of nearshore reef monitoring sites will be established offshore of each beach fill site and at Mariposa Point, and coordinates will be determined using Differential GPS. At each site, sand levels on the reef will be measured. Baseline measurements will be taken 30 days before beach fill operations will occur and be used as a benchmark. At each site, random surfgrass percent-cover measurements and surfgrass blade-length measurements will be collected. If sand is covering surfgrass, then sand depth over surfgrass and surfgrass blade length will be measured.

In addition, the presence and health of other macrophytes (i.e., *Egregia* and *Eisenia*) will be noted and the amount of any sand deposition over these plants will be estimated. A random

point-contact assessment of the reef cover will also be conducted using a 0.25 square meter sampling quadrat. The purpose of the point-contact study is to provide an estimate of the types and amount of sand and/or marine biological cover on the nearshore reefs that may be under the influence of the beach fill sediment movement.

Surveys will be conducted after the completion of beach fill at each of the four sites at days 30, 90, 180 and 360 after construction. A report will be prepared within four weeks of the completion of each survey and submitted to the City of San Clemente and the appropriate wildlife and regulatory agencies. In the event that it is determined that nearshore reefs and surfgrass meadows are being negatively affected by beach fill operations, the project will either be curtailed or stopped.

1.3 Pre-Project Bird Monitoring

A pilot shorebird monitoring program is proposed to generally evaluate shorebird usage and determine the general effects of beach fill projects to restoring shorebird habitat. This pilot monitoring effort would include conducting rough counts of shorebirds at the beach fill site by volunteers from the Audobon Society, other naturalist groups, or possibly by City lifeguards who would be supervised by a qualified ornithologist. The data would then be analyzed by an ornithologist or biologist using non-statistical methods to develop preliminary conclusions as to the effects of the beach fills on restoring shorebird habitat. This monitoring effort may be revised after the initial pilot efforts, if deemed necessary.

2. PHYSICAL MONITORING

2.1 Turbidity

Turbidity monitoring will be conducted to prevent impacts to least tern and snowy plover foraging from increased turbidity caused by fines suspended in the nearshore. Turbidity monitoring will be conducted during construction of the beach fills by visual observation to ensure that the turbidity plume does not increase significantly over ambient conditions for extended duration.

Turbidity will be first monitored visually from a shore-based vantage point (e.g., the pier, or bluffs backing the coast) by a monitor observing the placement of the beach fill. If observations indicate a significant change in visibility over ambient conditions as judged by the monitor, then field measurements will occur. A 100% decrease in visibility as estimated by the monitor for a period of more than four days will warrant a temporary halt to operations and reduction of the placement rate until conditions return to ambient. Observations will be documented with photos, and maps of maximum daily plumes will be made and assembled into a report submitted 30 days after construction. This approach was applied successfully for the Goleta Beach Demonstration Project.

2.2 Beach Profiling

Beach profile surveys will be conducted prior to and after construction of the beach fills. The City of San Clemente has established a citywide yearly beach-profiling program that will help supplement the beach profiling monitoring. Profiling will occur immediately after construction and at six and twelve months after construction. Beach profiles to be utilized for this program are those at North Beach, Linda Lane and T-Street. A licensed surveyor experienced with the survey methods and the specific project site, will survey the beach profiles. Four profiles exist that will be used for this study. The tasks include:

- 1. Re-establish three beach profile transects. The attached figure shows the profile locations.
- 2. Record beach and seabed elevation along the profiles from the back of the beach out to the depth of closure (estimated to be approximately -40 feet relative to MLLW). Survey equipment to be used includes:
- 3. Standard survey equipment (level, Global Positioning System or GPS, rod) for work on land; and
- 4. A survey boat with fathometer and GPS for work on the water to tie into the land profile.
- 5. Reduce data for interpretation and reporting.

2.3 Surfing

Surfing is a special attribute for San Clemente and the rest of southern California. San Clemente's beaches are renowned for their high-quality surfing conditions. Also, the value of the surfing community and industry to the City is great. As such, the City will monitor project effects to surfing using the best qualitative and quantitative scientific methodologies available. Methods include:

- 1. Document morning conditions on videotape weekly for 2 weeks prior to, and 8 weeks following beach fill construction;
- 2. Estimate wave height, type of wave (hollow or mushy), breaker distance from shore, length of peel, and existence of backwash;
- 3. Conduct standardized interviews with surfers using a questionnaire; and
- 4. Estimate the density of surfers at each site between North Beach and T-Street during videotaping.

3. **REPORTING**

Reports will be issued after each project and at the end of each year. Specifically, the City will submit a post-project report to all agencies (per requirement of the U.S. Army Corps of Engineers) containing the items below:

2.

- 1. All information collected as required by the special conditions of the USACE permit. The report will indicate whether all general and special permit conditions were met. Any violations of the permit will be explained.
 - The post-discharge report shall include the following information:
 - A. Corps permit number;
 - B. total volume placed at each site;
 - C. modes of transportation;
 - D. form of material; and
 - E. percent sand, silt, and clay.
- 3. Actual start date and completion date of transportation and discharge operations.
- 4. Monitoring results.

Annual reports will also be issued to all resources if projects occurred during the previous year. The report will present analysis of the program performance and whether changes are needed for improvement. Per requirements of the Water Board, prior to March 1 of each year, an annual monitoring report document project activities during the prior calendar year will be submitted to the resource agencies that includes, but is not limited to:

- 1. All data collected for the year.
- 2. Assessment of the impact of beach fill activities on the beneficial uses of the project location and vicinity.
- 3. A description of adaptive management efforts and remedial actions that occurred during the year in response to habitat, recreational, and sediment monitoring.
- 4. A description of documented habitat improvement for beach and nearshore environments and adaptive management efforts for improving habitat restoration improvements from subsequent sand placement activities.









Prepared by Maffett & Nichol

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Placement Site	Season	Maximum volume of sand placed weekly (cy)	Maximum weekly number of truck trips Projected ⁽³⁾	Maximum daily number of truck trips Projected ⁽⁴⁾	Maximum hourly number of truck trips Projected ⁽⁵⁾	Time between trips, on Average (minutes)
North Boach	Fall/Winter (Sept 21 – Mar 21)	13,000 ⁽¹⁾	929	154	15.4	4
Notifi Deach	Spring/Summer (Mar 21 – Sept 21)	10,000 ⁽²⁾	714	119	11.9	5
	Fall/Winter (Sept 21 – Mar 21)	8,000 ⁽¹⁾	571	95	9.5	6
Linda Lane (truck material around Mariposa Pt)	Spring (Mar 21 – Memorial Day)	6,000 ⁽²⁾	428	71.	7.1	8
	Peak Summer (Memorial Day – Labor Day)	4,000 ⁽²⁾	285	71 ^(4a)	7.1	8
	Fall/Winter (Sept 21 – Mar 21)	2,400 ⁽⁶⁾	240 ⁽⁶⁾	48 ⁽⁶⁾	6 ⁽⁶⁾	10 ⁽⁶⁾
Linda Lane, T-Street N & S (trucking via Pier at-grade crossing)	Spring (Mar 21 – Memorial Day)					
; ((()))	Peak Summer (Memorial Day – Labor Day)	. 6 1916		Bea	at the set	****

Table 3.3. Proposed Number of Truck Trips and Frequency

(1) Assumes a 10-week placement period for North Beach and a 6.5-week placement period for Linda Lane during fall and winter.

(2) Assumes a 4-week placement period for North Beach and Linda Lane during spring and summer.

(3) Assumes a twin trailer belly-dump truck holding 14 cy total.

(4) Assumes a 6-day workweek, Monday through Saturday.

(4a) Assumes a 4-day workweek, Monday through Thursday

(5) Assumes a 10-hour workday.

(6) Assumes a 10 cy capacity truck, a 5-day workweek (Monday through Friday), and an 8-hour workday.

(7) No construction is proposed on Sundays, or local, State, or Federal holidays.



Placement Site	Season	Maximum Volume of Sand Placed Weekly (cy)	Average Number of Railcars per Train ⁽³⁾	Average Time to Unload Train (hours)	Average Volume per Train (cy)	Average Number of Trains per Week	Number of weeks per season
	Fall/Winter (Sept 21 – Mar 21)	18,000 ⁽¹⁾	40	6.6	3,000	6	2.5
T-Street North	Spring (Mar 21 – Memorial Day)	15,000 ⁽²⁾	40	6.6	3,000	5	1.0
	Peak Summer (Memorial Day – Labor Day)	12,000 ⁽²⁾	40	6.6	3,000	4	1.3
	Fall/Winter (Sept 21 – Mar 21)	18,000 ⁽¹⁾	40	6.6	3,000	6	3.0
T-Street South	Spring (Mar 21 Memorial Day)	15,000 ⁽²⁾	40	6.6	3,000	5	1.2
	Peak Summer (Memorial Day – Labor Day)	12,000 ⁽²⁾	40	6.6	3,000	4	1.5

Table 3.4. Proposed Rail Transport Summary

(1) Assumes a 2.5 to 3-week placement period for T-Street N and T-Street S during fall/winter, respectively.

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(2) Assumes a 1 to 1.5-week placement period for T-Street N and T-Street S during spring/summer, respectively.

(3) Assumes a railcar holding 75 cy.

(4) Assumes a 6-day workweek (Mon - Sat) all year; except a 4-day workweek during Peak Summer (Mon - Thurs).

(5) No construction is proposed on Sundays, or local, State, or Federal holidays.

(6) All estimates are subject to approval and change by the Orange County Transportation Authority and Southern California Regional Rail Authority (SCRRA) for the proper use of tracks and possible impacts to scheduling of trains.



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 Table 2.

 Summary of Biological Information for Each Beach Fill Site

	•		BEACH F	ILL SITES	
		North Beach	Linda Lane	T-Street North	T-Street South
	Longshore distance to nearest rocky intertidal habitat	No rocky intertidal at the site; nearest is 1,600 ft south at Mariposa Point	No rocky intertidal at the site; nearest is 1,600 ft north at Mariposa Point	No rocky intertidal at the site; nearest is 2,000 ft north at Mariposa Point	No rocky intertidal at the site; nearest is 2,400 ft north at Mariposa Point
	Offshore distance to nearest surfgrass meadows*	500 ft	700 f	300 R	300 ft
	Offshore distance to reefs	400 ft	700 ft	300 h	300 ft
	Offshore distance to Washrock reef/kelp	2,400	2,400	3,400	3,400
	Offshore distance to kelp offshore of pier	4,100 ft	1,200 R	1,200 ft	2,400 ft
	Offshore distance to San Mateo Kelp	3.0 mi 16,000 ft	2.5 mi 13,400 ft	2.1 mi 11,000 ft	1.9 mi 10,000 ft
	Longshore Distance to San Mateo Creek mouth	3.4 mi 17,592 ft	2.6 mi 13,728 ft	2.5 mi 13,200 ft	2.1 mi 11,088 ft .
	Distance to Camp Pendleton Least tern colony at White Beach	15.9 mi	14.3 mi	14.2 mi	11.8 mi
	Surfgrass elevation above sea floor	+2 R	+i Ω	+1 to 2 ft @ 300 ft from shore; 0 ft @ 800 ft from shore	+1 to 2 ft @ 300 ft from shore; 0 ft @ 800 ft from shore
	Surfgrass blade length	3 ft	3 N	2.5 R	2.5 ft
	Maximum amount of surfgrass blade burial offshore fill site	1.3 ft	١n	1 R	1 ft
EXHI	Maximum depth of burial of surfgrass at Mariposa Point	0.75 ft	0.5 ft	0. 5 ft	0.5 ft
BIT NO.	Maximum duration of sand cover of surfgrass and reefs	6 months	6 months	6 months	6 months
NO V					

Summary California Coastal Commis

Table 3.Summary of Impacts for Each Beach Fill Site

+	BEACH FILL SITE			
	North Beach	Linda Lane	T-Street North	T-Street South
RESOURCE			•	•
Sand beach infauna at	Short-term, adverse, not-significant	Short-term, adverse, not-significant	Short-term, adverse, not-significant	Short-term, adverse, not-significant
beach fill site	loss of infauna. Recolonization	loss of infauna. Recolonization	loss of infauna. Recolonization	loss of infauna. Recolonization
	following beach fill	following beach fill	following beach fill	following beach fill
Intertidal reefs and	No rocky intertidal at site. No direct	No rocky intertidal at site. No direct	No rocky intertidal at site. No direct	No rocky intertidal at site. No direct
biota at beach fill	impacts.	mpacis.	inipacia.	impaco.
site				·
Intertidal reefs,	Short-term adverse, not-significant	Short-term adverse, not-significant	No impact*	No impact*
biota, and surfgrass	intertidal habitat 1.600 feet south at	intertidal habitat 1.600 feet south at		
at Mariposa Point	Mariposa Point	Mariposa Point		
Subtidal patch	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant
boulder reefs (-3 to -	impact Partial burial of low lying	impact Partial burial of low lying	impact Partial burial of low lying	boulder reefs 1 ft burial of surfaress
15 ft MLLW) at	surfgrass for 6 month duration	for 6 month duration	for 6 month duration	for 6 month duration
beach fill site	_			
Subtidal patch	Short-term adverse, not-significant	Short-term adverse, not-significant	No impact*	No impact*
boulder reefs and	impact Partial burial of low lying boulder reefs 0.5 ft burial 1.600 feet	impact Partial burial of low lying boulder reefs. 0.5 ft burial 1.600 feet		
surfgrass at	south at Mariposa Point	south at Mariposa Point	•	
Mariposa Point				
Offshore reefs (-15 to	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant
-50 ft MLLW)	impact increase of sand above ambient levels at base of reef (<0.2, ft)	Impact increase of sand above $\operatorname{ambient}$ levels at base of reef (<0.2 ft)	impact increase of sand above $ambient levels at base of reef (<0.2 ft)$	ambient levels at base of reef (<0.2 ft)
Koln Beds	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant
Keip Deus	impact increase of sand above	impact increase of sand above	impact increase of sand above	impact increase of sand above
	ambient levels at base of reef (<0.2 ft)	ambient levels at base of reef (<0.2 ft)	ambient levels at base of reef (<0.2 ft)	ambient levels at base of reef (<0.2 ft)
Other Macrophytes	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant
	reefs for a six month duration	reefs for a six month duration	reefs for a six month duration	reefs for a six month duration
California least terns	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant
	impact on individual foraging least	impact on individual foraging least	impact on individual foraging least	impact on individual foraging least
	tems due to increase in turbidity.	terns due to increase in turbidity.	terns due to increase in turbidity.	terns due to increase in turbidity.
	away from beach fill area	away from beach fill	away from beach fill	away from beach fill
Western snowy	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant	Short-term adverse, not-significant
ployer	impact on individuals foraging or	impact on individuals foraging or	impact on individuals foraging or	impact on individuals foraging or
Piorei	roosting wintering individuals during construction	roosting wintering individuals during construction.	roosting wintering individuals during construction.	roosting wintering individuals during construction.
California grunion	No impact. No known grunion	Potential adverse, but mitigatable	No impact. No known grunion	No impact. No known grunion
Camor ma Brannon	spawning habitat	significant impact.	spawning habitat	spawning habitat
Tidewater Goby	No impact.	No impact	No impact	No impact



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* assumes a net downcoast movement of the littoral drift.